Calibrating Coercive Policy Transfer:
An Introduction to Policy Compatibility

DAVID ALEMNA

A thesis submitted in partial fulfilment of the
requirements of the University of Brighton
for the degree of Doctor of Philosophy

September 2020

Declaration

I declare that the research contained in this thesis, unless otherwise formally indicated within the text, is the original work of the author. The thesis has not been previously submitted to this or any other university for a degree and does not incorporate any material already submitted for a degree.

Signed: .... David Alemna ....

Date: .... 25th September 2020 ....

Acknowledgement

Abstract

While the concept of policy transfer has caused a rethink in the ways the public policy process is understood, its coercive application in global governance remains debated. Commentators argue the effects of global governance has an unprecedented impact on the national policy-making process. One of such challenges is the question of policy compatibility. Focusing specifically on the socioeconomic impacts of IMF interventions on cross-national convergence, this thesis utilizes a realistic theoretical approach to examine the interactions between global policy subsystems and the national policy settings. Using a case-based configurational methodology, the thesis develops a calibrated approach to the assessment of policy compatibility by connecting global policy interventions with their contextual implementation to realistically evaluate their outcomes.

The results show that, the policy-making process is not 'hyperrational' but rather complex. Through the process of policy transfer, global institutions influence the domestic policy undertakings of member countries in order to stimulate convergence. This has resulted in convergence across human development indicators. However, continental disparities and variations in the domestic undertakings of member nations produced divergence in macroeconomic outcomes, especially in Sub-Saharan Africa. Analysing the interactions between the IMF and its member nations, it is observed that the domestic policy reform agenda is steered predominantly by the IMF.

Isolating a few cases, a detailed document analysis of IMF *Letters of Intent* shows that policy interventions are often driven by the global markets. However, the national policy capacity and economic resources of a country have a significant effect on the success or otherwise of an IMF intervention. This stresses the totalizing logic of the IMF as its fundamental principles fall back to an overarching neoliberal marketization approach to problem solving. Nevertheless,

given the ongoing global penetrations and systemic complexity that may push nations beyond their adaptive capacity, the IMF's retreat to neoliberal ideologies seems to be a common response. Unfortunately, such responses are profoundly dysfunctional in some cases.

In view of the above findings, the thesis provides a discussion on the conditions determining policy compatibility and argues a context sensitive approach to the application of coercive policy transfer. It recommends that, in order to effectively stimulate convergence, policies should be tailored to reflect national conditions. Convergence can only be achieved through an acknowledgement of diversity in contextual policy settings.

Table of Contents

List of Abbreviations

Association of Southeast Asian Nations .... ASEAN

Balance of Payment .... BoP

Compulsory Power .... CP

Development Finance Institutions .... DFIs

Economic Community of West African States .... ECOWAS

European Commission .... EC

European Union .... EU

Emerging and Developing Countries .... EDCs

Organization for Economic Cooperation and Development .... OECD

Group of 77 .... G77

Hierarchical Cluster Analysis .... HCA

Heavily Indebted Poor Countries .... HIPCs

Institutional Power .... IP

International Bank for Reconstruction and Development .... IBRD

International Development Association .... DA

International Monetary Fund .... IMF

International Non-Governmental Organisations .... INGOs

Latin America and The Caribbean Nations .... LACs

Low-Income Developing Countries .... LIDCs

Low Income and Developing Economies .... LIDEs

Millennium Development Goals .... MDGs

Multinational Corporations .... MNCs

New Public Management .... NPM

Non-Governmental Organisations .... NGOs

List of Figures

List of Tables

List of Boxes

Chapter One

The Policy Effects of Globalization: Beyond Goodness-of-fit

1.1. Background

The conventional notion of public policy is that it is always initiated within the nation-state or by its governmental institutions. Traditionally, scholars within the field of comparative public policy tend to compare policy developments within and between nations where nation-states remain the key policy-making unit (Stone, 2008). Thus, "... public administration [policy] has been a prisoner of the word 'state' ... [it] has assumed that the nation-state is the natural context within which the practice of public administration [policy] has to be studied" (Baltodano, 1997, p. 618). A significant trait of public policy is that it not only addresses the needs of citizens but also impacts their lives (Woolley, 2008). For this reason, public policy is designed to tackle national problems and resolve them (Peters & Pierre, 2006). These policies are ideally limited within the geographical jurisdiction of the state. As such, nations may respond to socioeconomic problems differently although such problems may be global in nature. The distinctive nature of each society's response to these global problems reflects its public policy values and process. This process is predominately undertaken either through legislative or executive arms of government.

Highlighted within the literature on globalization and cross-national policy convergence, academic scholarship has observed a new policy construction that transcends the notion that the nation-state remains the key policy-making unit. This is reflected in the notion of a 'global public sphere' (Dryzek, 1999); a 'global arena' (Ronit & Schneider, 2000); a 'transnational public sphere' (Nanz & Steffek, 2004); a 'playing field' of 'new levels and spaces' (Cerny, 2006); and "an acephalous ... modern global polity" (Drori, Meyer & Hwang, 2006. p. 14). Stone (2008) notes that if global public policy is detached from national policy-

making processes, the settings within which such policy activities transpire need not be tied to sovereign structures of decision-making as national public institutions no longer serve as the sole organizing centre for policy-making. In its place, it is crucial to "look at the restructuring of the playing field itself" (Cerny, 2006. p. 97). Reintroducing a Greek political term, Stone (2008) refers to this re-structured policy-making field as the 'global agora'. For Stone (2008. p. 12), the notion of the agora describes "…a growing global public space of fluid, dynamic and intermeshed relations of politics, markets, culture and society". Here, the nation-state is not inevitably declining (Douglas, 1997; Strange, 1997; Göksel, 2004) or being hollowed out (Skelcher, 2000; Pennings, 2017) but rather "re-configuring with the dynamics of globalisation and remains an important or central agent in the agora" (Stone, 2008. p. 12).

The composition of the agora – its values, discourses, symbols, norms, institutions and practices (Arthur, 2001) – are also fashioned by other state and non-state actors that have obtained or usurped public authority when reacting individually, or in collaboration with other actors, to specific global problems. Thereby creating 'global subsystems' for tackling specific policy issues. These global policy problems have resulted in new forms of methodological approaches to the analysis of power in international relations as they provide a fascinating study of the use of both 'hard' and 'soft' power to ensure compliance (as emphasised in the case of the European Union and specialised technical and adjunctive functioning global institutions[1]). Nevertheless, discussions on the impact of globalization on the domestic public policy process are concerned with how well policies formulated within these subsystems fit

---

[1] The term specialized technical and adjunctive functioning global institutions is used in this context to refer to global institutions that play a specialized or adjunctive/supportive role and as such differ in their degrees of power. An example of the former includes United Nations Specialized Agencies or the World Health Organization or the World Organization for Animal Health. These institutions have little or no power beyond their advisory role. The latter would consist of institutions like the International Monetary Fund and World Bank.

with the domestic settings of implementing states. Thus, how compatible these 'global policies' are with national conditions.

Explained as a complex dynamic model, public policy is viewed as a 'by-product' of interactions between policy actors at a meso, or sectoral level, regarding an issue of shared interest. Here, "a subsystem consists of actors from a variety of public and private organizations who are actively concerned with a policy problem or issue, such as agriculture, and who regularly seek to influence public policy in that domain" (Sabatier, 1998, p. 99). For Sabatier, (1998, p. 99) the subsystem is "the most useful unit of analysis for understanding the overall policy process," making it "superior to the use of other units such as government organizations or programs" (Howlett & Ramesh, 2002, p. 37). In this sense, in so far as the global agora is a global public policy space (Stone, 2008), it consists of numerous policy subsystems channelled towards specific policy paradigms and policy domains (Sabatier, 1998; Howlett & Ramesh, 2002). Within the agora lies a complex system of sectoral policy subsystems interacting within and between each other on specific socioeconomic problems and policy responses. Although multiple policy interventions are contemplated within subsystems, the emergence of individual actors (subsets) and the power dynamics that exists within these subsystems alters the nature of discussions and how policy change is promoted downstream (Singer, 1990; Buckley, 2000).

Existing literature on the pervasiveness of this realm has concentrated on ascertaining factors that encourage subsystem interactions (Howlett & Ramesh, 2002). Others have also attempted to identify the processes that inspire change across subsystems (Howlett & Rayner, 1995; Rayner et. al., 2001), and the manner of interactions as well as the types of change likely to occur as a result (Howlett, 2000). Yet, an examination of the interactions and impacts of subsystems on domestic policy processes is crucial in identifying and understanding the impacts on policy outcomes. Understanding the policy subsystem helps streamline a macro-

political system by bounding individuals and issues while removing those policy concerns that are extraneous to the subject of concern (Weible, Heikkila, DeLeon, & Sabatier, 2012).

Public policies get 'internationalized[2]' through these dynamic subsystem interactions (Hirst & Thompson, 1996). Global problems have created an atmosphere where the internationalization of public policy is gaining increasing importance as they tend to vanish the policy-making capacity of national actors. This has resulted in what Ohmae (1995, p.1) deems the "end of the nation state", and a growing convergence in policy interventions under the auspices of a subsystems' policy paradigm or policy domains (Howlett & Ramesh, 2002). In this context, convergence is explained as an "increase in the similarity between one or more characteristics of a certain policy (e.g. policy objectives, policy instruments, policy settings) across a given set of political jurisdictions (supranational institutions, states, regions, local authorities) over a given period of time" (Knill, 2005. p. 768). Yet, internationalization is a highly complex phenomenon with varying convergent effects.

Suggestions on the varying effects of internationalization highlight the fact that, amongst other things, convergence may happen as a result of policy imposition (Holzinger & Knill, 2005). Imposition – usually labelled 'coercive policy transfer' – occurs whenever an external political actor forces a movement towards the adoption of a certain policy (Dolowitz & Marsh, 2000; Holzinger & Knill, 2005). This suggests asymmetry of power, and often policy adoption is accompanied by an exchange of economic resources. Here, policies can either be unilaterally imposed on a country by another, or as a condition for membership to an international institution (Dolowitz & Marsh, 2000). Although the former does not frequently

---

[2] "Internationalization is a process through which the authority and autonomy of the state is challenged or supplanted by structures, process or policy developments which cut across national boundaries" (Moran & Wood 1996, p. 125). Or the prioritization of the global (subsystem) policy interests over those based on national socioeconomic conditions and policy groupings.

occur, conditionalities are more apparent. An example of conditional policy imposition can be seen in the policy prescriptions attached to overseas development assistance. Imposition implies that the country forced to adopt a certain model does not have much choice in modifying the policy. In such cases, domestic settings may be bypassed. This may cause changes in the existing institutional equilibrium of implementing states (Knill & Lehmkuhl, 2002). The compatibility of such policies may fail as external policies emerge as misfits.

Jørgensen, Pollack & Rosamond (2007) identified how these alterations can be assessed from two viewpoints. First, policy misfit – where domestic policies may be contradictory to external policies (Börzel, & Risse, 2000; Börzel, & Risse, 2003). Second, external policies may conflict with institutional structures, causing an institutional misfit. These exogenous policy interventions may contradict the domestic way of doing things, causing a need for policy calibration – the practice of connecting policy interventions and intervention mechanisms with the intervention context or vice versa. The body of literature on the issue of 'goodness-of-fit' concentrates on the 'adaptation pressures' of EU member states and the levels of 'fit' and 'misfit' between EU policies and the existing institutions, and policies at the national level (see for instance Olsen, 2002; Börzel & Risse, 2003; Mastenbroek, 2005). Little attention has however been placed on the levels of 'fit' and 'misfit' between policies imposed by specialised technical and adjunctive functioning global institutions on member nations.

1.2. Focus of the Study

With a focus on the International Monetary Fund, this thesis examines the dynamic interactions between global institutions, policy transfer, and convergence by looking at the impacts of IMF policy interventions on socioeconomic convergence between low income and emerging nations through its overseas development assistance lending activities. Although studies suggest that certain national conditions are likely to result in cross-national convergence (Knill, 2005; Holzinger et. al., 2007), causal mechanisms like socioeconomic problems and

policy impositions should also be considered. This is because although country-specific factors – like institutional, socioeconomic, geo-political and cultural similarities between countries – expose them to convergence pressures, other factors relating to the characteristics of underlying policy interventions (e.g. regulative policy or varying policy dimensions, policy paradigms, policy instruments and settings) may also influence convergence.

In assessing the impact of EU policies on member states, Cowles, et. al., (2001) noted that the first question to ask when changes occur at a European level is how these changes fit with the existing domestic policies. Reflectively, the question to ask when conditionalities are attached to loans and grants given to soliciting member nations by the IMF is whether these policies fit with the existing domestic settings of implementing states. These policies may lead to institutional reconfiguration within implementing states (Cowles, et. al., 2001). A broader look, not only at the impact on already existing policies, but also at domestic reforms and institutional transformation provides a deeper understanding of the need for domestic compatibility in coercive policy transfer. Moreover, the implementation of such policies may cause significant change in the policy arena of member nations (Börzel, et. al., 2000).

By looking at the impact of IMF conditionalities, Loewenson (1993) and Easterly (2005) found that these policies lead to institutional readjustments. It has been shown that IMF interventions do not always lead to positive outcomes (Easterly, 2000; Easterly, 2002; Dreher, 2006; Shah, 2013). As it shall become apparent later in this thesis, empirical findings on the socioeconomic impacts of IMF interventions and the degree of influence on convergence differ according to regions, observed time periods and national conditions (see Chapter Three). Understanding the variations in IMF impacts requires a consideration of other contextual factors before formulating, implementing and evaluating coercively transferred policies. Some of these factors include the diversity in the socio-cultural environment, the current economic

situation and political structures of implementing states as well as their varying developmental levels.

Also, the implementation of coercively transferred policies may cause alterations in the domestic sphere, including negative changes in the existing institutional equilibrium (Knill, & Lehmkuhl, 2002). For this reason, using a synthesis of a 'state-centric' and 'polycentric' perspective (Koenig-Archibugi, 2010), this thesis adopts a realistic configurational methodological approach in an attempt to model a compatibility framework. This integrates policy intervention mechanisms and their intervention context to realistically assess their outcomes. In this sense, this thesis attempts to methodologically advance public policy research and analysis in its bid to leave behind the restrictions of single case analysis (Gerring & Christenson, 2017). It strives for a research design that allows for systematic testing and sufficient comparative explanations of cross-national policy convergence at the interface between exogenous policy interventions and domestic conditions.

1.3. Research Questions and Aims:

By focusing on the socioeconomic impacts of IMF[3] supported arrangements in Sub-Saharan Africa, Latin American and Caribbean low income and emerging economies, this research contributes to existing knowledge on coercive policy transfer by introducing a calibrated approach to coercive policy transfer, that is to say, a concept of policy compatibility. A note on terminology is important here. The word calibration is used in this context to mean: to correlate the readings of policy with those of a standard in order to check the policy's relevance. Thus, policy adjustments considered to ensure that transferred policies are

---

[3] As at the time of writing, the IMF website currently describes its mission as: "to foster global monetary cooperation, secure financial stability, facilitate international trade, promote high employment and sustainable economic growth, and reduce poverty around the world." These undertakings to a large degree involve participation at the national level. As such, as discussions in Chapter Three have emphasized, in order to achieve this mission, the IMF imposes policy interventions (conditionalities) attached to its loans to alter national economic activities. This makes it an ideal institution for discussion.

compatible with domestic settings of implementing states. For this reason, this thesis asks the questions: *"What is policy compatibility? And, how can policy compatibility be assessed when policies are coercively transferred?".* To address these questions the researcher sets out the following aims:

A1. To examine the interactions between globalization, policy transfer and convergence.

A2. To identify from cross-national longitudinal macro socioeconomic datasets what patterns of convergence occur between low income and emerging countries when IMF supported arrangements are implemented.

A3. To realistically evaluate the impacts of IMF intervention outcomes on socioeconomic development convergence across IMF specialized areas in selected cases.

A4. To conceptualize policy compatibility.

1.4. Analytical Framework:

As shown in Figure 1.1 (below), to fully understand the compatibility of IMF interventions and its convergence effects, by assessing its underlying policy intervention mechanism and its impacts on cross-national convergence, this research considers two types of convergence – sigma and delta convergence[4] (Heichel, et. at., 2005; Knill, 2005).

---

[4] Academic studies assessing convergence consider sigma convergence to be the degree of similarities exhibited across a group of cases while delta convergence focuses predominately on the direction of travel. See for instance Heichel, Pape & Sommerer, 2005). For this research, the researcher test for convergence in three ways. First, sigma convergence [a growing similarity] is tested over time using macro socioeconomic indicators. Second, delta convergence is then applied as a robustness check for sigma convergence. Third, policy convergence [similarity] is tested by analysing the policy documents of the most converged cases.

Figure 1.1: Analytical Framework
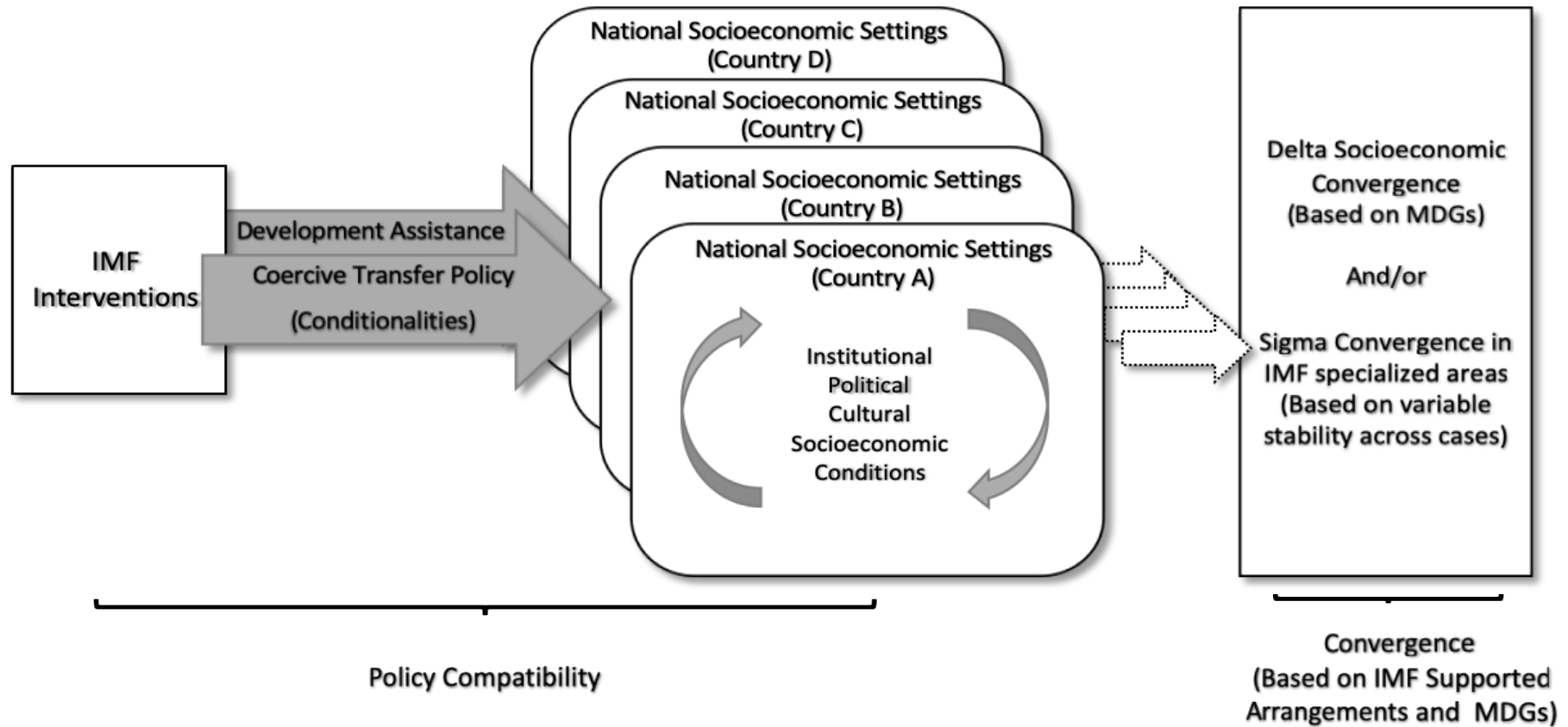
Note. Figure representation of the analytical framework showing the schematic of the researchers thinking in a logical systematic manner. Emulated from: Heinze, T., & Knill, C. (2008). Analysing the differential impact of the Bologna Process: Theoretical considerations on national conditions for international policy convergence. *Higher education*, *56*(4), 493-510.

Sigma convergence comes closest to the orthodox notion of convergence as a growing similarity in policy outcomes across a sample group of cases over time (see for instance Haynes & Haynes, 2016). It is identified as "the decrease in variation of domestic policies over time" or "a decreasing coefficient of variation (also known as dispersion index) coincides with policy convergence" (Heinze & Knill, 2008, p. 498). For assessing sigma convergence, this thesis places focus on macro socioeconomic similarities across country cases. Hierarchical cluster analysis (HCA) is used to cluster cases based on such similarities. Qualitative comparative analysis (QCA) is then used to identify convergent patterns in cluster groupings by pinpointing linking variables (prime implicants) across cluster memberships. From these similarities, *ex ante* socioeconomic convergence hypotheses are formed based on country specific similarities and the possible impact of IMF interventions on variable scores.

Nevertheless, Heinze and Knill, (2008, p. 498) note that an assessment of sigma convergence alone does not entirely capture "empirical realities as it does not necessarily address whether policy homogenization is synonymous with increasing proximity to a dominant policy model". In the case of assessing the convergent effects of IMF interventions, an analysis of delta convergence – which "focuses on the minimization of the distance to an exemplary model over time, e.g. as promoted by an international organization or forerunner regarded as successful" (Heinze & Knill, 2008, p. 498) – is applied to test for policy harmonization with other exogamous policy models, specifically, the United Nations Millennium Development Goals (MDGs). For this reason, this research is situated within the context of the MDGs. These were eight internationally agreed development goals targeted to be achieved between the years 2000 - 2015. It is assumed that, to achieve these goals, nations were moving towards convergence.

Empirically, although sigma and delta convergence often occur simultaneously (Heinze & Knill, 2008), variations in the points of travel can have significant effects on policy

developments and convergent outcomes. This is because cases may travel in the same direction (e.g. towards the achievement of the MDGs), but from different points of beginnings (e.g. developmental levels), leading to the persistence of national peculiarities (Bleiklie, 2001). An intensive analysis of national policy papers outlining the scope of an IMF intervention (Letter of Intents) and observation of variable movement is also undertaken to identify the direction of IMF interventions. However, an analysis of the possibility of countries converging towards an IMF exemplary model is not considered, as such interventions are considered as a means to an end rather than an end in itself. That is to say, the IMF was established to serve a technical and adjunctive/supportive role rather than for the creation of an 'ideal type' macroeconomic and monetary policy model. For this reason, attention is contextually placed on the role of the IMF in development finance and its use of conditionalities as part of its lending activities[5].

Likewise, with the aim of conceptualising policy compatibility (research aim 4), after giving an overview of national factors accounting for socioeconomic convergence (research aim 2) and drawing *ex ante* convergence hypothesis, focus is shifted to linking IMF interventions to national similarities at different time periods. This is essentially aimed at developing testable hypothesis on the possible relationships between the presence of an IMF intervention and country-specific factors, as well as the resulting impacts on the degree of cross-national socioeconomic convergence. To achieve this, an application of the 'goodness-of-fit' hypothesis, which holds that the smooth adaptation to external policies depends on the degree to which these fit with existing national policies and institutions (Duina,1997; 1999), is applied to test for a misfit argument based on country-specific variable threshold stability and the direction of variable movement. Here, stability in variable thresholds signify stability of

---

[5] As discussed in Chapter Five, based on the clustering results, it becomes evident that countries sharing geographical borders become similar over time. This was identified as a result of regional agreements or cross border arrangements; a growing similarity may emerge across neighboring countries. As such, this is also factored into the analysis of convergence.

variable trends over time. That is to say, when a variable score for a cluster (or group of countries) consistently remains above or below threshold, across different time points.

Although the goodness-of-fit hypothesis has been criticized for its extensive focus on the ease of policy adaptation (Knill & Lenschow, 1998; Haverland, 2001; Börzel & Risse, 2003; Falkner et al., 2005; Mastenbroek & Kaeding, 2006), this research places particular emphasis on policy misfit by looking at how variable changes occur when IMF interventions are considered. As scholarly work suggests (Hansen & Scholl, 2002; Börzel & Risse, 2003; Börzel, 2005), an assessment of misfit should also be considered at not just the policy level but also the institutional level. For this reason, a detailed analysis of institutional and policy compatibility is conducted - by focusing on comparing IMF policy documents within ongoing national policy reforms and existing institutions or national mediating factors (Mastenbroek & Kaeding, 2006; Mastenbroek & Keulen, 2006) – between an IMF intervention and domestic policy and institutional settings.

1.5. Conceptualizing Policy Compatibility:

With the aim of conceptualising policy compatibility, this thesis applies the 'goodness-of-fit' hypothesis to test for a misfit argument. To reiterate, the 'goodness-of-fit' hypothesis holds that the ease of adaptation to an external policy depends on the extent to which these external policies fit with the national policies and institutions (Duina,1997). Here, emphasis is placed on the period/duration of policy adaptation rather than the domestic context (Duina,1999). Following critics of this viewpoint, which have shown that domestic preferences and beliefs should be brought into the theory building and analysis of policy misfit (Knill & Lenschow, 1998; Falkner et al., 2005; Mastenbroek & Kaeding, 2006), this research reintroduces the term 'policy compatibility' as a conceptual, and methodological approach, for

the assessment of 'goodness-of-fit'. As emphasised in its utilization of an abductive approach[6],
to be able to assess policy compatibility, the following hypotheses are emulated from Heinze
& Knill (2008) and tested at the data analysis stage (Chapter Five).

<u>Hypotheses:</u>

H1. Socioeconomic Convergence Hypothesis

- The greater the similarities in socioeconomic settings (conditions[7]/problem pressures[8])
  across 'n' countries at a point in time (t_o), the more likely it is that variable threshold
  scores in certain macro socioeconomic indicators will converge over time(t_1).

H2. Policy Intervention Mechanism and Convergence Hypothesis

- The implementation of an IMF intervention is a sufficient, but not necessary, condition
  for convergence in variable threshold scores over time across IMF interested areas.[9]

H3. Domestic Preference Hypothesis

- The ease of adaptation to an IMF intervention depends on the extent to which policy
  conditionalities fit with national policies and institutions.

H4. Policy Capacity Hypothesis in the Context of Convergence

- Similarities in the policy capacity between 'n' countries at a point in time (t_o), would
  lead to convergence in variable scores over time (t_1) under the influence of IMF
  interventions.

---

[6] See Chapter Four for a discussion on the Research Methodology

[7] In this research, national 'conditions' are based on the similarities or differences identified in the cluster QCA results.

[8] This is based on the theoretical assumption that policy transfer and as such convergence occurs when countries face similar problem pressures (i.e. in this case the in ability of countries to stimulate development assistance and foreign direct investment etc)

[9] i.e. as reflected in its mission statement: reducing inflation, stimulating development assistance and foreign direct investment. However, given that the IMF performs an adjunctive/supportive role, this thesis also considers the fact that stability in variable threshold scores could be a result of an IMF intervention, but IMF interventions are not necessary for stability - while considering counterfactuals (variable instability).

Guided by the research aims and analytical framework (Figure 1.1), the first hypothesis (**H1**) considers the baseline assessment of convergence by evaluating how country-specific factors may have an impact on convergence (sigma convergence). In identifying the causes and conditions for cross-national convergence, observers have placed emphasis on the similarities or otherwise between countries as influencing discussions on whether to transfer a policy (Heinze & Knill, 2008). Policy transfer is likely to occur when countries share similarities in the problems they face and/or similarities in their domestic settings (i.e. similarities between the place of policy origination and policy destination). In cases where similarities are high, policy interventions are likely to result in convergent policy outcomes.

Contextually, socioeconomic similarities also represent shared policy-specific challenges countries are confronted with. At this stage (**H1**), focus is placed on the fact that cases are collectively considered as low income or emerging economies, and as such, are faced with similar socioeconomic problems in their attempt to climb up the ladder of development (through the achievement of the MDGs). Thus, a convergent effect is expected in their pursuit of the MDGs – delta convergence. As such, **H1** provides a baseline assessment of convergence to contextualise a realistic evaluation of IMF intervention impacts and derive justifiable conclusions for the research aims (**A2** & **A3**).

The second hypothesis (**H2**) considers the role of the IMF within the context of development assistance and is linked directly to the second and third research aims (**A2** & **A3**). It reflects convergence in variable trajectories/trends for specific macro socioeconomic indicators that the IMF associates with stability over time. Given the mission of the IMF (reducing inflation, stimulating development assistance and foreign direct investment), **H2** seeks to determine whether the presence of an IMF intervention influences the baseline assessment of socioeconomic convergence identified in **H1.** Or, whether the presence of an IMF intervention ensures stability in variable threshold scores in an IMF specialised area

14

overtime. To gain a deeper understanding of the findings from **H1** and **H2**, the third and fourth hypothesis (**H3** & **H4**) consider the domestic policy settings/preferences. **H3** considers the implementation of an ease of adaptation. This is explained as the implementation of *ex ante* IMF conditionalities. In such cases, countries are seen to change their domestic policies in order to reflect IMF standards. These *ex ante* changes in domestic policies are aimed at guaranteeing the disbursement of loans and are usually implemented before further adjustments are made (IMF, 2018).

In cases where national actors alter their domestic policies before monetary assistance is received, it is assumed that a high level of domestic policy and/or institutional misfit occurred – as argued in the goodness-of-fit hypothesis. Likewise, in cases where no immediate/ex ante changes to domestic policies is observed, it is assumed that there is a level of 'fit' between the domestic policies and/or institutional sittings of the soliciting nation and the policy conditionalities of the IMF. Nevertheless, for a realist assessment of policy compatibility, **H4** considers the variations in the national policy capacity of countries and the influence this could have on an IMF intervention outcome.

1.6. Research Contributions:

This research develops a conceptual framework for policy compatibility. In practice, it contributes to the improvement of the theory and understanding of coercive policy transfer, ensuring that policies implemented coercively deliver positive policy outcomes. In addition, the thesis contributes to quantitative research methodology and development finance analysis as it goes beyond the simple application of standard quantitative methods and integrates cutting-edge configurational analysis to capture complexity. Theoretically, the thesis innovates the literature on policy transfer (Evans & Davies, 1999; Dolowitz & Marsh, 2000), policy diffusion (Meseguer, 2005; Shipan & Volden, 2008), and lesson drawing (Rose, 1993; James & Lodge, 2003) by exploring in detail coercive policy transfer. This research informs not only

the IMF but other supranational bodies[10] and global financial institutions that stimulate policy convergence using coercive policy transfer.

1.7. Summary

This chapter summarised the state of the art by acknowledging the policy effects of globalization when considering issues regarding policy compatibility. It observes that, through the process of globalisation, a new policy construction that transcends the notion that the nation-state is the key policy-making unit has emerged. This has challenged or supplanted the authority and autonomy of the state as policy processes or policy developments now cut across national boundaries. Tampering with the existing policy and/or institutional equilibrium of states, this has raised questions regarding how well external policies fit with domestic preferences. With the aim of assessing this, the goodness-of-fit hypothesis was used to explain policy compatibility. The first part of this thesis (Chapters Two and Three) builds on this assumption and addresses the first research aim (**A1**) as it analyses the domestic implications of global policy structures.

Chapter Two provides a detailed discussion on the interactions between globalization, policy transfer and convergence. It utilizes the literature on these three themes to theorise coercive policy transfer by looking at the various locations and modes of policy transfer as well as the power relations that may emerge between transfer agents. From this, Chapter Three provides a discussion on the context within which the thesis observes the application of coercive policy transfer. Thus, policy prescriptions for the achievement of socioeconomic development. In this Chapter, the thesis brings forward a discussion on the concept of development, development assistance and the use of policy conditionalities by development finance institutions. Focus is then placed on the role of the IMF in development assistance

---

[10] Such as the European Union (EU), the Organization for Economic Co-operation and Development (OECD), United Nations (UN), and African Union (AU) inter alia.

lending. Here, an observation is made regarding the IMFs use of coercive policy transfer alongside its lending activities. However, outcome effects are inconsistent. Additional assessment of empirical evidence from previous studies on the development assistance and socioeconomic growth relationship show that the adaptation of a particular methodology – in terms of data sources, data samples, method(s) of date analysis, etc. – strongly influence the analytical results.

Due to the cloudy nature of evidence suggesting the impacts of development assistance, the second part of this thesis (Chapters Four, Five and Six) highlight the adaptation and application of a realistic approach to the evaluation of IMF intervention outcomes on convergence. In Chapter Four, the research methodology and conceptual framework are discussed. Here, consideration is given to the application of Dynamic Pattern Synthesis (DPS) and documentary analysis for the assessment of the dynamic forms of external policy effects on convergence.

Utilising the methodological approach and the conceptual framework, Chapter Five applies the DPS method to the quantitative assessment of convergence across a sample group of low-income and emerging economies and considers the impacts of IMF supported arrangements. This addresses research aim two (**A2**), as well as the first and second hypothesis (**H1** and **H2**). Synthesizing the quantitative results with the theoretical framework, Chapter Six provides a documentary analysis of IMF policy interventions in the most converged cases to assess interactions between the domestic settings and IMF interventions (**H3** and **H4**). Additional qualitative data reflecting the policy capacity of these cases is also used alongside the document analysis. This provides a realistic evaluation of IMF intervention outcomes on socioeconomic development convergence and variable threshold scores over time across IMF specialized areas in selected cases (**A3**). Focusing on the findings from the above, Chapter Seven provides a discussion on the conditions determining compatibility. It highlights the

policy impact of the IMF as evident when considering its approach to policy transfer and the domestic conditions. Consequently, an attempt is made at conceptualising policy compatibility (**A4**). From this, additional conclusions were drawn with policy recommendations.

Part One

Global Structures and Domestic Implications

Chapter Two

Globalization, Policy Transfer, and Convergence

2.1. Globalization in the Context of Public Policy.

In the last decade, globalised cross-border exchanges have increased extensively (Scholte, 1997). This illustrates the growing interconnectedness and inclusiveness between societies (Held, 1997). Jones & Newburn (2002) also acknowledge that factors beyond the nation state are influencing and shaping domestic policies. Thus, the viewpoints of policy-actors, especially in the context of globalization and cross-border interactions plays an important role in the formulation, implementation, and evaluation of domestic public policies. This is because globalisation is not limited to the movement of people, goods and/or resources, but also policy ideas. Here, the knowledge of policy actions and their implications across borders influences the actions of policy-actors domestically. Rose (1991) notes that every country has problems. However, these problems are not uniquely restricted to one nation. Hence, policy-actors learn from their counterparts facing similar problems. Moreover, the failure of other governments' policies provides lessons about what not to do (Rose, 1993).

Due to globalisation, it is widely acknowledged that advanced industrial societies face related problems and are inclined to solving such problems in similar ways (Bennet, 1991). In contemporary comparative public policy, globalization and public policy are best differentiated to explain the independence and interrelations of both concepts. Globalization can be used to identify how policies are transferred from one geographical political jurisdiction to another. Policy transfer can therefore be characterized as an instrument for globalization. It is however imperative to acknowledge that these two concepts are intertwined. Policy transfer can act as a stimulus of the globalization processes that leads to 'lesson-drawing'. In a similar way, for policy transfer to occur there must be interactions between nations. For Hay (2008), the

relationship between these phenomena can be conflicting as domestic policy objectives may be impaired by global decisions.

Society has witnessed the growing influence of global institutions like the United Nations (UN), International Monetary Fund (IMF), World Bank (WB), and the World Trade Organization (WTO) among many others. Similarly, regional integrations like the European Union (EU), African Union (AU), Association of Southeast Asian Nations (ASEAN), and North American Free Trade Agreement (NAFTA) in addition to many others, have emerged in almost every part of the world. These institutions have progressively globalized the world and, to some extent, interfered with the domestic policy framework of their member states. The challenge, however, lies with the increasing complexity in socio-economic systems (Haynes, 2017) on a global political scale (Alberts, & Czerwinski, 1997; Steger, Amann, & Maznevski, 2007; Alter, & Meunier, 2009; Harrison, 2012). This begs the question of whether the interactions between globalization and the domestic public policy making process provide a solution to improve the policy-making process or rather contribute to this complexity. From this perspective, this chapter discusses the literature on globalization and cross-national policy convergence. First, it explores the interactions between the 'global agora' (Stone, 2008. p. 12) and the nation-state through the process of globalization. Subsequently, the chapter examines the concept of policy transfer and convergence as well as the role of power in coercive policy transfer.

2.1.1. Defining Globalization

Due to its all-encompassing nature, there is no single definition for the word globalization. Maranga, Kennedy, Madison, & Denise, (2017) noted that globalization has experienced an array of changes and developments, and it is influencing 21st Century organizations. Globalization "is not a single concept that can be defined and encompassed within a set time frame, nor is it a process that can be defined clearly with a beginning and an

end" (Stromquist & Monkman 2014, p.3). Archibugi, Held, & Köhler, (1998, p. 30) state that, "globalization is best understood as a spatial phenomenon, lying on a continuum with "the local" at one end and "the global" at the other." Thus, globalization is not a new phenomenon. Earlier studies on this phenomenon revolve around the idea of global system by Sklair (1991); global culture by Robertson (1992); and global modernity by Featherstone et al., (1995). Hensby & O'Byrne (2011) described globalization as a process of international integration that supports the view of the world as a 'global village'. Masson (2001) also defines globalization as the increased integration of economies, reflected by increases in trade, capital, investment and migration flows.

Similarly, Drezner (2001) noted that globalization is a collection of innovations that have significantly lessened the boundaries between political, economic and cultural trade. Stromquist & Monkman (2014) also acknowledged that globalization can be discussed in political, economic and cultural terms. As pointed out by Maranga, et. al., (2017), some often relate this phenomenon to the cross-geographical mobility of people and the popularization of a phrase which surfaced only fifty years ago as a result of the increasing improvement of innovative technology, especially communication technology such as the internet. For Hay (2008, p.6) globalization is best understood by differentiating it into what he considered the four most obvious pairing. These are:

(i)   Nation vs. Global (referring to the level at which the centre of gravity of the world system might be seen to lie and the primary character of the cultures, economies, and polities within that system);

(ii)   International vs. Global (referring to the character of supranational decision-making processes and specifically, the extent to which these might be seen as trans- rather than merely international in form);

(iii)   Regionalization vs. Globalization (referring to the precise geographical scope and character of any particular process of integration);

(iv)   Protectionism/closure/internal orientation vs. Globalization as external orientation (referring to a policy-making orientation and a set of policies consistent with such an orientation).

Linking to the above descriptions, globalization in the context of this thesis will focus mainly on its public policy implications. Therefore, drawing on Held, McGrew, Goldblatt, & Perraton, (2000) and Howlett & Ramesh, (2002) conceptualisation of globalisation as internationalisation, globalization in this thesis refers to a process of political, economic and socio-cultural cross-border exchanges and amalgamation within the public policy domain affecting the orientation of policy actors. For Moran and Wood (1996, p. 125) "Internationalization is a process through which the authority and autonomy of the state is challenged or supplanted by structures, process or policy developments which cut across national boundaries".

Nevertheless, national problems are not restricted to geographical boundaries and as such similar solutions may emerge (Bennet, 1991; Rose, 1993). Audretsch, Lehmann, Richardson, & Vismara (2015, p.1) state that "the world is growing ever-more interconnected and because of this world's greater connectivity, there comes a slew of more problems, but also a greater variety of available policy solutions as countries can look to one another." Indeed, climate change can be an obvious example of a global challenge requiring collaborative endeavours to tackle it. However, it would be difficult not to argue that neoliberal globalization (Scholte, 2005) is behind the growth of vast inequalities, natural resource depletion, and man-made climate change itself (Islam, 2013). The 1960s saw a rapidly expanding awareness of threats to the natural environment, the emergence of the modern environmental movement, and the development of governmental policies for environmental protection. With the rise of

neoliberalism, these became defined as impediments to economic growth and competitive disadvantages for the countries and other jurisdictions that adopted them (Parr, 2014; Gunster, 2017).

From this perspective, globalization can, therefore, be a contradictory force as it provides both policy solutions to societal issues and causes some socio-political, economic and environmental concerns. Through the process of policy learning, governments have adopted policies from neighbouring countries to solve domestic issues. An example of this can be seen in the impact of American ideas on British social policy (Hulme, 2006) such as crime control policies (Newburn., & Jones, 2007). This is also evident in recent campaigns for free healthcare policies in developing countries (Lagomarsino, Garabrant, Adyas, Muga, & Otoo, 2012). Similarly, these collaborative incentives have helped solve catastrophic outbreaks such as the case of Ebola in West Africa. Yet, in the mist of the global pandemic (COVID – 19), countries have opted to take different and nationally defined approaches to tackle the pandemic whilst others have engaged in openly challenging institutions like the WHO and boycotting efforts to find collective, global, solutions.

As such, academics like Beck (2015), Cohen (2012), and, Hirst, Thompson, & Bromley (2015) amongst many others may contend that globalization can be disadvantageous as it tampers with the sovereignty of nation States. Here, through the establishment of multilateral corporations (facilitated through globalization) domestic economic activities are influenced by externalities such as trade relations. These externalities also consist of global trade unions that claim to promote price stability via supply agreements. The most popular example of this is the Organization of the Petroleum Exporting Countries (OPEC). Yet, commenters argue a detrimental effect of these organizations on domestic corporations (Narula, & Dunning, 2010; Lundvall, Joseph, Chaminade, & Vang, 2011). Earlier studies by Hall (1992) also accentuated the harmful influence of globalization on cultural identity. Likewise, Yusuf (2008)

acknowledges that globalization involves the exchange of ideas. This raises apprehensions about the increase in materialistic values.

Domestic policy frameworks have also been strongly influenced by cross-border interactions. Through multinational collaborative memberships such as the UN, and regional economic unions like the EU, national policy formulation within member States are set to be consistent with the policy targets of these multinational collaborations. As such, there is a need to understand the interactions between the domestic public policy-making process and globalization.

2.1.2. Interactions between Globalization and Domestic Public Policy-making Process

The concept of public policy is derived from the activities of politics and governance. Politics is the process by which societies work out the various ways in which they organize and control their populations (Colebatch, 2002). The traditional notion of public policy is that it has always been initiated within the state or by its governmental institutions. As defined by Cochran et. al., (1999, p. 18) "public policy refers to actions of government and the intentions that determine those actions". Public policy can also be whatever government chooses to do or not to do (Dye, 1992). Similarly, Cochram & Malone (1995) explained public policy as political choices for implementing governmental agenda to accomplish societal goals. These definitions show that the relationship between government and society is accentuated through public policy. Likewise, as put forward by Woolley (2008), a significant trait of public policy is that it not only addresses the needs of citizens but also has an impact on their lives. Although debatable, public policy is designed to tackle socioeconomic problems and resolve them. These policies are ideally limited within the geographical jurisdiction of the state. This is because nations differ in culture, economic and political institutional structures among many others. The distinctive nature of each society should be reflected in its public policies and public policy process. As such, this process should be predominately undertaken within the state, either

through its legislative or executive arms of government. This stresses the fact that public policy and its processes are embedded within the culture of the society.

The public policy-making process involves a complex procedure containing numerous elements that determine a policy (Cochram, et. al., 1999). In this sense, public policy-making usually contains various decision-making processes and action or inactions. Easton (1953, p. 130) describes policy as "a web of decisions and actions". In other words, policy can be described as a course of action or inaction rather than specific decisions or actions (Heclo, 1972). Public policy-making does not involve a single decision but rather a sequence of decision-making processes aimed at addressing an issue. As Hill (2013) puts it, policy-making constitutes an intricate attempt to settle a policy problem. The public policy-making process involves numerous interrelated procedures, most commonly referred to as policy-making stages (Jenkins, 1997; Hill, 2013). These stages are sometimes perceived to be a continuous cycle and never-ending (a web of decisions).

Figure 2.1: An Example of the Public Policy Cycle Approach
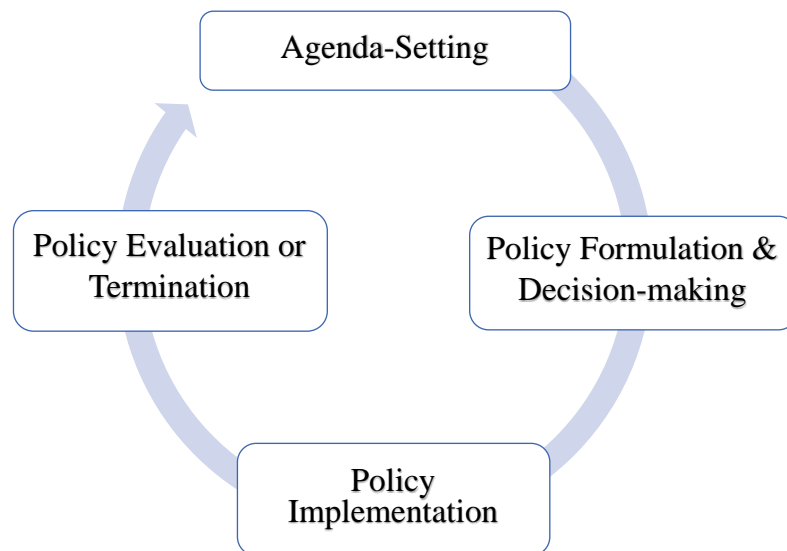
Note. Figure presentation of the policy cycle. From Fischer, F., & Miller, G. J. (Eds.). (2006). Handbook of public policy analysis: theory, politics, and methods. crc Press.

As presented in Figures 2.1 (above), the public policy process involves the continuous analysis of societal issues and evaluation of already existing policies in order to ensure their effectiveness (Howlett, Ramesh, & Perl, 2003; Colebatch, 2006; Jann, & Wegrich, 2007). Juma, & Onkware (2015, p.830) indicated that public policy is "a multifaceted discipline". This results from the various forms policy may take (law, regulations, or a set of all regulations and laws that govern an issue, area or problem). This process consists of "activity that cannot be adequately considered apart from the environment in which it takes place" (Juma, & Onkware, 2015, p.830). The policy cycle approach to the public policy process emphasizes a logical succession of stages.

The standard theory of the public policy process consists of a continuous revolving process. It has four main overlapping stages: First, Agenda setting (problem recognizing and issue selection), as the name indicates, at this stage policy actors identify an issue through public opinion or opinions expressed to the elite about discontent with a current situation. The concerns are then outlined and articulated by individuals and institutions such as the mass media, interest groups, and public outcry inter-alia. Numerous problems may exist within a society and problems can be identified as not meeting the political agenda. Not every issue makes it to the agenda-setting stage as some societal problems may gain or lose public and elite attention. Second, at the policy formulation stage, policymakers discuss the suggested methods for correcting problems identified during the agenda setting process. This normally involves choosing from various alternatives to ensure the best possible policy outcome. Following the policy formulation stage, policies are then legitimized or authorized at the policy adoption stage. This is done mainly through parliamentary proceedings in a democratic state. Third, the policy is then executed at the policy implementation stage. This implementation could either be radical (drastic) or incremental (gradual), inter alia. Subsequently, in the fourth stage, policies are evaluated according to various standards to ensure policy effectiveness. A

27

traditional method of policy evaluation is to measure output and outcomes. Thus, intended consequences against the actual effects. If these intended consequences are not achieved policies are then revised or dismantled and the policy-making process is started all over again. These stages highlight the multifaceted nature of the public policy-making process.

Figure 2.2: An Example of the Public Policy Stage Model
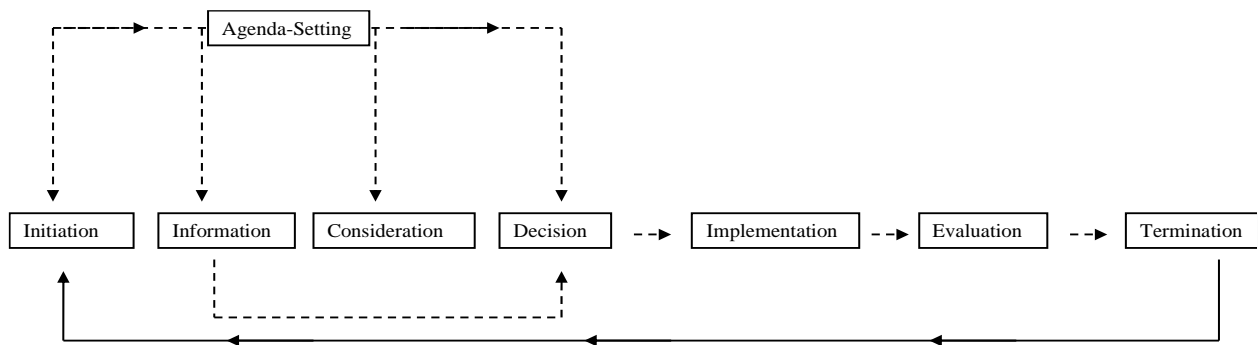
It should also be pointed out that, whereas the policy cycle suggests, to some degree, a strict sequential approach to the policy-making process, the stage model (Figure 2.2 - above) provides a more realist depiction for the policy-making process because it acknowledges that some stages may be omitted, or policy discussions can be accelerated. For instance, as illustrated in Figure 2.2, the various aspects of the agenda setting stage can lead to policy implementation. Policy-making within the agenda setting stage does not necessarily have to be initiated, informed, and considered before a decision is made to be implemented. In the same way, during policy implementation, something can go wrong, or social structures and/or institutions may not be conducive for implementing such policies. As such, there may be a need to change or terminate the policy. This can be done without necessarily evaluating it. This

emphasizes Lindblom's (1979, p.195) notion of the public policy-making process as an incremental process of 'muddling through'.

Jann, & Wegrich, (2007) acknowledge that, although studies on the policy-making process have provided an insight into policy-making, they have generated an increasing debate regarding the policy-making framework. For example, focusing on the public policy formulation process and its implementation, Kenis & Schneider (1991) indicated that, in reality, the variations between decision makers and implementers question the authenticity of both models. Equally, Longo (2013) recognizes that modern discussions on the domestic policy processes identify the emergence of external policy actors. Here, membership to political and/or economic unions like the EU as well as various regional integrations are seen to affect the domestic policy-making processes of member states.

Additionally, it should be noted that the idea of a chronological or sequential approach to public policy-making as suggested in both the cycle and stage models (Figure 2.1 & Figure 2.2) is debated. These models of policy-making take for granted the concepts of 'bounded rationality' (Simon, 2000) and incrementalism (Hayes, 1992) amongst others. This 'ideal type' policy-making process is highly problematic, mostly because it does not exist in reality (Jann, & Wegrich, 2007; Hill, 2013). However, this thesis identifies the stage and cycle models of public policy-making as 'frameworks' or 'blueprints' for policy-making rather than an actual binding guideline. The continuously engaging deliberations within literature on the policy-making process provides two assumptions: The first suggests a broadly rational and systematic approach to policy-making; and secondly, an assumption that implies a 'complex' non-hyperrational approach to policy-making. This thesis is influenced more by the second position.

The public policy-making process is channelled predominantly towards providing solutions to societal problems. Here, the problem-solving activities of policy makers play a principal role. Globalization has however added an additional layer to the policy-making

process as membership to regional integrations necessitates member states' adherence to policies formulated at an external level. Thus, the state is re-configured by globalization (Stone, 2008) as national policy decision makers are now being described as policy 'takers' rather than 'makers'. This is reflected in a study conducted by Held, McGrew, Goldblatt, & Perraton, (2000) on global transformations. They pointed out that, the hyperglobalist movement contends that the rise in globalization is increasingly eroding and disintegrating the nation-state and lessening its power of policy-making.

Similarly, in tackling the prospective responsibility of evaluating policy coherence for development, Picciotto (2005) acknowledges that poorer countries are seen as policy-takers whereas the richer countries are seen to be policy-makers. Here, new forms of policy-making authorities are developing through transnational partnerships and multinational collaborations that coexist alongside states' individual and rational policy-making processes (Dolowitz, & Marsh, 2000; Evans, 2004). Daugbjerg & Swinbank (2015, p.429) also noted that the creation of institutions such as the World Trade Organization highlighted the inauguration of a 'new phase' in globalization as some of the decision-making authority of the state was transferred to these supranational authorities. This aspect of globalization is what some scholars would refer to as political globalization (Cerny, 1997; Stubbs, & Underhill, 2000; Germain, 2000). Due to the argument of this thesis, focus is placed on the role this aspect of globalization has played in altering the orientation of policy actors at the domestic level, and how domestic policies are seen to be consistent with such global orientations.

Taken contextually, globalization involves the transfer of some aspects of the decision-making authority from the state to these external bodies (supranational or transnational institutions) (Sassen, 1996). This may be beneficial to some extent or may raise conflicting interests regarding the core role of the State and the involvement of transnational institutions in the formulation, implementation, and evaluation of domestic public policies. These

30

interactions occur within almost every public policy sector, from health, economic, educational and social welfare policies, to environmental degradation, waste management, and climate change policies. Optimists of political globalization have argued that globalization has provided numerous benefits. These include the spread of democracy and democratic ideologies; inter-governmental activities against worldwide problems, for instance, the Sustainable Development Goals (SDGs); the provision of aid by developed countries to assist development in other states; the increase in Non-Governmental Organisations in achieving policy outcomes (humanitarian aid); and the widespread fight against corruption.

Although these merits of globalization seem encouraging, the negative implications of globalization are far-reaching. These include implications on the state and sovereignty, the growing importance of international bodies, the rise of non-state actors, the rise of cosmopolitan sensibilities and the growth of complex interdependence among others. For this thesis, focus is placed on five contextually relevant areas of conflicting interactions. These include: (i) The path dependency syndrome of the transnational and supranational external policy-making bodies; (ii) The domestic economic paradox of globalization; (iii) Complications in public policy accountability and decision-making; (iv) Loss of the State's sovereignty; and (v) The issue of policy compatibility.

Concerning the path dependency syndrome, Daugbjerg & Swinbank (2015) pointed out that the institutional values of external policy-making bodies may conflict with the values of the State. March and Olsen (1989) show that institutions are identified by their various characteristics as the members of these institutions seem to share a common purpose, the same code of conduct, norms, etc. which smoothens or limits interactions. The complex and rigid nature of the policy process ensures that State policies are aimed to combat societal issues and reflect the domestic culture, customs, and values of the State. Similarly, transnational and multilateral institutions (for instance the IMF and WB) would equally have institutional values.

31

Although these values, like ideologies, can change overtime they are normally embedded implicitly within the purpose for which they were established[11]. Consequently, these values are reflected in the policies they formulate and could offer conflicting ideologies with the domestic intrinsic values of policies within the implementing State (Stiglitz, 2007). Liew's research on China's engagement with Neo-liberalism emphasizes this concept of path dependency within the IMF and WB and presents the conflicting policy ideologies (Liew, 2005).

Likewise, an analysis of the underlying purpose for which these transnational/supranational policy-making institutions are established reveals that these institutions are characterised by path dependency which depicts the trajectory of institutional development (Daugbjerg & Swinbank, 2015). For instance, the Bretton Woods institutions which were set up in July 1944, are still operating. These institutions have been criticized for exhibiting path dependency with the implementation of 'one size fits all' policies (Stiglitz, 2007). These policies can be seen as outdated and ideologically orientated. Thus, the institutions symbolize a historical legacy that outlines consequences, benefiting some policy options over others. Using Kontopoulos' (1993) terminology, this demonstrates the 'totalizing logic' of these institutions[12].

From an inverse perspective, multilateral institutions and external policy-making bodies seem to formulate policies which are 'more advanced' for implementing states. This is demonstrated within developing countries. Here, infrastructure development, social institutions as well as basic social amenities may available to facilitate policy implementation. For instance, pressure groups like Transparency International, often seen as a central global

---

[11] See for instance Klemm, Eguíluz, Toral, & San Miguel, (2005) discussion on Globalization, polarization and cultural drift.

[12] The totalizing logic is used in this context to refer to overarching institutional logics that can hold influence on the undertakings of an institution for considerable historical time period. Examples include the total logics of capitalism etc. (Haynes, 2018)

movement for anti-corruption policies, may insist developing countries eradicate corruption by implementing certain policies. Yet the institutional structures that need to be in place for enhancement of these policies, such as the watchdog and whistleblowing institutions, are probably not in existence within these developing countries. The advocacy for openness in governmental activities can only be facilitated with the existence of a free and fair media.

In a similar sense, institutional divergence may emerge as a result of conflicting interest between external bodies and internal institutions. This conflict could be as a result of ideological differences. For instance, institutions such as the IMF and WB may suggest an open-market approach to running a domestic economy. Here, governments are advised to allow the influx of foreign corporations and privatization of domestic institutions so as to reduce government control over the market, in so doing, providing consumers with a variety of choices. However, implementing states may have set up institutions to aid in the domestication of services or may have adopted an import substitution initiative to reduce balance of payment deficits. This provides an emerging policy incompatibility between internal and external institutions as well as ideologies (Kelton, 2020). In addition to this, global institutions such as the United Nations may set international development goals to be achieved over a timeframe. These goals, for instance, the Millennium Development Goals (MDGs), and their successors in the form of the Sustainable Development Goals (SDGs), are sometimes considered as 'global wish lists' as the possibility of achieving such high standards may seem impossible (Saith, 2006; Tiwari, 2015). Here, international economic policy may contradict and conflict with international development.

Developing this point further, one may argue that, globalization has helped increase the involvement of smaller states on a global level since smaller states come together to form a cluster through which their collective needs are achieved. An example in the coalition of developing countries, is the Group of 77 (G77) which was established to support the collective

economic interest and craft a greater collaborative approach to negotiations in the UN (Kim, & Russett, 1996). This is however not necessarily the case because critics of political globalization have argued that globalization has facilitated a greater influence of big countries in the decision-making process of supra-national organizations. For instance, Hay (2008) acknowledged that through globalization, external policy-making institutions like the IMF and World Bank, have emphasized neo-liberal ideologies such as privatization and market liberalization.

The economic paradox of globalization can be seen as equivocal as it leads to some 'bittersweet' interactions between globalization and the public policy process in the domestic states. As discussed earlier, globalization can be viewed simply as a process of political, economic and socio-cultural cross-border exchanges and amalgamation. Economic integration which however involves the sharing of factors of production (as reflected in the EU) may benefit some and be detrimental to other members (Anderson, & Reichert, 1995). Bitzenis, & Andronikidis (2006), point out that, for instance, a major cost of joining the EU is that member states risk losing their monetary policy instruments. Likewise, in assessing the impacts of globalization, Hay (2008) indicated that globalization leads to economic integration which could, to some extent, benefit the State and at the same time be detrimental. While the influx of foreign corporations could provide a competition with consumers benefiting, local corporations may be unable to compete with foreign entities causing them to eventually fold (Skogstad, 2000). Similarly, state-owned enterprises may be unable to contest with these private entities and may eventually lose their market. This could further lead to loss of state-owned enterprises as well as the various socioeconomic setbacks that come with privatization. Paradoxically, competitiveness could lead the state to engage in other economic activities. An example of such can be seen in research done by Lopez, & Hathie, (1998) who examined the

impact of World Bank Structural Adjustment Programs and its effects on the peanut market performance in Senegal.

Arguably, as indicated earlier, membership to international governmental organizations like OPEC and the WTO amongst others could raise conflicting issues regarding the formulation and implementation of domestic policies. As stated by Skogstad (2000), economic globalization yields imperatives to be economically competitive, which emphasize demands for a retrenched public sphere and configuration of policy instruments and outcomes with those in other countries. This puts other countries at the heart of the policy and may not reflect domestic values and ideologies. This could further lead to a reconfiguration of economic policy instruments and actors within domestic states as they attempt to realign themselves with new policy targets. For instance, the European Union outlines policy targets for member states which are normally implemented domestically on an incremental basis. Some of these targets include emissions laws and waste management policies. While developed states like Germany and France may find these targets easier to achieve because the institutions and policy instruments required are present, developing member states like Albania, Bosnia and Herzegovina and Bulgaria may have to go through some structural and institutional adjustments as their existing domestic policy capacity maybe incompatible to achieve these policy targets and ensure policy coherence across EU members.

Given that public policy development involves an intense complex and somewhat rigid process, policy-makers undertake several procedures to ensure that policies developed provide suitable solutions to a specific societal problem. Here, the state seeks justifications for its policies (Weiss et. al., 1986). Hay (2008) notes that globalization has facilitated the privatization of certain public policy domains rending the state as less publicly accountable. Stone (2008) indicated that public policy has become trans nationalized. Consequently, national policy institutions no longer serve as the core domestic policy generating institution.

35

Here, in a democratic state where policy implications are measured by their domestic policy responsiveness, governments are rendered accountable for the policies they implement. However, with the advent of globalization and the involvement of secondary public policy generating institutions like the WHO and WTO, which dictate the scope of domestic policy frameworks for nations as a result of their membership. This raises the issue of domestic and international community policy accountability when policy outcomes are negative. Numerous examples exist of the IMF and WB promising economic prosperity to developing countries with disastrous consequences (see Easterly, 2000; Easterly, 2002; Shah, 2013).

Lastly, the interactions between globalization and the domestic public policy-making process has had a significant effect on the sovereignty of the State and its core role in the development of domestic public policy. Presumably, the state's capacity as a policy-making instrument is continuously diminishing and judged ineffective as membership to multinational corporations and international institutions constantly set the frameworks within which domestic policies are formulated. In assessing the effects of globalization on Canadian public policy, Skogstad (2000) identified a loss in the state's capacity as a policy-making instrument. Arguably, the assumed scope of action by policy actors within public policy formulating institutions domestically is lessened due to the actions or inactions of transnational institutions, international corporations, and supranational bodies. This is emphasized in what Marquand (2004) would call a 'decline of the public'.

Equally, Hay (2008) identified a diminishing role in the public policy-making capacity of the state as well as a decrease in its autonomous nature. This has resulted in the re-allocation of the role of the State to quasi-public policy bodies such as think tanks and from national to transnational institutions. In contradiction, for Stromquist & Monkman (2014) policymaking is predominantly the state's as it interacts with these transnational institutions when formulating domestic policies. However, in the development of public policy, the state

36

considers the repercussion of policies within its domestic context in addition to the impacts its policies may have on the international community. This could lead to conflicting interest as domestic policies may conflict internationally, representing a bottom-top policy clash. Similarly, international policy could also conflict with the domestic policies, representing an upwards-down policy clash.

As reflected in the discussions above, globalization can be the driving force of public policy learning (Hay, 2008; Stone, 2008). Although the public policy-making process in its generic sense can be seen to be complex and multi-layered, policy actors continuously search for solutions domestically as well as externally. Through the process of globalization, interactions between nation states has provided a collaborative approach to problem solving. However, integration between nation states eventually produces some unforeseen consequences as the decision-making power of nation states can be hollowed out. It is also observed that domestic policy actors seem to be experiencing a reallocation of their policy-making authority to these supranational bodies and regional integrations. In consequence, this has raised questions regarding the compatibility and/or synergy that exists between the domestic settings of implementing states and the policies formulated from these external policy-making bodies. As a result of this, the interactions between globalization and domestic public policy-making processes are sometimes incompatible. This places emphasis on the need to search for ways through which the disparities between the externally formulated policies and domestic policies can be reduced. Public policy analysts have raised questions regarding the role of policy learning in globalization (Drezner, 2001; Hay, 2008; Stone, 2008). This is discussed through the concept of policy transfer and convergence.

2.2. Public Policy Transfer and Convergence

Public policy involves a continuous process of complex stages to ensure policy effectiveness. This complexity in the domestic policy-making process is even more intensified

as globalization adds an additional layer of policy frameworks to public policy formulation. Globalisation has facilitated the development of socioeconomic and political integrations and provide a collaborative means to combat complex regional and global socioeconomic problems as well as advancing development. However, membership to these integrations ostensibly leads to alignment in national policy agendas towards the objectives of the external bodies. This has led to some form of policy convergence as member states are becoming more alike in their socioeconomic and political undertakings. As such, the interactions between globalization and public policy transfer do not necessarily produce positive policy outcomes. To ensure that the state implements policies that are legitimate and impactful, state policy actors continuously interact with non-state and state policy actors domestically and internationally (Dolowitz & Marsh, 2000). These actors include but are not restricted to think tanks, academic scholars, diplomats, and civil servants. The process of engaging with non-state actors is often described as a consultative process. This policy consultative process may include policy learning procedures.

The policy learning process is an activity whereby social issues are analysed within the context of similar issues and their existing policy solutions (Rose, 1991). This search for policy solutions could be conducted domestically or within a different political jurisdiction or across various time periods. The processes of selecting and implementing such policies can be identified as the policy transfer process. Research into the phenomenon of policy transfer has become increasingly important especially within the context of globalization. As pointed out earlier (section 2.1) policies made at a global level provide an outline within which policies are formulated and implemented domestically through a process of policy transfer. This is discussed next.

<u>2.2.1 Clarifying Terms: Policy Transfer, Policy Diffusion and Policy Convergence</u>

As acknowledged by van Gerven & Weiguo (2017, p. 246): "As the world economy, in particular, is transformed by new modes of production and trade, and as transnational corporations and institutions come to exercise more influence and power, so the capacity of national policy-makers to frame their own agendas is diminished. Public policy now takes place in a world system as well as in national political systems." Similarly, Jones & Newburn (2002) specified that factors beyond the nation-state are influencing and shaping domestic policies. This can be seen as a result of the rising influence of globalization and regional integrations that have increased interactions and interdependency between nation states (Dolowitz & Marsh, 2000; Evans 2004; Hay, 2008; Stone, 2008). As such, much of policy-making is based on similar policy developments in other jurisdictions both domestic and internationally. This process of 'learning from abroad' is commonly referred to as policy transfer. This thesis argues that globalization and the domestic public policy-making process can be effectively linked through the concept of policy transfer, the following subsection explores how these policy interactions and exchanges have led to a growing similarity in policy interventions as well as policy outcomes (convergence) across nations.

➢ <u>Policy Transfer and Diffusion</u>

Policy transfer analysis has increasingly become a key factor in the public policy and international relations academic and epistemic community (Benson & Jordan, 2011). According to Carroll & Common (2013), the increase in this phenomenon has caused a major rethink in the way that the formulation and implementation of public policy is understood. For Dolowitz and Marsh (1996) policy transfer refers "to the process in which knowledge about policies, administrative arrangements, institutions etc. in one time and/or place is used in the development of policies, administrative arrangements, and institutions in another time and/or place" (1996, p.343). In this sense, policy transfer refers to the process by which actors borrow

programmes and/or policies developed in one political setting to develop programmes and/or policies within another geographical setting. It involves the implementation or improvement of an existing policy in one political geographical setting to that of another.

For Evans (2018, p.2), "policy transfer analysis is a theory of policy development that seeks to make sense of a process or set of processes in which knowledge about institutions, policies or delivery systems at one sector or level of governance is used in the development of institutions, policies or delivery systems at another sector or level of governance in a different country". In their research on the micro-dynamics and macro-effects of public policy transfer, Hadjiisky, Pal, & Walker, (2017) acknowledged the existence of a large collection of academic literature regarding the phenomena of public policy transfer in various academic disciplines. It was based on this collection of literature that they categorised seven different ways public policy transfer has been discussed. These include literature under the following sub-headings:

Policy Diffusion, Policy Learning and Policy Transfer: This aspect of policy transfer research represents the origins of policy transfer studies from the publications of Walker (1969); Gray (1973); and Rose (1991; 1993) inter alia. Here, focus is placed on intra-state transfer and less attention is paid towards the mechanisms of transfer. Hadjiisky, et. al., (2017) point out that this approach was then adjusted and used in cross states comparative analysis as reflected in the seminar works of Dolowitz and Marsh who developed and framed the idea of policy transfer (see Dolowitz & Marsh, 1996, 2000; Dolowitz, 2004; Dolowitz, 2009). From this an extensive amount of literature has ever since surged regarding cross state policy transfer (see Evans, 2009; Massey, 2009; Marsh & Sharman, 2009: Dumoulin & Saurugger, 2010). Hadjiisky, et. al., (2017) further argue that, although Dolowitz and Marsh (2000) provided a conceptual framework for understanding both voluntary and involuntary transfer in addition to their influential factors, the principal observations in this research was that the "study of policy transfer analysis should be restricted to action-oriented intentional learning: that which takes

place consciously and results in policy action" (Evans, 2009, p. 244). This analytical bias was criticized by, among others Benson & Jordan, (2011, 2012) and Dussauge-Laguna, (2012) who argued that the narrow focus on voluntary policy transfer takes for granted the coercive imposition of transferred policies. In an attempt to capture this bias, this research seeks to contribute to the limited literature on involuntary policy transfer by exploring coercive policy transfer.

Development and Governance: Although policy transfer literature can be seen to have originated from the political sciences and policy studies discourse, an emerging inquiry about the role of policy transfer in the field of development economics is reflected in the works of the Bretton Woods institutions. Here, focus is placed on the use of similar economic reform policies – collectively referred to as the Washington Consensus – by these institutions within developing and transitioning economies (Rodrik, 2006; Woods, 2006a; Carroll, 2010). This perspective of policy transfer can also be seen in relation to the critiques raised against the IMF's Poverty Reduction Strategy Papers (Klugman, 2002; Craig, & Porter, 2003; Fraser, 2005). Hadjiisky, et. al., (2017) emphasize this body of literature has however raised some important points. First, this literature emphasises the position of prominent international organisations and global governance institutions. Second, it highlights the object of transfer – the policy paradigms as well as the policy instruments and programs, and implementation strategies. The third point places focus on the emergence of discussions on policy failure (failed transfer) and resistance as a result of ideological and contextual variations. Though not explicitly stated as failed transfer, this is emphasized in the literature of academics like Easterly (2000), Easterly and Vásquez (2013) and Stiglitz (2003, 2006) who criticize the activities of IMF and World Bank in developing and transitioning economies. In addition to this, Hadjiisky,

et. al., (2017) noted that an aspect of this literature also evolved from the focus on economics and markets to governance systems and public institutions[13].

International Relations/International Governmental Organisations: Although the earlier literature on policy transfer, diffusion and policy learning focused mainly on the movement of intra-state policy models and eventually across states, by the late 1980s the relationship between the domestic policy arena and international forces began to gain attention (Hadjiisky, et. al., 2017). This was as a result of the increasing interactions between policy actors in the development of domestic and international policies. Developments in international relations added to the works on policy transfer. These contributions stressed the role of government and non-governmental agencies in policy exchanges (Slaughter, 2009; Biermann & Siebenhüner, 2009) and reemphasised the role of international institutions in stimulating policy transfer (Stone, 2000) as new modes of analysis started to accentuate the distinctive institutional policy interests and agendas (Barnett & Finnemore, 2004; Ougaard, 2010).

*Global Public Policy Network*s: Closely related to the above but distinctively relevant, research into the role of global public policy networks has also contributed to the literature on policy transfer. Here, focus is placed firstly on the role of 'ideas' and their 'carriers' in transnational policy developments – epistemic communities (scientists and researchers, think tanks) – and how to critically assess these 'suppliers' of policy ideas (Haas, 1992). In this sense, when domestic policy makers are searching for information regarding a particular policy response they are influenced by their own personal or political ideological bias. In the same sense, these epistemic communities have their own limitations and biases. Similarly, they do not act alone as they engage with other experts and states through networks (Dunlop, 2009).

---

[13] It should be pointed out that the emergence of this change in analytical focus of policy transfer towards development studies plays a central role in the comparative case-based approach utilized within this research as it seeks to analyze the domestic impacts of coercively transferred policy in developing and emerging economies.

Taking into consideration these characteristics one can see how policy transfer can be analysed from an alternative perspective as focus could be placed on the complex nature of policy 'suppliers' and/or their interactions with policy 'implementors'.

Europeanization: Hadjiisky, et. al., (2017) point out that the study of the Europeanization process is a natural point of contact when referring to literature on policy transfer. This is because both frameworks place focus on the role of actors at different governmental levels. This body of literature concentrates on the 'adaptation pressures' of EU member states and the levels of 'fit' and 'misfit' between EU policies and the existing institutions and policies at the national level of member states (Olsen, 2002; Börzel & Risse, 2003; Mastenbroek, 2005). The literature on Europeanization has provided a new method to policy transfer analysis as in the Europeanization process, alterations at the domestic levels are ascribed to external EU pressures without always considering other possible sources of policy evolution such as economic trends, institutional borrowing between individual member states, international actors influence, etc. Here, focus is also placed on policy transfer interactions between EU member states as well as between the EU and public policy networks, emphasizing the multi-layered dimensions of policy transfer (Thatcher, 2014).

The literature on Europeanization has also added to the methodological approach to policy transfer analysis as it provides a fascinating case of the use of both 'hard' (conditionality) and 'soft' (capacity-building and technical assistance) power to ensure compliance. Likewise, the large number of member nations also offers a number of laboratories to explore the dynamics of transfer and diffusion (Hadjiisky, et. al., 2017). In addition to this, scholars like Cowles et al., (2001) and Baisnée & Pasquier, (2007) have emphasized the 'unorthodox' bottom-up approach to policy transfer which is evident in the EU. From this perspective, Börzel & Risse, (2012, p. 204) describe the Europeanization process as "active

processes of selective adaptation whereby the targets are not passive recipients, but active shapers of institutional change".

Policy Mobility: This series of policy transfer literature has immediacies in urban geography as it focuses on aspects like urban social movements, policing, gentrification etc (McCann & Ward, 2011). Advocates of this area of study identify a possible synergy with the literature on conventional policy transfer studies (Peck, 2011). As noted by Peck & Theodore, (2015. p. 5), here "the movement of policy is more than merely a transaction or transfer but entails the relational interpenetration and mutual interdependency of policymaking sites and actors". Peck & Theodore, (2015. p. 5), describe their notion of 'fast policy' as an attempt to capture what they assert to be both the increased intensity and velocity of policy transfer. Hadjiisky, et. al., (2017) explain that this perspective to policy transfer analysis can be seen in the context of the neoliberal crisis and coercion than in earlier literature on policy transfer. This intensity and velocity in policy transfer is also reflected in the outbreak of New Public Management reforms during the aftermaths of the 2008 global financial crisis and can be identified as one of the reasons why the literature on policy transfer has generated 'velocity', 'intensity' and 'density' as many transfer processes are about learning and searching for solutions. The pace of transfer is therefore highlighted in how quickly policy actors attempt to adapt policies.

The last sub-group and most contextually relevant is the literature on *socio-political conditions of policy transplantation*. This series of literature was inspired by sociologists. It focuses on the ways in which policy actors interpret and use – or otherwise – the policy being transferred within their social space. Even in the case of fast policy mobility some level of institutional connection, be it cultural or political, must exist between policy source and the destination. As noted by Hadjiisky, et. al., (2017, p. 14) this area of policy transfer inquiry is diverse as subjects revolve around the "international 'circulation' of academic texts (Bourdieu,

2002), institutional instruments and doctrines (Kaluszynski & Payre, 2013), cultural conditions for policy diffusion (Strang & Meyer, 1993), or the appropriation and local adoption of globally generated ideas and strategies, for example women's rights (Merry & Levitt, 2009)."

In this sense, policy transfer is treated like transplantations and is deeply dependent on the existing socioeconomic, political, institutional and cultural settings of the place of policy origination and implementation. Similar settings are likely to produce similar policy outcomes - leading to convergence. What is undetermined is how locations with varying settings may also produce similar policy outcomes. Accordingly, a contextual (context-sensitive) approach to the implementation, analysis and evaluation of policy transfer is essential (Peck & Theodore, 2015). This research takes this stance in its analysis of IMF policy interventions in low income and emerging developing nations in Sub-Saharan Africa and Latin America by taking into consideration the objects of transfer and their compatibility with the domestic setting of implementing states. Bender, Keller, & Willing, (2015) identified that the objects of transfer can either be policy goals; the content of policy; policy instruments/interventions; policy programs; policy institutions; ideologies; ideas & attitudes; as well as negative lessons; or a combination of these. Viewed this way, policy transfer can be interpreted from multiple perspectives (Stone, 2001).

Figure 2.3 (below) outlines the various geographical levels of policy transfer. At the sub-national level, policies are transferred between the sub-divisions of a nation. These sub-divisions are usually distinguished by a community with a similar culture and interest, and by administrative dependency. For instance, in a devolved state (Australia, United States, and the United Kingdom) where the central government of a sovereign state delegates powers to institutions at a sub-national level. Due to their semi-autonomous nature, counties are allowed to make their own policies as long as these policies are situated within the framework of the national constitution and/or policies developed at the national level. These policies could,

however, vary in terms of context. For instance, if policies are implemented using an incremental approach, some counties may be at a higher stage in the policy implementation process. This is normally reflected in policy frameworks developed at the national level. Walker, (1969) and Gray, (1973) research on the diffusion of legislations across American states provide examples on sub-national policy transfer. As such, policy transfer at a sub-national level usually occurs between regions and counties.

Figure 2.3: Geographical Hierarchy of Policy Transfer Locations
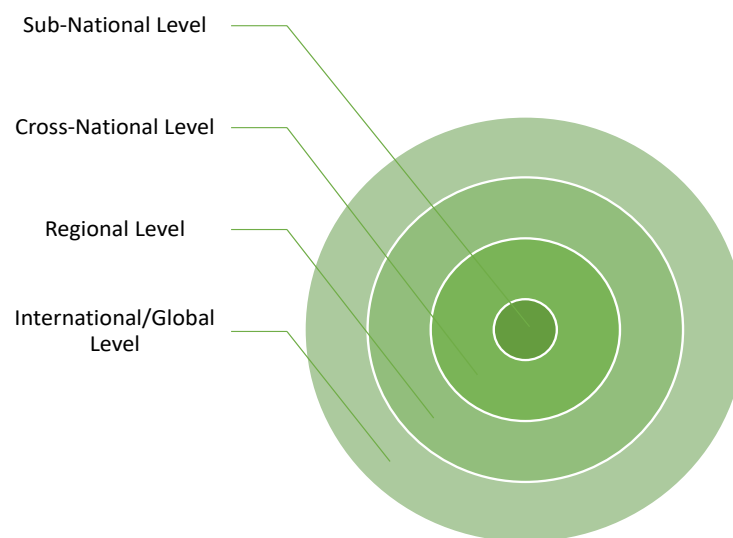
Note. Figure presentation of the geographical perspectives of policy transfer. From Evans, M., & Davies, J. (1999). Understanding policy transfer: A Multi-level, multi-disciplinary perspective. Public administration, 77(2), 361-385.

At the cross-national level, policy transfer occurs between nations. Here, policy actors look beyond borders for solutions to domestic problems. An example of this phenomenon is shown in research done by Jones & Newburn (2002) who studied the influence of the US on domestic crime control policies in the UK; and the UK 'prison work' agenda which can be said to have been inspired by the US (Jones, & Newburn, 2007). This form of policy transfer is

normally referred to as policy learning or lesson drawing (Rose, 1991; 1993). At the regional level, policy transfer can be seen to occur as a result of regional integrations (Farrell, 2009). Here, a nation's membership to a regional organization like the EU, influences policy actions downstream. In this respect, policy transfer is personified in this case by the Europeanization process[14]. Similarly, members of regional integrations may come up with a mutual goal which in turn may involve mutual policy initiatives. An example of this is reflected in the Vision 2020 of ECOWAS which can be seen as a target of the organization and as such all members of ECOWAS are inclined to make compulsory modifications in their policy formulation and implementation, as well as their institutional capacity (Economic Community of West African States, n.d.).

At the sub-national, regional, international and global levels of policy transfer, there is an upward-down policy transfer. Policies are transferred from a centre (where policy frameworks are developed) and then passed downwards to institutions at lower levels to implement. At the implementation stage, policies are implemented based on the 'hard' or 'soft' nature of policy implementation frameworks developed at the centre (Stone, 2004). Kennedy, Chan, & Fok (2011, p.44) indicated that "on the one hand implementation can be directed by legislation and regulatory monitoring with the possibility of sanctions for non-compliance ('hard' policy) or it can come in the form of recommendations, education campaigns and strong advocacy ('soft' policy)." Here, the intensity of policy compliance could reflect the degree of permitted control, legal frameworks (hard), as against negotiated frameworks (soft), as shown with policy conditionalities. This will be discussed further in proceeding sections. It should,

---

[14] Europeanization refers to: Processes of (a) construction (b) diffusion and (c) institutionalization of formal and informal rules, procedures, policy paradigms, styles, 'ways of doing things' and shared beliefs and norms which are first defined and consolidated in the making of EU decisions and then incorporated in the logic of domestic discourse, identities, political structures and public policies (Radaelli, 2003, p. 30).

however, be stressed that policy actors on Sub-national, Cross-national, Regional and International/Global levels are not limited to searching within their level when probing for policies to transfer. For instance, policy actors at the county level can seek to transfer policies in other nations and implement these policies at the county level (Dolowitz & Marsh, 2000).

As a result of the multi-layered nature of policy transfer, transfers occur at/and between every level (Evans, & Davies, 1999). It is however necessary to indicate that policy transfer can also be done on a basis of 'time sequence'. Thus, policies developed in the past to solve old problems can be revived and/or modified to be implemented within the context of a present situation. Similarly, negative policy implications also serve as deterrents for policy actors. Unsuccessful policies provide actors elsewhere with lessons of what not to do (Rose, 1991). Although scholars have outlined numerous variations of policy transfer (Bennett, 1991; Rose, 1993; Dolowitz, & Marsh, 1996; Evans, & Davies, 1999; Dolowitz, & Marsh, 2000; Benson, & Jordan, 2011). This thesis integrates Rose (1991) and Dolowitz & Marsh (2000) perspectives of policy transfer in its discussions. This is particularly relevant to this thesis because these perspectives place ample focus on the link between voluntary and coercive policy transfer as well as the links between policy transfer, policy convergence, and policy 'success' and/or 'failure'. All of which are fundamental to this thesis.

➢ Policy Diffusion

Policy diffusion is defined as "the process whereby policy choices in one unit are influenced by policy choices in another unit" (Maggetti & Gilardi, 2016, p. 90) or, "the process through which innovations are communicated through certain channels over time among members of a social system" (Rogers 2003, p. 11). Simmons & Elkins (2004) note that policy diffusion is influenced by international economic competition and the policies of countries with similar sociocultural features. In a narrow sense, diffusion is seen between top-down approaches (Bender, et. al., 2015). Here, according to Busch, & Jorgens (2007), policy actors

48

willingly and individually implement policies from other geographical jurisdictions. Hadjiisky, Pal, & Walker (2017) assert that earlier literature of policy transfer emerged within the political science research on how legislations were diffused across American States (Walker, 1969; Gray, 1973). Here, attention was placed on intra-state transfer of policy models and law with little focus on the instruments of transfer – see Table 2.1 below. Here, policy diffusion was narrowed down and applied in comparative policy analysis across states.

Stone (2012) puts forward that, literature on policy diffusion indicates that policy change occurs by 'osmosis' – contagious instead of chosen – and that it denotes a spread of policy models from a common point of origin. An example of this is reflected in the post-mid 1970's which saw changes in the IMF policy and an increasing use of conditionalities around neoliberal markets in 1980s (Vreeland, 2006). This approach to the studies on policy diffusion has however been condemned for its analytical neglect of the various policy actors and instruments that are involved in the transfer, although some exemptions can be made - such as Weyland's (2009) book on policy diffusion across social sector reforms in Latin America where focus was placed on the role of policy actors and bounded rationality. In a broader context, policy diffusion may result from external pressures as a result of interdependent and joint agreements for policy coordination. This may however result in policy actors involuntary implementing policies due to bilateral or multilateral agreements. Other studies on diffusion also make mention of direct and mediated policy diffusion where mediated diffusion is explained as the transfer through networks and communication flows (Busch, & Jorgens, 2007), and direct diffusion occurs on the bases of mass policy transfer. Here, when a larger number of political entities implement a similar policy, others are likely to do the same.

➢ Policy Convergence

Policy convergence on the other hand refers to "the tendency of societies to grow more alike, to develop similarities in structures, processes, and performances" (Kerr 1983. p. 3).

Within studies in comparative public policy, policy convergence would simply refer to the inclination of political entities to become similar in policy structures, processes, and performances. Consequently, policy convergence is usually annex with isomorphism – see Table 2.1 below (Knill, 2005). As defined by DiMaggio & Powell (1991. p. 66), isomorphism is a process of integration that causes one component of a population to look like other components that face a similar set of environmental conditions. With isomorphism, focus is placed on the mechanisms by which institutions become similar over time. Acknowledging these overlapping definitions, the distinctive disparity between policy convergence and isomorphism lies within their empirical focus.

Literature on the former tends to focus on increasing similarities in features of national policy while literature on the latter, by contrast, centres on rising similarities in the cultural and institutional structures of organisations. In this sense, it could be argued that policy convergence looks at similarities at macro level whereas isomorphism focuses on similarities at meso/micro levels. Taking this into consideration, Knill (2005. p. 768) defined policy convergence "as any increase in the similarity between one or more characteristics of a certain policy (e.g. policy objectives, policy instruments, policy settings) across a given set of political jurisdictions (supranational institutions, states, regions, local authorities) over a given period of time". Bennett (1991) also points out that, policy convergence could signify one of five things: a convergence of policy goals, a partnership to resolve common policy problems; a convergence of policy content, that is to say, administrative rules, regulations, etc.; a convergence of policy instruments; a convergence of policy intervention outcomes (positive or negative); and lastly, a convergence of policy style - e.g. the processes through which policy responses are adopted. Viewed in this way, policy convergence discusses the extent to which policy interventions and their outcomes become more similar to each other overtime. It should also be added that convergence may also emerge in an attempt to ensure policy coherence

(May, Sapotichne & Workman, 2006) as with the case of IMF poverty reduction strategy papers (see Craig & Porter, 2003).

Knill, (2005) remarks that academic scholarship on convergence and its related concepts provides an array of causal factors which could explain growing similarities (or otherwise) in policy goals, content, instruments, intervention outcomes and style. He classifies them into two categories: (1) causal mechanisms triggering the convergent policy changes across countries; and (2) facilitating factors which affect the effectiveness of these mechanisms (Knill, 2005). In relation to causal mechanisms emphasis is placed on factors such as similar or parallel problem pressures to which countries seek to address. These may include for instance a convergence of policy interventions to tackle poverty and whether or not there is convergence in the outcomes of such policies. Memberships to international or supranational organisations can also be seen as a causal mechanism as it leads to the harmonisation of national policies although this does not necessarily lead to 'outcome convergence' (see for instance Haynes & Haynes, (2016) discussion on the Euro currency project).

In addition to this, regulatory competition which may emerge from an increasing economic integration either regionally as with the EU, or globally as with the WTO, could lead to mutual amendment of national policy. Through the process of lesson-drawing and joint taskforces to combating social problems, information exchanges in transnational communications and global integrations has also led to a growing similarity (convergence) in national policies and to some extent their policy outcomes. Lastly, policy imposition (coercive policy transfer) by international organisations as well as economically powerful nations can lead to a convergence in policy interventions and the adjustments of national policies, leading to a convergence in policy instruments, interventions, content and possibly outcomes.

The second category, i.e. facilitating factors which affect the effectiveness of these mechanisms include factors that potentially affect the likelihood of convergence. These include

the characteristics of countries under investigation. In this sense, it is argued that convergence is more likely to happen in countries that share greater aggregate patterns of similarities in institutional structures (Knill & Lenschow, 1998), socioeconomic levels of development (Janicke, 1988), cultural values (Strang & Meyer, 1993) and geophysical environments. These place emphasis on the policy settings. Following this, policy content (i.e. the underlying characteristics of the policy) could also influence convergence. Here, focus is placed not only on the policy setting but also on the type of policy. The order of relevant policy concepts is highlighted in Table 2.1 showing their analytical and empirical focuses as well as their dependant variables.

Table 2.1. Policy Convergence and Related Concepts

	Policy Convergence	**Isomorphism**	**Policy Transfer**	**Policy Diffusion**
Analytical focus	Effects	Effects	Process	Process
Empirical focus	Policy characteristics and policy outcomes	Organizational structures	Policy characteristics	Policy characteristics
Dependent variable	Similarity change	Similarity change	Transfer content transfer process	Adoption pattern

Note. Emulated from Knill, C. (2005). Introduction: Cross-national policy convergence: concepts, approaches and explanatory factors. Journal of European public policy, 12(5), 764-774.

A further explanation of these concepts is illustrated in Figure 2.4. (below). Here, before policy transfer or diffusion occurs there must be a realization that a policy domain may need improvements or change. This awareness could either originate endogenously (within the nation state) or exogenously (outside the nation state). This assumption takes into consideration the multi-layered geographical locations policy transfer may occur (as shown in Figure 2.3 - above). On account of this, policy actors both endogenous and exogenous may look to other political geographical jurisdictions or previously implemented policies to identify possible alternative solutions to a particular problem. Although this may suggest a problem-solving

approach, it should be pointed out that transfer or diffusion may also result from a sudden awareness of better policy alternatives or a change in policy goals.

Upon identifying a possible policy solution, the policy is either transferred or diffused from a place of policy origin to the implementing state. The place of policy origin may vary in terms of location and time. For instance, in relation to the former, it could either be a supranational body, a specialized agency (WHO), an economic superpower and/or another political jurisdiction. Clearly, both concepts of policy transfer and policy diffusion hold a similar assumption (Simmons & Elkins, 2004) and both transfer and diffusion processes hence require that actors both domestic and external are informed about the policy choices of others (Strange & Meyer, 1993). Given these conceptual overlaps, diffusion is often equated with policy transfer (Kern, 2000; Tews, 2002). The effect of this process of policy transfer or diffusion may lead to policy convergence. Like policy transfer, policy diffusion usually denotes 'processes' (rather than results) that could consequently result to the spread of policy resemblances and similar outcomes amongst countries, policy convergence (Simmons & Elkins, 2004).

On account of this, for this research, policy transfer and diffusion are used interchangeably as the researcher seeks to focus on the coercive aspect of both themes, as well as identify possible convergences in policy outcomes. This all-encompassing approach is vital as the formulation, transfer/diffusion, implementation and outcomes of coercively transferred policy play an important role in the formulation of a compatibility model as convergence of policy outcomes may occur (or otherwise) despite variations in policy implementation and the extent of transfer. In this sense, given the time-series methodological approach adapted in this research (see Chapter Four), this research focuses on convergence as a process (growing similarity overtime) and an outcome (the emergence of similarity).

Figure 2.4: Explanation of Policy Transfer, Diffusion and Convergence within the Context of this Research
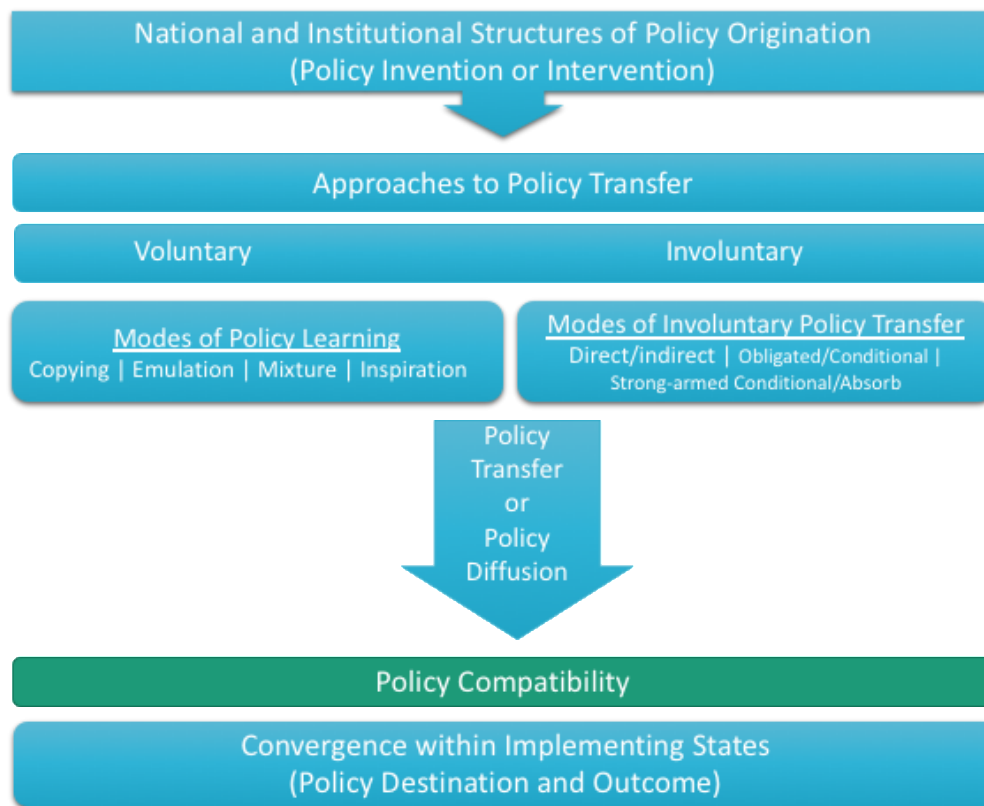
Note. Figure presentation explaining policy transfer, diffusion and convergence within the context of this research. Developed by researcher.

In this sense, this research uses macro socioeconomic data as well as a qualitative analysis of policy documents to discuss convergence by focusing on the two categories: (1) causal mechanisms triggering the convergent policy changes across countries; and (2) facilitating factors which affect the effectiveness of these mechanisms (Knill, 2005). It is argued that for policy transfer to successfully lead to policy convergence, policy compatibility must exist between the policy settings of both the institution or nation of policy origin and the implementing nations as well as the policy content inter alia. As reflected in Figure 2.4, policy compatibility occurs during the process of implementing a transferred/diffused policy so as to

obtain some form of convergence in policy outcomes. The various modes of policy transfer are discussed below.

2.2.2. Modes of Policy Transfer

As already established, policy transfer is a multifaceted phenomenon. As such, various scholars have provided alternative perspectives for analysing this phenomenon. The above focused on the geography of the policy transfer process. This sub-section goes further to discuss the various modes of policy transfer with reference to the transfer process. Rose (1991, p. 22) and Dolowitz and Marsh (2000, p. 9) labelled these: ways of drawing lessons and degrees of transfer respectively. These modes of policy transfer are illustrated in the table below (Table 2.2). They include Copying, Emulation, Mixture (Hybridization and Synthesis) and Inspiration. Copying occurs when policy actors adopt programmes that are in use elsewhere without any changes. In this sense, they adopt the exact policy for the same purpose without any alterations (Rose, 1991). Due to this, it is easily identified in the wording of the legislative bill which is usually unchanged (Dolowitz & Marsh, 1996). An example of this mode of policy transfer can be seen in the environmental protection law Canada copied from the USA in the 1980's (Xiao, & Dunlap, 2007). This was as a result of the amount of pollution from the USA which, due to their shared border, had an effect on Canada.

In an attempt to provide a detailed understanding of this, in his later work, Rose (2004, p. 81) further split this mode of policy transfer into two, photocopying and copying. He explained that, photocopying occurs when policy actors' hand over a precise replica of a policy with slight changes in the names of organisations as well as places and dates. Copying on the other hand refers to duplicating nearly every part of a programme already in effect in another place. It is important to note that copying is however not very common. This is due to language differences as well as socio-political and geographical differences. It is also difficult to find a policy that was copied word for word (Rose, 2005). However, within national settings (intra-

state policy transfer) such as decentralized and devolved states copying occurs more often (Rose, 2005).

Table 2.2: Modes of Policy Transfer

	Dolowitz & Marsh (1996)	Richard Rose (1991)	
	Degree of Transfer	Ways of Drawing Lessons	Explanation
Mode of Policy Transfer	Copying	Photocopying	Implementing exact/complete policy programmes already in existence either within another jurisdiction or another time frame.
		Copying	
	Emulation	Emulation	Implementing policy programmes that are already in use or have been used within another political jurisdiction with some adjustment either for different or similar circumstances.
	Mixture	Hybridization	Integrating elements of policy programmes from two different places to be implemented at home.
		Synthesis	Combining similar elements from policy programmes in effect in three or more different places.
	Inspiration	Inspiration	Policy programmes elsewhere used as an intellectual stimulus for developing a new programme.

Note. Figure presentation explaining the modes of policy transfer as discussed by Dolowitz & Marsh (1996) and Rose (1991). Developed by researcher.

With emulation, every detail is not 'copied and pasted'. However, policy actors accept that a particular policy elsewhere could serve as a 'best standard' for designing legislation at home (Rose 1991; Dolowitz & Marsh, 1996; Dolowitz and Marsh, 2000). Here, policy-makers take parts of a policy which is (or was) implemented elsewhere and transform/tailor it into their version so as to suit - probably - the socio-political, economic, cultural or environmental standards at home. That is to say, policies are not directly copied but serve as a benchmark for the creation and/or adoption of new policies (Rose, 1991). A suggested example of policy emulation can be identified in policy exchanges between America and Britain. In this example, British policy-makers emulated the American welfare system in what would be referred to as

'welfare to work' programmes. The granting of independence to the Bank of England was also emulated from America (Dolowitz et. al., 2000). Bennett (1991) noted that in the emulation of policies, foreign policies are employed as exemplary or model policies which are then modified and adapted. The other country's policy serves as a blueprint that pushes a general idea on the political agenda. It should, however, be noted that policies being transferred must have been successful in the country the policy is being transferred from, as policies are altered to ensure positive policy responsiveness within implementing states.

Also, hybridization occurs when policy actors integrate various aspects of two policy programmes from two political jurisdictions and implement them at home. These could be policy past or present from multiple or a single political jurisdiction (Rose, 1991; 2004). Similarly, policy synthesis occurs when policy actors combine similar elements from multiple policy programmes in effect in three or more different political jurisdictions to be implemented at home (Rose, 1991; 2004). Here, whereas with hybridization, policy actors combine aspects of policy programmes from country A and B to formulate policies domestically, with synthesis, policy actors can combine policies from numerous sources (i.e. locations, paradigms, instruments etc). Dolowitz and Marsh (2000) however categorized these two as one degree of policy transfer (mixture). Examples of this mode of policy transfer can be seen with the transfer of New Public Management (NPM) initiatives between the United Kingdom, the United States and Australia (McGuire, 2001).

In addition to this, inspiration occurs when policy actors unaccustomed to travel, view a familiar problem in an unfamiliar setting. This can inspire fresh ideas about what might be done at home. Here, actors' study familiar problems in an unfamiliar setting so as to expand ideas and inspire fresh thinking about what is possible at home. In relation to this, actors through exposure broaden their ways of dealing with problems. An example of this degree of policy transfer can be seen in the population control policy in Turkey (Dogan, 2015) which can

be said to have been inspired by that of China's One Child Policy (Fitzpatrick, 2009; Rosenzweig & Zhang, 2009). While the Chinese use their one-child policy measures to reduce population by focusing on lesser family sizes, Turkey on the other hand use this policy initiative to advocate for earlier marriages and larger families.

From the above, one can say that the distinction in these modes of policy transfer rests mainly within the link or level of resemblances between; (i) the country practicing the policy and the country transferring the policy; and (ii) the problems faced. That is to say, in copying, there should be a high level of resemblance both in relation to the problem and/or the country being copied and the country implementing copied policies. This is because not a single change is made to the legislation. As such, copying usually occurs at the sub-national level where devolution or decentralization has taken place (Rose, 2005). Equally, in emulating policies, there may exist some level of similarities between the country and/or problem being emulated and the implementing state. Gray (2005) argued that, as a result of significant disparities in the financial markets, it was impossible for Canada to implement an exact imitation of the USA Sarbanes-Oxley Act (SOX) policy. In principle, with mixture, similarities may exist either with regards to the problem or the domestic settings. However, due to the complex nature of the problem or the society within which the policy would be implemented, multiple elements of policy programmes must be combined to provide an effective solution. In this sense, positive lessons are taken out of already existing policies and combined to form a 'best fit'. Lastly, with 'inspiration', there is little to no similarity, but the problem may be familiar. Within this context, policy actors look to other policies to foster creativity and innovation.

In addition, the complexity of a policy intervention influences the mode of transfer. Here, complexity refers to adverse or unwanted secondary effects. This context, it symbolizes the latent (hidden) effects of policy implementation. While manifest (obvious) effects may be positive, latent policy implications may be detrimental. In this case, policies with adverse

effects are more likely to be copied while policies with greater adverse effects are likely to be emulated, mixed or looked upon for inspiration. For instance, while economic policies shaped towards centre-right political ideologies (e.g. privatization) may be seen to provide various economic benefits (manifest effects) outwardly, some imperceptive detrimental effects (latent implications) such as decreases in the quality of service provided may also emerge. Blumenthal and Hsiao (2005) research on the privatization of health care systems in China provides an example of this.

Indeed, many factors may prompt a country to engage in policy transfer, e.g. an ineffective policy or a lack of resources (Page, 2000), absence of policy (Rose, 1991), or technical incapability to implement a policy (Dolowitz & Marsh, 1996). Whatever the case, policy transfer has developed into an important instrument used by policy actors to study lessons from the experiences of other countries (Bache & Taylor, 2003; Evans, 2006; Stone, 2008). In their later research on the role of policy transfer in contemporary policy-making, Dolowitz, & Marsh (1996; 2000) noted that policy transfer can manifest in two alternative forms (i.e. voluntary or coercive forms - see Figure 2.5 below). In such situations, focus is placed on the willingness of policy actors to accept transferred policies. With voluntary policy transfer, actors willingly search and choose policy programmes to implement, whilst, with coercive policy transfer, actors are forced to implement policies as a result of pressure emanating from:

(i)   Membership to International Organizations (e.g. UN) and Specialized Institutions (e.g. WHO & WTO).

(ii)   Membership to Regional Integrations (e.g. EU & ECOWAS).

(iii)   At County level, as a result of policy frameworks developed at the National level.

(iv)   Conditionalities attached to aid from International Financial Institutions (e.g. SAP's by the IMF).

The earlier-mentioned modes of policy transfer (Copying, Emulation, Mixture, and Inspiration) are usually procedures used in voluntary policy transfer. For instance, with the case of China emulating UK risk-based management policies of contaminated land (Luo, Caney, Lerner, 2009) or UK emulation of US domestic crime control policies (Jones & Newburn, 2002). Coercive policy transfer and voluntary policy transfer may sometimes overlap. This is reflected within the context of influence. In this case, policy actors domestically are influenced (not coerced) by external policy actors to implement similar policies owing to convergence. An ideal example of this is reflected in the 'global' implementation of the Sarbanes-Oxley Act. SOX was implemented in the US to safeguard shareholders and the public from dishonest practices in enterprises, and to improve the accuracy of corporate disclosures. Although countries are not forced to implement this policy, due to its effectiveness and moral significance, countries such as the UK, China, Canada and EU member states amongst others have emulated this policy voluntarily (see for instance Akanchise, 2017).

Figure 2.5: Policy Transfer Continuum
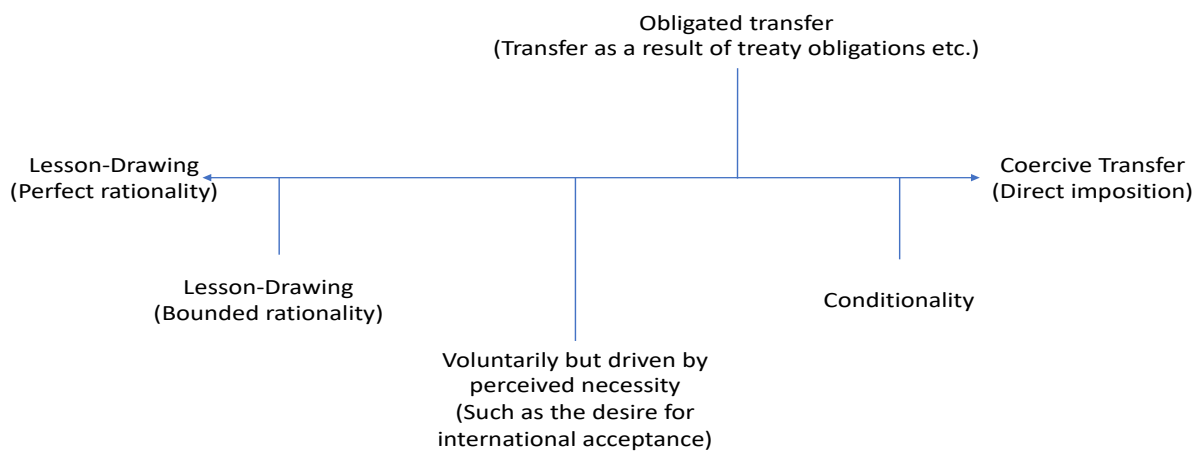
Note. Figure presentation of the Policy Transfer Continuum. Retrieved from Dolowitz and Marsh (2000, p.13). Learning

from abroad: The role of policy transfer in contemporary policy-making. Governance, 13(1), 5-23.

Alternatively, placing emphasis on its moral significance, countries that have not emulated this policy have been frowned on by international organisations and multinational corporations initiating an indirect style of coercive policy transfer. Another example of this can be identified in Genschel & Plumper's (1997) study of regulatory competition and international cooperation. Here, they argue that as a result of the capital adequacy standard consensus met between US and UK regulators in 1987, and later Japan, all other members of the Bank of International Settlements had to implement these standards. Dolowitz & Marsh (2000) suggest that, voluntary and coercive policy transfer cannot be easily distinguished. As such, in an attempt to differentiate between the various dimensions of voluntary and coercive policy transfer Dolowitz & Marsh (2000) developed a continuum that runs from Rose (1991) concept of lesson-drawing which provides a rational perspective of policy transfer to the direct imposition of policy programmes (coercive policy transfer). This is illustrated in the figure above (see Figure 2.5). According to Dolowitz and Marsh (2000), this continuum serves as an exploratory device enabling researchers to analyse policy transfer more systematically, especially with regards to the transition between voluntary and coercive policy transfer. In this thesis, focus is however placed mainly towards the coercive end of the continuum.

2.2.3. Dimensions of Coercive Policy Transfer:

As suggested, the literature on the policy transfer process usually suggests that transfer is a rational process (lesson-drawing) involving policy actors copying, emulation, mixing and inspiring policy. This rationalistic perspective tends to downplay issues regarding politics and conflict of international processes or consider into detail the contextual effects of coercively transferred policies. This thesis argues that policy transfer is not always voluntary as it falls amongst literature on policy transfer studies that emphasizes the coercive influence of external policy-making institutions on the domestic public policy process. However, this section focuses on two alternative perspectives of coercive policy transfer. Thus, what this thesis terms

as an 'absorbed coercive policy transfer' and a 'strong-armed conditional coercive policy transfer'. Using a combination of the policy transfer continuum (Figure 2.5) and the geographical perspectives of policy transfer (Figure 2.3), coercive policy transfer can be explained simply as the direct imposition of policies from a higher policy-making institution. This could occur at multiple levels. As reflected in Figure 2.3, coercive policy transfer can occur at sub-national (county) level with policy frameworks formulated at the national level directly imposed on counties. In a similar sense, coercive policy transfer can occur either at cross-national, regional or international/global levels.

Focusing on the various methods through which policies are imposed on implementing political jurisdictions, coercive policy transfer can also be viewed from multiple perspectives. In their earlier publication on policy transfer, '*Who Learns What from Whom: a Review of the Policy Transfer Literature*', Dolowitz & Marsh (1996) identified two forms of coercive policy transfer, the direct and indirect coercive policy transfer. Similarly, in a later publication '*Learning from Abroad: The Role of Policy Transfer in Contemporary Policy-Making*', Dolowitz & Marsh (2000) further indicated that coercive policy transfer can be viewed from an obligatory coercive transfer and conditional coercive transfer perspective. As outlined below, this thesis critiques the above and proposes two alternative approaches: the absorbed coercive policy transfer and strong-armed conditional coercive policy transfer. These are outlined in the table below (Table 2.3).

.

Table 2.3: Methods of Coercive Policy Transfer

	METHODS	CRITIQUE
Dolowitz & Marsh (1996, p. 348-349)	<u>Direct Coercive Transfer:</u> This is the most direct method of coercive policy transfer. It happens when one political authority forces another to adopt a policy. The transfer of American regulatory policies to the European States can be cited as an example (Majone, 1991). It should be noted that the direct imposition of policy transfer on one country by another is rare. <u>Indirect Coercive Transfer:</u> This perspective focuses on coercive policy transfer as a result of externalities, or functional interdependence. Here, externalities are seen to push governments to work together to solve a common problem. An example of this can be seen in Haas (1980) demonstration on how such interdependence was responsible for policy transfer and the development of common environmental policies in the Mediterranean	The Direct and Indirect methods of coercive policy transfer as suggested by Dolowitz & Marsh (1996) can be identified as very limiting. Thus, focus is placed mainly on the direct forceful imposition of external policies and a collaborative approach to problem-solving as a result of mutual external problems. These do methods do not take into consideration conditionalities attached to loans as well as regional and international integrations that develop policies at the highest level and impose them on member states. despite the fact that regional integrations like the EU can be seen to have raisin as a result of functional interdependences, the explanation provided was insufficient and did not place emphasis on these aspects.
Dolowitz & Marsh (2000, p.14-15)	<u>Obligated Coercive Transfer:</u> This perspective holds that national governments can be forced to adopt programs and policies as part of their obligations as members of international regimes and structures. The European Union can be cited as an example of this perspective of coercive transfer. <u>Conditionalities:</u> This perspective holds that coercive transfer can be stimulated through transnational organizations and international aid institutions that have been capable of forcing governments to adopt policy programs and incentives against their will. Here, conditionalities in the form of policies attached to loans and/or grants by financial institutions such as the International Monetary Fund and World Bank (Dreher, 2004; Woods, 2006).	Similar to the above, obligated coercive policy transfer and conditionalities are somewhat lacking in terms of the scope of coercive policy transfer both of them cover. While both methods may explain policy transfer into details, they can both be seen as falling under the scope of indirect coercive transfer. Thus, taking for granted the direct aspect. Additional, obligated coercive policy transfer places emphases on the fact that as a result of membership to international regimes and regional integrations, member states are coerced to implement policies developed at the center. It, however, takes for granted the fact that within these regional integrations member states participate in policy decision-making process thereby making them "policy stakeholders".
Alternative Approach	<u>Absorbed Coercive Policy Transfer:</u> This perspective holds that coercive transfer can be identified as a result of externalities and/or functional interdependence. This may come as a result of direct/indirect coercive transfer (Dolowitz & Marsh, 1996) and obligated coercive transfer (Dolowitz & Marsh, 2000). However, what sets this method apart from the others is the fact that the implementation of these coercively transferred policies is usually done through emulation. Thus, policies are tailored to suit the socio-economic, political, cultural, or geographical context of the implementing state. It should also be noted that, in absorbed coercive policy transfer, policy actors of the implementing state take part in the policy-making process either at higher levels or domestically. An example of this is can be seen in relation to regional integrations such the EU and ECOWAS. <u>Strong-armed Conditional Coercive Policy Transfer:</u> This perspective holds that coercive policy transfer can be seen as an imposition of conditionalities. In this sense, implementing states are provided with a "take it or leave it" approach to loans and grants. Here, implementing states a not involved in the policy formulation process neither are they allowed to emulate policies. Thus, there is no form of absorption (involvement) on the part of the implementing state in any aspect of the policy-making process.	

From Table 2.3 above, this thesis provides an alternative approach to viewing the various methods used in coercive policy transfer. These distinctions are based on the involvement of implementing states in the formulation of policies transferred coercively. To draw more light on both methods, absorbed coercive policy transfer occurs when externalities and/or functional interdependencies (integrations) may force countries to implement certain policies. In this sense, this method of coercive policy transfer inculcates the direct, indirect and obligatory methods of coercive policy transfer. However, absorbed coercive policy transfer acknowledges the fact that policy actors within states are actively involved in the policy decision making processes either at the centre or during the policy negotiation or implementation process. Thus, some form of policy emulation or involvement on the part of implementing states is involved.

For instance, at the regional level, the EU can be described as both an interdependent functional institution and an instrument of obligatory coercive policy transfer. Nevertheless, policy actors within member states are not only actively involved in the policy-making process but also have the option of emulating policies on an incremental basis to ensure that policies are conducive to their domestic policy environment. At the global level, human rights records of UN member states are reviewed through the Universal Periodic Review (UPR). This was created through the UN General Assembly by resolution 60/251 and as at the year 2011, the Human Rights Council has reviewed the human rights records of all 193 UN member states (OHCHR | UPR, n.d.). At each country's review, other member states are allowed to mediate and make suggestions to the state under review. Nonetheless, this state has the right to either accept or reject recommendations according to the policy's coherence with local contexts.

The Organization for Economic Cooperation and Development (OECD) regulatory reviews is also based on self-presentation of national directions by members for assessment by OECD staff and peer review (Lodge, 2005). Here, the review process is voluntary and member

states are not inclined to implement the policy recommendations. The involvement of implementing states in this policy process highlights the absorption of implementing states into the policy decision making process. These processes thereby help in ensuring the compatibility of policies within implementing states

On the contrary, with strong-armed conditionalities, coercive policy transfer is done on the basis of conditionalities which may take the form of policies attached to loans and/or grants by International Financial Institutions such as the International Monetary Fund (Buira, 2003; Stone, 2008) and World Bank (Dreher, 2004; Woods, 2006b). These conditions usually come with the provision of benefits such as loans, debt relief or bilateral aid and are imposed in exchange for financial support. Examples of these conditionalities include but are not limited to policies implemented in Heavily Indebted Poor Countries (HIPCs) (Easterly, 2002) and conditionalities attached to loans and grants such as the Structural Adjustment Programmes/ Policies (SAPs) (Loewenson, 1993). This takes a similar view as Dolowitz & Marsh (2000) conditionalities. However, with strong-armed conditionalities, implementing states are provided with a 'take it or leave it' approach when negotiating for loans and grants. As a result of this, implementing states have little to no influence over the formulation of such policy. Thus, the implementing state either accepts loans/grants on condition they implement policies attached to these loans or they reject the loan and everything that comes with it. International financial institutions like the IMF and World Bank are well known for the stimulation of this form of coercive policy transfer.

Likewise, despite the involvement of implementing states in the policy-making process, a vital distinctive element separating absorbed coercive transfer and strong-armed coercive transfer is reflected in the hardness or softness of policy implementation frameworks. That is to say, softer policy frameworks may enable implementing states to have some influence over the transferred policies as with the case of absorbed coercive policy transfer. On the other hand,

the strong-armed conditional coercive policy transfer would involve much harder policies as these policies may provide little or no involvement of the implementing state. The provision of this alternative approach to analysing coercive policy transfer is of vital relevance to this thesis. This is because, this thesis focuses on how coercive policy transfer can be calibrated to ensure that transferred policies are compatible with the domestic setting of implementing countries. Thus, the focus of this thesis on strong-armed conditionalities provided by the IMF as well as their effects on implementing countries.

It should be noted that despite the continuous need for a conceptualization of policy transfer, no previous research or scholarship has provided a clear distinctive element on the criteria of the involvement of implementing states in the formulation of policies that are transferred coercively. This section however provided a clear distinction by introducing what is termed as absorbed coercive policy transfer and strong-armed conditionalities. This re-emphasized earlier discussions between globalization and the domestic public policy-making process. Thus, the invisible role played by domestic policy actors during the formulation of these conditionalities places them within the category of policy 'takers' rather than 'makers'. As a result of this lack of involvement, strong-arm conditionalities may result in levels of policy incompatibility as policies may not reflect situations within the domestic settings of implementing states. This form of coercive policy transfer is used predominantly by international financial institutions (IMF and WB) with the aim of fostering socioeconomic development. In order to provide a deeper understanding of the absorbed and strong-armed coercive policy transfer, the next section discusses the power dynamics that exist within the proposed dimensions of coercive policy transfer.

2.3. Power in the Context of Policy Transfer:

The concept of public policy transfer has reshaped how discussions on the public policy-making processes are viewed and raised strategic questions regarding the role of power

and its influence in the policy-making process. In this subsection, a discussion on the influence of power dynamics within the context of coercive policy transfer is presented[15].

Hill (2013) notes that, in studying various public policy processes (policy transfer inclusive), it is crucial that discussions on the role and influence of power are not ignored. However, the definition of power remains contested (Barnett & Duvall, 2005; Petersen, 2012; Ellison, 2017). For Kotter (2010) power is the ability to get others – individuals, groups, or nations – to behave in ways that they ordinarily would not. Barnett and Duvall, (2005. p.40) have operationalized power as "how one state uses its material resources to compel another to do something it does not want to do". Viotti and Kauppi (2013, p. 202) defined power as "the means by which a state or other actor wields or can assert actual or potential influence or coercion relative to other states and non-state actors because of the political, geographic, economic and financial, technological, military, social, cultural, or other capabilities it possesses"[16]. These definitions however focus on one aspect of power, capability and influence, and fall predominately within the realist perspective of power.

The inability of scholars to arrive at an ultimate consensus reflects the level of complexity in the multiple approaches through which power can be assessed. For the sake of simplicity, in this thesis, a synthesis of Barnett & Duvall (2005) Taxonomy of Power; and Ellison (2017) analysis of Politics, Power and Policy Transfer would be applied within the context of coercive policy transfer. The reason for this choice is that, Barnett & Duvall (2005)

---

[15] Discussions regarding a universally accepted definition of power has proven challenging. With the aim of contributing to the literature on coercive policy transfer, this thesis does not seek to deliberate on 'what power is' but rather recognizes that the utilization of the various perspectives of power can aid in the provision of a deeper understanding of coercive policy transfer and assist in the conceptualization of policy compatibility.

[16] See also Ray & Singer, (1973); Stoll & Ward, (1989); Mansfied, (1993); and Mearsheimer (2001) for other definitions of power. Other scholars have gone further to develop various terms like hard and soft power (Nye, 2002; 2004; 2007), coercive power (Raven, 1958; French, Raven & Cartwright, 1959; Lewis & College, 2012), power over (Morriss, 2002), legitimate power (Raven, 1958; French, et. al., 1959), and power with (Allen, 1999).

provide a multidimensional perception of power and integrate this within the framework of social relations. This provides a broader understanding of the analysis of power. Ellison (2017) also provides an integration of political processes and power, and how these two concepts help shape the policy transfer process. Here, focus is placed on the actors. Consequently, a synthesis of both social relations and the role of actors in using power as a stimulus for coercive policy transfer provides an integrated approach to power analysis and aid in the assessment of compatibility[17].

> Taxonomy of Power:

Power is a complex concept with numerous definitions (Barnett and Duvall 2005), however most definitions and debates about power are overly focused on an actor-oriented perception and "guilty of conceptual favouritism" (p.39). For Barnett and Duvall (2005) power is "the production, in and through social relations, of effects that shape the capacities of actors to determine their circumstances and fate" (p.42). This definition provides two conceptual analytical dimensions of power on the bases of social relations[18]: the kinds of social relations within which power works; and the specificity of social relations within which effects on actor's capacity are produced. These dimensions of power provide the foundation through which their taxonomy of power was built. As illustrated in Figure 2.6 (below), four types of power were derived: Compulsory power (CP); Institutional power (IP); Structural power (SP); and Productive power (PP).

---

[17] In this sense, this thesis does not seek to disconnect from an actor-oriented approach and support a somewhat "behavior analysis perspective" to power analysis but utilizes the various forms of power within these approaches in providing a deeper understanding of power within coercive policy transfer.

[18] The insertion of social relations into the analysis of power in international politics suggests an integration of social psychological and anthropological theories into the political sciences and international relations epistemic communities. Social relations can simply be described as the quality of interactions between actors and derives its foundations from the works of sociologists such as Max Weber and Karl Marx. Given the scope of this thesis, emphasis is placed on social relations as social interactions and the socio-psychological positions actors hold within these interactions. A deeper understanding of this reflected is in the examination of Barnett & Duvall's (2005) taxonomy.

From Figure 2.6 (below), two concepts also emerge with regard to social relations: (i) the kinds of social relations that influence an actors' capabilities, and (ii) the specificity of these social interactions between and within actors. Primarily, social relations work through interaction or constitution. The outcomes of these interactions or constitutions could either be specific or diffuse. Through interactive relations, the conduct of an actor (actions or inactions) could alter the ability (or inability) of another actor to control the conditions of their existence[19]. Through constitutive relations between (and within) actors, thus an actors' capacities or position, could impact their abilities to structure the settings of an actors' existence. Accordingly, the ability of an actor to have 'power to' influence another actor's decision, also stressing the identity of the object and subject of power.

Figure 2.6: Taxonomy of Power

| | | Relational Specificity | |
		Direct	Diffuse
Power works through	Interactions of specific actors	Compulsory	Institutional
	Social relations of constitution	Structural	Productive

Note. Retrieved from Barnett, M., & Duvall, R. (2005). Power in International Politics. International organization, 59(1), 39-75.

Exploring power through the perspective of social interaction reveals outcomes on social identities whereas studying power through the lens of constitutive relations may reveal

---

[19] This illustrates a 'power over' perception as one actor executes control over another, emphasizing the behaviour of an object of power.

some effects on actions of actors. Insofar as power works through the interactions of specific actors in shaping the behaviour of another actor, hence, exercising control over an actor's decisions, a variety of techniques may arise, either directly or diffused. Likewise, inasmuch as power works through social relations of constitutions[20] - that is, the ability of an actor A to influence B as a result of A's social identity or position – a variety of approaches may equally arise directly or diffused. This notion presents the other conceptual analytical dimensions of power, the specificity of social relations of power (direct or diffuse). This is based on social distance. A direct approach to power would entail an abrupt and substantial causal and constitutive network between the holder of power and subject of power. This usually depends upon them (subject and object) being in social proximity. If the social relations through which power works is diffused, power is enforced through a "mediator" or "third party" as the connections between the subject and object of power are seen to be socially or spatially distant.

In situations where there is little to no social distance between interactions of specific actors and social relations of constitution power is seen to be compulsory and structural respectively. Here, compulsory power emerges when an actor has direct influence over another. This influence could either be intentional or unintended. Compulsory power has notably informed debates on power in international politics as it shifts consideration towards the utilization of substantial resources to control others. Powerful actors occasionally use resources to influence or intimidate others. Equally, multinational corporations (MNCs), as well as supranational and transnational bodies use financial resources to alter various policies at national and global levels. Compulsory power could also involve the use of symbolic and normative resources. For instance, humanitarian agencies utilize acts of shaming to force a

---

[20] Here power works through behavior relations or interactions, which, in turn, affect the ability of others to control the circumstances of their existence

state to alter its policies. Similarly, structural power can be identified as a direct and mutual constitution of the capacities of actors. Thus, the social structures that depict the type of social beings' actors are. This type of power focuses mainly on the social psychological interpretation of power. It occurs when the constitutive relations are of a direct and specific nature[21]. This emphasizes the relationships of actors within and between social structures and their implications on the actors' self-perception or social identity. As suggested by Barnett & Duvall, (2005), a classical example of this form of power can be identified in the master-slave relationship.

Linking this to Barnett & Duvall, (2005) structural power, an actors' societal interactions lead to the development of an actors' concept of self[22]. It is through this self-perception that another actor can have 'power over' or an actor can have 'power to'. As such, structural power informs the conditions of an actors' existence as individual capacities are based on societal positions. For instance, in transnational negotiations a representative from a Western economy would be given reverence as against a leader from a developing economy. Here, apparent 'reputation' plays an important role. In situations where there is a substantial amount of social distance between interactions of specific actors, and social relations of constitution – that is to say diffused - power is seen to be institutional and productive respectively. Institutional power occurs when an actor indirectly has control over the possible actions of a socially distant actor. This perception concentrates on the relations that permit actors to implicitly influence the actions of others. Here, emphasis is placed on the institutions that arbitrate between actors.

---

[21] The use of the word "constitutive" in this context refers to the ability of an actor to have the power to establish or give organizational existence to something.

[22] Baumeister (1999) defines self-concept as an "individual's belief about himself or herself, including the person's attributes and who and what the self is."

Productive power has similarities to structural power. This is because both concepts of power focus on the social psychological perception of 'self' held by actors. In this sense, structural power focuses on the social relations that exist between actors on a direct basis and the impacts of social structures on actors. Productive power, however, analyses social influences on a more generalized spectrum, thus a movement from actors' interactions within social structures, to interactions and networks within social systems. Here, social interactions involve an element of systems thinking (Leleur, 2017) and can be analysed using a functionalist perspective (Pierce, 1964) while focusing on how power in the context of these social interactions influences societal decisions. As pointed out by Barnett and Duvall, (2005), classifications of an actor such as 'Western', 'European', 'African' and 'democratic' amongst others fall within this context.

➢ Politics, Power and Policy Transfer:

Ellison (2017), suggests an approach to power analysis within the context of public policy transfer[23] by identifying two dimensions of policy transfer processes: 'exogenous' and 'endogenous'. Coercive or consensual transfer can be exogenous as policies and/or factors provoking a transfer may originate externally. Within this context, coercive transfer occurs when implementing states are forced to implement policies formulated externally. In a similar sense, consensual transfers may transpire, when domestic policy actors are helped on condition that they meet mutually agreed targets (Orenstein, 2009). Consequently, with exogenous transfer, structural forces or actors stand outside the immediate transfer locus. As such, this form of transfer could occur within regional integrations depending on the power and/or

---

[23] It is important to note that Ellison (2017) acknowledges that earlier discussions on power within the context of policy transfer have broadly been conducted implicitly (Dolowitz & Marsh 1996, 2000, Evans 2009, Hudson & Lowe 2009). He notes that the literature on policy transfer is guilty of treating policy transfer as a dependent variable. Instead, "it is advantageous to understand the term as an integral component of the wider field of policy analysis and one that can throw light on a range of policy issues" (Ellison, 2017. p.8).

influence held by the institution of regional integration. Here, "pressures – often global and economic – can occur outside a particular arena and trigger subsequent learning and transfer activities within" (Ellison, 2017. p.11).

Endogenous forms of transfer emerge internally. Here, the initiation on the need to change domestic policies originate domestically and can either result from policy failure or internal pressures to reform a policy. This form of transfer is commonly associated within and/or between nations as government themselves identify a need for new policies. These dimensions of transfer processes suggest that policy transfer is not a bounded entity. As such, different models of power can be connected with different types of policy transfer. Ellison (2017), identified three forms of power in his analyses of the transfer process:

(i)   Power as mutual influence (PMI) (through voluntary or open learning);

(ii)   Power as weighted bargaining (PWB); and

(iii)   Power as coercion and/or conditionality (PC).

With power as mutual influence (PMI), power is illustrated in terms of influence. The main features of this paradigm are that, the need for policy change originates endogenously as national policy actors acknowledge that existing policies need refining by learning from policy improvements elsewhere. Here, influence is seen as an element of power as it plays an important role within debates about the policy-making processes. Within this paradigm power is seen as mutually influential and policy actors hold 'levelled' positions in policy discussions. For Ellison (2017), an example of this is reflected in the Organization for Economic Cooperation and Development (OECD). Transfers within this context are largely voluntary and policy inclinations are likely to be 'tailored' and reflect, for instance, the cultural and political

agendas of implementing states depending mainly on the complexity in the nature and scope of the policy and implementing environment[24].

For Ellison (2017), an example of this can be seen in the Gateway Review Process for managing procurement processes from the U.K. to Australia (Fawcett & Marsh, 2012). As illustrated in Figure 2.7, with power as mutual influence, both actors (A & B) work together or have an equal level of influence on the policies. Partakers of these interactions are seen to be making authentic attempts to find solutions that can be accepted by everyone (Koenig-Archibugi, 2010). Cohen & Sabel (2005) termed these interactions 'deliberative polyarchy'. Here, they share the policy as well as the question (problem) and work together to formulate and/or implement a policy. As such, interactions between actors are seen to be identical.

Figure 2.7: Power as Mutual Influence
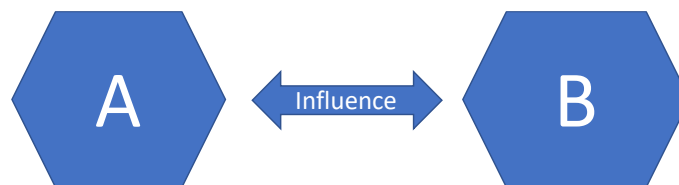
For power as weighted bargaining (PWB), the need for policy change are exogenous to implementing states. Key actors however have significant influence in negotiations with governments to adopt various policies or promote ideas that may influence the domestic policy process. As such, actors are not considered as peers even though influence may not guarantee policy acceptance. In this paradigm, global and regional institutions, supranational bodies, amongst others, as well as nations with the capacity to influence other governments play a key role. Here, power is viewed on a hierarchical basis with a larger portion of power concentrated at the apex. This hierarchy could either be global, regional or institutional, or could reflect a

---

[24] A detailed understanding of the paradigm of power as mutual influence in policy transfer processes is reflected in True et. al., (2007) *Punctuated-equilibrium theory.*

level of importance on the bases of an issue under discussion. For instance, institutions such as the UN, WB, WTO, and IMF use their status and global position to influence, to create, to supervise, and to enforce policies on various national and institutional policy actors (O'Brien, 2009). As shown in Figure 2.8, with power as weighted bargaining one actor, in this case actor A, has more influence over the other actors (B) policies. As such, there is an uneven level of interactions between actor A and B as A has the greater influence over B.

Figure 2.8: Power as Weighted Bargaining
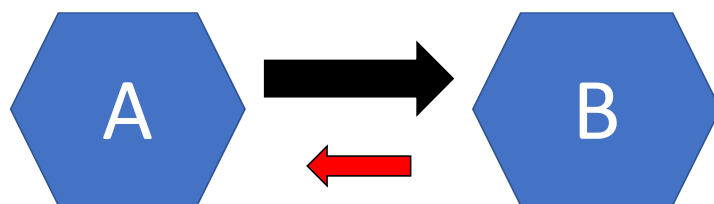
Lastly, within the power as coercion and/or conditionality (PCC) paradigm, power is expressed in the form of coercion or conditionality. Here, power is seen as the ability of an institution or national body to impose policies on another to the extent that, even though these policies may be met with disinclination on the part of the implementing actors, implementing actors are seen to have little or no choice but to embrace these policies. This form of power is exercised predominately by global financial institutions such as the IMF and WB, and MNCs, or as a result of memberships to various transnational/regional integrated bodies, and membership to specialized agencies such as the WHO and WTO. Conditions could either be attached to a provision of financial assistance or aid, or in partial fulfilment to membership respectively. As explained in Figure 2.9, with PCC, policies are transferred on a coercive or conditional basis from actor A to B. As such, Actor B may have little or no involvement in the formulation of such policies.

Figure 2.9: Power as Coercion and/or Conditionality
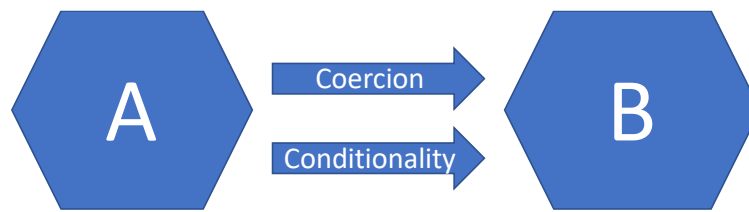
Before proceeding to synthesizing Barnett and Duvall's Taxonomy with Ellison's paradigms within the context of coercive policy transfer, there is a need to point out that, the above discussions provide a vivid illustration of the complex nature of power analysis. The polygonal feature of policy transfer and the policy-making process, in its totality, adds an additional layer of complex interactions between and within policy actors and networks on a multidimensional spatial scale. It is however prudent that investigators undertaking an analysis of power within the particular context approach discussion from one viewpoint or another. This thesis holds that a utilization of a combination of the two can be used in an attempt to provide insights that either approach may have overlooked.

2.3.1. Incorporating Approaches to Power Analysis with Coercive Policy Transfer

From the above discussions, it is clear that Barnett & Duvall's (2005) taxonomy of power, and Ellison's (2017) power paradigms, both explore power as the 'influential capability' of an actor. Whereas Barnett & Duvall (2005) build their typology on social relations and interactions, Ellison (2017) uses an actor-oriented approach to develop his paradigms. By incorporating both perspectives, this subsection distinguishes the various power relations that exist within the absorbed and strong-armed conditional coercive policy transfer. Within the context of Ellison's (2017) paradigms, the power dynamics that may exist within the absorbed coercive policy transfer could either be a PWB, PMI and PCC or a combination of them. In absorbed transfers, the need for policy change may originate largely exogenously although this could sometimes be endogenous. Exogenously in the sense that power is effected

as a result of membership to a political and/or economic regional integration like the EU or ECOWAS. The stimulus for a change in a particular policy could originate from the centre (the governing institution) rather than its members. Contrary to this, policy change stimulus could also originate from within a member state (endogenously) and then be proposed to, or identified by, the governing institution for implementation in other member states.

Absorbed transfer holds that in coercive policy transfer, policy actors within implementing states to a large extent have influence over the policy-making process. In this way, actors are involved in the formulation, implementation and evaluation of transferred policies. Policy decisions are usually put through a vote amongst multiple stakeholders (member states) and in the case where policies are accepted, member states have the flexibility to implement policies within the framework of what was agreed. Here, policies are emulated rather than copied (e.g. the EU and ECOWAS). Outwardly, members are seen to have an equal say and ideally power should be identified on the basis of mutual influence (PMI). However, practically, power is predominately weighted bargain (PWB) as some actors, due to their economical, geographical, and political capabilities among others, play a more dominant role in initiating change, and in the formulation of policies. The methods through which these policies are developed for domestic implementation are however coercive or conditional on the basis of members' position within the institution (PCC). Thus, although some member states may meet these policies with strong resistance, as part of their membership agreements they are required to implement these policies or recant their membership.

Similar to absorbed coercive policy transfer, with strong-armed conditional coercive policy transfer, the stimulus for policy change may be instigated exogenously or endogenously (but policy responses are mostly exogenous). In relation to the latter, although policies are formulated in consonance with ideological justifications by specialized agencies like the WTO and WHO or IFIs like the IMF and WB. Policy actors within implementing states may embrace

such policies to enforce their ideological preferences as these ideologies may be parallel to that of the external agencies (Koenig-Archibugi, 2010). A clear example of this is reflected in Vreeland's research on why countries enter into IMF agreements (2003; 2007). Here, Vreeland (2007) suggests that nation states may want the IMF to 'impose' policies on them so as to weaken domestic opposition on economic reforms. Power paradigms may however then be seen as PWB and PCC but predominantly reflects PCC. Here, with regards to IFIs, nations soliciting for financial aid are provided with 'terms of agreements' in the form of policy prescriptions on condition that after (ex post) or before (ex ante) these policy prescriptions are met, aid would be provided (PCC). On the other hand, specialized agencies like WTO and WHO use indirect approaches to force nations to implement their policies (this is discussed within the context of Barnett & Duvall's taxonomy). Power cannot be seen as mutual influence (PMI), because, in this method of coercive policy transfer actors are not seen as coequals and as such to not mutually influence each other. Consequently, power is seen as weighted bargain (PWB) by virtue of the fact that on some occasions, policy actors within implementing states negotiate with these external agencies on the number of conditionalities and the methods of domestic implementation (either incremental or drastic). Although this negotiation usually favours one side over the other. In analysing Barnett & Duvall's Taxonomy within the context of policy transfer, emphasis is placed on the social interactions between policy transfer actors and networks, as well as the repercussions these interactions have on the role of policy actors in the transfer process. Consequently, all the power paradigms recognized in the taxonomy can be identified within both the absorbed and strong-armed conditionalities.

Concentrating on compulsory power, as discussed, alludes that interactions between actors are direct and involves the use of either material resources or resources that carry a symbolic significance to dictate how another individual should behave, (Barnett & Duvall, 2005). In this context, external policy actors use material resources (predominately economic

and military) to coerce others to implement external policy initiatives. In strong-armed conditional coercive transfer, compulsory power plays a dominant role. Here, state and non-state policy actors directly coerce nation-states to implement policies through financial aid and the imposition of conditionalities. The clearest example of this, is seen within the context of developing nations soliciting for funds from other nations. For instance, aid conditionalities regarding human rights observations between Kenya-Norway and Indonesia-Netherlands (Baehr, Selbervik, & Tostensen, 1995), and the conditionalities attached to development aid assistance from China to African states (Alden, 2005; Welle-Strand, & Kjøllesdal, 2010).

In the absorbed coercive policy transfer, compulsory power transpires when an external policy actor directly forces nation states to adopt policy frameworks developed elsewhere. Here, a 'carrot and stick approach' is not utilized as with the case of conditionalities but rather external actors use a direct approach like economic sanctions or military interventions to demand the domestic implementation of policies. An example of this is reflected in the use of military interventions and economic sanctions by the United States to 'export' democratic principles (Meernik, 1996; De Mesquita, & Downs, 2004). Also, non-state actors, international organisations, and specialized institutions utilize compulsory power through symbolic and normative resources. For instance, activists of Lesbian, Gay, Bisexual and Transgender (LGBT) human rights have used the acts of global shaming in attempts to persuade governments of Sub-Saharan African countries to implement LGBT friendly policies (Kollman, & Waites, 2009). Linked to this, environmentalists have used comparable tactics to lure governments into implementing environmental protection policies.

Similar to compulsory power (with the utilization of resources but different in approach), institutional power may also take the form of 'power as control' (Barnett & Duvall, 2005, p. 48). Here, the rules, processes, and regulative norms that define an institution, limit or monitor how actors act. Control is however indirect as this perception concentrates on the

relations that permit actors to implicitly influence the actions of others. Here, emphasis is placed on the institutions that arbitrate between actors. Unlike compulsory power, institutional power does not suggest an ability of actor A to directly influence the activities of actor B. But rather, actor A's influence is seen to be indirect and through the use of an intermediary or 'institutional mediator'. Elements of this form of power are predominately exhibited within the context of strong-armed conditionalities. Here, dominant policy actors (nations, elite clusters, as well as multilateral organisations to mention a few), use institutions to coercively propagate their policy agenda.

These institutions may undertake the propagation of their policy agendas through the use of conditionalities. The varying institutional arrangements imply, for example, different capacities of agenda setting or unevenly distributed policy outcomes when transfer is initiated and is an idea prominent in neoliberal institutionalism. In the context of absorbed coercive policy transfer, the mediating institution may use, shaming, membership voting powers, amongst others (with exception of conditionalities) to compel nations to implement external policies. Likewise, the concept of interdependence (PMI & PWB) reflects the idea of institutional power, as asymmetrical interdependence and creates unequal control over outcomes and diverging costs. This approach can be described as an indirect form of global influence in policy transfer. An example of this can be identified within criticisms raised against IMF and WB as they are seen to spread US hegemony (Mueller, 2011).

In the case of strong-arm conditional coercive policy transfer, structural power is normally exhibited within international institutions, regional integrations and transnational negotiations. Through these classifications, functional differentiations may emerge, causing privileges among some policy actors and may dictate national identity and interests. To an extent, an example of this form of power within the context of strong-armed conditionalities can be seen in relation to global economic functions and trade liberalization initiatives. In

global interactions, policy actors within developing and underdeveloped countries are more likely to accept and implement conditional policies which emphasize openness and trade liberalization which would stimulate an influx of foreign businesses in order to climb the social ladder. Likewise, developing countries are more likely to coercively enforce these policies conditionally instead of for instance conditioning import substitution initiative policies so as to preserve their dominance (Kelton, 2020).

In the context of absorbed coercive policy transfer, structural power can be viewed within the context of Ellison's (2017) power as mutual influence. Here, nations form groups like the OECD or G7 to facilitate mutual learning. These, groups could be based on social classifications such as industrialized, technologically advanced, poverty stricken, highly indebted, inter alia. Although the transfer of policies may not necessarily be directly coerced, superior groups (OECD) may develop policy benchmarks within which other nations are required to operate. This can be seen predominately within ecological and environmental protection policies as well as waste management policies. As pointed out, structural power and productive power hold many similarities. Both emphasize how social interactions affect the perceived societal positions policy actors hold, thereby providing a policy actor with the ability to influence another policy actor's ability to participate in the formulation and/or implementation of coercively transferred policies.

Nevertheless, productive power differs from structural power by reason of its use of a generalized and diffused approach to social classifications. Here, whereas structural power places emphasis on social orderings within institutions and societies (as with the case of the World Bank and IMF having power over borrowing low income and emerging economies (Barnett & Duvall, 2005)), productive power focuses on broader social interactions within social systems and general social scopes. Thus, social systems within which social structures may exist. An example of this social grouping is reflected in the categorization of countries as

part of the global north or south, inter alia, European or western. Here, similar to structural power, groups within social systems may stimulate power as mutual influence (absorbed coercive policy transfer) and in some instance could hinder the ability of policy actors to influence the formulation and/or implementation of externally developed policies.

In light of this analysis, attention should be drawn to the overlapping nature of Barnett & Duvall's taxonomy and Ellison's power paradigms. For instance, compulsory power can take the form of PCC, institutional power can reflect elements of PCC, PWB and PMI, and lastly, structural and productive power can exhibit elements of PCC, PWB and PMI. As such, this thesis sides with Barnett & Duvall's notion that the various perceptions of power do not conflict with each other but rather manifest in diverse forms and may overlap in some cases, and in other cases multiple forms of power may persist. It is however clear that, limited research has been done regarding the dynamics of power within the policy transfer domain, especially within the perspective of coercive policy transfer. As such, the above analysis builds on and contributes to the already established understanding of coercive policy transfer.

To conclude this chapter, it is important to also point out that, the power relations that may manifest within the context of coercive policy transfer strongly influences the domestic compatibility or 'good-fit' of transferred policies within implementing states. Here, on one hand when an absorbed approach to policy transfer is used, and the power relations that are patent within are utilised, implementing states have the possibility of ensuring compatibility as they can alter transferred policies to fit their domestic settings and warrant convergence in policy outcomes. On the other hand, when a strong-armed approach is utilised, the power dynamics that manifest within this approach may not encourage a tailored approach to policy adoption and implementation. In the long-run, this may eventually lead to divergence in policy outcomes as a result of policy incompatibility. This research seeks to discuss this assumption by analysing IMF interventions and their policy outcomes. Building on this, the proceeding

Chapter provides a discussion on the context within which the application of coercive policy transfer is observed. Thus, policy prescriptions for the achievement of socioeconomic development. Here, discussions are made regarding the concept of development, and how this is linked to convergence. Focus is then shifted to the application of coercive policy transfer by development finance institutions in an attempt to stimulate development.

Chapter Three

Policy Prescriptions for Socioeconomic Development

3.1 Introduction:

Chapter Two discussed how policy transfer in this thesis reflects a strong-armed conditional approach. This chapter shows how this approach has been used by development finance institutions in an attempt to facilitate socioeconomic development and stability. On account of this, the central argument made in this chapter assumes that, strong-armed coercive policy transfer has been utilized alongside development assistance with the intention of accelerating socioeconomic development; and that this approach has been employed by various Development Finance Institutions (DFIs) and donor nations in the form of conditionalities. This has resulted in instances of policy misfits as the domestic context of developing economies and the conditionalities applied are incompatible, emphasising a need for policy calibration. The initial part of this chapter looks at how theories of economic development can be linked to convergence. Next, the Chapter focuses on the global influences in development by considering development assistance as a precursor for achieving socioeconomic growth. This is followed by a case study investigating the changing role of the IMFs assistance. The chapter concludes with a discussion on the complexities of national policy within international policy frameworks.

3.2. Theories of Development: Development as a Linear Process

During the Cold War (1947-1991), the world was divided into the capitalist and communist political ideologies. The swift manner of decolonization throughout this period fashioned a need to formulate a concept of development for emerging states. Given the quest of the capitalist block to become allies with these new emerging states, it was crucial that they produce a model for development. At this period, the USA had commenced the Marshall Plan

which injected huge sums of financial aid into the reconstruction of war-torn European economies. The success of this experience influenced ideological perspectives about development especially with regards to emerging economies (agrarian societies). Development thinking started to revolve around the assumption that industrialized nations were once agrarian and as such, development could be recognised as a sequence of successive stages through which all countries pass (Todaro, 1994). From this the modernization theory emerged. Modernization theorists perceive development as a linear pathway consisting of various stages. It suggests that given the right conditions, and incorporation into the global capitalist economy, a country would progress into modernity. This is reflected in Levy's (1967, p. 207) assumption that, with time, nations will progressively bear a resemblance to each other "because patterns of modernization are such that the more highly modernized societies become, the more they resemble one another". This can be linked to the concept of convergence. That is, the tendency of societies to grow more alike, to develop similarities in structures, processes, and performances" (Kerr 1983. p. 3) in their attempt to climb up the ladder of development. The two famous models of the modernization theory are Rostow's (1990) stages of growth model (Figure 3.1.- below) and the Harrod–Domar model (Todaro & Smith 2009).

Rostow (1990) identified five economic dimensions: the traditional society; pre-conditions for take-off; the take-off; the drive to maturity; and the age of high mass consumption (as illustrated in Figure 3.1.). At the first stage, nations were seen to be dependent on a rural economy (agriculture). At the second stage, nations were seen to be emphasizing education and skill development as well as developing infrastructure. The third stage involved the presence of industrialization, political change, regional growth and a dependence on a sub-urban economy. At the fourth stage nations begun to diversify as they became more innovative and dependent mainly on growth and investments with a decreased reliance on imports. At the final stage, nations begun to adopt a more consumer-centred approach to the production of

goods and service and relied on the global economy. The modernization theory holds that nations converge at various points of a similar development path.

Figure 3.1: Rostow's Stages of Development
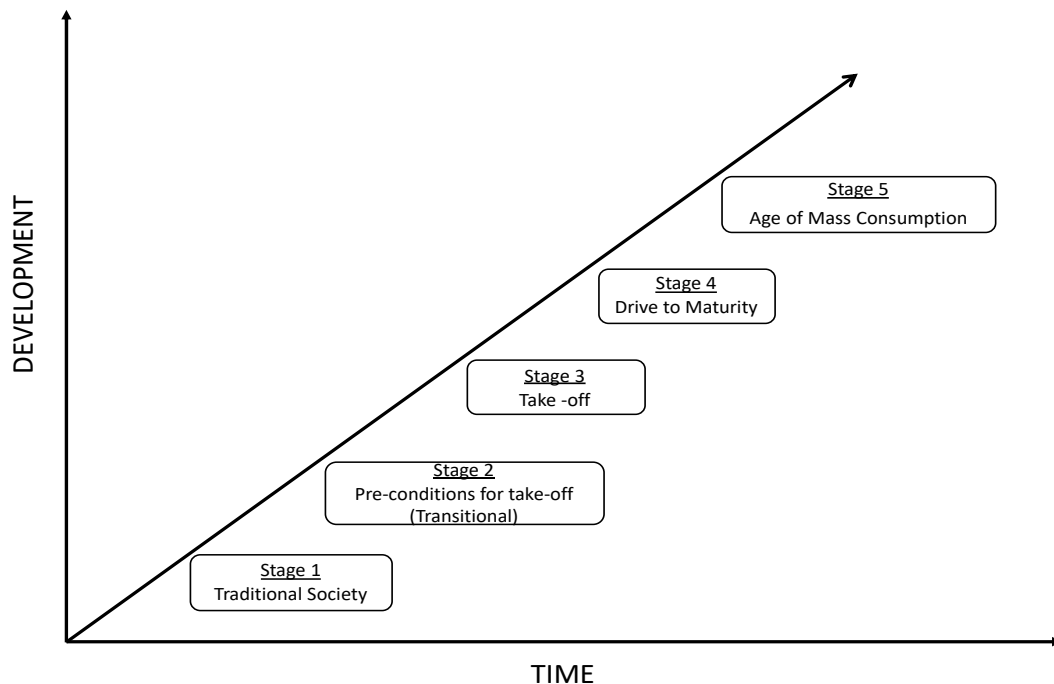
Note. Figure representation of Rostow's stages of development. From Rostow, W. W. (1990). The stages of economic growth: A non-communist manifesto. Cambridge university press.

Rostow (1990) believed that this classification of countries on a broader continuum suggested that aiding development implied helping a country move from one stage to the next. This theory represents the foundation of development theories[25]. Similar to Rostow's five stages of growth, Harrod–Domar's model stresses the importance of growth in terms of a nation's savings and capital investments (Ghatak, 2003). Originally formed to assist in the analysis of economic cycles, the model was adapted to explain development from an economic perspective. This model identified three types of economic growth: warranted; actual; and

---

[25] It should, however, be noted that the over-all opinion held under this ideology was the fact that capitalism is good, this is reflected in the title of Rostow's (1990) book *"The stages of economic growth: A non-communist manifesto".*

natural rate growth. The warranted rate of growth can be identified as growth rate at which the economy does not grow indeterminately (i.e. the savings rate of the economy divided by its capital output ratio). Actual growth rate can be seen as the actual rate expansion in a nations GDP per year, and lastly, the natural growth rate places focus on the progress a national economy demands in order to sustain full service (i.e. if human resource increases at 5% per annum, to preserve full service, there should be a parallel growth of 5% per annum in GDP). As such, development is dependent on the quality of labour and capital, implying that national growth is conditioned by domestic policies that expand investments through savings.

Though Modernization theorists placed importance on the role of savings, capital, and investments (Domar, 1947; Harrod, 1948; Rostow, 1960), its limitation lies in the simplistic and generalized nature of its assumptions (Adelman, 2000). That is, every nation is assumed to have the same basic circumstances necessary to stimulate development and would progress through the same stages. In developing an alternative perspective to development, advocates of structuralism argued that it is the numerous makeups of capitalism that prevents emerging states from developing (Ferraro, 2008). Here, the exploitation of emerging countries by the developed nations impeded the development process of the former.

To structuralists, the growth achieved by developed countries was the result of the exploitation of emerging nations. This eventually caused developing countries to fall a step behind the development continuum into a stage beyond the traditional/undeveloped society, thus what structuralists refer to as a stage of underdevelopment. This stage of underdevelopment was never experienced by the developed countries and as such the starting point of both cases vary. For this reason, Sunkel, (1969) describes structuralism as the rationalisation of development in terms of outward influences such as politics, economics, international relations etc. on domestic developmental policies. Synthesising these perspectives, Rosenstein-Rodan (1976) developed the 'Big Push model' of economic

development. This model holds the assumption that underdeveloped nations need heavy investments into various sectors in order to accelerate their development process. This heavy investment would push the economy into a better developmental state[26].

Combining these perspectives, three assumptions may emerge: First, for a developing country to develop it needs to exploit another country, as seen in the case of China (Taylor, 2007; Cheru, & Obi, 2010; Chau, 2014)[27]. Second, as some dependency theorist's may suggest, developing countries need to cut ties with developed nations in order to achieve development (Baran, 1958; Frank, 1969; Amin, 1990); Third, utilizing the assumption that development can be considered as a linear pathway and international dependencies, one may argue that a synthesis of policy transfer and financial assistance can be employed in the achievement or acceleration of development. In this sense, developing nations can be provided with financial assistance to initiate capital investment and at the same time copy policies implemented within developed nations to quicken their developmental process.

Given that public policy refers to the actions of government (Dye, 1992; Cochran et. al., 1999) in accomplishing societal goals (Cochram & Malone, 1995) through problem solving (Woolley, 2008), the significance of public policy can however not be overstated when achieving socioeconomic development. Through the public policy process, governments put together a 'development strategy', which integrates policies needed to stimulate positive change. Thus, a movement up the ladder of development. Although the modernization model

---

[26] The big push model also holds that, low-rate investments into a specific sector may not yield any positive impacts in the economy and may result in wastage. As such, development assistance policies need to reflect a minimum investment quota to developing countries so as to guarantee their path to progression. It should be pointed out that these heavy investments may not necessarily take the form of monetary-based investment but could also be huge volumes of investments in infrastructure and education.

[27] In recent times, China has emerged as one of Africa's largest business partners because of its aid arrangements, that encompass conditions which are seen as more favourable to Africa than those of the West. Nevertheless, China still exploits Africa's resources as the balance of trade between both parties would reflect the former procuring more through the exportation of technology, agricultural ideologies and manpower (Matunhu, 2011);

highlights the dominant features of convergence at each stage. Structuralist emphasize the international dependencies. Here, through public policy, governments set the national 'priorities' and 'preferences' needed to move from one stage to the next[28]. Heavy investments aligned with these national strategies could also push the economy into a better developmental state. Policy transfer and convergence theory play a vital role in assessing the stage at which a nation is, as well as the type of policy needed to proceed to the next stage. For this reason, this research places emphasis on the third assumption.

In recent times, development theorists have categorized development on the basis of economic factors, which concentrate on economic development theories, and social factors, which emphasize social development theory (Palvia, Baqir & Nemati, 2017). More recent studies, however, seem to be absorbing various environmental factors and technological advancements into the concept of development and underdevelopment (Panayotou, 2016; Sauvé, Bernard, & Sloan, 2016; Murray, Skene, & Haynes, 2017). Bridging the gap between these economic and social categorizations of assessing development lies socioeconomic development. Socioeconomic development is normally reflected in recent literature on development (Milenkovic, et. al., 2014). Stiglitz (2002), argues that the interpretation of the term development is more often than not associated with economic development. There is, however, a need to provide a holistic perspective of development. Socioeconomic development can therefore be seen as an attempt to do this.

Due to its interdisciplinary approach (Jaffee, 1998), socioeconomic development can be viewed from multiple perspectives. As reflected in Table 3.1 (below), socioeconomic

---

[28] For instance, through an incremental approach to policy implementation nations may progress from a rural/agrarian economy towards an emphasis on education and skill development as well as infrastructure development. Thus, from a traditional society to a transitional society. Likewise, through macroeconomic policy implementation government ensures that national investments and savings are made, thereby ensuring an expansion in national GDP per year.

development provides a wider interpretation of the concept of development. The focus is not placed entirely on economic productivity or social factors but rather a synthesis of various aspects like healthcare, education, poverty alleviation and empowerment, sustainable development, and democracy (Madon, 2000).

Table 3.1: Definitions of Socioeconomic Development from various Academic Disciplines.

Discipline	What is Socioeconomic Development?
Economics	- Socioeconomic development is a "potpourri of economic, social, cultural and political forces". - Various dimensions of socioeconomic development that are considered vital include grassroots development such as entitlement, empowerment, entrepreneurship, well-being, and sustainability. Poverty is viewed as vulnerability and lack of voice, power, and representation
Sociology	- Values such as power, security, achievement, hedonism (aspiration), stimulation, self-direction, conformism/tradition, and benevolence/ goodness - Development in income, education, human capabilities, politics, culture, ecology, nutrition, health, life expectancy, personal dignity, freedom of association, personal safety and freedom from fear of physical harm, and the extent of participation in the civil society part of socioeconomic development
Political Science	- Broad and equitable improvements in material and social welfare of people Economic power, wealth, income, direct and indirect economic benefits in the form of (better paying) jobs, better living standards, and accelerated economic activities
Geography	- Natural resources, income, infrastructure, health, poverty, infant mortality, child nutrition, inequality, and social cohesion combined explain the socioeconomic development of a region, country, and society. Geography deeply impacts socioeconomic development. It becomes an important and interesting concept when the impact of altitude, urbanization, rainfall, distance to market, sea, rivers, population density, quality of public administration, and general level of health and diseases are discussed in relation socioeconomic development. - Issues such as social capital, civil society, and participatory development and economic development
Climatology	- Socioeconomic development is defined as complex social challenge including life-expectancy, educational achievement, quality of governance (political stability, level of corruption), and disparities in per capita income.
Medical Science	- Socioeconomic development is considered means of inequality in access to healthcare, service use, and outcomes. Medical science's view of socioeconomic development includes understanding of the poverty levels, social justice (and inequalities), education, health care access, service, use, and ability to pay
Information Systems	- Education and income levels are used to define socioeconomically advantaged and disadvantaged. Socioeconomic development dimensions include social well-being, economic growth, political wellbeing, and physical environment

Note. Table was adopted from Palvia, P., Baqir, N., & Nemati, H. (2017). ICT For Socioeconomic Development: A Citizens' perspective. Information & Management.

For the purpose of this research, a political economic perspective of socioeconomic development is adapted. This incorporates both the economics and political science interpretation of socioeconomic development as reflected below. Drawing on the above discussion, numerous factors intersect to enhance the rapid achievement of socioeconomic growth and a move towards convergence with advanced nations. Public policy, however, serves as an apparatus through which national activities are steered towards reaching domestic as well as global developmental targets. Thus, the ability of national policy actors to adapt sound policies suitable to their own situation and effectively implement them would determine a country's way forward on the path to achieving socioeconomic development. For this reason, the proceeding section discusses the role of development assistance in achieving socioeconomic growth.

3.3. Development Assistance as a Precursor for Achieving Socioeconomic Growth

The suggested relationship between development and development assistance lies in the fact that developing nations need an injection of capital to rapidly accelerate their developmental process (Feeny, & McGillivray, 2011). Although development assistance is normally seen as a means through which achieving development can be made possible, critics of developmental assistance have however questioned its durability and effectiveness (Healey, & Killick, 2000; Easterly, 2002; Erixon, 2005). Hudson (2015) points out that there is however no consensus regarding how development assistance achieves its principal goals of fostering socioeconomic growth and poverty reduction. In the proceeding subsections attempts are made to deconstruct the term 'development assistance' by looking at the various definitions and forms development assistance may take. In so doing, key patterns surrounding the geo-political and economic trends resulting in modern day development assistance are highlighted. The literature then goes further to discuss the aid-growth nexus through the lens of the various

theoretical inclinations justifying (or otherwise) modern development assistance. Consequently, discussions on the justifications and criticisms of development assistance are highlighted. By so doing, this section sets the broader context of development studies and its intersection with public policy transfer, policy misfits and incompatibility for further analysis.

3.3.1. Deconstructing Development Assistance

Development assistance is occasionally used interchangeably with development aid, overseas development assistance, official development assistance, and sometimes foreign aid. In a broader sense, foreign aid can be described as exogenous support transferred from one national actor to another with the aim of providing support for the achievement of specific goals. For Reynolds (2012), the term aid is used to describe development assistance to developing countries and countries in transition. Foreign aid can therefore be categorized into two main themes: non-development aid and development aid (Minoiu & Reddy, 2009). The former includes humanitarian support for emergencies from charities, international organisations and nation states as well as military assistance (Riddell, 2008). With the latter, aid is focused on specific long-term developmental goals such as poverty reduction, improvement in the quality of health and/or educational services amongst others[29].

For Easterly (2007), development assistance is a combination of money, technical advice and conditions offered by developed nations and International Finance Institutions (IFI) designed to stimulate economic development in poor nations. Kargbo (2012) describes development assistance as a type of foreign capital usually distributed in the form of grants or

---

[29] Moyo (2009) points out that foreign aid can further be separated into three categories: charity-based aid; humanitarian or emergency aid, and lastly, systematic aid. Here, charity-based aid refers to aid distributed by charitable organizations, normally to particular institutions to achieve specific goals. Emergency aid can be seen as aid allocated after a natural disaster and is vital in ensuring the survival of victims as well as rebuilding the infrastructure of affected areas. This does not directly target socioeconomic growth within a nation. Lastly, systematic aid is given from either one country to another (bilateral aid) or through multinational institutions (multilateral aid). It should be pointed out that systematic aid can also be provided to support political goals and commitments (Clemens, Radelet & Bhavnani, 2004).

concessionary loans. Likewise, Sahoo (2016, p.1) defined development assistance as the "international transfer of public funds in the forms of loans and grants directly from one government or an international financial institution to another government for welfare purposes".[30]

ODA can either be made directly to a nation through government-to-government interactions or via an institutional third party like the IMF or World Bank. This form of assistance incorporates concessional loans and financial grants, thus loans with no or very low interest rates (Riddell, 2008; Hudson, 2015). For this research, the words foreign aid, foreign assistance, development assistance, official development assistance, and developmental aid are used interchangeably to refer to Overseas Development Assistance (ODA). In this research, ODA signifies aid disbursed with the intention of achieving or stimulating an anticipated promotion of socioeconomic growth within recipient nations and Non-Development Assistance (NDA) refers to aid that does not have development as its fundamental objective but could in one way or another lead to the socioeconomic growth of a recipient nation. However, for the purpose of this research emphasis is placed on ODA provided by the IMF.

3.3.2. Literature on Development Assistance and Socioeconomic Growth

With the aim of assessing the impact of development assistance on socioeconomic growth convergence through a public policy perspective there is a need to discuss certain key theoretical issues regarding the relationship between development assistance and socioeconomic growth. Using a similar approach to Hansen et. al., (2000) and Moreira (2005),

---

[30] The above descriptions of ODA however suggest that the primary aim of aid is to assist in the promotion of socioeconomic development and bettering the well-being of individuals within the countries receiving aid. Although development assistance may vary in terms of what is being transferred, not all aid flows are considered to be ODA even if they may be developmental in intent. Humanitarian aid is included if it is for long-term development and not just emergency relief (Degnbol-Martinussen, & Engberg-Pedersen, 2003) but in practice the distinction is not always clear (Browne, 1999).

this section briefly classifies and discusses these theoretical evolutions into four generational schools of thought, namely:

- Development Assistance, Savings, and Growth (1947 to mid-1970s)

- Development Assistance and Fungibility (Mid-1970s to 1990s)

- Development Assistance and the Policy Environment (1990s to 2000)

- Development Assistance in the Millennium (2000 onwards)

➢ Development Assistance, Savings, and Growth.

Most research on development assistance and socioeconomic growth began after the second world war. During this period, the logic behind development assistance was that foreign capital increases savings which in turn would boost investment and economic growth. Thorbecke (2007) points out that the main rationale behind development assistance was the provision of the required capital resources needed by developing nations to attain a high enough savings rate to boost them into a state of self-sustained growth. Here, emphasis was placed on the impact of development assistance on domestic savings and growth as the works of scholars like Rosenstein-Roden (1961) and Chenery and Strout (1966) became dominant. In this sense, development assistance was intended to subsidise domestic savings of recipient nations and positively contribute to socioeconomic growth. Rosenstein-Roden (1961) suggested that every additional dollar of development assistance could lead to an increase in total saving within a recipient nation.

During this period, development ideologies disregarded the usage of arrangements of development assistance measurements and anticipated that the total amount was allocated for productive investments. Thus, there was no outlined amount of assistance recipient nations need to maintain sustainable socioeconomic development. The success of the Marshall Plan heightened the popularity of this developmental model. Consequently, through the activities of

the Bretton Woods Institutions, most national development plans were designed around this ideology. Easterly (2008) points out that, taking into consideration the fact that decades later, most aid recipient economies are still not self-sufficient, this assumption however remains unverified.

➢ Development Assistance and Fungibility.

As at the mid-1970s most researchers were unable to identify whether or not foreign aid was productive in recipient economies. It was evident that the development assistance-savings-growth ideology was universally ineffective (Hansen & Trap, 2001). Investigation was however shifted from the relationship between development assistance, savings, and growth to development assistance and its usage in recipient nations. Although, Domar (1947) and Rostow (1956) defended the earlier ideology, others like Freidman (1958) found contradictory results. Similarly, others like Rehman (1968), Weisslopf (1972), and Griffin & Enos (1970) argued that development assistance had negative impacts on socioeconomic growth within recipient nations. For Griffin & Enos (1970), aid increased national expenditure rather than investments, a condition they termed 'aid fungibility'.

Fungibility of aid simply refers to the usage of development assistance in a sector for which it was not granted. For instance, when a recipient nation spends developmental funds which were intended for the health sector within its educational sector. As such, donors may end up financing something completely different from what was intended (Pettersson, 2007). These raised questions of development assistance 'misfit'. During this period the major debates concerning the effectiveness of development assistance began to emerge[31].

---

[31] It should be pointed out that the most contextually relevant debate that emerged originated from the works of Boone (1996) who backed the claims of Bauer (1976) and Griffin (1970) that aid did not only increase national consumption but was used in other sectors rather than savings and investments.

➢ Development Assistance and the Policy Environment.

Roodman (2007) notes that the mid-1990s can be identified as a controversial period regarding the development assistance and socioeconomic growth debate as various contradictory theories and research techniques emerged. Scholars like McGillivray & Morrissey (2000) and Burnside & Dollar (1996; 2000) argued that the absorption rate of aid is conditional on domestic factors such as human capital, the political environment, institutional infrastructure, policy capacities[32] and the microeconomic policy environment of recipient nations. This placed emphasis on the compatibility regarding the usage of development assistance as outlined by donors and the domestic policy preferences for aid utilization within the recipient nations. Literature revolving around this doctrine can be seen in the works of Collier and Dollar (2001), Lloyd et. al., (2001), Islam (2003), McGillivray (2003) and others who found that the existence of good policy environments within recipient nations led to positive development assistance outcomes and socioeconomic growth. That is to say, the effectiveness of aid is dependent on the policy environment (Burnside & Dollar, 2000). In this sense, "misfit" occurs when donor intentions are not in alignment with those of the recipient or when the domestic policy capacity needed to ensure the effective utilization of ODA is incompatible with the requirements of the donor.

Nevertheless, Lensink and White (2000), Hansen and Tarp (2000; 2001), Lu and Ram (2001) argue development assistance shows substantial positive outcomes on economic growth irrespective of the policy environment of recipient nations. For instance, in an OECD DAC/Development Centre Experts' Seminar on 'Aid Effectiveness and Selectivity', Ehrenpreis and Isenman (2003) found that aid had had positive impacts on the economic

---

[32] Policy capacity is one of the fundamental concepts in public policy and can be explained as the set of skills and resources— or competences and capabilities— policy actor need in order to undertake their policy functions.

growth of recipient nations. Contrary to this, further research conducted by McGillivray (2003) and Kosack (2003) showed that although development assistance had positive impacts on socioeconomic growth, impact became higher in economies that were democratic and had a stable political system[33].

> Development Assistance in the Millennium.

In the new millennium, a critical observation relating to the development assistance nexus is the emergence of an 'aid as a partnership' approach. This placed focus on international development cooperation and a globally collaborated approach to achieving socioeconomic development. Here, institutions such as the United Nations (UN) are seen to be playing a front role in outlining the need for development assistance and setting targets that development aid should seek to achieve. Similarly, institutions such as the Development Assistance Committee (DAC), United States Agency for International Development (USAID), the IMF and World Bank amongst many other IFC's – such as those considered to be dominant forums for policy debate concerning development – increasingly influence the global targets and objectives of development assistance and its evaluation. This shift from an individualist approach of development assistance – where nations single-handedly provide development assistance to developing nations – to a more international development cooperation approach has swiftly changed the analysis of the impacts of development assistance from predominately attempting to justify or otherwise its effectiveness to a more goal oriented and collaborative approach to

---

[33] it is important to point out that, in addition to the development assistance and policy environment model, other models emerged during this period. These include but are not limited to: (i) The diminishing returns of development assistance which argues that aid reaches a point where any additional increase results in reduced returns (Mühleisen, Ghura., Hadjimichael, & Ucer, 1995; Clemens et. al., 2012); (ii) The micro-macro paradox and choice of development assistance-growth models which suggests that, using a cost-benefit analysis approach, micro-level research on development assistance produced positive results as against those targeted at macro-level (Roodman, 2007; Howes et. al., 2011); and (iii) The timing (lagged) effect and type of development assistance which indicated that the timing and type of aid mattered in assessing the impacts and effectiveness of development assistance (Alesina & Dollar, 2000; Rajan et. al., 2008).

development assistance. Here, the emergence of universally well-defined goals and poverty reduction strategies began to surface as development assistance was channelled towards achieving convergence at the global level.

This is reflected in the emergence of the Millennium Development Goals and the Sustainable Development Goals. These targets are seen to provide a baseline scenario within which policy and institutional changes as well as levels of target-based financing within developing nations are aligned towards. Here, policy actors within donor nations may embrace 'universal policy models' – for instance those of DAC – to reorient their approach to stimulating policy change in recipient nations and as such encouraging aid effectiveness. At the same time, the issue with these universal policy models lies in the fact that policy actors hold the assumption that one policy framework fits all, thereby creating a form of convergence in policy content within recipient nations[34].

Easterly (2002), however, draws attention to the presence of socio-political and economic diversity within recipient nations. Noting that, although these global initiatives have served as a motivational tool to encourage developmental efforts within poor nations, a less-discussed perspective of these global goals is the impact on these performance measurements on some developing nations (Easterly, 2009). An example includes the noticeable failure of Sub-Saharan economies in achieving such indicators as compared to nations within other regions. Easterly (2009) goes further to argue that these goals are arbitrarily designed to assess progress against poverty and deprivation, making Africa look worse than it actually is. The author concludes that, although unintentional, the MDG's were set up in a way that makes it rather unlikely that Sub-Saharan nations achieve them as against the possibility of developing nations

---

[34] For instance, in assessing the strategies of the fast track to provision of universal primary education applied within Yemen, Kenya, Nigeria, Cameroon, and Pakistan amongst others, Elayah (2014) identified an identical planning and administrative framework.

within other regions because most Sub-Saharan African nations started with the lowest levels of development in line with the outline indicators (Easterly, 2009).

3.4. The Role of Development Finance Institutions in Aiding Development: The Bretton Woods Institutions

Insofar as the role of development finance institutions are concerned with the usage of coercive policy transfer to stimulate socioeconomic growth within developing countries, the IMF and World Bank constitute key contributors. These institutions have aided in the provision of financial assistance to poverty-stricken, war-torn, developing countries to help in economic reconstruction and socioeconomic growth through the provision of loans with policy conditionalities (Havnevik, 1987; Dreher, 2004; Dreher, 2009). These institutions have been criticized by some scholars for being unable to promote sustainable socioeconomic growth (see Easterly, 2005; Rodrik, 2006)[35]. Interestingly, decades after the collapse of the Bretton Woods monetary system, there has been a growing interest within existing scholarship highlighting the various shortcomings of the Bretton Woods institutions and their role in aiding development finance (see Butkiewicz, & Yanikkaya, 2005; Bulíř, & Hamann, 2008). This awareness was even more enhanced as a result of the various repercussions produced by the 2007/8 financial crisis (Helleiner, 2010).

Recognizing the above, this section seeks to elucidate the roles both institutions have played in aiding sustainable socioeconomic development as well as the shift towards a policy-based lending approach and the use of Neoliberal ideologies in structural adjustment policies. While the focus of the research is the IMF, discussions on the IMF – especially within the

---

[35] While some left-wing observers condemn these institutions as instruments of US imperialism, anti-globalization movements perceive them to be institutions ensuring global capitalism. Likewise, right-wing organizations also hold a perception that these institutions assist corrupt governments and elites thereby destroying economies and causing socioeconomic disparities. Other critiques have however centred around their internal democratic and voting structures, lack of transparency and accountability, as well as the limited role developing countries play in the formulation of various policy conditionalities attached to development assistance.

context of stimulating policy transfer – could not leave out the IMF-World Bank relationship due to their historical background and increasing collaboration.

3.4.1. The Bretton Woods Institutions

In an attempt to stimulate global trade and investment, the IMF and the World Bank were created in an atmosphere of limited private capital flows[36]. With the goal of supervising the reconstruction of the world's international payment system and stabilizing exchange rates, the IMF was set up in 1944 and currently has a membership of 189 countries. As such, it is identified as a multilateral institution that lends money to governments experiencing currency instabilities as well as balance of payment deficits (Feldstein, 1998; De Vries, 1987). Currently, the IMF undertakes a vital part in balance of payment issues in addition to supporting member states in times of global financial crises (Allen, et. al., 2002)[37].

The core purpose of the IMF can be seen as improving the economic environment. As such its functions can be categorized under two broad areas of focus: First is the provision of financial assistance in the form of loans to countries experiencing balance of payment problems. This involved the provision of momentary finance to aid policies aimed at resolving underlying problems such as loans to low-income countries targeted towards poverty reduction (Sachs, 2002). In addition to this, the IMF was tasked with the role of monitoring economic and financial developments as well as provision of policy advice and technical assistance aimed mainly at crisis prevention (Ostry, & Zettelmeyer, 2005).

---

[36] Private capital flows consist of net foreign direct investment and portfolio investment. This thesis assumes that the stimulation of foreign direct investment (FDI) can be seen as an approach to resolve balance of payment deficits (BOP). In this sense, due to a lack of consistency in BOP indicators, macroeconomic indicators used to analyze IMF impacts in the proceeding Chapter's would focus on the stimulation of FDI into developing economies.

[37] The IMF obtains its funds mainly through a quota system. This system serves as a means through which member states contribute to, and nations experiencing balance of payment issues can borrow from the fund. National contributions to this quota system also reflect the amount of money nations are permitted to borrow (Bordo, & James, 2000).

Similar to its sister institution, the World Bank was also founded in 1944 at the United Nations Monetary and Financial Conference, Bretton Woods (Scammell, 1975). Originally called the International Bank for Reconstruction and Development (IBRD), the World Bank was tasked with the reconstruction of post-WWII Europe. As these nations improved, the attention of the Bank was focused towards the economic development of non-industrialized economies, with an ultimate goal of aiding in the eradication of poverty. The World Bank is currently considered as the world's main source of financial aid for developing countries (Powell, & Taylor, 2017). Due to the evolving nature of the role played by the World Bank, it currently consists of a body of institutions collectively referred to as the World Bank Group (WBG).

Partnerships between the IMF and the WBG was facilitated in a concordat to safeguard collective involvement in areas of shared importance (Feinberg, 1988; Woods, 2006b; Peet, 2009). IMF analysis of economic environment and policies of countries provide aid in the Bank's discussions on possible development reforms. Likewise, the Bank provides advice on reforms to be taken into consideration by the Fund in its policy advocacy. Both institutions also undertake joint policy agendas like the Heavily Indebted Poor Countries (HIPC) Initiative and the Poverty Reduction Strategy Papers (PRSP). Lastly, both institutions have aided in the establishment and undertakings of global agendas such as the Millennium Development Goals (MDGs) and their 2015 replacement, the Sustainable Development Goals (SDGs).

3.4.2. Alterations in the Roles Played by the IMF and the World Bank:

In order to ensure permanence and cope with the continuously evolving international socioeconomic environment, the IMF and World Bank have experienced various amendments

in relation to the diverse roles for which they were created[38]. As pointed out by Gilbert & Vines (2000), during the creation of the Bank, it was unclear whether the Bank was to serve a transitory role; solely to aid in the reconstruction of Europe (Oliver, 1975). The IMF on the other hand, appears to have secured a more permanent role as its principal function was to assist member nations suffering from severe balance of payment deficit (Killick, 1985). However, both institutions served pivotal roles in enhancing socioeconomic growth.

In the early 1960's the role of the Bank in relation to the reconstruction of Europe was seen to have been accomplished. Nevertheless, decolonization had rapidly begun specifically in Africa. This led to the emergence of underdeveloped countries and provided a shift in the focus of the Bank. The International Development Association (IDA) was then established pioneering a major move of the Bank from assisting in reconstruction to a development lending agenda (Mason & Asher, 1973). Woods (2008) notes that, during this period, the Bank was seen to aid its poorest members through long-term loans at markdown rates via the IDA[39]. Serving as a monetary policy regulator, the IMF ensured that member states' currencies fluctuated within constricted bands. For that matter, when a member state's currency value declined towards a lower end of the band, the IMF would intervene by lending money to balance it. However, as noted by Vreeland (2006), eventually, the funds of the IMF became

---

[38] These changes can be attributed to numerous factors. Woods (2008) traces these alterations in roles the Bank played with regards to its expansion and the creation of institutions that fall underneath the umbrella of the WBG. Also, Wolff (2013) points out that after the establishment of the institutions they were faced with three major barriers: the rapid process of decolonization, the threats of decreasing international liquidity and the collapse of the par value system.

[39] The appointment of Robert McNamara in 1968 as president of the Bank proved to be a substantial moment as the Bank turned toward a poverty-focused approach (Kraske, 1996). Likewise, as indicated by Gilbert & Vines (2000), from this period onwards, the Bank repositioned itself not only as an institution that lends for development related projects but also as a development agency in itself. The IMF also played a major role in socioeconomic reconstruction during the period between 1945 and the late 1960s.

inadequate to aid in the stabilization of exchange rates. Instead of expanding the Fund, the US assumed the mantle by helping directly through the Marshall Plan[40] (Eichengreen, 2019).

Although this period marked a time of astonishing economic prosperity, one fundamental problem during this period was the emergence of disparities in economic growth between and within developing countries as compared to the developed ones. Growth in developing countries was largely determined by exports in agricultural products as the growth within the developed economies encouraged a demand for these commodities. This would eventually lead to major economic disparities between the developed and developing economies as has been explained by the Prebisch-Singer hypothesis[41] (Sapsford, Sarkar, & Singer, 1992). This eventually caused the terms of trade of primary-product-based economies to decline. This period also marked the emergence of development thinking (as discussed in section 3.2).

3.4.3. Reflecting on Development Policies (The Development of Underdevelopment)

The lack of international coherence in economic monetary policies led to weakened development and elevated unemployment rates. This stage reflects high levels of stagflation[42] on a global scale. Most developing countries (predominately in Africa and Latin America) that were solely depended on the foreign market for processed goods began to experience spill over effects as developed countries were unable to purchase their primary goods. As explained in the Prebisch-Singer hypothesis, this eventually led to the deterioration of developing economies as their inability to develop at the same pace with the Western economies was

---

[40] The Marshall Plan, formally known as the European Recovery Program (ERP), lasted six years (1947 – 1953) providing a total of $13 Billion to aid in European reconstruction process.

[41] This reflects the notion that the price of a primary commodity depreciates in relation to the price of its manufactured product in the long-run

[42] Stagflation simply refers to a fusion of stagnation and inflation. Thus, a period were the inflationary rates are high, economic growth rate declines, and unemployment is constantly high.

heightened (Sapsford, Sarkar, & Singer, 1992). The effects of this uneven trade led to increasing socioeconomic disparities within and between developing countries. Eventually, diminishing returns set in, as developing countries were seen to be declining (rather than progressing) down the ladder of development, generating the emergence of increasing levels of underdevelopment. Increasingly, these developing countries experienced high debt levels. The inability of Highly Indebted Countries (HIC) to repay loans became inevitable. For instance, in August 1982, Mexico announced its inability to pay such loans. This started a series of national defaults globally.

In response to these concerns, there was a change in development (economic) thinking. Developing nations sought for ways to climb up the scale of modernity and catch up with the developed world. Development economics however provided the practical framework of planning and implementing developmental strategies. It was during this period that the members of the US Treasury, IMF and World Bank provided a universal compendium of economic reforms to aid in the advancement of developing countries. Collectively, these policies are referred to as the Washington Consensus[43]. Over time these policy reforms became the framework for conditionalities imposed on developing nations as a condition for debt aid and financial support.

3.5. Warranting IMF Lending to Developing Countries

Following the collapse of the Bretton Woods system, the IMF shifted its attention to solving the problem of capital injection/foreign direct investment issues (Balance of Payment) that developing nations were experiencing. Discussions regarding the IMF's involvement in developing countries has undoubtedly sparked an extensive debate with varying opinions. Bird (1996, p.478) points out that this change the in IMF's *modus operandi* "provided plenty of

---

[43] This term was first used by John Williamson in 1989 to reflect the influence of the three Washington-based institutions (The World Bank, The International Monetary Fund, and The World Trade Organization).

ammunition for its critics". Whereas some scholars like Rogoff (2004) have urged for a significant decrease in IMF involvement within developing nations, others like Fischer, Meltzer, Sachs, and Stern (2003), Bird (2004), and Bevan (2005) argue the opposite and even highlight measures for further involvement. For Birdsall, Williamson and Deese, (2002), there is a need for the IMF to transfer its main concessional lending facility – the Poverty Reduction and Growth Facility (PRGF) – to the World Bank as the Bank is well equipped to deal with developing countries.

With regards to its systemic role, a coalition of NGOs campaigned for a need to close down the IMF as it was seen as inadequate for developmental activities, arguing that IMF and World Bank policies did more harm than good and that developing countries were better off without them (Danaher, 1994; Amin, 1995; Bird, 1996). The 1995 Mexican economic crisis further fuelled this debate as some saw the crisis as evidence of the deficiencies of IMF activities and for those on the other hand as justification for increasing the policy capacity building and lending activities of the IMF. Likewise, the final report of the Meltzer Commission (The International Financial Institution Advisory Commission, 2000) suggested the IMF limits its involvement in developing nations. Similarly, The Overseas Development Council report (2000) also stressed the need for the IMF to terminate its PRGF in support of the World Bank. In light of these prevailing condemnations, it is imperative that discussion surrounding the rationale – if any – for the IMF's interest in developing nations are highlighted.

Lombardi (2005) points out that, understanding the role of the IMF in developing countries can be looked at from two perspectives, the institutional perspective and the political economic perspective. From the institutional perspective, the IMF can be identified as one of the most significant multilateral institutions as it comprises of 189-member nations consisting

a range of industrial, emerging, and low-income countries[44]. Taking into consideration the fact that the World Bank Group: IBRD and IDA have 189 and 173 members respectively, and the United Nations has 193 members, the IMF can be seen as one of the largest multilateral international finance institutions. However, membership numbers alone do not emphasize the dominant role played by the IMF as an international finance institution until one acknowledges the fact that its members, and as such its activities, are not limited to reconstruction and development alone but function at every stage of development. Out of its 189 members 80 members of the IMF are PRGF-eligible. Thus, the IMF assists about 42.3% of its members with development assistance through its poverty reduction and growth facility. No other development assistance institution has such a large number of developing nations relying on it for assistance. This emphasizes the power (Barnett & Duvall, 2005; Ellison, 2017) held by the IMF and the power relations that transpire between it and developing economies.

From the political economic perspective, through its surveillance activities, the justification for the IMF's interest in developing nations lies within its ability to provide investors and donors with important information on the political economy of these developing nations. Rodrik (1995) points out that, this information can be regarded as a 'public good' as it may benefit all potential investors and donors as well as the nations in question. This is because, while individual investors are likely to find it challenging to collect and preserve data on possible projects and policy capacities of developing nations, and in cases where this data collection is possible, investors are reluctant to share such data. The IMF is, however, better positioned to acquire such information and share it efficiently. This emphasises the IMF's *de facto* role in constantly engaging in close discussions with national regimes to determine the state of their economies and the quality of their policies. This information and data gathering

---

[44] As at the 22nd of October 2018. This number is also the same as the World Bank

could also stimulate policy transfer and assist in the policy capacity improvement of developing economies as the IMF is not limited to engaging with low-income economies and emerging nations but also developed and advanced economies.

Using the information gathered, donor nations may seek to influence the policy capacity of recipient nations and prevent aid fungibility through the use of ex ante conditionalities so as to ensure aid effectiveness. As indicated by Lombardi (2005), a vital feature of multinational lending conditionalities – in this case, IMF conditional lending – is that they offer an avenue for additional development assistance to be mobilized as donor nations have greater assurance that appropriate policy reforms would be implemented within recipient countries and as a result of these policies, recipient nations would return to a path of sustainable development. The IMF has an important role in assisting member nations with weaken institutional and policy capacities to develop the competence to effectively formulate and implement policies. Although policy capacity building may not be a unique feature of the IMF, this institution can be seen to provide a remarkable comparative advantage in macroeconomic frameworks as it also plays a surveillance role which is highlighted within its Articles of Agreement. By so doing, it possesses a distinctive pool of information from cross-country policy experiences and outcomes. Through its surveillance, IMF may also give prominence to member nations on the appropriateness of entering into various lending arrangements with the Fund which target specific sectors using evidence from information gathered. This makes it easier for lesson drawing and policy transfer to occur as information is shared amongst member nations through the IMF's Policy Support Instrument (PSI).

For this reason, the IMF does not merely transfer financial resources to member nations. It also provides policy frameworks to assist borrowing nations in policy capacity building. Although debates on the role of IMF within the development assistance nexus remain inconclusive. The Independent Office of Evaluation report endorsed the assumption that ODA

donors are more likely to rely on the IMF to provide a signal on the soundness of the macroeconomic policies of a recipient nation (IEO, 2002). Similarly, as noted by Lombardi (2005), a survey of donors by the IMF acknowledged that respondents confirmed that the IMF's indicators constitute their main source of information about low-income economies and that they use them extensively when allocating aid flows.

Confidence in IMF indicators seems to be more of a matter of entrenched policy than a recognized prerequisite. Weiss (2004) draws attention to the similarities between the Paris Club debt treatment and IMF-support arrangements[45]. Similarly, Lombardi (2005) mentions that the Paris Club debt treatment, is generally conditioned on the existence of an IMF-supported arrangement, and the Enhanced HIPC Initiative to relieve low-income economies from the burden of unsustainable debt. Likewise, the Paris Club depends on a satisfactory performance under an IMF-supported arrangement before entering into agreements. Taking the above into consideration, it is however important to consider earlier discussions on power as this raises issues regarding the position of the IMF as it seeks to provide 'a seal of approval' accrediting recipient nations as well as a donor nations' policy conditionalities.

3.5.1. IMF Policy Based Lending - Conditionalities

As observed in the previous section, the IMF plays a vital role in aiding low income and emerging nations climbing up the ladder of development. However, its activities within developing countries has attracted a lot of controversies. For the purpose of this research, attention will be shifted from IMF's development assistance in its totality to placing focus on the policy capacity building aspect of its activities. This subsection examines the presence or

---

[45] The Paris Debt Club is aimed at renegotiating the debt of developing countries having repayment difficulties. For a detailed discussion see for instance Rieffel, A. (1985). The role of the Paris Club in managing debt problems. International Finance Section, Department of Economics, Princeton University.

use of policy-based lending (conditionalities)[46] in IMF development assistance. It is however important to point out that, the use of the term development assistance in this context refers to financial assistance provided by the IMF.

➢ Description and Rationale for Policy Conditionalities:

The concept of conditionalities within development assistance and financial lending is among the most controversial aspects on IMF's involvement in development assistance (Buira, 2002; Kentikelenis, Stubbs, & King, 2016). Broadly speaking, conditionalities can be seen as "the application of specific, pre-determined requirements that directly or indirectly enter into a donor's decision to approve or continue to finance a loan or grant" (Bull, Jerve, & Sigvaldsen, 2007, p.4). Similarly, Buira (2002, p.3) defines conditionality as "a means by which a party offers support and attempts to influence the policies of another in order to secure compliance with a program of measures", or "a tool by which a country is made to adopt specific policies or to undertake certain reforms that it would not have undertaken, in exchange for support" (Buira, 2002, p.3).

Christian Aid (2006) defines conditionality as the use of loans and grants to secure change in developing countries by making money conditional on the implementation of certain reforms. World Bank (2005) however narrows down its definition of conditionalities to the specific conditions attached to the disbursement of policy-based lending or budget support. For the IMF (2018), conditionalities are economic policy adjustments agreed upon by member nations when borrowing from the IMF. These policy conditionalities are created with the intention of helping member states resolve their BoP problems without employing detrimental policy measures which could obstruct national prosperity. Simultaneously, policy

---

[46] It is important to point out that the term 'policy-based lending' would be used within the context of this research to refer to policy conditionalities attached to IMF financial assistance.

conditionalities are also argued to assist in safeguarding IMF resources and ensuring the BoP within the borrowing country is resilient enough to guarantee loan repayment.

Until the 1980's the IMF utilised conditionalities that focused on areas understood to be within its mandate (Diaz-Alejandro, 1984). It outlined anticipated policy reforms targeted predominately on monetary policies, exchange rates and budget deficit (Williamson, 1983). Finch (1983) affirms that the IMF operated in accordance to the 'doctrine of economic neutrality' and did not interfere with the socioeconomic objectives of member (borrowing) nations. Polak (1991, p.39) demonstrates this by stating that, although the IMF helped nations facing macroeconomic problems, "how the government brought down the deficit, by raising taxes or cutting expenditure, and the particular taxes or expenditure at issue [remained] the government's responsibility". In this respect, IMF conditionalities did not explicitly challenge the domestic structures of recipient nations.

In response to the changes in the geo-political and socioeconomic environment of the 1980's IMF activities expanded. This led to the introduction of policy-based lending which empowered the IMF with the ability to encourage the removal or alteration of certain domestic policies that were considered essentially as policy-induced obstacles to socioeconomic growth and development. As the expansion of IMF policy conditionalities was parallel to the increasing influence of neo-liberal ideologies, IFIs adopted aspects of the privatization, economic deregulation and, trade and financial liberalization agenda in their conditionalities. This led to the emergence of structural adjustment conditionalities. Babb & Buira (2005) point out that, this period marks the beginning of IMF's movement beyond its initial functions prescribed within its Articles of Agreements.

Extensive literature on the IMF focuses on the effects of these conditionalities – thus, imbalanced distributional effects of these conditionalities, the inability of these conditionalities to address socio-environmental issues, and ultimately, the failure of these conditionalities to

stimulate sustainable development – collectively referring to them as the Washington Consensus (Williamson, 1990; Summers & Pritchett, 1993; Toye, 1994; Babb & Buira, 2005). Years later, the framework of IMF conditionalities extended further to cover a collection of policy areas including welfare policy, labor market reforms, and governmental transparency and accountability (Stiglitz, 2002; Chang, 2006; Serra & Stiglitz, 2008; Babb, 2013). This broadening of the policy content of IMF conditionalities became to be understood as 'mission creep' (Babb & Buira, 2005). The phrase suggests the IMF's movement beyond its core mandate of BoP and other economic activities towards an area that essentially belongs in the jurisdiction of politics (Stiglitz, 2002). Thus, defying national sovereignty and domestic independence of member nations in the formulation and implementation of policies (Krasner 1999; Przeworski & Vreeland 2000).

An area of critique over the lack of efficacy regarding these conditionalities emerged during the late 1980s as empirical evidence suggested a large amount of structural adjustment programmes were not implemented as planned, and in cases where implemented, policies did not necessarily yield positive results (Haggard, 1985). These critiques intensified in the late 1990s, particularly after the Asian financial crisis, as a fresh collection of academic literature confirmed these assumptions (Feldstein, 1998; Killick, Gunatilaka, & Marr, 1998; Radelet & Sachs, 1998; Dollar, & Svensson, 2000; Goldstein, 2001; Stiglitz. 2002). For instance, Easterly (2005) concluded that placing external conditions to regulate the behaviour of governments through loan conditionalities has failed to demonstrate successful results in reaching pervasive policy enhancements or in levitating developmental potentials within implementing nations. Aside its efficiency, other critiques also revolved around the disposition of sovereign nations to put aside public will and instead endeavour to satisfy conditionalities set by IFIs.

In recent times, others like Elayah (2016) have associated the ineffectiveness of conditionalities to the external position held by IFIs. That is to say, development assistance

interventions may be unsuitable as external policy actors maybe inadequately informed of the nature and extent of the issue at hand and, the local environment within which this issue would be addressed (Brinkerhoff, 2005). Elayah (2014) further points out that, the orientation of these external policy actors in designing and managing development assistance interventions and projects easily becomes biased towards their institutional ideology. This issue of a lack of knowledge of the domestic settings may result in negative results for both donor and recipient policy actors.

Here, due to the complex and ever-changing local environment of recipient nations, it is virtually impossible to assess local problems effectively and formulate adequate policies to combat these problems. Consequently, the adoption of a given approach to solving developmental problems in a given recipient nation may, over a period of time, emerge ineffective as the approach may appear to be remote from reality as new local perspectives begin to surface with regards to certain issues. Furthermore, given that developmental issues have numerous perspectives, the policy responses to local issues may be unable to reflect the real problems of the implementing nation (Elayah, 2016). In effect, this raises questions regarding the 'compatibility' between IMF policy conditionalities and the domestic settings of implementing ODA recipient economies.

In light of these criticisms, the IMF (2001), acknowledged its extensive use of conditionalities within varying policy areas and sought to undertake reforms. The IMF expressed its desire to 'streamline' its conditionalities and retreat to its primary function of macroeconomic and exchange rate policies. By 'streamlining' its conditionalities, the IMF seeks to prompt conditionalities only when they are directly relevant for macroeconomic and exchange rate stabilization. Validating its involvement in aiding developing nations achieve the Millennium Development Goals, the IMF announced that lending programmes would encourage 'policy space' to authorities within recipient nations insofar as these national actors

112

reach the standard that members' policies must meet in order to qualify for IMF support (IMF, 2004).

The principles underpinning this new design of conditionalities were to emphasize tailoring of policies to country circumstances, policy ownership, and policy coordination amongst others. Nevertheless, beyond this rhetoric, a new stream of criticism surfaced regarding the so called 'new' conditionalities. For example, the IMF's Independent Evaluation Office raised concerns regarding the extent of change in IMF-supported lending programmes as conditionalities continue to play a vital role in its undertakings (IEO, 2007). In response to these critiques, the IMF released a sequence of reports stressing its apparent revamp of past bad practices (IMF, 2009a; IMF, 2009b; IMF, 2009c; IMF, 2009d).

3.5.2. Conditionalities as a Toolkit for Policy Capacity Building

To investigate the intended role of conditionalities in development assistance it is essential to address the underlining assumption that developing nations do not possess the policy capacity needed to deliver an economic, effective, and efficient use of financial assistance. Venner (2015) noted that the notion of capacity development within the development assistance nexus has seemingly become omnipresent as development actors acknowledge a deficiency in capacity within developing nations is one of the principal impediments to development. For Kühl (2009), capacity building remains something DFIs anticipate developing while undertaking their activities within developing nations. Nair (2003. p.1) indicates that the World Bank stance on capacity development signifies "the abilities of individuals, institutions, and societies to perform functions, solve problems, as well as set and achieve a country's development goals in an effective, participatory, and sustainable manner". Boesen & Therkildsen, (2004) also described capacity building as the capability of a developing nation to generate suitable developmental outcomes.

Tracing its original usage, Venner (2015) identified that the usage of the phrase 'capacity building' can be traced as far back as the 1970s with regards to local government policies on fiscal decentralization reforms within the USA. Here, the term was used as a substitute for improvement in the management of local governments. The problems experienced by local government during this period - inadequate distribution of social services, unproductive monetary management, poor budgeting processes, lack of coordination between government and non-governmental entities, etc - are very closely related to the problems some developing countries are facing. Eventually, the notion of capacity building shortly emerged within the development assistance nexus (Venner, 2015). For instance, in their study on poverty in Asia, Rondinelli & Mandel (1981) concluded that the only realistic approach to eradicating poverty in Asia lies within local governments capacity to organise community resources, and that, limited governmental capacity could be identified as the main obstacle to poverty reduction instead of a lack of finances. Similarly, in a research conducted on sustainable development in Sub-Saharan Africa, Mundial (1989) suggested that in order to reverse the socioeconomic decline in Africa there is a need for actors to enhance the institutional capacities of African nations through the use of favourable economic policies.

Within the public policy context, the definition of capacity building can be linked to an aspect of the 'Capacity Development Results Framework' published by the World Bank (Otoo, Agapitova, & Behrens, 2009). This suggests that, capacity building is a process of creating transformations in socio-political, policy-related and organizational elements of government and concentrating on how these changes occur, drawing on lesson learning and identifying agents of change. Wu, Ramesh, & Howlett, (2015) note that most scholars define policy capacity as the ability of governments to make intelligent choices (Painter & Pierre, 2005), to scan the environment and set strategic directions (Howlett & Lindquist, 2004), to weigh and assess the implications of policy alternatives (Bakvis, 2000), and to make appropriate use of

knowledge in policy-making (Parsons, 2004). Of course, in the world of overseas development assistance, policy capacity building is achieved through the use of conditionalities as external policy actors seek to encourage domestic actors to implement sound policies so as to ensure the effective use of development assistance.

Utilizing the public policy definitions of policy capacity, one may argue that the IMF is presumably well positioned to undertake these tasks – making intelligent decisions based on the assessment of different policy alternatives – especially given its surveillance activities and expertise in economic policies. However, as discussions in Chapter Two suggest, institutions like the IMF are normally denoted by path dependency which depicts the trajectory of institutional development (Daugbjerg & Swinbank, 2015), and have been criticized for exhibiting path dependency with the implementation of 'one size fits all' policies (Stiglitz, 2007). These policies are ideologically orientated, benefiting some policy options over others and reflect the 'totalizing logic' of these institutions[47] (Kontopoulos, 1993).

At the same time, it can be debated that due to the complexities of national problems, external bodies may not possess the required knowledge of national problems to ensure successful domestic policy implementation, and as such, may not be able to marshal the right resources and responses needed in combatting such complex problems. This could eventually lead to policy intervention misfits as the varying perspective of IMF policy actors and domestic conditions may not be in alignment. Conclusively, it could be argued that having adequate policy capacity is an essential pre-condition for successful policy outcomes and as such successful development assistance interventions.

---

[47] The totalizing logic is used in this context to refer to overarching institutional logics that can hold influence on the undertakings of an institution for considerable historical time period. Examples include the total logics of capitalism etc. (Haynes, 2018)

3.5.3. The Question of Imposition or Self-Imposition in IMF Policy Capacity Building

While attempting to synthesize the discussions above, it becomes clear that due to the complex and ever changing local environment of recipient nations, it is virtually impossible for external policy actors to accurately assess local problems effectively and formulate adequate policies to combat these problems (Elayah, 2016). Thus, the disconnection between the IMF, its policies (through the use of conditionalities), and the national (domestic) problems are heightened by virtue of the IMF's external position. In addition to this, Bird, & Willett (2004) also point out that this disconnection can also be seen in relation to the domestic implementation of IMF policies. Here, domestic policy actors may not recognise the details of the policy being implemented as they did not partake in its formulation. A limited understanding of the policy, its purpose, and intended outcomes may hinder policy effectiveness. Li (2007) conceptualises this as 'rendering technical'[48]. For this reason, due to this policy disequilibrium – thus, the inability of IMF policies to strongly address the socioeconomic problems of recipient nations – there has been an emergence of literature on the need for extensive coordination between policy actors domestically and externally. As discussed in the section on IMF policy-based lending, it was highlighted that the IMF revisited its conditionality stance and undertook a process of streamlining them. Here, conditionalities were placed directly in areas relevant to macroeconomics and exchange rate stabilization.

In addition to this, Bird & Willett (2004) observed the appearance of a second wave of reforms. These reforms placed an increasing emphasis on the notion of policy 'ownership'. Drazen (2002. p. 37) defines ownership "as the extent to which a country is interested in

---

[48] The concept of 'rendering technical' is the idea that political questions associated with development are taken up by development experts, artificially enclosed, and problematized in ways that fit existing solutions, rendering them non-political (Li 2007, 7). In this regard, less attention is given to country-specific [political] context, hence sometimes leading to their failures.

pursuing reforms independently of any incentives provided by multilateral lenders." Also discussed in the section on IMF policy-based lending was the IMF's emphasis on recipient nations submitting a memorandum detailing the necessary socioeconomic and financial policy reforms a nation seeks to undertake – this is attached to a letter of intent – when member states request for financial assistance. This assumes that, policy actors within recipient nations are more prima facie to implement IMF policies they 'own', rather than policies they feel have been imposed on them (Bird & Willett, 2004). In this sense, domestic policy actors are seen to be involved in the policy decision-making process.

Additionally, earlier discussions also emphasised that, in response to its critiques, the IMF proposed that its lending programmes would encourage 'policy space' (ownership) to policy actors within recipient nations insofar as these national actors reach 'the standard that members' policies must meet in order to qualify for IMF support (IMF, 2004). This however suggest an absolved form of coercive policy transfer rather than a strong-armed approach. Nevertheless, the thin line that exist between absolved and strong-arm coercive policy transfer perspectives lies within the ability of policy actors to collectively undertake policy decision-making as well as the power relations that exist during these decision-making processes and as such the 'politics' of coercive policy transfer.

The IMF has been criticised for its voting system. Lombardi (2005) demonstrates that IMF's low-income members hold less than 10 percent of the institution's voting power and a roughly similar share of its quotas, which are based on the relative size of each member's economy. Thus, unlike the United Nations, which operates on the principle of one-country-one vote, the IMF operates a 'weighted' voting system based on a countries economy. Academic citations have stressed that the quota system the IMF operates determines subscriptions, drawing rights, and voting rights and that this could be explained better by history and politics than by economic ideologies (Bird, 1987; Kelkar et al., 2004; Bird & Rowlands, 2006).

Certainly, collectively utilising their 10 percent voting power, developing nations can have no legitimate right over routing the direction of the institution.

It was also acknowledged that as an institution, the IMF can be identified as one of the most significant multilateral institutions with low-income country membership amounting to 80 members. Likewise, through its activities, IMF indicators constitute their main source of information about low-income economies and that donor nations use them extensively when allocating aid flows (Rodrik, 1995) and as such most donors rely on IMF indicators as a 'seal of approval' accrediting recipient nations as well as a donor nation's policy condition. For this reason, other donors sometimes emulate IMF support arrangements (Weiss, 2004). Using both Barnett, & Duvall (2005) taxonomy of power and Ellison (2017) analysis of politics, power and policy transfer, it is evident that the power possessed by the IMF over developing nations seeking assistance would undoubtedly stimulate a form of strong-armed coercive policy transfer regardless of country 'ownership'.

Bird (1996) calls attention to the fact that for the IMF to act as a development finance institution, two sets of conditions have to coincide. First and foremost, developing countries need to request assistance, and, secondly, the IMF has to be willing to provide this assistance. Reflecting on this statement, one may suggest that both policy stakeholders need each other. However, irrespective of a sense of mutual dependence the power interactions between low-income developing nations and the IMF is certainly not power as mutual influence but instead power as weighted bargaining with one side having the ability to utilise power as coercion. Although developing nations do not possess the power needed to alter the policy directions of the IMF, external factors such as critiques from academic and other institutions (global or otherwise) have strongly altered the policy direction of the IMF. This is evident in the recent financial times publication by Johnson (2019) who suggests that the IMF may be changing course.

3.6. Conclusion: Goodness-of-fit in the Development Assistance Nexus

This chapter sought to demonstrate the utilisation of policy transfer and as such strong-armed coercive policy transfer alongside development assistance by development finance institutions with the intention of accelerating socioeconomic growth. By so doing, this chapter revisited the theories of socioeconomic development; discussed the assumption that development assistance can be seen as a precursor for achieving socioeconomic growth; placed focus on development finance institutions and their role in aiding development assistance; and lastly observed the use of a policy-based lending approach by the IMF in its developmental lending. Based on these discussions a strong-armed conditional approach to coercive policy transfer was observed within IMF's development lending activities. As a final point, it is important to acknowledge the idea of 'goodness-of-fit' in the development assistance nexus – good policies and good policy environment. Although some scholars have argued that the policies of developing nations are inconsistent with development and as such the need for ex ante policies to be implemented before loans are disbursed (Sachs, 1989; Diwan & Rodrik, 1992), others like Pronk (2001) have argued that quality is the only thing that matters. This could be quality in the amount of aid, quality in the policies attached to aid, or quality in the policies of the recipient nations.

Indeed, synthesising discussions in Part One, it is evident that development theories can directly be linked to the concept of convergence. Development assistance and policy transfer (conditionalities) are meant to assist developing economies with the required capital resources, and capacity development, needed to attain a state of self-sustained growth. However, as reflected in the literature on development assistance and socioeconomic growth (see Section 3.3.2.), there is a lack of convergence in ODA intervention outcomes. This can be linked to the contextual and case specific nature of policy compatibility. That is to say, the causal mechanisms triggering the convergent policy changes across countries as well as the

119

facilitating factors which affect the effectiveness of these mechanisms (Knill, 2005). Here, the role of the IMF as a mechanism in triggering convergence policy changes is demonstrated in its use of conditionalities in development assistance lending. Nevertheless, the variations in policy outcomes have led to a lack of convergence in ODA intervention outcomes. In the literature (see Section 3.3.2.), this has been linked to multiple factors.

The underlining context of discussion relevant to this research remains that, depending on how well these policies fit with the domestic settings of implementing states, the implementation of coercively transferred policies may cause alterations in the domestic structure of an implementing nation and may result in unintended policy outcomes (see Figure 4.2 in Chapter Four for a schematic depiction). This alteration could cause changes in the existing institutional equilibrium of implementing states (Knill, & Lehmkuhl, 2002). This could lead to questions about compatibility as external policies may emerge as misfits. Jørgensen, Pollack & Rosamond (2007) identified that goodness of fit can be assessed from two viewpoints. First, policy misfit: where domestic policies maybe contradictory to externally coerced policies (Börzel, & Risse, 2000; Börzel, & Risse, 2003). Second, externally coerced policies may conflict with institutional structures, causing an institutional misfit. Thus, these policies may contradict the domestic way of doing things. This could lead to institutional restructuring in order to ensure compatibility. Keeping these discussions in mind, the subsequent chapter proceeds to highlight the data analytical framework used within this research.

Part Two:

A Realistic Approach to the Evaluation of IMF

Intervention Outcomes on Convergence.

Chapter Four

Research Methodology

4.1. Introduction

This chapter describes the research methodology, methods and data utilized in the analysis of the cross-sectional country level evaluation of the impact of IMF supported policy intervention outcomes on convergence in Low Income and Developing Economies (LIDEs). A brief review of the cross-country literature and empirical evidence on the development assistance and socioeconomic growth relationship, suggests that the adaptation of a particular methodology – in terms of data sources, data samples, method(s) of date analysis, etc. – strongly influences the results. Studies such as Karras' (2006) adopts a quantitative approach to a cross-section evaluation of the aid-growth relationship has proven advantageous in terms of analysing time effects in panel data estimates and the robustness of outcomes. Other studies, (Dalgaard & Hansen 2001; Easterly et. al., 2001) have proven that research outcomes are likely to vary depending on the use of diverse case studies and methodological specifications. Tarp (2011) utilised a quantitative meta-data analytical approach in cross-country regression analysis on African case studies and identified a trivial stimulation of economic growth in Africa. On the other hand, sample studies on the correlation within the aid-growth relationship across cases in Asian and European countries tend to produce more positive results.

When countries are singled out, and aspects of evaluation are more specific, some significant results are highlighted irrespective of a country's geographical location (Levy, 1988; Loxley & Sackey, 2008). These studies bring to light the fact that results from the various evaluations of the impact of development finance on socioeconomic growth within or across countries may provide varying outcomes based on regional differences as well as methodological approaches. For instance, a comparative analysis of two quantitative meta-data

analysis by Doucouliagos & Paldam (2008) and Mekasha & Tarp (2011) shows the influence of varying methodological approaches in the aid-growth relationship. Although, there may be some convergence in their results for Africa, they still disagree on results from the entire sample of developing countries and in other forms of impacts assessment due to different methodological estimations. But, as Gomanee et. al., (2005) may argue, probably, the problem of low growth rates in some cases may be associated with problems not related to foreign aid. Similarly, research conducted by Burnside & Dollar (2000) has had its results disproved by both Easterly, et. al., (2001) and Dalgaard & Hansen (2001) largely on the basis of sample differences as well as changes to variable specifications. Clearly, the results of research on the development assistance and socioeconomic growth relationship are largely dependent on the sample group and methodology used.

Due to the cloudy nature of evidence suggesting the impacts of development assistance, this research adapts a realistic approach (Pawson & Tilley, 1997) to its evaluation of IMF intervention outcomes on convergence. It also combines a configurational approach (outlined within the context of Dynamic Patterns Synthesis) with documentary analysis in its evaluation of macro-data across 58 LIDEs. The initial part of this chapter focusses on the concept of realistic evaluation and outlines the analytical framework through which the examination of both the quantitative and qualitative aspects of this research are situated. The chapter then moves on to discuss the methods used – Dynamic Patterns Synthesis (DPS) and Documentary Analysis. After this, focus is placed on the unit of analysis - the 'what' and 'who' is being studied, the variables selection, and complementary data used within this research. The chapter concludes with a discussion on ethical considerations, and an outline of the data management and analysis process.

4.2. A Realistic Approach to the Evaluation of IMF Interventions

Tilley (2000) indicates that research into the evaluation of policies within social systems and social change, find their ancestries in the works of scholars like Popper (1945), Campbell (1969), Campbell and Russo (1999). Popper (1945) established the concept of 'piecemeal social engineering' as an alternative to 'utopian social engineering' as a social science research method for combating social problems. This method is based on the introduction of modest change to address specific social problems. Popper advocated the presentation of small-scale interventions to deal with these harms, to check whether they produced the intended effects, and whether they also produced any unwanted side effects. He promoted the use of trial and error as a learning approach to redefining interventions. Here, the role of a social scientist is to conduct research that would replicate the theories that were built into these interventions. From his viewpoint, these practices would in the long run produce social benefits and cause measurable reductions to social ills. And, at the same time, contribute to developments within the social sciences.

Campbell (1969) further developed the concept of 'reforms as experiments.' This is based on the notion that experimentation is essential to test the success of a reform and serve as a basis for finding out, and learning about, what works. This could then be built upon to inform policy actors on how to combat specific social problems. Undoubtedly, forms of both the 'piecemeal social engineering' and 'reforms as experiments' are evident in the modern-day incremental approach to policy implementation and lesson drawing. Nevertheless, although Popper (1945) and Campbell (1969) emphasized the importance of social science in contributing to social policy and practice – through the examination of the effectiveness of policy interventions – both methods are fundamentally limited.

Unlike orthodox scientific research that can be tried and tested in a laboratory – with an experimental and a controlled group – the complexity of social systems does not permit

social scientists to effectively partake in experimental approaches. Talcott (2013) describes a social system as the patterns of relationships that make up a rational whole and occur between individuals, groups and institutions. These patterns of relationships differ from person to person, from group to group, and from one institution to another. As such, it is evidently impossible for a social science researcher to have a controlled and experimental group that are ideally similar and share exactly the same or similar patterns to make inferences that, based on what worked for group A, should seemingly work for groups B, C, and D, thereby stipulating a 'one size fits all' hypothesis. For this reason, Pawson and Tilley (1997) developed a social science research method that encourages the investigation of relationships between context, mechanisms, and outcomes to address the complexity in researching complex social systems.

In a traditional experimental research, researchers seek to find out what works and/or what does not work. However, in realistic evaluation, from the onset, a researcher seeks to identify what works for whom, within what circumstances, thus focusing on configurational patterns amidst conditions between and within cases. In this sense, a realistic evaluation aims at identifying and understanding which intervention produces which effects within which context. Realistic evaluation is therefore a theory-based evaluation approach that finds its epistemological foundations in critical realism (Collier, 1994; Danermark, Ekstrom, & Jakobsen, 2005; Archer, Bhaskar, Collier, Lawson, & Norrie, 2013). As evident in Chapter Three (Section 3.3.2), despite a plethora of theoretical knowledge and academic literature regarding the relationship between ODA and socioeconomic growth, there is little robust evidence supporting the efficacy of the development assistance and socioeconomic growth relationship. The underlining source of this problem remains in the use of traditional evaluation approaches by social scientists in the generalisation of intervention results as well as the issues associated with assigning causality to relationships between variables. It is for this reason that Pawson & Tilley (1997) developed their ideas about realistic evaluation.

Magnin, Jeannot, Voahangy, & Stoll (2018) note that realistic evaluation utilises the Context, Intervention, Mechanism, and Outcome (CIMO) configuration. Highlighted in the figure below (Figure 4.1), the CIMO configuration considers the various ways within which a particular context could result in a mechanism that achieves a given intended outcome or otherwise (Wong, Greenhalgh, Westhorp, & Pawson, 2014). In their review of user-fee exemption policies for health services in Africa, Robert, Ridde, Marchal, & Fournier (2012) illustrate that the exchanges between the context and the outcomes are triggered by the mechanism. Here, interventions do not live in isolation but rather trigger one or more mechanisms to facilitate an outcome (Robert, et. al., 2012). Nevertheless, the CIMO configuration used within the context of this research adds an intervention context. This is based on Lacouture, Breton, Guichard, & Ridde, (2015) model which was utilised by Magnin, et. al., (2018) in their realistic evaluation of a malnutrition programme in Madagascar.

Figure 4.1. The CIMO Configuration
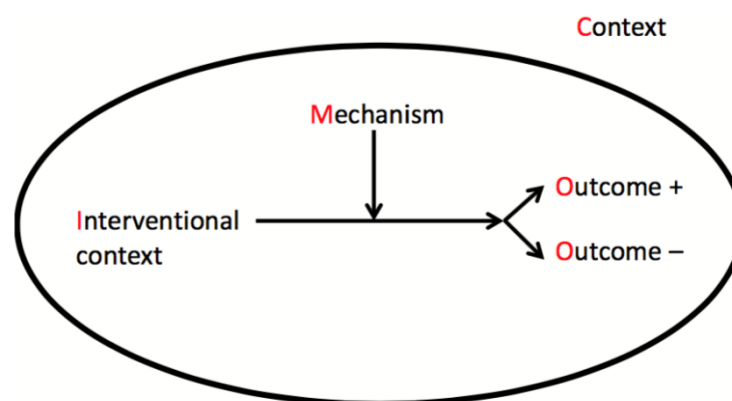
Note. Figure representation of The Context, Intervention context, Mechanism, Outcome configuration (schematic version).

From Magnin, M., Jeannot, E., Voahangy, R., & Stoll, B. (2018).

The context (C) is explained as the social system within which a particular intervention triggers a mechanism that is envisioned to create a specific outcome (Tilley, 2000). It generally refers to the settings within which the interventions, mechanisms and outcome all manifest. It consists of dimensional factors such as the sociocultural demographics, geographical location,

institutions, political structures, and socioeconomic environments etc. The intervention context (I) describes the exact context or conditions within which an intervention was implemented as well as the methods in which it was implemented. These features are essential in evaluating which interventions produced what outcomes and why. The mechanism (M) demonstrates the factors and methods used. These mechanisms may lead to a particular outcome pattern within a given context (Tilley, 2000). In this research, policy interventions are considered as mechanisms. Outcomes (O) look at the patterns of effects produced by particular policy interventions being triggered in a given context. These patterns may either emerge immediately or otherwise. Outcomes can be short, medium or long term and positive or negative.

4.3. Towards a Conceptual Framework

With the purpose of assessing the compatibility of policy intervention mechanisms through which IMF conditionalities impact member countries, a synthesis of the typologies of dynamic patterns in complex social systems is adopted to identify the effects of IMF policy interventions on LIDEs (as reflected in Figure 4.2 below). It is assumed that based on the degree of compatibility, systemic interactions are more likely to produce certain dynamic convergent patterns. If IMF policy interventions fit well with the domestic settings of implementing states, the systemic dynamics likely to occur would be stable in nature. This suggest that, given the purpose of the IMF, an IMF intervention should produce relative macroeconomic stability and maintain convergent patterns. Here, variables and case patterns would both remain stable. Alternatively, depending on the degree of misfit, patterns could be unstable in nature. If the interactions between the domestic settings and external policy conditions are a misfit, the dynamic patterns of interactions are likely to demonstrate pattern instability. The adoption of a realistic approach becomes evident here as the analysis of compatibility looks beyond labelling what works and/or does not work, but what works for whom, under which circumstances.

127

Figure 4.2. Overall Research Conceptual Framework

Dynamics and Forms of External Effects on Convergence

Policy

Intervention Mechanism & Mode of Policy Transfer

Policy Implementation Context

Policy Outcome

IMF Requirements for Monetary Assistances (Conditionalities)

Strong-armed Coercive Policy Transfer

Fit

Misfit

Positive (Opportune Conditionalities)

Negative

Low (Sustained Convergence)

High (Inopportune Conditionalities)

Policy Compatibility
National Policy Capacity & Policy Alignment with IMF Interventions

Absorptive Capacity & Domestic Policy Calibration
Domestic opportunity for policy intervention alignment and domestic policy and institutional recalibration

Ease of Adaptation
Cost of domestic policy calibration

Type of System Dynamics	Variable Pattern	Case Pattern
Stable Dynamics	Stable	Stable
Case Instability	Stable	Unstable
Variable Resilience	Stable	Unstable
OR		
Case Resilience	Unstable	Stable
System Instability	Unstable	Unstable

Dynamic Patterns Synthesis
Configurational approach to assessing compatibility based on stability of case clustering and variable interactions

Note. Figure representation of the conceptual framework showing the schematic representation of the various concepts and analytical framework used within this research. Created by

Author: A Synthesis of Typologies of Dynamic Patterns (Haynes, 2017) and The External Dimension of Europeanization (Lavenex & Uçarer, 2004).

The cross-national, cross-continental, and longitudinal spatial comparative approach grounded within a global context, utilized within this research justifies the adaptation of a realistic approach. The comparative case study approach adopts a multi-level analytical perspective like the geographical hierarchy of policy transfer locations (see Figure 2.3. in Chapter Two). However, the starting point of the analysis looks at the national level on a comparative basis. This can be seen in Figure 4.3 (below).

Figure 4.3. A Contextual Emulation of The CIMO Configuration
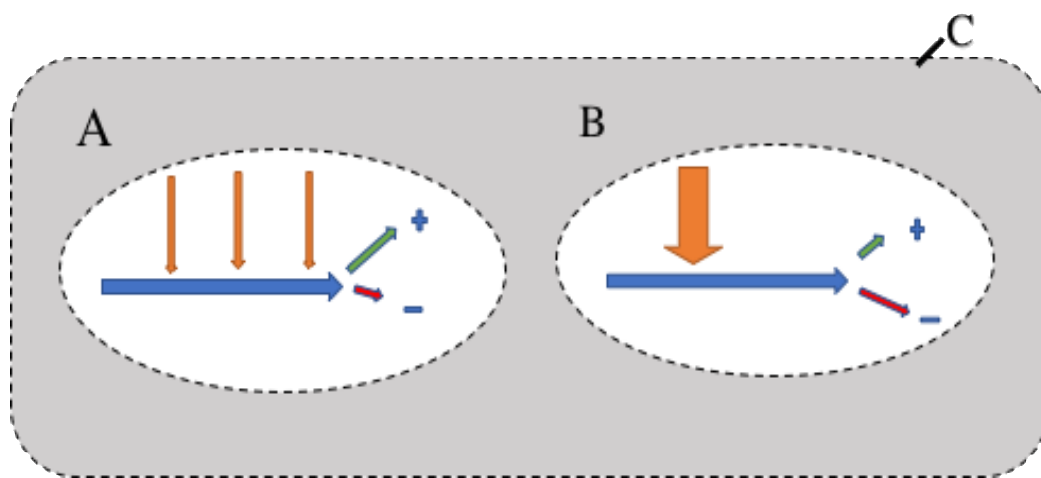
Note. Figure representation of the Contextual Emulation of The CIMO Configuration showing the schematics of the approach used in analysing IMF Interventions in cross-country cases within this research. Created by Author.

In Figure 4.3 above, A and B represent a small social system – for this research countries – and has semi-permeable boundaries that can be influenced by either A, B, or C. In this sense, C (the grey rectangle) represents a larger social system – for this research the continent or geographical region – within which A and B are located. Taking a closer look at A and B, the blue arrow signifies the intervention context or regularity, that is, the time period within which an intervention was implemented. The orange arrow represents the intervention or mechanism whereas the green and red arrows represent outcomes. The green arrow signifies a positive outcome and the red arrow suggests a negative outcome. Within the context of this

research, policy intervention outcomes are centered on country convergence and heterogeneity, and variable predictability in IMF specialized areas. Here, focus is placed on whether IMF interventions lead to a convergence in positive socioeconomic stability, or otherwise, as reflected in the macro-data.

From Figure 4.3, it can be observed that A has experienced multiple interventions that are smaller in size (compared to that of B). The interventions were also implemented at different time periods (along the blue arrow, signifying the intervention context). From this, the researcher recognizes that in as much as the context may vary, policy interventions (and number of interventions) may vary from one location to another, and from one time period to the other. As reflected above (Figure 4.3), both cases (A and B) have experienced some positive and negative outcomes. This research does not seek to find one outcome at the expense of the other. Rather, it seeks to analyze multiple outcomes and examine the configurational patterns in intervention outcomes. Nevertheless, although the interventions within A may have been delayed, they produced greater positive outcomes. Instead, the intervention within B produced greater negative outcomes over the course of time. Also, A may be exhibiting delayed policy responses as compared to B and B could have similarly experienced positive outcomes at the time of policy implementation but in the long run the negative outcomes outweighed the positive. It can also be observed that the context within which interventions, mechanisms and outcomes are situated (i.e. within A and B) are semi-permeable and as such factors within the larger context (C) may influence settings within A and B. Hence, the dotted line around the circumference of A and B. This portrays the assumption that no smaller social system exists in isolation and as such they may, have some influence on each other.

Figure 4.4. A Global Contextual Emulation of The CIMO Configuration
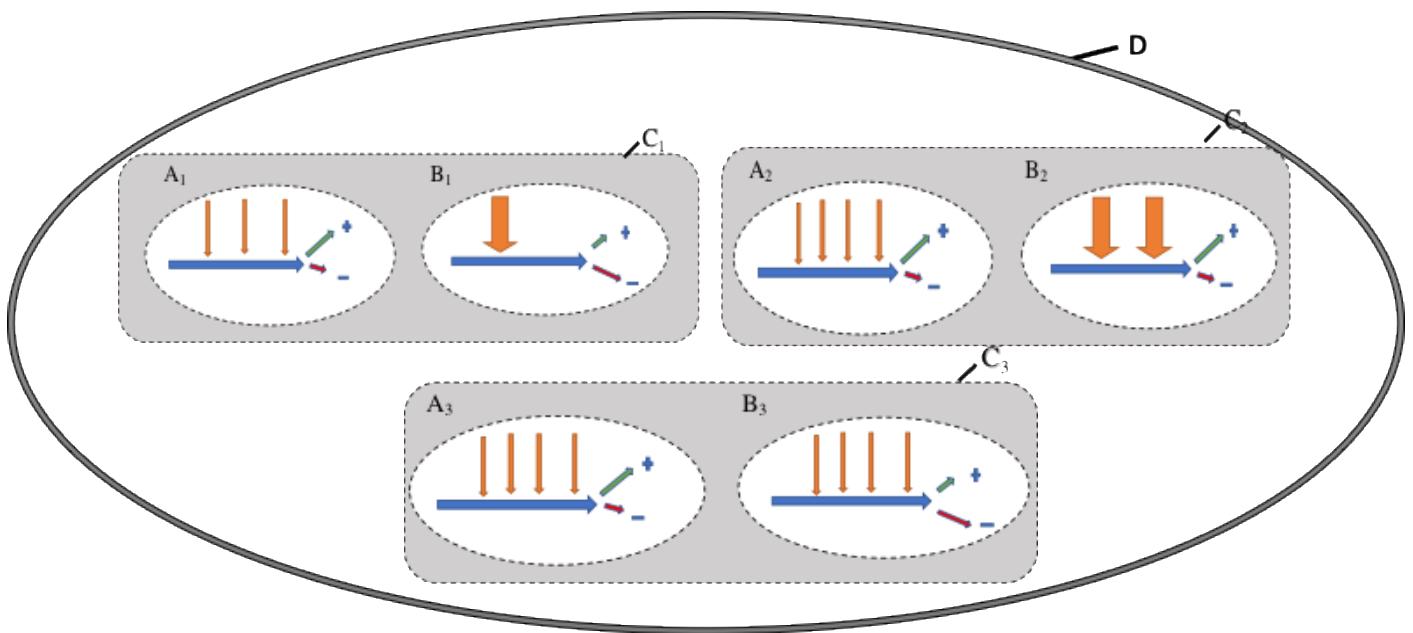
Note. Figure representation of the Global Contextual Emulation of The CIMO Configuration showing the
schematics of the approach used in analysing IMF Interventions in cross-country, cross-continental and longitudinal case
study approach within this research. Created by Author[49]

The settings within the larger social system are more than likely to influence activities within the smaller system. Taking this analysis further, Figure 4.4 (above) represents an even larger (more complex) perspective. Here, C, C_2 and C_3 represent multiple large social systems (in the case of this research continental regions) while A, B, A_2, B_2, A_3, and B_3 all represent smaller social systems (subsets/countries) located within C, C_2 and C_3. D is the global environment within which all these levels exist. It is important to note that from this perspective, continental regions C, C_2 and C_3 are also semi-permeable as global factors within D can diffuse into them and influence activities within them. Likewise, since A, B, A_2, B_2, A_3, and B_3 are also semi-permeable. They can be influenced by factors within C, C_2 and C_3. A ripple down effect is therefore observed as settings within D also influence settings within C,

---

[49] In this demonstration (diagram) other factors like regional integrations are not depicted but are factored in the analysis.

C_2 and C_3 which then influence the settings within A, B, A_2, B_2, A_3, and B_3. In this sense, the environment within which an intervention context, mechanism, and outcomes are analyzed are saturated by external factors in C, C_2, C_3 and D.

In doing public policy analysis it is essential to acknowledge that the existence of a larger external policy context can have adverse effects on smaller social systems/subsets within them. Similarly, the conditions within these smaller social systems are also likely to have diverse effects on the relatively smaller social systems existing within them. These varying effects – the various ways in which externalities are diffused into smaller social systems – are likely to influence the context. Consequently, outcomes could be observed from multiple perspectives. Outcome variations could either be in response to varying intervention and varying spatial context, or externalities, and how these externalities influence interventions.

Due to the complicated nature of social systems, and the complexity in undertaking realistic evaluation, Cilliers (1998, p. 24) notes that an analytical approach alone would be limited as it may lead to "serious distortions by 'cutting out' part of the system". In order to identify configurations in policy intervention outcome patterns within the complex web of policy analysis, there is a need for the researcher to be equipped with tools needed to undertake a robust and rigorous research that not only acknowledges this complexity but takes into consideration these multilayer perspectives of analysis. For this reason, Dynamic Pattern Synthesis (DPS) is an appropriate overarching research strategy. Before proceeding to discuss the DPS methods it is important to clarify what is meant by configurational comparative analysis.

Earlier works on configuration materialized in the 1970s (Miles & Snow, 1978; Miller & Friesen, 1978, 1984; Miller 2018). This approach emerged in response to contingency theory and, as an aspiration to pursue both in philosophy and methodological techniques (Merton, 1957). The main argument was that it is imperative to differentiate varying circumstances when

132

predicting possible outcomes and that numerous elements defining the context could cluster in thematic patterns (configurations) which may influence outcomes (as demonstrated in Figure 4.4). Whereas a variable-oriented analysis may involve the deductive analysis and testing of developed theories, this approach is the observation of cross-case relationships between variables. In variable orientated analysis, cases become predefined, and the number of cases and quality of data decisively influence the estimation quality (Kaimann, 2017).

Configurational comparative analysis, in contrast, attempts to define and analyze cases "through a simultaneous formation process of theoretical construction and empirical estimations" and "as the analysis proceeds, the sets of cases become more specific through concept formation and empirical development" (Kaimann, 2017. p. 3). As a result, cases begin to show some patterns of convergence and case heterogeneity becomes apparent. Here, contingent causality[50] and equifinality[51] become evident as each causal path signifies a configuration of germane causal conditions that result in the outcome in question. Configurational comparative analysis does not seek to explain why, and which independent variable has statistical influence on the outcome (dependent) variable. Rather, it attempts to rationalise how a causal condition and a blend of conditions are linked to a particular outcome (Fiss & Ragin, 2008; Ragin & Rihoux, 2009; Schneider & Rohlfing, 2016; Kaimann, 2017; Ragin & Fiss, 2017)[52].

4.4. Dynamic Pattern Synthesis

Taking into consideration the complex tools and methodological rigor required to analyze, synthesize and realistically evaluate IMF interventions within and across cases over

---

[50] Contingent causality refers to similar patterns resulting in varying outcomes. Thus, when conditions A and B result in E (A + B = E), and A and B also result in F (A + B = F)

[51] Equifinality refers to when an outcome can be reached by varying conditions. Thus, when condition A and B result in E (A + B = E), and C and D also result in E (C + D = E)

[52] For a detailed discussion on configurational comparative analysis see Ragin, (1987, 2000).

three periods, this section considers the methods employed to address the demands of this research. Advocated by Haynes (2017), Dynamic Pattern Synthesis (DPS) is situated within complexity theory and configurational methods and combines the complementary strengths and weaknesses of cluster analysis (CA) and qualitative comparative analysis (QCA) in a given research situation (Haynes, 2017). The DPS methodological approach has also been used by Haynes who has undertaken unique combinations of QCA and CA to study the European political economy (Haynes & Haynes, 2016) and the evolution of European welfare states (Haynes, 2015b). Likewise, in his recent book *'Social Synthesis: Finding Dynamic Patterns in Complex Social Systems'*, Haynes (2017) provides a comprehensive understanding to the application of these methods within social science research. This approach has recently been added to the UK Civil Service guidance on policy evaluation (HM Treasury, 2020).

Haynes (2017) emphasizes that, within the social sciences, the concept of synthesis refers to social phenomenon that occurs when people act together. Here, the sum of this social phenomenon is seen to be greater than each individual part. As such, social systems like countries, regional integrations, and global institutions alike, exhibit a complex synthesis of behavior which is dynamic and ever-changing. Even if statistical analysis is done in an aggregated way, there is the likelihood that the attestation of results maybe questionable as such approaches are fundamental in reductionist designs (Borenstein, et. al., 2011). Similarly, Haynes (2017, p. 34) suggests that meta-analysis is likely to ignore the addition of much exterior data as it "may do little more than combining the sample size of numerous small studies so that rather small differences in effect can be generalized to a larger population".

If constructed around a synthesis, meta-analysis may neglect the inclusion of much contextual evidence (Pawson, 2006). In addition to this, Haynes (2017) draws attention to Byrne's (2004) research on housing and health which emphasized the implication of complex realism for quantitative modelling. Byrne's findings suggest that multilevel modelling is

essentially variable centered, and that analyzed data are aggregated into descriptions that are isolated from individual cases (Byrne, 2004). Nevertheless, utilizing a qualitative model, academic scholarship has also acknowledged that synthesis is a method of combining earlier studies to develop a combined benefit from both (Major & Savin-Baden, 2010). However, in her analysis of the strengths and limitations of the qualitative research paradigm, Atieno (2009) outlined that, the principal weakness of a qualitative approach is that findings cannot be protracted to a wider population with the same degree of certainty as with a quantitative approach.

Similarly, Haynes (2017) notes that even though a more open and inductive approach – as emphasized in qualitative methods – may reduce a researcher's likelihood of falling subject to the imperfections of a quantitative approach, qualitative approaches are likely to exhibit replication errors as measurements and judgements are subjective to the researcher. For this reason, Cilliers (1998) suggests two distinctive methodologies for modelling complex social systems, namely: the 'logical rules' and the 'connectionist' and strongly advocates for the latter. DPS seeks to combine both methodologies. This is highlighted in its use of cluster analysis (logical rules) and qualitative comparative analysis (connectionist) as it attempts to model complexity. It is important to note that Haynes (2017) reemphasizes Cilliers (2001, p. 137) assumption that modelling a complex social system to perfection is impossible[53]. However, a good model would hope that what is omitted is reduced and acknowledges that, a

---

[53] Byrne (2005) distinguishes between 'simplistic complexity' and 'complex complexity'. Here "'Simplistic complexity' seeks to explain emergence in complex systems as the product of simple rules and defines complex science as the process of establishing such rules. It can and does serve as the basis of technocratic social engineering in the interest of the powerful. In contrast 'complex complexity' recognizes the significance of social structure and willed social agency and does not reduce emergence to the mere working out of a restricted set of rules". For a detailed discussion see Byrne, D. (2005). Complexity, Configurations and Cases. Theory, Culture & Society, 22(5), 95–111. https://doi.org/10.1177/0263276405057194

model would never be complete and would always be subject to errors. Taking this into consideration, the suggested DPS methods are discussed below.

➢ Cluster Analysis

Cluster analysis is a general name used to describe a range of mathematical methods that may be brought into play when identifying which objects in a given set are similar or otherwise (Romesburg, 2004). Anderberg (1973) explains that, it is an aggregate phrase comprising a wide range of methods for defining natural groups or clusters within datasets. Wilks (2011, p. 603) presents cluster analysis as a "fundamentally exploratory tool that seeks to sort data vectors into like groups, when true group memberships are not known". For these reasons, Haynes (2017, p. 36) describes cluster analysis as "a quantitative case-based method that uses variable scores to measure how similar or different cases are to each other". As such, it is a method for "developing a typology or classification" and "investigating useful conceptual schemes for grouping entities" (Aldenderfer & Blashfield, 1984, p. 9). Romesburg (2004) echoes this assumption by stating that cluster analysis is normally used by researchers who seek to make classifications and find out why such classifications exist.

Cluster analysis groups cases or entities using mathematical algorithms to justify why such cases can be grouped into clusters. Byrne (2002, p. 127) emphasizes the fundamental characteristics of cluster analysis that distinguish it from other methods. There are various types and approaches to cluster analysis. These approaches vary on the bases of the mathematical perspectives and how calculations are applied when clustering data (Haynes, 2017). Wilks (2011) indicates that the variances between clustering methods result from the use of diverse metrics for identifying similarity or distance amongst individual vectors, and between groups of vectors. Hierarchical cluster analysis (HCA) will be used as the method of choice for the macro socioeconomic country/continental meta-analytical comparison of IMF policy interventions in this research. This is because HCA allows exploratory modelling with samples

of countries. This method seeks to build a hierarchy of clusters and consists of two main strategies; Agglomerative (bottom up) and Divisive (top down) (Hair, Black, Babin, Anderson, & Tatham, 1998; Rokach, & Maimon, 2005; Kaufman, & Rousseeuw, 2009). One distinctive advantage of this method is its ability to theorize the configuration of cases to explore the complexity of case-based patterns (Haynes, 2014; Haynes, 2017).

Earlier work by Haynes (2014) proposed that HCA is used for proposing a hypotheses of country clusters, and QCA is used to test the validity of these clusters (where cluster membership is the outcome variable). In his recent works Haynes (2017, p. 37) suggests that, upon using cluster analysis as an exploratory tool, one needs to beware of 'statistical artefacts', thus, outcome patterns which may be merely arithmetical and may have no valid interpretations in the real world. For this reason, a social scientist needs a qualitative interpretation to identify what binds clusters together. In the application of cluster analysis to realistically evaluate complex social systems over time, cluster analysis is beneficial in exploring altering cluster patterns in datasets and seeing how these relationships between cases change. Haynes (2017) argues that the best method to use when attempting to decipher which variables have led to cluster grouping is configurational case analysis based on qualitative comparative analysis (QCA). Such configurational modelling is used to identify the influence of IMF interventions on country clusters ('sets'). Further remodeling is used against specific policy outcome variables to theorize multiple casual paths of an outcome.

➢ Qualitative Comparative Analysis (QCA)

QCA describes both a method and a hypernym for three specific research techniques (Rihoux, Rezsöhazy, & Bol, 2011). It was first introduced in the seminal papers of Charles Ragin in 1987 and finds its background within the field of comparative political sociology as a method of country comparison (Haynes, 2017). Consequently, QCA is channelled towards a multiple case studies research design and attempts to meet two seemingly conflicting targets

(Rihoux, et. al., 2011). These are: (i) assembling detailed insights into different cases; and (ii) capturing the complexity situated when analysing each case, while generating some amount of generalisation (Ragin, 1987). In this sense, QCA presents a 'synthetic strategy' that lies between the case-oriented approach or qualitative paradigm and the variable-oriented approach or quantitative paradigm (Rihoux, et. at., 2011). Additionally, it has been referred to as a 'Marco-Comparative' research approach (Berg-Schlosser, et. al., 2009. p. 3). Furthermore, Hudson & Kuhner (2013) note that, in spite of the fact that QCA uses mathematical approaches in its analysis, it is fundamentally qualitative in its desire to consider Patterns and contradictions that one can then attempt to hypothesise about or seek explanatory theories for (Haynes, 2017).

Similar to cluster analysis, QCA utilises a case-based approach. It inculcates the use of truth tables, crisp/fuzz sets and Boolean algebra (Ragin, 1999; Emmenegger, Schraff & Walter, 2014; Haynes, 2017). Its methods focus on how cases can be associated with each other rather than using statistical equations to aggregate variable scores so as to present an exemplary case. In this sense, QCA offers a 'multiple conjunctural causation' (Ragin, 1987; Berg-Schlosser, et. al., 2009; Haynes, 2017). Thus, "a causation that is not necessarily permanent and where different circumstances may result in the same outcome" Haynes (2017, p.54). By using QCA, a researcher is advised not to streamline a particular causal model that may fit the data best - as with the case of standard arithmetical methods. But rather identifies the (Rihoux, et. at., 2011) distinctive features of the diverse causal models that exist among the comparable cases (Ragin, 1987). In their extensive review on the use of QCA in public policy analysis, Rihoux, et. at., (2011) observed that, since the late 1990's there has been an increasing number of social science scholarship adopting a multi-case study research approach. This can be due to the fact that social scientists seek to assemble detailed interpretation of the various cases and acknowledge the complexity of each case, while seeking to provide some generalizations.

The DPS method applies specific elements of QCA. It utilises the configurational approach to understanding patterns when considering outcomes. It does not adhere to all the conventions of QCA, like parsimony and internal validity with configurations and conditions. Since DPS focuses on understanding case complexity rather than parsimonious solutions, it does not use Boolean minimizations and simplifying assumptions, but rather is accepting the idea of complex solutions. This is somewhat similar to what commentators consider a 'realist approach to QCA' (Schneider & Wagemann, 2006; Schneider & Wagemann, 2010; Thomann, 2017; Thomann & Maggetti, 2020). Recognising these strengths, Haynes (2014; 2017), advocates the integration of QCA with other methods as the systematic use of this method offers the potential for a more comprehensive and nuanced understanding of social scientific phenomena. This research intends to do this by combining cluster analysis with QCA.

➤ Combining Hierarchical Cluster Analysis and Qualitative Comparative Analysis

A combined application of the methods discussed above are presented under the umbrella of DPS. HCA can be advantageous in its mathematical approach as it offers the strengths of numeric intervals and scale variables and their effects on cluster grouping. It neutralises the difficulties associated with reducing parameters in QCA. Similarly, whereas QCA can be used to test theory, HCA is exploratory in nature. For this reason, the conundrum associated with adopting an HCA model occurs when a researcher attempts to determine what specific variables scales are utilized and how clusters differ from one another at a fix point in time. Although some traditional descriptive statistical approaches may provide some level of understanding to cluster groupings, they subject the researcher to the prospect of making statistical assumptions about the level of variable influences. For this reason, QCA can be used as a tool to validate and understand such clusters. Through its arithmetic approach, HCA is adopted for putting forward a hypothesis about which cases cluster together, and QCA is implemented to test the validity of such clusters. In the same way, QCA can be used to study

139

how clusters are affected by variables as well as the similarities or otherwise within and between case clusters. In addition to this, Haynes (2017) points out that QCA also provides a possibility of adding supplementary categorical variables to the model that were not added to the HCA.

As such, the sequence of the DPS method is to commence HCA first, to "make informed judgements about the most 'real' clusters to test" (Haynes, 2017. p. 58). Clusters are then considered as outcome variables and then QCA is used to authenticate and explore variable parameters against cluster definitions, and to consider the addition of any other outcome variables. After this combined synthesis of HCA and QCA has been established, the same approach is replicated for other time periods to ensure coherence. This combined model of HCA and QCA, and its qualitative interpretation, makes up the DPS method.

4.5. Documentary Analysis of IMF Letters of Intent

With the aim of realistically evaluating the impact of IMF interventions on convergence and variable stability, in addition to the DPS method, this thesis applies a documentary analysis to examine policy documents (IMF Letters of Intent) on relevant cases. Document analysis is a method for examining or evaluating documents (Appleton & Cowley, 1997; Shaw, Elston, & Abbott, 2004). Bowen (2009) describes it as a qualitative approach in which documents are decoded by a researcher to give meaning around an assessment subject. Corbin and Strauss (2008) also note that document analysis requires that data be examined and interpreted in order to elicit meaning, gain understanding, and develop empirical knowledge.

Discussions in Chapter Three highlighted the important role that conditionalities play in IMF lending activities. They lay out the specific macroeconomic and structural policies design for an IMF-supported program and the indicators used to monitor progress toward goals outlined by the country in cooperation with the IMF. For this reason, an analysis of IMF Letters of Intent is conducted to identify the shapes and forms of IMF conditionalities as well as its

intensity within the context of selected countries. This provides a qualitative understanding of the policy processes and networks that influenced IMF interventions as well as the interventions themselves.[54]

O'Leary (2014) provides two approaches for exploring the content of documents: the interview approach and content analysis. For the former, a researcher considers the document like a respondent that provides the research with relevant information. Here, the researcher asks questions and then attempts to identify answers within the text. Content analysis on the other hand focuses on the occurrences or frequency of particular words, themes and concepts. Essentially, the researcher determines what is being searched for, then documents and organizes the frequency and number of occurrences within the document. The information is then organized into what is "related to central questions of the research" (Bowen, 2009, p. 32). Some scholars object to this approach as it may obscure the interpretive process, Bowen (2009), notes that documents contain a wide variety of information, and as such, content analysis can be very advantageous for painting a comprehensive, overall picture.

Accordingly, content analysis can then be used for a "first-pass document review" (Bowen, 2009, p. 32) that can provide the researcher a means of identifying meaningful and relevant words that can be linked to the research questions. For this reason, at the first stage of documentary analysis a content analysis approach is applied to test for the frequency in word occurrences within the letters of intent so as to identify similarities and differences in word occurrences. The content analysis of IMF letters of intent can be broadly catalogued into three

---

[54] As noted in Chapter Three, these IMF interventions also provide 'a seal of approval' accrediting recipient nations as well as their national policy capacity (Weiss, 2004; Lombardi, 2005). Conditionalities safeguard IMF financial and technical resources by ensuring that the soliciting nations balance-of-payment will be resolved to permit repayment of the loan. For this reason, the soliciting nation is responsible for selecting, designing, and implementing these macroeconomic and structural policies to stimulate a successful intervention outcome. These conditionalities are described in a Letter of Intent and is often accompanied with a memorandum of economic and financial policies. In this sense, the IMF programs and policies are dependent on the circumstances of the soliciting nation.

subprocesses: data reduction, data display and data interpretation (O'Dwyer, 2004). Two computer assisted qualitative data analysis software packages in RStudio (Natural Language Processing Infrastructure, i.e. NLP version 0.2-0; and Text Mining Package, i.e. 'tm' version 0.7-6) allowed for the managing, decoding and display of data. These packages offer an array of commands that assist in quantifying qualitative data and assess the frequency of word occurrences. Subsequently, an interview approach was applied in order to undertake a detailed exploration of the content of the documents. For this, an initial checklist of contextual questions (see Chapter Six Table 6.1.) is developed with reference to the CIMO configuration and guided by earlier discussions on policy transfer (see Chapter Two) and IMF interactions with developing economies (see Chapter Three).

Haynes (2017) emphasizes that DPS provides a researcher with the ability to interpret social interactions and the changing dynamics that exist for cases in the context of their social environment over time. Complemented with the documentary analysis, the researcher further explores evidence provided within policy documents that validate – or otherwise – the proposed configurational patterns of case convergence highlighted in the quantitative results. The approach to triangulating of these methods, cluster analysis; qualitative comparative analysis; and documentary analysis, is governed by an abductive logical inference.

4.6. Logical Inference: An Abductive Research Approach

A deductive approach examines theory, develops rational conclusions from the theory, and presents these conclusions in the form of hypotheses before proceeding to testing these hypotheses with empirical evidence and making conclusions that either authenticate or falsify the self-generated hypothesis (Kikeby, 1990; Wigblad, 2003). Here, Danermark, Ekstrom, & Jakobsen (2005) describe this logical structure to research as a sequence beginning with identifying rules, to case applications, and then to confirmation or verification of results. An inductive approach on the other hand uses an antithesis approach as the researcher's

epistemology (knowledge of the world) is seen to initiate propositions and their generalisations within a theoretical framework (Flint & Mentzer, 2000). Beyond these two paradigms is the abductive approach. Here, incomplete observations get the best possible prediction while accepting that no explanation is ever perfect and is always partial (Kikeby, 1990; Wigblad, 2003; Danermark, et. al., 2005). This way, when doing abductive reasoning a researcher's logical inference is based on constant interactions between the available empirical evidence and theoretical knowledge and as such can result in 'suggesting' a general rule (Andreewsky, & Bourcier, 2000).

For this reason, rather than placing emphasis on generalisations and/or specific manifestations alone, the researcher is not only interested in these manifestations but also the features of a specific situation and how other aspects may deviate from a general structure. Therefore, it enables the researcher to understand the general aspects of social phenomenon and the other (external) aspects that pertain to a specific situation, taking for instance, cultural environmental factors. Kirkeby (1990) emphasises that, it is the ability of a researcher to differentiate general factors from particular factors, and both general and particular factors from a given situation. This would depend on the researcher's epistemological and ontological foundations. The creative-intuitive characteristic of abductive reasoning (Taylor, Fisher, & Dufresne, 2002) as well as its ability to single out the general aspects of social phenomenon from the particular (Danermark, et. al., 2005), makes it very suitable for this research as it functions through understanding or re-contextualizing social phenomena within a given contextual framework (Dubois, & Gadde, 2017). Making room for the contextual analysis of social phenomenon, it lies clearly within the parameters of realistic evaluation and dynamic pattern synthesis as it accommodates complexity and contextual analysis.

4.7. Modelling Complex Configurations Using Cross-Case Synthesis and Analysis

Centred within this research lies its use of large-scale quantitative data in its analysis and synthesis of cases identified. As already stated, the methods of choice (cluster analysis and qualitative comparative analysis) are case-based methods. For this reason, a cross-case synthesis and analytical approach to data examination is used. A case study is a study of a social phenomenon, carried out within the boundaries of one or more social systems (cases), within the case's natural context, by observing the phenomenon during certain periods or collecting information afterwards (Swanborn, 2010. p. 13). It is a detailed examination of an individual unit with the aim of gaining inferential insights to a larger (similar) unit (Gerring, 2004). Here, a unit represents a spatially bounded phenomenon. Harrison, & Callan (2013) explain that a case study can offer exploratory interactions (within a social system) for a research endeavour as it occurs in a real-world setting.

Miles & Huberman (1994) suggest three synchronised streams of activities in undertaking a cross-case analysis. These are data reduction, data display and conclusion drawing/verification. These actions are applied within the context of this thesis. Through HCA, the metadata on country cases was employed in the clustering of cases into meta-matrices and time-ordered displays. These were used to draw conclusions from the synthesized studies. This use of clustering and groupings facilitates the comparison of the cases as well as identifying a hierarchy of areas of convergence or divergence. An advantage of this method is its transparency in the process of synthesis. The realistic perspective adopted also ensures that the research seeks to identify what works for who under what conditions instead of making general assumptions when drawing conclusions.

4.7.1. Demarcation of the Domain: Unit of Analysis

The unit of analysis can be seen as a central concept in relation to understanding, preparing and implementing a case study (Yin, 2003). It is vital in selecting and making

decisions regarding appropriate conclusions on what the researcher seeks to achieve at the end of the study (Patton, 2002). The unit of analysis denotes the degree of aggregation (Sekaran, 2000) and/or level of exploration (Zikmund, 2000) of data collected regarding a social phenomenon or particular object. Consequently, as the focus point of this research is on the impacts of IMF policies on convergence across implementing nations, the IMF can be identified as the research's unit of analysis. As such, Chapter Three discussed the role of the IMF in the development assistance nexus and outlined the parameters of the Funds activities. This was intended to capture the institutional perspective of this research regarding the Fund's activities and the significant relationships it has with its members. Since this research seeks to analyse IMF impacts, analysis would be based on country cases that have implemented IMF policies within a given timeframe.

4.7.2. Selection of Country Cases

Although Patton (2002) may suggest that there is no difference between the unit of analysis and case study, Berg (2001) argues that the unit of analysis outlines what the case study is focusing on (what the case is). This way, the case study could be the unit, or a social phenomenon being analysed. Linking this assumption to this research, the selection of key country cases is based on their interactions with the unit of analysis (IMF) within a given social phenomenon (coercive policy transfer). Consequently, an approximate of 57 LIDEs that have experienced IMF interventions between the years 2000 and 2016 have been selected from the LAC, and the SSA region. The cases were selected on the following criteria:

- The country should have been a member of the International Monetary Fund (IMF) during the selected period of analysis.
- As at the time of the research, the country should have been classified as a low-income developing country (LIDC) or an emerging and developing country (EDC).

- The country should have implemented at least one IMF intervention during the period of analysis[55].

- The country should have information regarding IMF interventions available on the IMF Monitoring of Fund Arrangements (MONA) Database.

- Furthermore, in order to undertake a detailed country level analysis of IMF interventions, it was intended that a large proportion of countries selected had documents such as the country's letter of intent (which often has a memorandum of economic and financial policy interventions attached), and an IMF intervention report published.

- A large amount of meta-data on the socioeconomic activities (improvements or otherwise) of the country should be available on the World Banks World Development Indicators (WDI) databank and on the IMF's World Economic and Financial Surveys - World Economic Outlook Database.

From these criteria, a list of the selected cases can be found in Appendix C.

4.7.3. Time Series - Period Selection

The study is based on a cross-country macro data level of analysis covering the period from 2000 to 2015. Haynes (2017, p. 71) notes that "the minimum number of time points needed to undertake a DPS is two, although it is not ideal in terms of having a confident conclusion about time effects." Previous DPS models have focused on the use of three time points (see for instance: Haynes & Haynes, 2016; Haynes, 2017; Taylor, Haynes & Darking, 2020). As such, the idea of choosing three time points for a DPS model is becoming established in the use and application of the approach. For this reason, the DPS analysis undertaken within

---

[55]Suriname did not have an IMF intervention during the period under discussion but was included in the data as robustness checker.

thesis focuses specifically on the year 2000, 2008, and 2015. The choice of this period is based on the availability of relevant data for the study and the justification below.

➢ The Millennium Development Goals: *The Year 2000*

In the year 2000, a United Nations Millennium Summit was held to launch the Millennium Development Goals (MDGs) which world leaders had agreed to be achieved by the year 2015. These goals were seen as a set of targets agreed by the international community to be reached within low income and emerging nations, thereby seeking a form of convergence across these countries. As highlighted in Chapter 3, the IMF through its Poverty Reduction Strategies Paper (PRSP) and economic surveillance played an important role in assisting developing countries with budget deficits and balance of payment issues as well as contributing significantly with policy views on relevant issues. In addition to this, the IMF also tried to ensure that developed countries executed policies that were supportive of developing nations by stimulating development finance, opening markets to exports from developing nations, and sustaining a healthy global fiscal climate.

Recognising that macro socioeconomic stability and growth are deeply rooted in the establishment of financial, institutional and structural factors, the IMF made its concessional financing instruments flexible and better to meet the requirements of low income and emerging countries. In addition to this, the Fund worked closely with other international agencies such as the World Bank, OECD and other multilateral and bilateral providers of aid in financing and providing annual monitoring reports (Global Monitoring Report - GMR) that aimed at assessing how nations were performing with regards to the implementation of policies and actions. However, the question of whether these IMF interventions assisted in the achievement of economic convergence remains unanswered.

➢ The Global Economic Crisis: ***The Year 2007/8***

Although the global financial crisis is seen to have originated from the advanced economies, it diffused to the emerging markets, and a third wave of the crisis eventually hit LIDEs and compromised the progress made towards achieving the MDGs. From this crisis emerged an increased financial need from the international community. This need was heightened within LIDEs and created the likelihood of millions falling back into poverty. For this reason, many EDCs and LIDCs obtained assistance from the IMF. Similarly, the IMF strategically positioned itself as it claimed to have undertaken reforms built around a sharp increase in concessional lending to low-income countries. It increased concessional resources; permitted low-income countries to receive exceptional relief on all interest payments; streamlined conditionalities; and introduced a new architecture of concessional financing facilities through the establishment of the Extended Credit Facility, the Standby Credit Facility and the Rapid Credit Facility. Consequently, an analysis of the impacts of both the economic crisis and IMF supported arrangements on the socioeconomic convergence of LIDEs is conducted to identify what configurational patterns emerged before and after the financial crisis. As reflected in Figure 4.4, within the context of this research the global economic crisis is considered as an external crisis that influences policy actions at continental and national levels.

➢ Seven Years after the Financial Crisis and the introduction of Sustainable Development Goals (SDGs): ***The Year 2015***

The year 2015 signifies not only the end of the MDGs and the introduction of the SDGs but, also seven years after the financial crisis. A comparative analysis is conducted to assess the impact of number of IMF supported arrangements on the socioeconomic convergence of LIDEs. The year 2015 also served as the year where a comparison of the overall socioeconomic variable stability of LIDEs and their impact on country convergence was carried out. An overall

analysis of variable stability was also conducted with focus placed on the period the MDGs were initiated through to the 2007/8 global economic crisis. Here, configurational patterns were identified and linked to which cluster patterns endured or otherwise.

4.7.4. Variable Selection and Description

From the onset, this research has sought to assess the socioeconomic impacts of IMF interventions on convergence and variable stability across LIDEs. Within the context of this research, indicators identified for assessing socioeconomic development place importance on both economic and social developmental factors. The former would place emphasis on variables that indicate a rise or decline in economic indicators. For example, Gross Domestic Product (GDP), National budget deficits, Inflation, and Gross national product etc, while the latter focuses on human development indicators such as social welfare, and health indicators (Milenkovic, Vukmirovic, Bulajic, & Radojicic, 2014). Development within the context of this research does not take a purely economic stance. The process of assessing developmental convergence therefore involves not only the consideration of various economic factors but also certain social factors. For this reason, the variables used in the meta-data analysis within this research consists of two databases. One highlighting economic policy variables/indicators and the other social policy variables/indicators. Appendix A provides a list of these variables. The relevant data was collected from various sources: World Bank's World Development Indicators (WDI) Databank and IMF's World Economic and Financial Surveys - World Economic Outlook Database. Appendix J provides the definitions and data source of each variable. Data on IMF purchases was also collected from the IMF Monitoring of Fund Arrangements (MONA) Database. Appendix I provides details on countries that implemented IMF interventions as well as the number of interventions implemented. Table 4.1 and Table 4.2 (located at the end of this Chapter) shows the social welfare variables, and economic performance indicators, respectively, used within this research.

4.8. Ethical Considerations

Although this research does not present major ethical issues, attention has been paid to ethical concerns during collection and assessment of the secondary data. As this research uses literature to back macro socioeconomic data results, documents used are already published in books, journal, and articles etc. and as such issues concerning anonymity have already been considered. Thus, only secondary data was used. In assessing IMF conditionalities, a detailed analysis of Country Letter of Intent was used to arrive at conclusions. These documents were identified not only in other research publications but are also available online for public scrutiny.

Analytical findings are presented solely as reflected in the methodological approach and data collected. The data collected is also published within this appendix and is openly assessable for verification. The DPS handbook (Haynes, 2017) and the references section represent a full disclosure of the research methods and documents used in the research. This allows peer review on the adequacy and ethics of the research design. This also encouraged self-reflection by the researcher on the limitations of this research design as well as the implications of the research. Frequent contact with supervisors at the University of Brighton ensured that this research meets the ethical standards and expectations of a Ph.D. thesis in this field.

4.9. Data Management and Analysis Process

An overview of the stages used by the researcher in the data management and analysis process are highlighted in Box 1. Similar to what is suggested by Haynes (2017), the researcher implements a data management and analysis process comprising of four main stages. The results for the first, second and third stages are presented and discussed in the proceeding chapter. Results for stage four are discussed in Chapter Six.

Box 1. Stages of the Data Management and Analysis Process

Stage One
- Downloading of relevant macro socioeconomic data from relevant online international database sources.
- Formulation of a single statistical excel database in preparation for analysis using SPSS software package and R (R Studio).
- Data verification and competency processes are conducted using Pearson's correlation to identify whether similar variables were significantly correlated (see Appendix D & E). A final list of socioeconomic indicators used in this research and their abbreviations can be found in Table 5.1. and Table 5.2. located below. Further details on each indicator can be found in Appendix J.

Stage Two
- A general discussion on the overall socioeconomic performance of each continent based on changes in variable mean.
- Exploratory analysis using hierarchical cluster analysis (HCA), forming hypotheses of country patterns and changes over time, with a focus on countries that are outliers or that change cluster membership over time. Three waves (time periods) are assessed. The years: 2000, 2008 and 2015.
- Validation of clusters using qualitative comparative analysis (QCA) to see which variables influence cluster membership (prime implicants).

Stage Three
- IMF intervention variables were then added at the QCA stage and configurational patterns regarding the influence of IMF interventions on country convergence were outlined.

Stage Four
- Conceptualization of policy compatibility using additional documentary analysis and a further detailed analysis of case studies.

4.1. Macro-Social Policy Variables Indicator Name and Abbreviation.

MACRO SOCIAL POLICY VARIABLES	
Indicator Name	**Abbreviation**
Access to clean fuels and technologies for cooking (% of population)	ATCCT
Access to electricity (% of population)	ATE
Adjusted savings: education expenditure (current US$)	ASEE
Age dependency ratio (% of working-age population)	ADR
Current health expenditure per capita (current US$)	CHE
Current health expenditure (% of GDP)	CHE%
Domestic general government health expenditure per capita (current US$)	DHE
Domestic general government health expenditure (% of current health expenditure)	DHE%
Employment to population ratio, ages 15-24, total (%) (modelled ILO estimate)	EPR
Mortality rate, infant (per 1,000 live births)	IMR
Life expectancy at birth, total (years)	LEB
Out-of-pocket expenditure per capita (current US$)	OPE
Out-of-pocket expenditure (% of current health expenditure)	OPE%
People using at least basic drinking water services (% of population)	BDW
People using at least basic sanitation services (% of population)	BSS
Population growth (annual %)	PGA
Renewable electricity output (% of total electricity output)	REO
Renewable energy consumption (% of total final energy consumption)	REC

Table 4.2. Macro-Economic Policy Variables Indicator Name and Abbreviation

MACRO ECONOMIC POLICY VARIBALES	
Indicator Name	**Abbreviation**
Food production index (2004-2006 = 100)	FPI
Foreign direct investment, net inflows (% of GDP)	FDI%
Foreign direct investment, net inflows (BoP, current US$)	FDI
Gross domestic product, current prices	GDPCUR
Gross domestic product, deflator	GDPDI
Gross domestic product per capita, current prices	GDPPCC
GDP per capita growth (annual %)	GDPPC%
Gross domestic product based on purchasing-power-parity (PPP) share of world total	GDP
General government net lending/borrowing	GGNLB
General government revenue	GGR
General government total expenditure	GGE
Inflation, average consumer prices percentage change	IACP%
Inflation, average consumer prices index	IACPI
Net barter terms of trade index (2000 = 100)	NBTT
Net migration	NM
Net ODA received per capita (current US$)	ODA
Net official development assistance and official aid received (current US$)	ODAA
Rural population (% of total population)	RP%

152

Chapter Five

Empirical Results

5.1. Empirical Results

Utilising the above data management and analysis process, this chapter presents the results and findings of this research. General results on the socioeconomic performance of each continent under study is presented, and comparisons are made over the three time periods. This is followed by a comparative analysis of convergence alongside the number of IMF interventions each country implemented. The results are then used to test the socioeconomic convergence hypothesis, which considers a baseline assessment of sigma convergence (**H1**), and the impact of an IMF intervention on convergence (**H2**)[56]. Particular focus is placed on country cases that exhibit exceptional features – namely cases that change/maintain cluster membership – over time. A detailed analysis of IMF interventions is conducted regarding such countries to test the domestic preference (**H3**) and policy capacity (**H4**) hypothesis[57]. These are discussed in Chapter Six.

5.1.1 Socioeconomic Performance of Geographical Regions

This section discusses the socioeconomic performance of continental clusters. First, an outline of the performance of each continent is presented, by highlighting the changes in

---

[56] H1. Socioeconomic Convergence Hypothesis: The greater the similarities in socioeconomic settings (conditions /problem pressures) across 'n' countries at a point in time (t_o), the more likely it is that variable threshold scores in certain macro socioeconomic indicators will converge over time(t_1). H2. Policy Intervention Mechanism and Convergence Hypothesis: The implementation of an IMF intervention is a sufficient, but not necessary, condition for convergence in variable threshold scores over time across IMF interested areas.

[57] H3. Domestic Preference Hypothesis: The ease of adaptation to an IMF intervention depends on the extent to which policy conditionalities fit with national policies and institutions. H4. Policy Capacity Hypothesis in the Context of Convergence: Similarities in the policy capacity between 'n' countries at a point in time (to), would lead to convergence in variable scores over time (t1) under the influence of IMF interventions.

average variable scores (variable mean) and the total number of countries that have had an IMF intervention. Proceeding this, a comparison of the results is undertaken.

5.1.2. Socioeconomic Performance of the Sub-Saharan Africa (SSA) Region between 2000 and 2015

Table 5.1 (below) shows the underlying macro-economic variable trends in the DPS across the three time periods for SSA economies. Discussions concentrate on relevant variable changes before the financial crisis (2000 – 2008) and after the financial crisis (2008 – 2015). Variable code definitions can be identified in Table 4.1 and Table 4.2 (page 153 of Chapter Four or Appendix J.3).

From Table 5.1 (below), general key trends can be identified in the incremental rise in FPI, FDI, FDI%, GDPDI, GDPPCC and GGE. IACP%, NM, and ODAA also exhibit some significant increases in average scores. GDP is stable despite a very marginal rise, although, average scores for IACPI and RP% drop. The drop in IACP% is also substantial. The table also shows some volatility in GDPPC%, GGNLB, GGR, NBTTI and ODA. Although both ODA and ODAA display considerable increases between 2000 – 2008, ODA drops noticeably after the financial crisis while ODAA continued to rise. This suggests an increase in net official aid received, which sustained the net official development assistance and official aid received (ODAA) variable. The decrease in development assistance per capita can also be linked to the rise in population. Empirical results suggest "the average growth in population in the region is 2.52%, which is on the average twice the growth in per capita GDP" (Anetor, Esho, & Verhoef, 2020, p.8). O'Reilly, (2019), shows that statistical projections indicate that the population of the Global South is increasing, by 2025 this will represent over 84% of the world's population. Evidently, other studies like Alesina & Dollar, (2000) and Neumayer, (2003) show that ODA per capita is negatively associated with the population size of recipients. Martinsen, et. al., (2018) also note that some donor allocations are based on the population size of recipients.

154

Table 5.1 Macro-Economic Policy Variable Trends, 2000 – 2015, Sub-Saharan Africa

YEAR	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTTI	NM	ODA	ODAA	RP%
2000	87.26	129,386,191.53	2.65	71.62	2,064.90	0.90	0.04	-0.97	20.51	21.49	30.60	93.91	93.15	-30,605.78	45.71	289,199,444.44	63.66
2008	113.11	718,021,999.13	6.52	140.39	2,883.08	2.60	0.05	0.36	23.90	23.54	13.12	203.30	133.38	-47,559.00	82.94	817,000,000.00	60.17
2015	136.46	1,096,141,757.34	6.73	207.90	3,716.79	0.88	0.06	-4.78	21.58	26.37	5.21	375.65	124.92	-60,470.31	68.31	921,994,722.22	57.02
Change	^	^	^	^	^	~	Stable	~	~	^	v	^	~	^	~	^	v

Table 5.2. Macro-Social Policy Variable Trends, 2000 – 2015, Sub-Saharan Africa

YEAR	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
2000	14.34	29.22	117,475,848.45	90.44	30.97	5.53	15.17	33.70	46.02	80.66	52.19	45.81	46.59	56.26	26.83	2.51	49.54	73.17
2008	17.68	35.84	451,038,324.48	86.06	58.83	6.03	24.31	29.48	44.58	60.83	56.97	62.33	43.40	61.58	31.13	2.61	49.08	70.15
2015	20.34	44.09	731,683,905.89	82.12	71.78	6.48	32.87	30.74	43.44	47.96	60.93	71.20	35.49	66.30	34.78	2.46	48.00	65.79
Change	^	^	^	v	^	^	^	~	v	v	^	^	v	^	^	~	v	v

Table 5.3. IMF Intervention Variables for Sub-Saharan Africa.

Year	Total Number of SSA Countries with IMF Interventions	Total Number of IMF Interventions within All Countries in SSA
2000 – 2008	31	62
2008 - 2015	32	50
Change	^	v

The inverse relation existing between IACP% and IACPI indicates that, although the percentage of inflation dropped (IACP%), the price of goods as calculated against the 2010 base year (IACPI) increased, this could relate to the increasing value of the dollar after the financial crisis (Maggiori, Neiman, & Schreger, 2019)[58]. GDPPC%, GGNLB, GGR, NBTTI and ODA all rise before the financial crisis but drop in the aftermaths. A noteworthy rise in GDPPC% and GGNLB before the financial crisis and sizeable decline afterwards can also be observed. Overall, a general element of volatility can be observed across macro-economic variable trends. From Table 5.2 (above), the macro-social policy indicators demonstrate incremental changes. Noticeable improvements across ATCCT, ATE, ASEE, CHE, CHE%, DHE, LEB, OPE, BDA, and BSS are observed. While the improvements in infant mortality (IMR) and age dependency ratio (ADR) are also observed. Slight changes are also seen in the domestic general government health expenditure – thus, percentage of current health expenditure (DHE%) – and in the annual percentage change in population growth (PGA). Overall, a general positive trend can be identified in variable trends. This suggests that the financial crisis did not have a significant effect on human developmental indicators of countries in SSA.

The overall direction of changes in IMF intervention variables across SSA (Table 5.3 - above) shows a slight increase in the number of countries that experienced IMF interventions. An increase from 31 between the period of 2000 to 2008 to 32 between the period of 2008 to 2015. Yet, the collective total number of IMF interventions within each country (given that countries can have more than one intervention in a given period) in SSA has significantly reduced from 62 in 2000 – 2008 to 50 in 2008 – 2015. This could be due to the effects of the

---

[58] The index calculation (IACPI) reflects changes in the cost to the average consumer of acquiring a basket of goods and services that may be fixed or changed at specified intervals such as yearly. In this case, the base year (2010).

financial crisis causing more SSA nations in need of financial assistance and, at the same time, the critiques raised against the IMF (as discussed in Chapter Three) resulting in a reduction in the number of interventions SSA countries were willing to agree to. Also, the rise of international development finance nations (such as the rise of China) and alternative sources of development finance in Africa could have created a reduction in the need for IMF assistance.

Overall, it appears the impact of the Financial Crisis can be identified mainly amongst economic variables with little to no impact on the social policy variables of SSA nations. Additionally, although IMF intervention numbers dropped within SSA economies there was an increase (one additional country) in the number of countries that had interventions after the financial crisis.

5.1.3. Socioeconomic Performance of Latin America and the Caribbean (LAC) Economies between 2000 and 2015

Table 5.4. (below) shows the variable trends in the DPS across the three different time periods for the macro-economic policy variable for the LAC case studies over the period of 2000 - 2015. Some key observations include declines in IACPI% and RP%; the average scores across FPI, FDI, GDPPC, GGR and GGE all rise alongside IACPI, NM and ODAA. Other variables like GDPPC%, GGNLB, NBTT and ODA also experience incremental changes, but not highly volatile. Similarly, FDI% substantially declines in the period after the Financial Crisis even after reaching its peak in 2008. GDP remains stable although marginally declining. Overall, trends in macro-economic variables appear unstable.

Table 5.4. Macro-Economic Policy Variable Trends, 2000 – 2015, Latin America and the Caribbean

Year	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTT	NM	ODA	ODAA	RP%
2000	92.87	3,105,359,047.04	3.26	113.01	7393.33	1.40	0.37	-3.34	20.71	24.05	11.03	490,022,295,023.70	97.91	-265756.20	47.94	154,743,636.36	41.23
2008	104.77	5,659,844,634.20	6.24	236.10	10845.99	2.81	0.35	-1.06	24.78	25.84	10.12	846,688,382,132.14	103.45	-109944.30	108.95	305,113,181.82	38.18
2015	123.81	7,204,761,856.16	4.45	357.02	13008.25	1.38	0.33	-3.03	25.22	28.25	3.48	1,290,929,118,137.06	99.02	-84094.70	44.17	344,655,714.29	35.74
Change	^	^	~	^	^	~	Stable	~	^	^	v	^	~	^	~	^	v

Table 5.5. Macro-Social Policy Variable Trends, 2000 – 2015, Latin America and The Caribbean

YEAR	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
2000	70.21	83.54	3,366,461,127.50	67.50	205.61	5.26	94.38	45.80	39.32	30.16	70.59	157.20	41.90	86.17	72.43	1.29	46.50	31.28
2008	76.35	88.35	7,881,821,258.21	60.24	360.16	5.71	184.24	48.32	40.81	22.88	72.41	233.68	37.78	90.29	76.42	1.17	39.31	28.89
2015	78.98	91.77	10,176,412,349.46	55.19	493.03	6.47	282.06	53.38	38.11	19.35	74.05	270.19	34.19	92.64	78.74	1.07	36.97	28.77
Change	^	^	^	v	^	^	^	^	~	v	^	^	v	^	^	v	v	v

Table 5.6. IMF Intervention Variables for Latin America and the Caribbean.

Year	Total Number of LAC Countries with IMF Interventions	Total Number of IMF Interventions within All Countries in LAC
2000 – 2008	15	32
2008 – 2015	12	24
Change	v	v

From Table 5.5. (above), stability is observed across macro-social policy variables. Variables are either increasing or decreasing with only employment to population ratio (EPR) demonstrating minor volatility. Variables like ATCCT, ATE, ASEE, CHE%, CHE, DHE and DHE% all rise alongside LEB, OPE, BDW and BSS. However, a decrease in the average scores for ADR, IMR, OPE%, PGA, REO and REC is observed. The decline in infant mortality rate (IMR) and increase in life expectancy at birth (LEB) are noteworthy. During this period commenters (Adato & Hoddinott, 2010) observed the transfer of conditional cash transfer (CCT) policies across Latin America[59], as part of the left leaning nationalist surge during that period (Weyland, 2013). These governments have now all gone alongside many of the social protection programmes.

Examining the overall direction of changes in IMF intervention across LAC economies (Table 5.6), reveals a decrease in the number of IMF interventions. A drop from 15 between the period of 2000 to 2008 to 12 between the period of 2008 to 2015. Likewise, the collective total number of IMF interventions within each country in LAC has significantly reduced, from 32 in 2000 – 2008 to 24 in 2008 – 2015. Additionally, the financial crisis had a minor impact on the average variable scores for social policy development across LAC economies. Contextually significant economic variables like FDI% and ODA that peaked in the year 2008 were negatively impacted by the financial crisis. Yet, GDP remained relatively stable. Nevertheless, there is no connection between the significant drop in FDI% and ODA on the social policy variables as the data indicates a rise in human development. This could be an indication of the impact of aid as the ODAA indicator rose significantly.

5.1.4. Comparison of Results for Geographical Regions.

As the data suggest, both regions exhibit similarities in average scores for economic policy variable trends demonstrated by an increase in FPI, FDI, GDPDI, GDPPCC, GGE, IACPI, NM and ODA as well as similarities in the decrease in IACP% and RP%. In addition to this, there seems to be

---

[59] Particularly in Brazil, Chile and Colombia (for a detailed discussion see Soares & Silva, 2010; Arakali, 2012; Lavinas, 2015)

some substantial differences amongst regions with respect to their FDI% and GGE. A key trend to point out is the average score of the GDP variable. Although both regions seem to exhibit stability in GDP, GDP in the SSA region increases marginally from 0.04 to 0.05 and finally to 0.06 across the three time periods whereas GDP in LAC marginally decreases from 0.37 to 0.35 and finally to 0.33 across the three time periods[60]. Incremental changes are also observed in GGNLB, GDPPC%, NBTTI and ODA across both regions. Another noteworthy trend is the general increase in ODA between the periods of 2000 to 2008 and then the sudden decrease after the financial crisis within both regions. Despite this, it can also be observed that ODAA continues to rise within both regions.

Trends in average score for social policy variables show an overall sense of positivity as key variables like IMR drop and LEB rise across both regions. Similarly, ATCCT, ATE, ASEE, CHE, CHE%, DHE, OPE, BDW and BSS all exhibit similar increases in average variable scores as against ADR, OPE%, REO and REC which all present similar decreases in average variable scores. Some dissimilarity between the regions are observed in DHE%, EPR and PGA. Significantly, although both social and economic variables demonstrate similar average variable score trends, the specific details can be quite different. For instance, while both regions experience an increase in LEB, the LAC region sees its increase from an average score of approximately 71 years in 2000 to 74 years in 2015 whereas SSA sees its move from an average score of approximately 52 years in 2000 to 61 in 2015. These results are consistent with other discussions (for example, UN World Summit Declaration, 2005; World Bank and IMF Global Monitoring Report, 2005; Blair Commission for Africa, 2005) which stressed that SSA was lagging behind with regards to meeting the MDGs. However, as discussed in Chapter Three, this sense of lagging behind is because most SSA nations started with the lowest levels of development (Easterly, 2009). This is reflected in the outline indicators discussed.

---

[60] This shows that, although the continents may move in the same direction (i.e. stability in GDP), they travel from different points of beginnings (i.e as reflected in the actual rate of growth), leading to the persistence of continental peculiarities (Bleiklie, 2001).

Figure 5.1: Visual Presentation of All Country Cases and Number of IMF Interventions
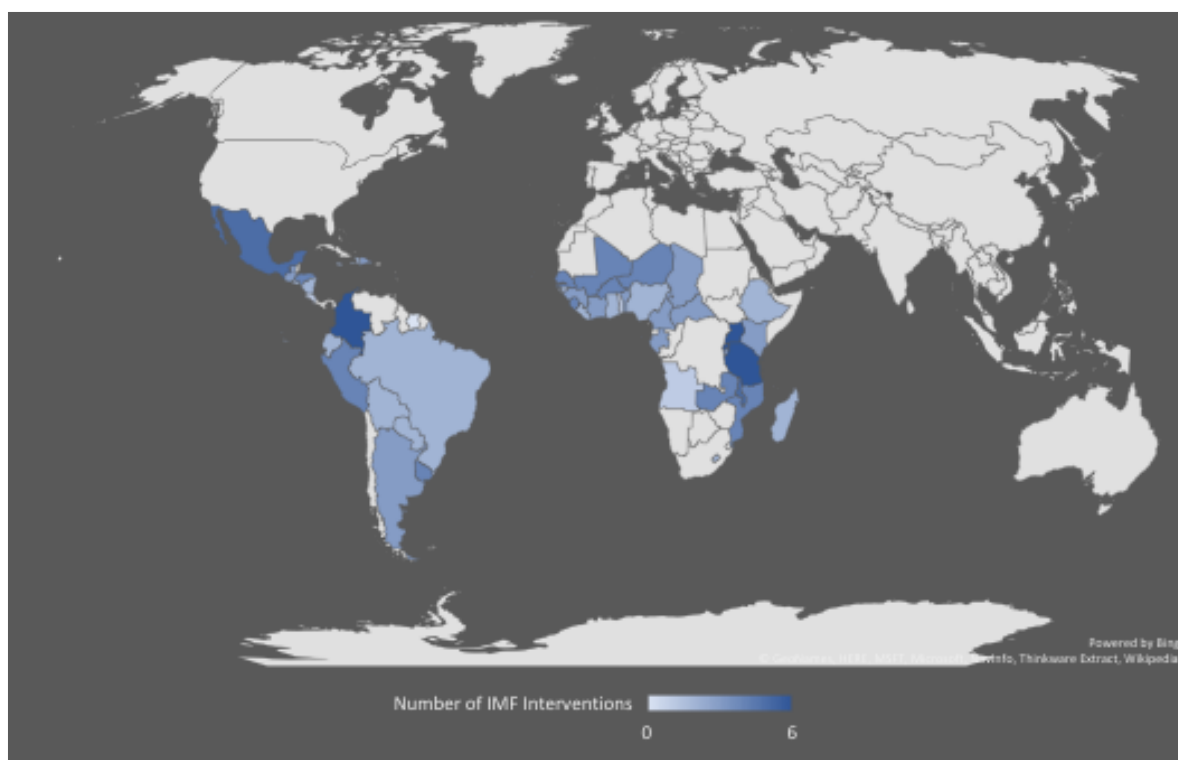
Figure 5.1 (above) provides a visual presentation of relevant country cases across geographical locations and the IMF Interventions they have had. Looking at the IMF intervention variable trends within both regions (Tables 5.3 and Table 5.6 - above), there is a general depreciation in the overall collective total number of IMF interventions across both regions. Thus, a drop from a total of 94 interventions within all SSA and LAC countries between the period of 2000 -2008 to 74 within the period of 2008 to 2015. Nevertheless, the total number of countries with IMF interventions across both regions varies with a slight increase in countries within the SSA region and a marginal reduction in countries within LAC, including a total of 46 countries between the period of 2000 – 2008 and 44 between the period of 2008 – 2015. The proceeding section presents the empirical results of DPS for the LAC region.

5.2. Empirical Results for Latin America and The Caribbean Economic and Social Policy Variables

In this section, the empirical results for the application of dynamic pattern synthesis on LAC macro socioeconomic variables are presented. This research seeks to identify, from cross-national longitudinal macro socioeconomic datasets, what configurational patterns of convergence occur between countries when IMF interventions are implemented – as reflected in research aim three (**A3**). First, focus is placed on the baseline assessment of convergence (**H1**). The presentation and analysis of empirical results is undertaken by looking at the DPS results for the first-time interval (2000 and 2008). This is followed by a consideration of whether or not similar patterns of convergence reoccur between country cases over the second time interval. IMF interventions are then added into the model to consider the impact the presence of an intervention has on convergence (**H2**). Here, focus is also placed on a comparative analysis of possible convergence patterns and heterogeneity between the two-time intervals.

➢ DPS Results for Latin America and Caribbean Economic Variables, 2000

The dendrogram in Figure 5.2 (below) offers a visual representation of the cluster analysis results for the first time period, 2000, using the twenty-two LAC countries. As discussed earlier, cluster analysis groups country cases on the bases of their mathematical similarities (see Chapter Four for a discussion on the methods). When cases are mathematically similar, HCA places them together at the distance represented by the horizontal axis and cases are listed in order of similarity on the vertical axis. This is done until all cases have been covered. However, cases with a significant number of missing variables are exempted from such cluster grouping - as with the cases of Dominica, and St. Kitts and Nevis which are not represented on the dendrogram. A note for terminology is important here. The term similar is used to represent cases showing similar patterns (clustered together) at the same time point, without considering trajectory over time. Convergence implies that cases are becoming more similar across two time points, over time (sigma convergence). Club convergence or

club clusters indicates a group of similar cases at a given point in time, without considering their trajectory.

From Figure 5.2, three dominant clusters (club convergent clusters) are observed below point 10 of the rescale distance. These are from Argentina to Suriname forming the most converging cases; Honduras through to Haiti forming cases showing a relative level of convergence; and lastly Antigua and Barbuda, and Grenada; Brazil and Mexico which constitute the two heterogenous cases. Taking a closer look at the three convergent clubs, one can observe the formation of about five main cluster groupings below point 5 of the rescale distance. Thus, Argentina and Uruguay; Colombia, Peru, Jamaica, El Salvador, Paraguay and Bolivia; Honduras and Nicaragua; Costa Rica, Dominican Republic and Guatemala; and lastly, Antigua and Barbuda are grouped with Grenada.

A further look at the Costa Rica, Dominican Republic and Guatemala grouping would suggest that Ecuador can be viewed as an outlier. And, for this reason the others in the group demonstrates a significant amount of homogeneity. However, Ecuador is grouped with countries at the next stage of clustering (between point 5 and 10 of the rescale distance). Taken into consideration the next stages of cluster groupings, six main clusters are observed with two outliers as shown in Table 5.7 below.

Table 5.7. Proposed LAC Economic Cluster Membership for 2000

Cluster	*Cluster Members*
Cluster 1	Argentina, Uruguay
Cluster 2	Colombia, Jamaica, Peru
Cluster 3	Bolivia, El Salvador, Paraguay
Cluster 4	Suriname
Cluster 5	Honduras, Nicaragua, Costa Rica, Dominican Republic, Guatemala, Ecuador
Cluster 6	Haiti
Cluster 7	Antigua and Barbuda, Grenada
Cluster 8	Brazil, Mexico

Figure 5.2. Dendrogram of Cluster Formations: LAC Economic Variables 2000

Dendrogram using Ward Linkage

Rescaled Distance Cluster Combine

| | 0 | 5 | 10 | 15 | 20 | 25 |

Argentina 2
Uruguay 20
Colombia 5
Peru 18
Jamaica 14
El Salvador 9
Paraguay 17
Bolivia 3
Suriname 19
Honduras 13
Nicaragua 16
Costa Rica 6
Dominican Republic 7
Guatemala 11
Ecuador 8
Haiti 12
Antigua and Barbuda 1
Grenada 10
Brazil 4
Mexico 15
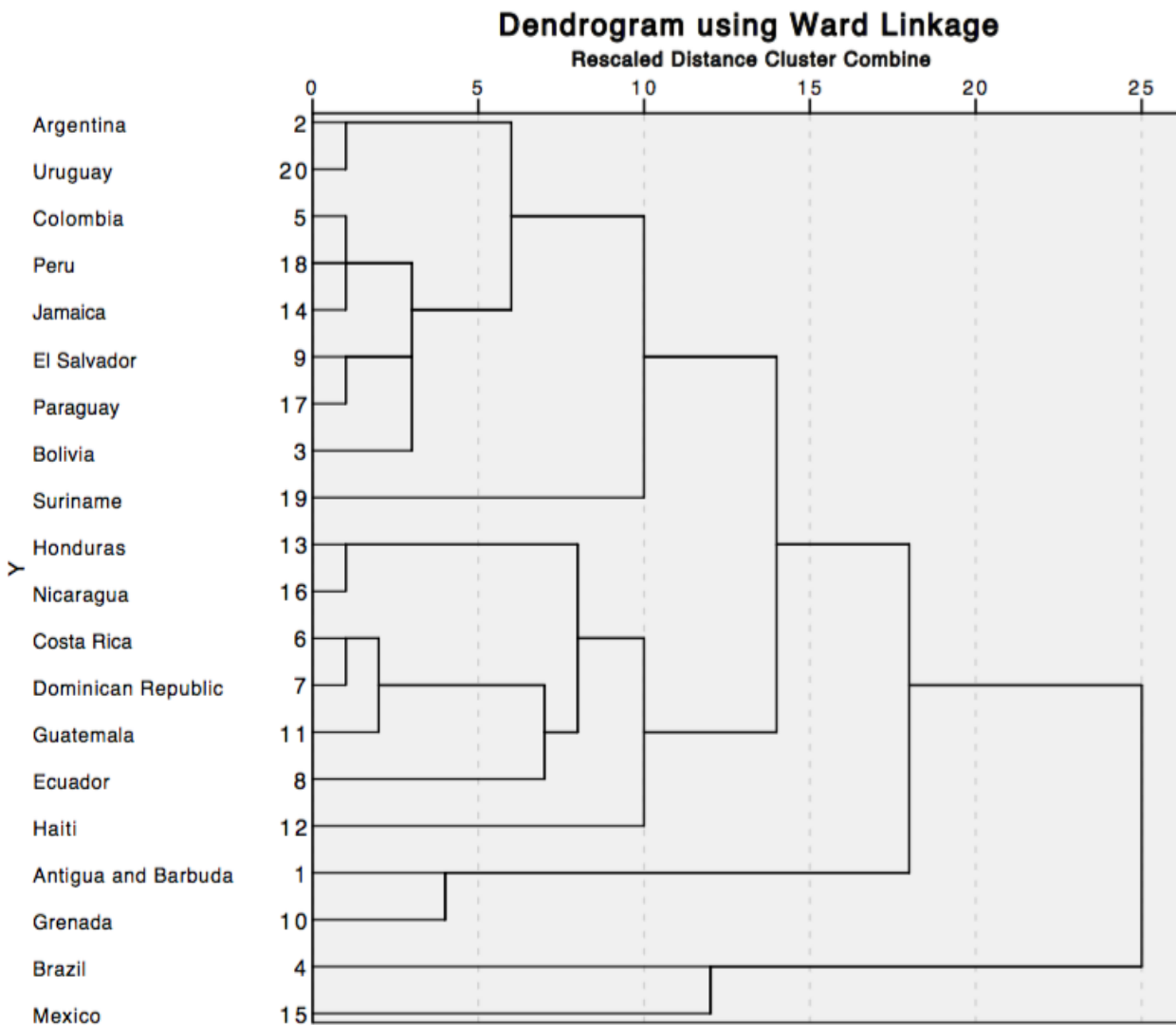
From the HCA groupings, it can be observed that Argentina and Uruguay (Cluster 1), which are both South American countries and share a national border are paired together. Other clusters reflecting geographical proximity include Honduras and Nicaragua (in cluster 5) and Colombia and Peru which are South American and share a border (in cluster 2). In addition to this, Antigua and Barbuda and Grenada (all Caribbean islands) are grouped together. This could be as a result of their membership to the Organization of Eastern Caribbean States. The outliers (Brazil and Mexico) are amongst the largest countries in the Americas by both population and geographical territories.

As the DPS method proposes, upon observing country groupings and similarities, qualitative comparative analysis is used to validate clusters and test whether or not there are any linking variables (prime implicants) that define group membership. The median of each variable is used to decide the binary threshold score for each case. Appendix E.1. shows the QCA threshold conversion for the year 2000. From the threshold conversion, a truth table (Ragin, 1987) is developed (Appendix F.1.) and used to confirm the HCA groupings based on the existence of prime implicants. To conclude the results of combining HCA and QCA, Table 5.8 (below) summarizes the cluster formations from the HCA, and prime implicants from QCA in Boolean simplification (Ragin, 1987). Variable code definitions can be identified in Table 4.1 and Table 4.2 (page 152 of Chapter Four or Appendix J.3).

Observably, clusters with smaller members experience a higher level of similarity – as represented by prime implicants - as compared to clusters with larger members. This shows the realistic element of the methodology as larger cluster groupings exhibit greater diversity. Members of Cluster 1 and Cluster 7 (Argentina and Uruguay; and Antigua and Barbuda, Grenada) exhibit the highest level of economic similarity based on the number of prime implicants. Although other groupings like Honduras and Nicaragua can also be considered.

Table 5.8. Boolean Simplification of LAC Economic Cluster Variables 2000

Cluster	*Boolean Simplification*
Cluster 1	fpi * fdi% * gdpdi * GDPPCC * gdppc% * GDP * ggnlb * iacp% * iacpi * oda * odaa * rp%
Cluster 2	FPI * FDI * gdpdi * oda
Cluster 3	GDPDI * gdppcc * gdppc% * NBTT * ODAA
Cluster 4	
Cluster 5	fpi
Cluster 6	
Cluster 7	FPI * fdi * FDI% * GDPDI * GDPPCC * GDPPC% * gdp * iacp% * IACPI * nbtt * NM * ODA *odaa * RP%
Cluster 8	FDI * GDPPCC * GDPPC% * GDP * IACP% * NBTT * oda * rp%

Though Cluster 1 and 7 have similar macroeconomic prime implicants, noticeable disparities emerge when threshold scores are considered. Whereas both clusters have FPI, FDI%, GDPPCC,

GDPPC%, GDP, IACP%, IACPI, ODA, ODAA, and RP% as prime implicants, some variables differ as either above or below threshold score. Only GDPPCC, iacp% and odaa appear to be similar across both clusters. The same DPS process is repeated with the equivalent cases and variables for the next period, 2008, to assess whether there is any evidence of change.

➢ DPS Results for Latin America and Caribbean Economic Variables, 2008

Figure 5.3 (below) shows the results of the cluster analysis for the second time period, 2008. From Figure 5.3, three club clusters and one outlier (Brazil) are observed below point 10 of the rescale distance. From Costa Rica through to Haiti; Antigua and Barbuda to Jamaica; and then Argentina to Peru. Dismantling these club clusters, five sub-clusters can be detected with two outliers. These are represented in Table 5.9 (below).

Figure 5.3. Dendrogram of Cluster Formations: LAC Economic Variables 2008
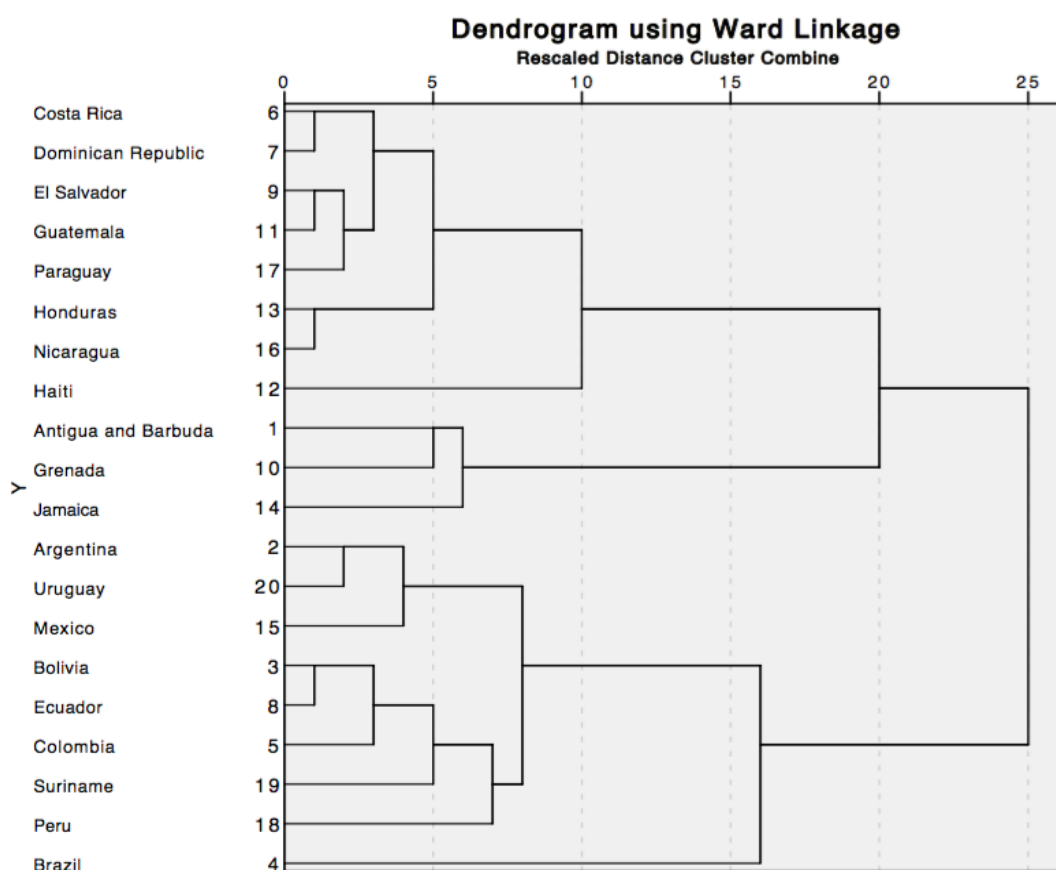
At first glance, one may observe a significant movement in country patterns across the dendrogram as compared to the previous year (2000). Key trends include the movement of Costa Rica, Dominican Republic and Guatemala who remain similar but travel from the middle of the dendrogram in 2000 to the top left corner in 2008. Also, Brazil, which was previously grouped with Mexico, has become an outlier, with Mexico sharing more similarities with Argentina and Uruguay. Likewise, Haiti remains an outlier. Countries which share geographical proximity (Honduras and Nicaragua; and Argentina and Uruguay) converge over time (2000 – 2008).

Table 5.9. Proposed LAC Economic Cluster Membership for 2008

Cluster	Cluster Members
Cluster 1	Costa Rica, Dominican Republic, El Salvador, Guatemala, Paraguay
Cluster 2	Honduras, Nicaragua
Cluster 3	Haiti
Cluster 4	Antigua and Barbuda, Grenada, Jamaica
Cluster 5	Argentina, Mexico, Uruguay
Cluster 6	Bolivia, Colombia, Ecuador, Peru, Suriname
Cluster 7	Brazil

Table 5.10. Boolean Simplification of LAC Economic Cluster Variables 2008

Cluster	Boolean Simplification
Cluster 1	ggr * gge
Cluster 2	FDI% * GDPDI% * gdppcc * gdppc% * gdp * GGNLB * gge * IACP% * IACPI *nbtt * ODA * ODAA * RP%
Cluster 3	
Cluster 4	fpi * FDI% * gdppc% * gdp * ggnlb * GGE * IACPI * odaa * RP%
Cluster 5	FDI * GDPPCC * GDP * GGR * iacpi * oda * odaa * rp%
Cluster 6	GGNLB * NBTT
Cluster 7	

Similarly, with the exemption of Paraguay, most South American countries cluster below the second half of the dendrogram. Likewise, Mexico presents similarities with Argentina and Uruguay. QCA is then used to validate and test cluster groupings (Appendix E.2.). From this, a truth table is developed (Appendix F.2.) to confirm cluster groupings. Table 5.9 (above) shows cluster memberships and Table 5.10 (above) summarizes cluster groupings and their prime implicants in Boolean Simplification. From these tables, membership in Cluster 2, 4 and 5 share similarities in GDP, ODAA and RP% although GDP is above the threshold and RP% below the threshold for Cluster 5.

➢ <u>DPS Results for Latin America and Caribbean Economic Variables, 2015</u>

Considering above patterns, Figure 5.4 (below) provides a visual representation of cluster formations for the third time period, 2015. Three convergent clubs are observed below point 10 of the rescale distance with two heterogenous cases. Thus, from Honduras to Antigua and Barbuda; Dominican Republic to Mexico; and Bolivia to Suriname with Brazil and Haiti as outliers. A closer look at the second convergent club suggests two sub-clusters emerging below point five of the rescaled distance. Consisting of Dominican Republic to El Salvador; and Colombia to Mexico. For this reason, four clusters and two outliers are proposed in Table 5.11 (below).

Comparing the HCA outcomes across the three time periods (i.e. Figure 5.2; Figure 5.3; and Figure 5.4), a significant reduction in the changes in cluster groups is observed. Some noteworthy trends include the journey travelled by some clusters across the three years. For instance, convergent groups like Costa Rica, Dominica Republic, El Salvador, Guatemala, and Paraguay – located slightly above the bottom left corner of Figure 5.4 – continue to remain grouped. Mexico displays similarities with Brazil in 2000, Argentina and Uruguay in 2008, but in 2015 it clustered with Colombia and Peru. Brazil continued to remain heterogeneous throughout each time period. The movement of both Argentina and Uruguay towards Brazil is also noticeable.

Figure 5.4. Dendrogram of Cluster Formations: LAC Economic Variables 2015

Dendrogram using Ward Linkage
Rescaled Distance Cluster Combine
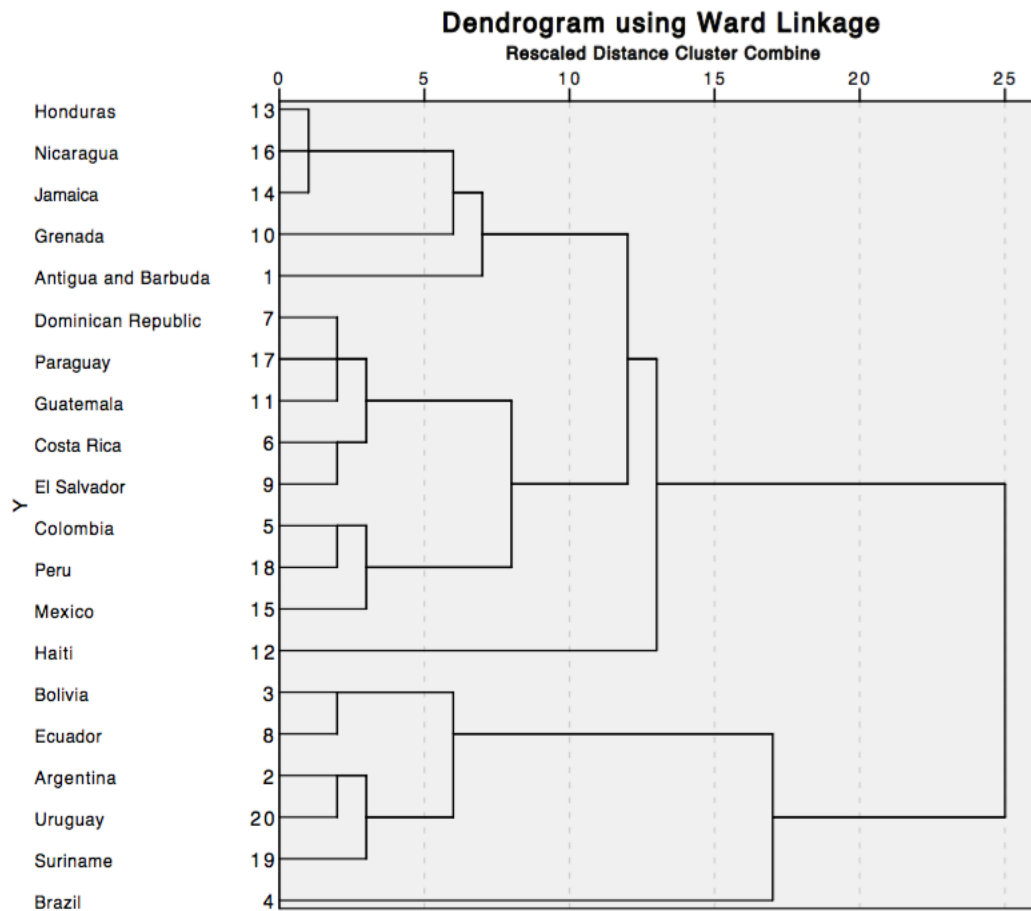
Similar to 2008, most of the countries at the bottom half of the 2015 dendrogram are South

American while Central American and Caribbean nations converge at the top half of the dendrogram.

Although converging, the clustering of Honduras and Nicaragua with other countries changed over the

three time periods. Previously paired together at the middle of the dendrogram in the year 2000,

Honduras and Nicaragua remained paired but moved slightly above the centre in the year 2008.

However, after the financial crisis both cases were clustered with Jamaica at the top. The path travelled

by Granada and Antigua and Barbuda is also of significance as they remained closely paired at the

bottom left corner in 2000. In 2008, although remaining paired both cases travelled to the middle of

the dendrogram and clustered with Jamaica. Finally, in 2015 both cases emerge at the top of the

dendrogram and clustered with Honduras, Nicaragua and Jamaica. When QCA results are taken into

consideration (Table 5.11 and Table 5.12), the extent of economic convergence as represented by prime implicants substantially reduces. This could be based on the larger cluster memberships, each cluster has a minimum of three members, as compared to earlier periods.

Table 5.11. Proposed LAC Economic Cluster Membership for 2015

Cluster	Cluster Members
Cluster 1	Antigua and Barbuda, Grenada, Honduras, Jamaica, Nicaragua
Cluster 2	Costa Rica, Dominican Republic, El Salvador, Guatemala, Paraguay
Cluster 3	Colombia, Mexico, Peru
Cluster 4	Haiti
Cluster 5	Argentina, Bolivia, Ecuador, Suriname, Uruguay
Cluster 6	Brazil

Table 5.12. Boolean Simplification of LAC Economic Cluster Variables 2015

Cluster	Boolean Simplification
Cluster 1	FDI% * gdp * RP%
Cluster 2	gge * iacp% * iacpi
Cluster 3	fpi * FDI * gdpdi * GDP * NBTT * nm * ODAA
Cluster 4	
Cluster 5	ggnlb * GGE * IACP%
Cluster 6	

➢ Patterns in Economic Convergence between the Period Before and After the Financial Crisis (2000-2015)

From the empirical results discussed above, it is clear that although similar patterns of economic convergence emerged throughout the three years, some countries remain converged while others do not. It is important to note that the degree of economic convergence is observed when the dendrograms are placed alongside each other. This identifies the occurrence of exact cluster paring over time and not the emergence of similar groupings. Figure 5.5. (below) shows the degree of

economic convergence across cases when the dendrograms for the years 2000 and 2008 are placed alongside each other. Here, four cases converge during the commencement of the MDGs up until the financial crisis. These are Argentina and Uruguay; Honduras and Nicaragua; Costa Rica and Dominican Republic; and Antigua and Barbuda and Grenada while Brazil remained an outlier.

Figure 5.5. Dendrogram Comparison – LAC Economic Policy Variables 2000 – 2008
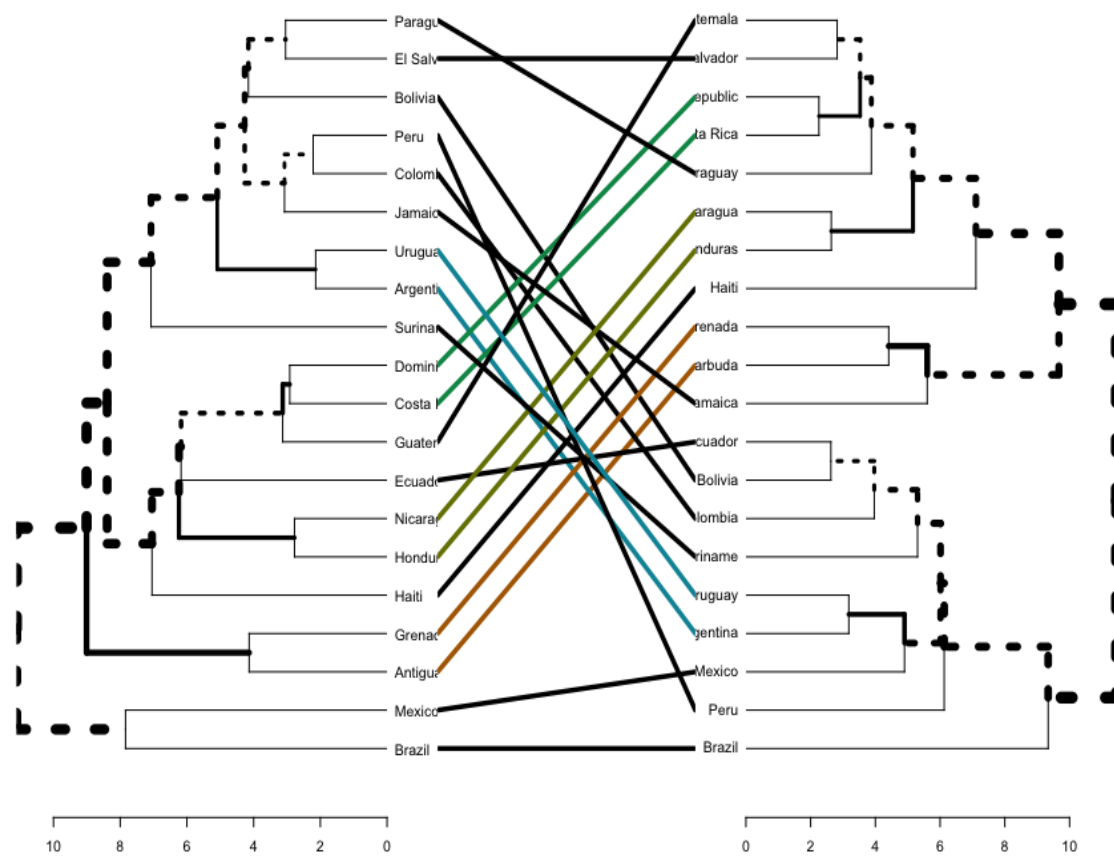
Similarly, Figure 5.6 (below) shows the patterns of economic convergence when the dendrograms for the years 2008 and 2015 are placed beside each other. From this, the recurrence of convergence between Argentina and Uruguay as well as Honduras and Nicaragua can be observed while Brazil continuous to remain an outlier. During this period Bolivia and Ecuador also converge. It appears that although remaining relatively close, Costa Rica and Dominican Republic; as well as

Antigua and Barbuda and Grenada converge during the period before the financial crisis and then diverge in the aftermath. Presumably, this signifies the distinctive impact the financial crisis had on these countries as well as the varying policy responses and outcomes experienced.

Figure 5.6. Dendrogram Comparison – LAC Economic Policy Variables 2008 – 2015
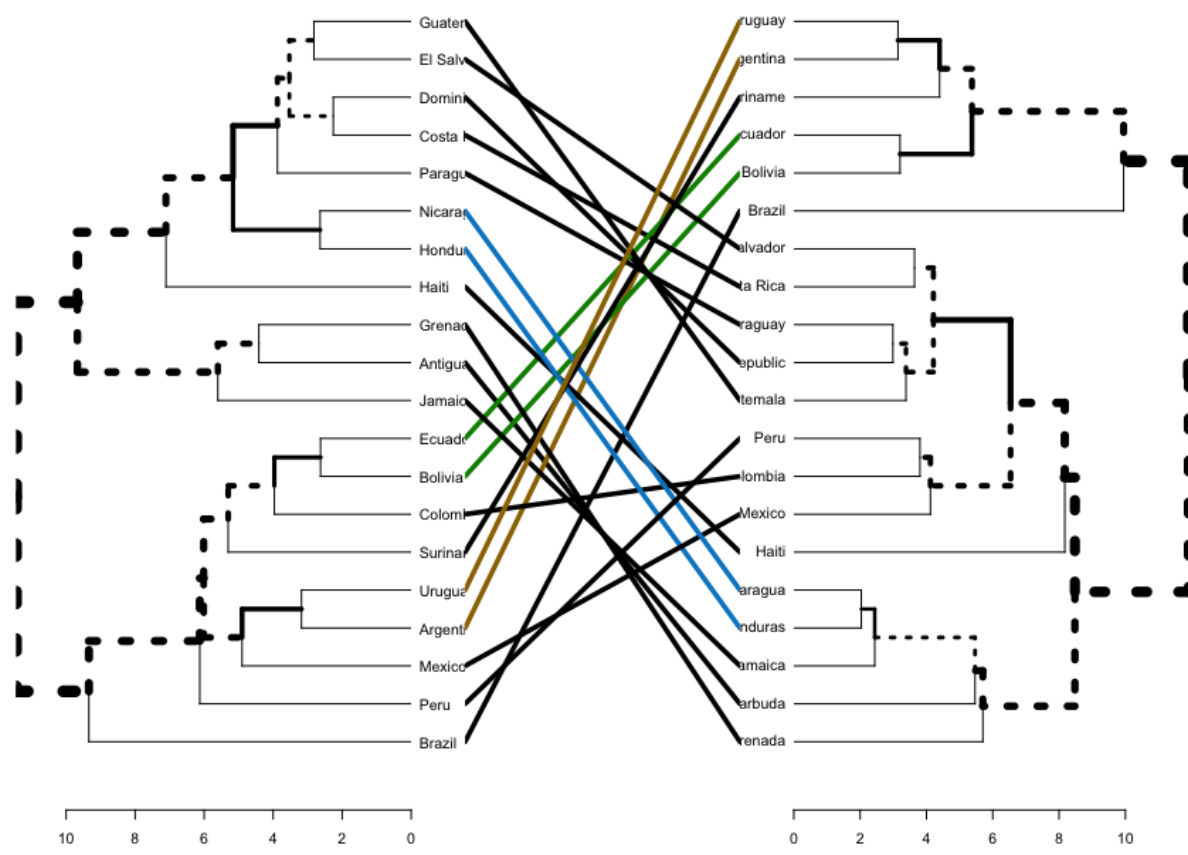
Figure 5.7 (below) shows the patterns of convergence during the commencement of the MDGs and its conclusion when the dendrograms for the years 2000 and 2015 are placed beside each other. From this, the re-emergence of convergence between Argentina and Uruguay as well as Honduras and Nicaragua are observed. Brazil continuous to remain an outlier. Colombia and Peru also converge. Although remaining within the same cluster groupings (Table 5.13; Table 5.14 - below), Colombia and Peru diverge during the financial crisis and display similarities afterwards.

Figure 5.7. Dendrogram Comparison – LAC Economic Policy Variables 2000 – 2015
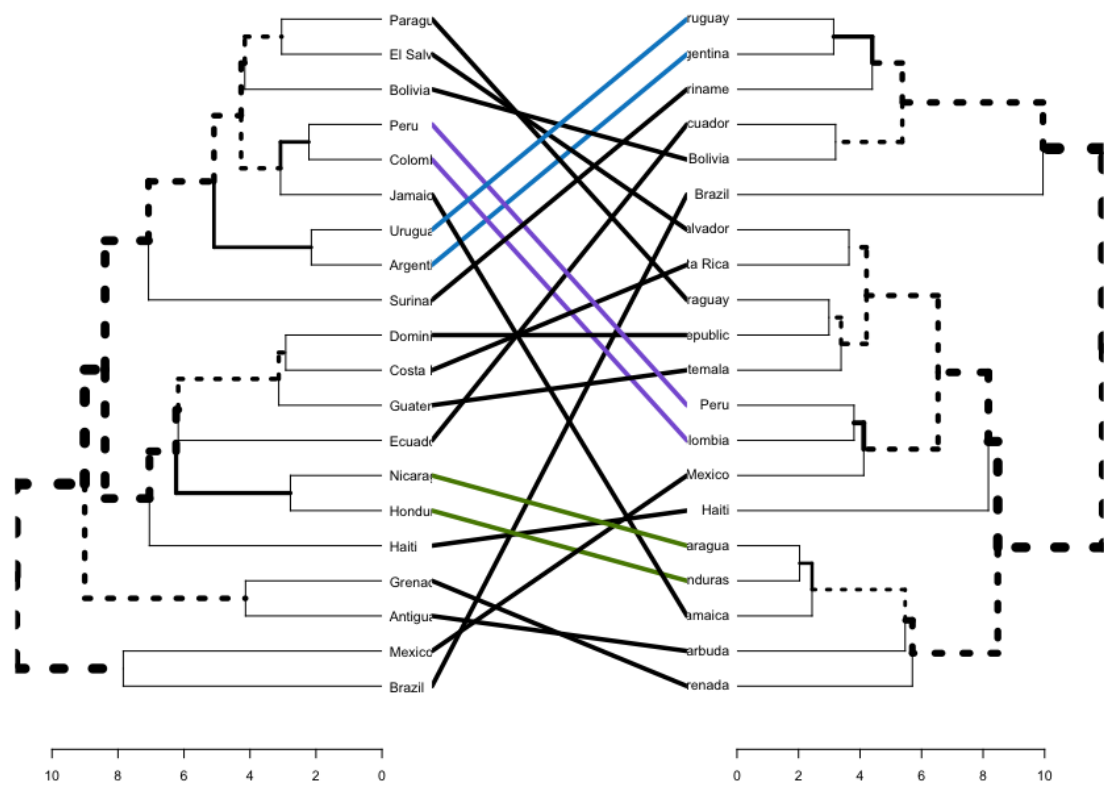
Using the proposed cluster membership (Table 5.7; Table 5.9; Table 5.11 – above) patterns in convergence can be identified. These countries are listed in Table 5.13 (below) for the 2000 to 2008 interval, and Table 5.14 (below) for 2008 to 2015. From these tables, economic convergence is somewhat demonstrated. Although dynamics within the 2000 to 2008 interval is observe with the number of cases changing cluster groupings, a larger number of these cases also remain grouped during the 2008 to 2015 interval. This suggests greater convergence as compared to the period between 2000 and 2008. In this sense, sigma convergence (growing together) can be observed after the financial crisis and at the conclusion of the MDGs. It is important to note that, some cases also demonstrate similar patterns of convergence based on similar trends in prime implicants. For instance, the QCA results showed Argentina and Uruguay as having similarities in GDPPCC, GDP, iacpi, oda, odaa and

rp% for both 2000 and 2008. Similarly, Grenada and Antigua and Barbuda show similarities in prime implicants for FDI%, gdp, IACPI, odaa and RP% for the years 2000 and 2008. However, although fpi and gdppc% re-emerge in 2008 they are below the threshold score.

Table 5.13. Patterns of Convergence Before the Financial Crisis

Patterns of Convergence	*Patterns of Divergence*
Argentina, Uruguay	Jamaica
Colombia, Peru	Bolivia
El Salvador, Paraguay	Suriname
Honduras, Nicaragua	Ecuador
Costa Rica, Dominican Republic, Guatemala	Brazil
Haiti (remained isolated)	Mexico
Antigua and Barbuda, Grenada	

Table 5.14. Patterns of Convergence After the Financial Crisis

Patterns of Convergence	*Patterns of Divergence*
Costa Rica, Dominican Republic, El Salvador, Guatemala, Paraguay	Mexico
Honduras, Nicaragua	
Antigua and Barbuda, Grenada, Jamaica	
Argentina, Uruguay	
Bolivia, Ecuador, Suriname	
Colombia, Peru	
Haiti & Brazil (both remained isolated)	

Comparably, during the period after the crisis, Honduras and Nicaragua shared similarities in prime implicants for FDI% and RP%. GDP was also a prime implicant for 2008 and saw a rise in threshold score in 2015. Likewise, Grenada, Jamaica and Antigua and Barbuda present similarities in prime implicants for FDI% and RP% during the period after the crisis. For Bolivia, Ecuador and Suriname, a decrease in the threshold score of net government lending and borrowing (GGNLB) prime

implicant is observed in 2015. Colombia and Peru also converge with an above threshold score for NBTT during the 2008 – 2015 interval while Haiti and Brazil both remained isolated. Acknowledging these findings, the proceeding sub-section discusses the DPS results for LAC social policy variables.

➢ DPS Results for Latin America and The Caribbean Social Policy Variables, 2000

Figure 5.8 (below) shows the results of the cluster analysis for LAC social policy variables for the first time period, 2000. From this, four main cluster groupings are observed below point 5 of the rescale distance. This includes Guatemala to Paraguay; Haiti and Nicaragua; Colombia to Costa Rica; and Argentina to Uruguay (see Table 5.15 - below). The results also show the separation of countries into two club clusters, Cluster 1 and 2 on one side and Cluster 3 and 4 on the other side. QCA results (Table 5.16 – below) show that Cluster 1 and 2 both have DHE and IMR as prime implicants although DHE is below the threshold in Cluster 1 and above in Cluster 2. Similarly, Cluster 3 and 4 also exhibit some identical features with regards to DHE% and OPE% although their threshold scores vary.

The social policy performance of countries in Cluster 4 is noteworthy as prime implicants are above the threshold with only ADR and DHE% falling below the threshold (Table 5.16 - below). Some similar groupings are also observed across economic and social policy clusters for the year 2000. These include Argentina and Uruguay, and Bolivia, El Salvador and Paraguay. These groupings are mainly South American countries although El Salvador (which is Central American) stands out. With majority of the clusters below point 5 of the rescale distance, and the number of clusters that emerged as compared to the economic policy clusters in 2000, LAC countries exhibit greater social policy convergence in 2000 as compared to the economic convergence during that year.

Linking the economic clustering in 2000 to social policy clustering in the same year, the results also show similar socioeconomic cluster patterns. Dominican Republic, Ecuador, Guatemala, and Honduras; Argentina and Uruguay; and Bolivia, El Salvador and Paraguay all cluster socioeconomically.

Figure 5.8. Dendrogram of Cluster Formations: Social Variables, 2000
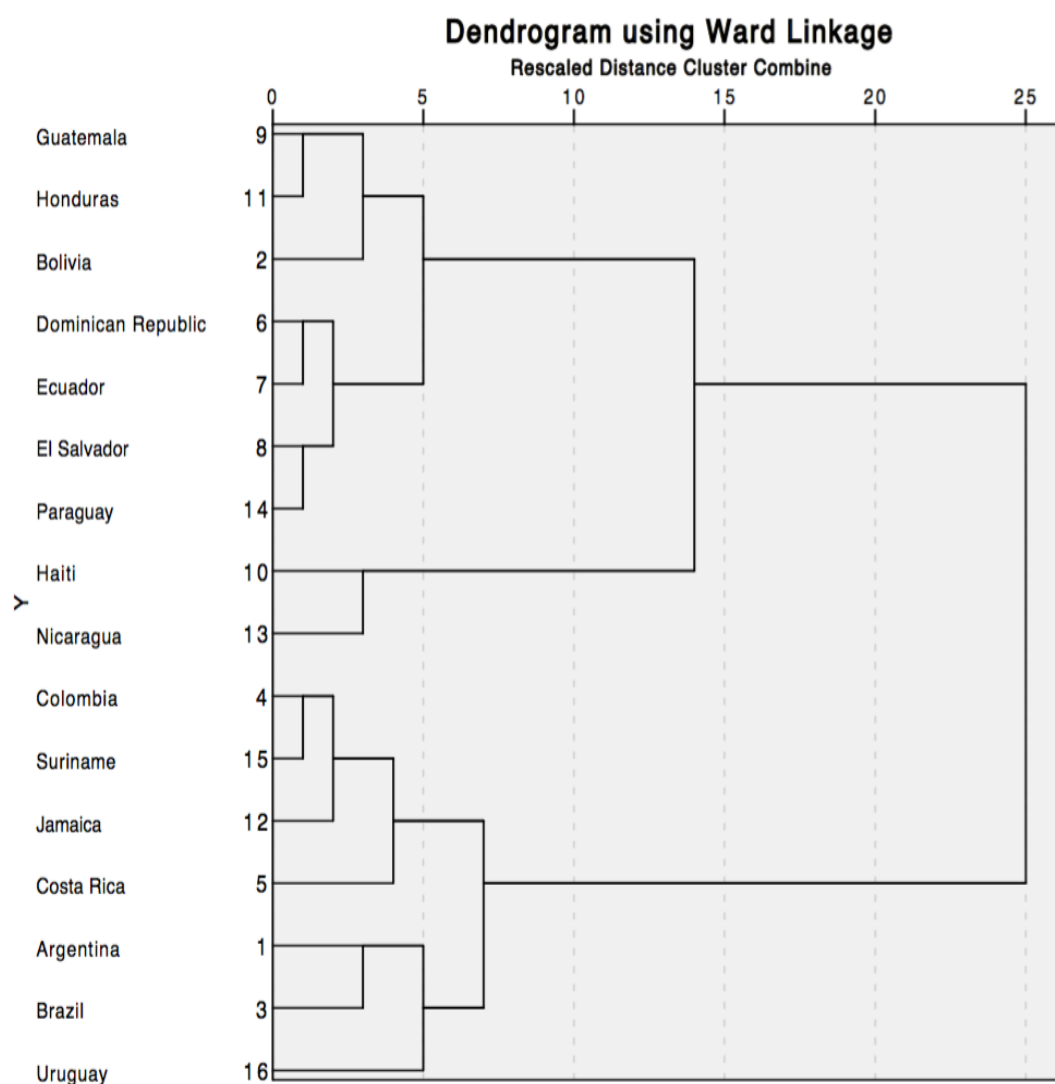
Table 5.15. Proposed LAC Cluster Membership for Social Policy Variables 2000

Cluster	Cluster Members
Cluster 1	Bolivia, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Paraguay
Cluster 2	Haiti, Nicaragua
Cluster 3	Colombia, Costa Rica, Jamaica, Suriname
Cluster 4	Argentina, Brazil, Uruguay

Table 5.16. Boolean Simplification for LAC Social Policy Cluster Variables 2000

Cluster	Boolean Simplification
Cluster 1	dhe * IMR
Cluster 2	atcct * ate * asee * ADR * che * dhe * epr * IMR * leb * ope * OPE% * bdw * bss * PGA * REC
Cluster 3	DHE% * ope%
Cluster 4	ATCCT * ATE * ASEE * adr * CHE * DHE * dhe% * OPE * BDW

➤ DPS Results for Latin America and The Caribbean Social Policy Variables, 2008

Figure 5.9 (below) shows the social policy cluster formations for the second time period, 2008. Similar to clusters in the previous year, clustering occurs below point 5 of the rescale distance. From this, five main clusters are proposed (Table 5.17 - below). Haiti and Nicaragua remain similar between 2000 and 2008 but differ in 2008 in terms of the countries around them. Similarly, Guatemala and Honduras also remain closely paired but there are noticeable changes in the countries they are similar to. Apart from the HCA grouping of Guatemala and Honduras (both Central American nations), other clusters cannot be significantly linked to geographical locations. The QCA results highlight the social policy performance of Cluster 3 as most variables are seen to be above the threshold. IMR and OPE% falling below the threshold which is also significantly positive in social impact (Table 5.18 - below). Also, Uruguay re-emerges amongst the high performing LAC countries. Cluster 5 is considerably the least performing cluster as most prime implicants fall below the threshold. Although ADR, IMR, and PGA appear above the threshold, they demonstrate negative social impacts.

Comparing the performance of Haiti and Nicaragua (Cluster 2 in the year 2000 and Cluster 5 in the year 2008) over the two-year period, the only significant change in variables lies within the dissimilarity in LEB and OPE% in the year 2000 and REO in the year 2008. Socioeconomic similarities observed in 2008 indicate some significant patterns as Peru and Suriname; Bolivia and Ecuador; and Dominican Republic, Guatemala and Paraguay cluster socioeconomically.

Figure 5.9. Dendrogram of Cluster Formations: Social Policy Variables, 2008
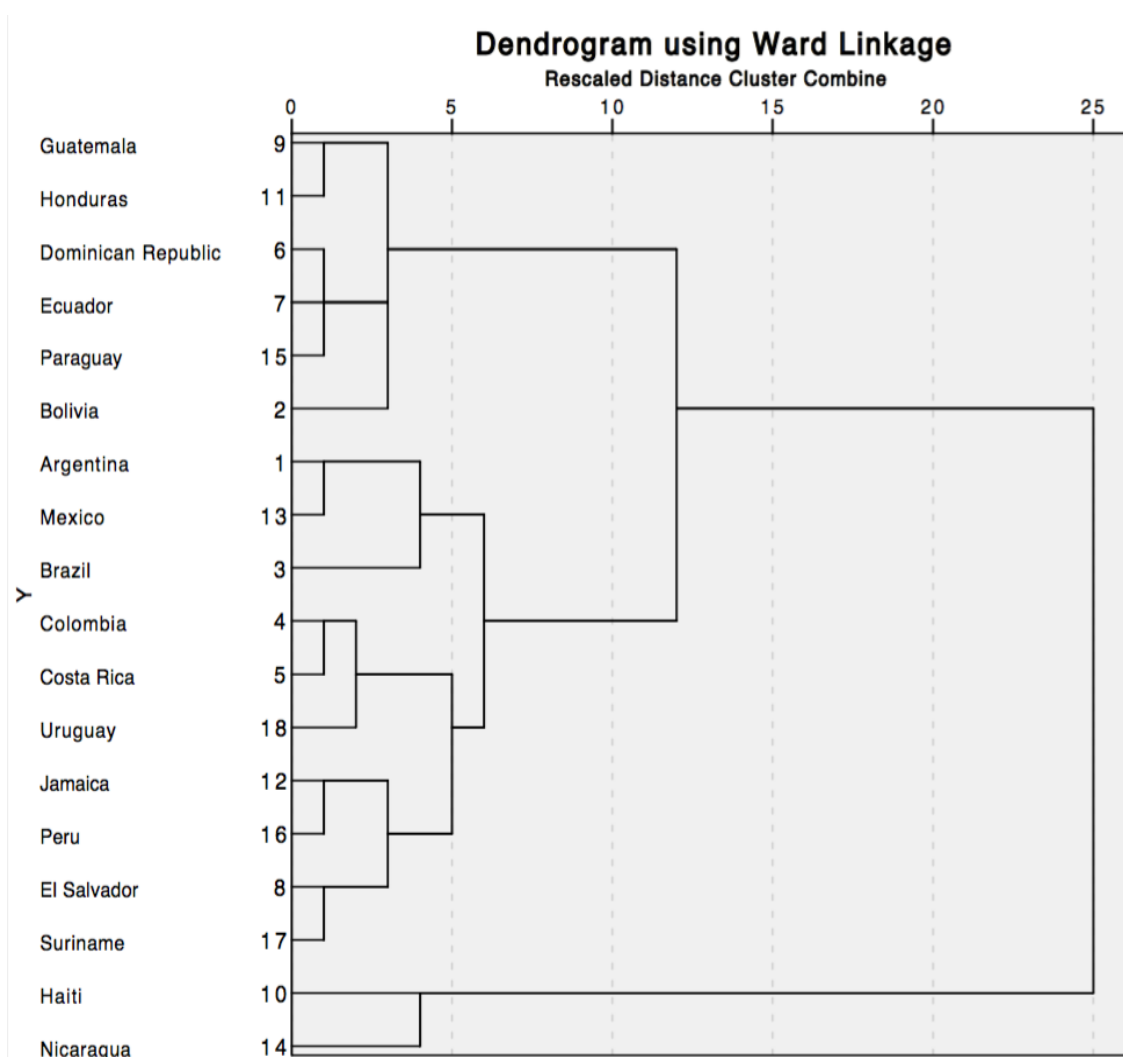
Table 5.17. Proposed LAC Cluster Membership for Social Policy Variables 2008

Cluster	Cluster Members
Cluster 1	Bolivia, Dominican Republic, Ecuador, Guatemala, Honduras, Paraguay
Cluster 2	Argentina, Brazil, Mexico
Cluster 3	Colombia, Costa Rica, Uruguay
Cluster 4	El Salvador, Jamaica, Peru, Suriname
Cluster 5	Nicaragua, Haiti

Table 5.18. Boolean Simplification for LAC Social Policy Cluster Variables 2008

Cluster	Boolean Simplification
Cluster 1	che * dhe * EPR * IMR * bdw * PGA
Cluster 2	ATE * ASEE * adr * CHE * DHE * LEB * OPE * BDW
Cluster 3	ATCCT * ATE * ASEE * CHE * DHE * DHE% * imr * ope% * BDW * REO * REC
Cluster 4	epr * pga
Cluster 5	atcct * ate * asee * ADR * che * dhe * epr * IMR * ope * bdw * bss * PGA * reo * REC

➢ DPS Results for Latin America and The Caribbean Social Policy Variables, 2015

Figure 5.10 (below) shows the results of the cluster analysis for LAC social policy variables for the final year, 2015. Like earlier social policy cluster formations, four club cluster groupings are observed below point 5 of the rescale distance. These include Guatemala to Suriname; Dominican Republic to Brazil; Costa Rica to Argentina; and Haiti and Nicaragua. From this, five clusters and one outlier are proposed (Table 5.19 - below). Considering the trajectory of cases between the period of 2000 to 2015, Guatemala and Honduras remained similar despite variations in cluster membership. Haiti and Nicaragua also remain similar but move around in relation to how they compare to other countries. Other countries like Bolivia, Dominican Republic and Paraguay have also maintained their position at the first half of the dendrograms throughout the three years.

A more detailed evaluation of cluster formations using the QCA results in Table 5.20 (below) emphasises the social policy convergence variables as well as the performance of clusters. It is clear that the extent of convergence within each cluster is significant. Only Cluster 1 has less than six prime implicants. Cluster 5 is high performing as majority of its prime implicants are above the threshold - with IMR falling below the threshold. However, LEB, EPR and OPE% show some considerable negative social policy performance. Despite similarities in a number of prime implicants across Cluster 5 and 6, membership to the latter is demonstrated by low social policy performance as most prime

implicant fall below the threshold. Similar patterns of socioeconomic clustering are also evident across Argentina and Uruguay; and, Guatemala and Paraguay. Brazil remains an outlier socioeconomically.

Figure 5.10. Dendrogram of Cluster Formations: Social Variables, 2015
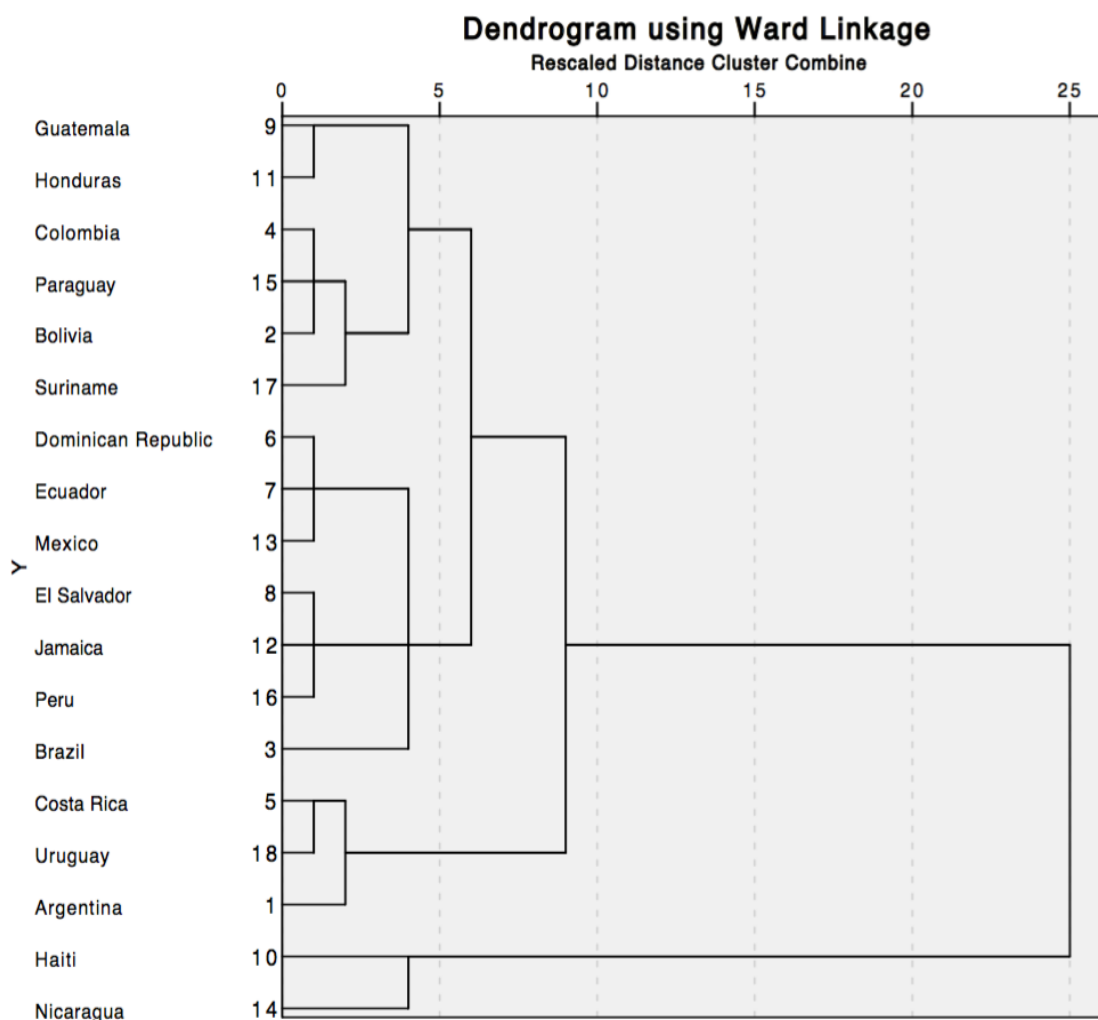
Table 5.19. Proposed LAC Cluster Membership for Social Policy Variables 2015

Cluster	Cluster Members
Cluster 1	Bolivia, Colombia, Guatemala, Honduras, Paraguay, Suriname
Cluster 2	Brazil
Cluster 3	Dominican Republic, Ecuador, Mexico
Cluster 4	El Salvador, Jamaica, Peru
Cluster 5	Argentina, Costa Rica, Uruguay
Cluster 6	Haiti, Nicaragua

Table 5.20. Boolean Simplification for LAC Social Policy Cluster Variables 2015

Cluster	Boolean Simplification
Cluster 1	leb * bss * REO
Cluster 2	
Cluster 3	ATE * ASEE * CHE * dhe% * OPE * OPE% * PGA * rec
Cluster 4	che * CHE% * dhe * DHE% * ope% * BSS * pga
Cluster 5	ATCCT * ATE * ASEE * CHE * DHE * DHE% * epr * imr * LEB * ope% * BDW * BSS
Cluster 6	atcct * ate * asee * ADR * che * dhe * epr * IMR * ope * OPE% * bdw * bss * PGA * reo * REC

➤ Patterns in Social Policy Variable Convergence between the 2000 - 2008 and the 2008 – 2015 Time Interval

The empirical results for each time period have shown some significant patterns regarding the path travelled by some cluster groupings and the social policy dynamics that exist between LAC countries overtime. Figure 5.11 (below) compares the social policy dendrograms for the years 2000 and 2008 to assess the degree of similarity in cluster groupings. From this, convergence can be observed between Guatemala and Honduras; Dominican Republic and Ecuador; and Haiti and Nicaragua. The QCA results also reveal similarities in prime implicants during this period. For instance, Guatemala and Honduras, and Dominican Republic and Ecuador have IMR and dhe as parallel prime implicants in 2000 and 2008. Likewise, Haiti and Nicaragua have atcct, ate, asee, ADR, che, dhe, epr, IMR, ope, bdw, bss and PGA as similar prime implicants in 2000 and 2008.

For the period after the financial crisis (2008 - 2015), Figure 5.12 (below) shows persistence in convergence across Guatemala and Honduras; and Dominican Republic and Ecuador; while Haiti and Nicaragua show a high degree of social policy convergence. This is similar to the economic convergent patterns identified when the dendrograms for LAC economic policy variables after the financial crisis were compared (Figure 5.6), emphasising that Nicaragua and Honduras show a high degree of socioeconomic policy convergence during the period after the financial crisis. Likewise,

when considering the social policy dendrograms for 2000 and 2015 a high degree of convergence can be observed across the same cases (Figure 5.13 - below).

Figure 5.11. Dendrogram Comparison – LAC Social Policy Variables 2000 – 2008
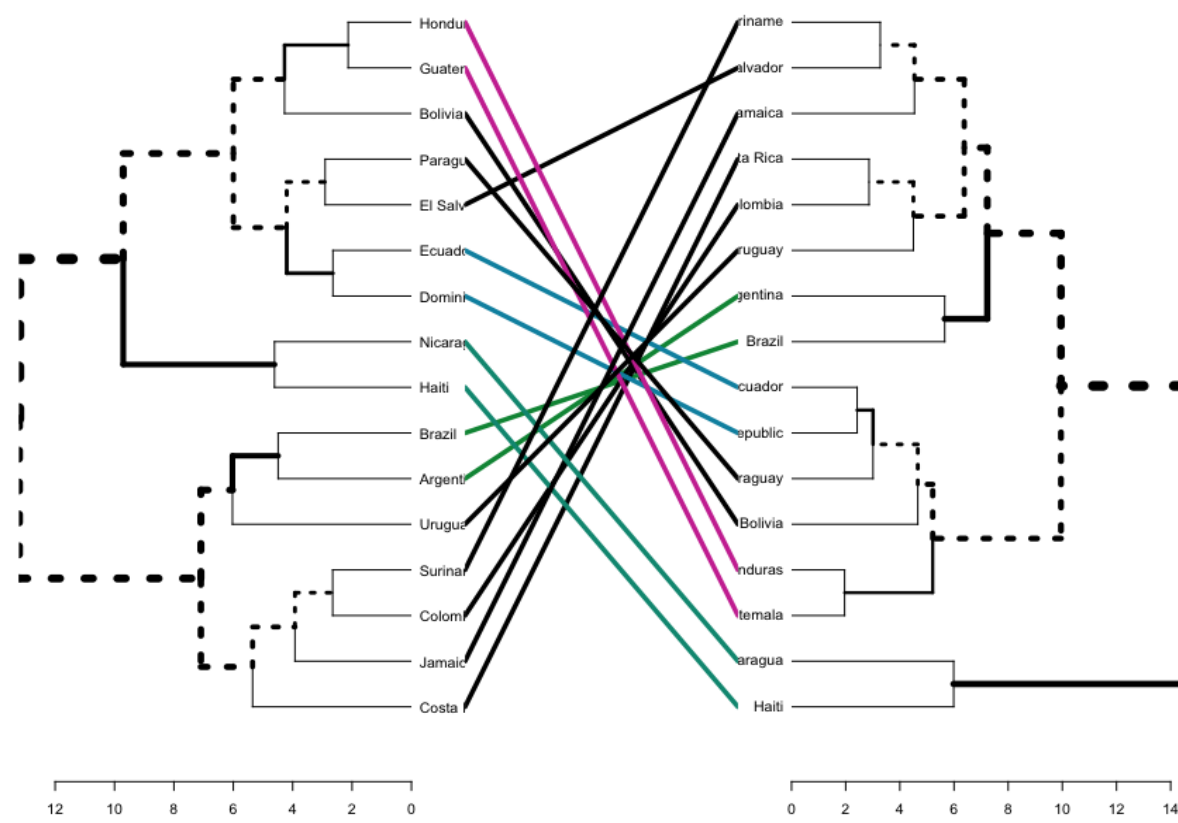
Comparing the patterns of social policy convergence (based on the proposed LAC cluster membership for social policy variables - Tables 5.15; Table 5.17. and Table 5.19) between each time interval (Tables 5.21 and Table 5.22 - below). Admittedly, before the financial crisis LAC economies experience a greater amount of social policy convergence as compared to the period after the financial crisis. This is evident as some country clusters maintain their groupings while others do not. Prime implicants also suggest varying convergent factors although Haiti and Nicaragua provide an exemption.

Figure 5.12. Dendrogram Comparison – LAC Social Policy Variables 2008 – 2015
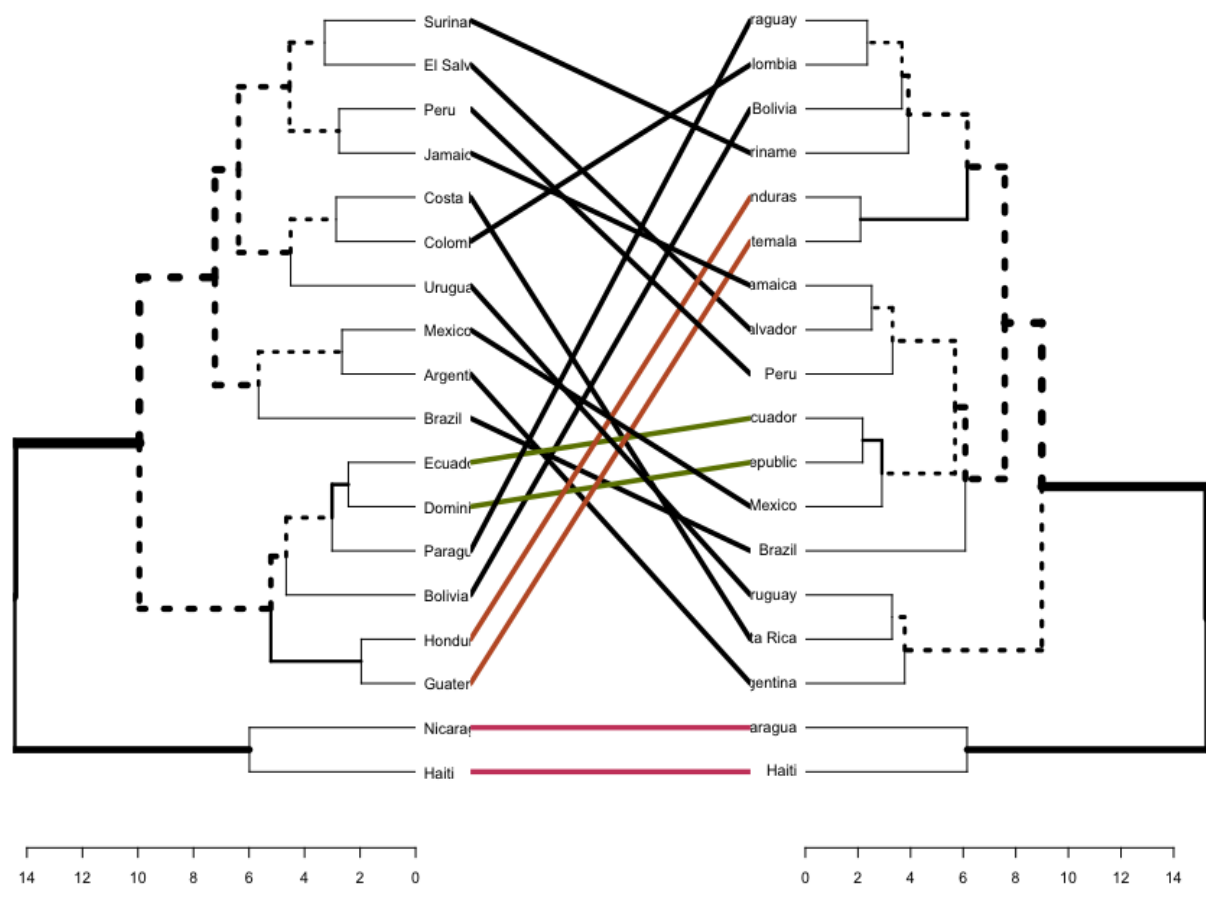
The overall longitudinal trends in social policy convergence is however volatile. This is represented in Table 5.22 (below) and reveals a general sense of unpredictability in cluster grouping over time. An important next step would however be to compare the extent of economic convergence amongst LAC economies with the social policy results to see if any patterns may emerge. In this sense, focus is placed on results in Tables 5.7; Table 5.9; and Table 5.11 for economic policy convergence and Tables 5.15; Table 5.17. and Table 5.19 for social policy convergence as well as their corresponding dendrograms – all above.

Figure 5.13. Dendrogram Comparison – LAC Social Policy Variables 2000 – 2015
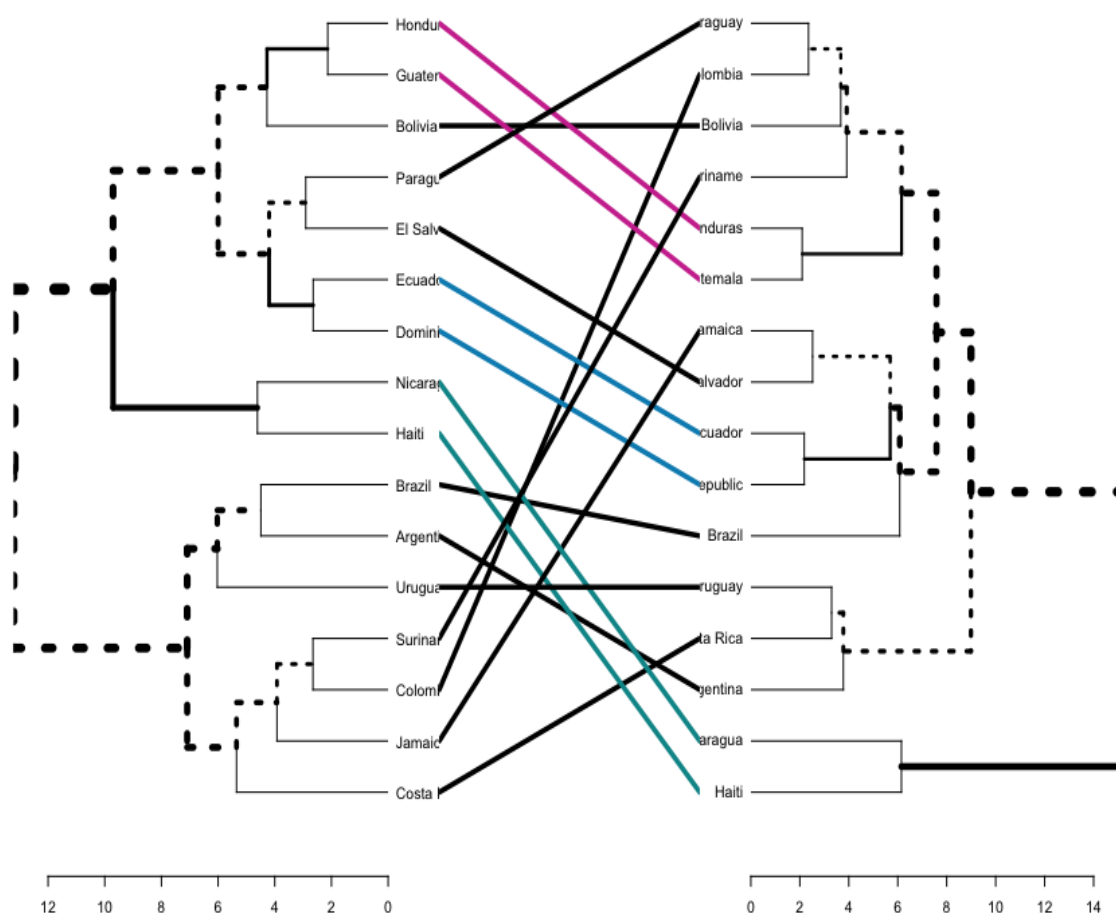
Table 5.21. LAC Patterns of Social Policy Convergence During the 2000 – 2008 Time Interval

Patterns of Convergence	Patterns of Divergence
Nicaragua, Haiti	El Salvador
Jamaica, Suriname	Uruguay
Bolivia, Dominican Republic, Ecuador, Guatemala, Honduras, Paraguay	Mexico
Colombia, Costa Rica	
Argentina, Brazil	

Table 5.22. LAC Patterns of Social Policy Convergence During the 2008 – 2015 Time Interval

Patterns of Convergence	Patterns of Divergence
Nicaragua, Haiti	Argentina
El Salvador, Jamaica, Peru	Mexico
Dominican Republic, Ecuador,	Brazil
Bolivia, Guatemala, Honduras, Paraguay	Colombia
Costa Rica, Uruguay	Suriname

Table 5.23. LAC Patterns of Social Policy Convergence During the 2000 – 2015 Time Interval

Patterns of Convergence	Patterns of Divergence
Nicaragua, Haiti	Argentina
Bolivia, Guatemala, Honduras, Paraguay	Mexico
Dominican Republic, Ecuador	Brazil
	Colombia
	Suriname
	El Salvador
	Uruguay
	Jamaica
	Costa Rica
	Peru

Comparing the HCA results - as reflected in the economic and social policy dendrograms – it is clear that secondary cluster formations emerge below point 5 of the rescale distance for social policy dendrograms as compared to the economic policy variables. This suggests that LAC countries share greater similarities socially than economically. In addition to this, greater patterns of convergence are seen to emerge with regards to economic cluster formations after the financial crisis (Table 5.14) as compared to social policy clustering (Table 5.22). There is also consistency in cluster grouping throughout the three time periods economically as compared to social policy variables. On one hand, for economic clustering, Argentina and Uruguay; Colombia and Peru; El Salvador and Paraguay; Honduras and Nicaragua; Costa Rica, Dominican Republic and Guatemala; and Grenada and Antigua and Barbuda reoccur during the 2000-2015 time interval. On the other hand, Nicaragua and Haiti; Bolivia, Guatemala, Honduras and Paraguay; and Dominican Republic and Ecuador reoccur in social

policy clustering over the same period. This observation could be linked to the varying impacts of, and response to, the financial crisis as well as the harmonization of national policies with other external policy models. Specifically, the MDGs (Heinze & Knill, 2008; Ulrich, 2010). Likewise, there is a much clearer distinction in economic convergence outliers over the three-year period. Mexico remains an outlier throughout the three periods under study (at a rescale distance of above point 10). This could be due to its geographical proximity to the United States and membership to NAFTA. With social policy variables, although Haiti and Nicaragua remain outliers', over time, their comparative similarities with other cases changes. This is represented in their movement across the dendrograms for each time period.

Linking this back to the socioeconomic convergence hypothesis outlined in Chapter One (**H1**)[61], the findings suggest that, with regards to LAC cases, similarities in socioeconomic settings, and in some cases problem pressures (for instance as observed in the transfer of CCT policies across some Latin American countries), may foster convergence. Likewise, geographical proximity can also stimulate economic convergence - neighbouring countries (countries with close geographical proximity) emerged within similar cluster grouping (Honduras and Nicaragua; Colombia and Peru; and Argentina and Uruguay). In addition to this, countries with similar features (i.e. Grenada and Antigua and Barbuda both of which are island countries) are also likely to converge.

Nevertheless, the QCA results highlights varying convergent factors at each time point (see Appendix L for an overview of LAC economic and social policy clustering and Boolean simplification). Although countries may show similarities (based on cluster groupings) at a particular point in time (for instance before the crisis) the specificity of these similarities may change over time (e.g. Colombia and Costa Rica; El Salvador and Paraguay). This is evident when prime implicants are

---

[61] H1. The greater the similarities in socioeconomic settings (conditions /problem pressures) across 'n' countries at a point in time (t_o), the more likely it is that variable threshold scores in certain macro socioeconomic indicators will converge over time(t_1).

observed. For instance, Argentina and Uruguay converged economically before, during and after the financial crisis. However, convergent factors, as reflected in the QCA results for the period before the crisis 2000 to 2008 (t_0) showed similarities in above threshold scores for GDPPCC and GDP, and below threshold scores for iacpi, oda, odaa and rp%. However, there were no similarities in convergent factors for the 2008 to 2015 (t_1) time interval. Here, sigma convergence is observed as both cases maintain cluster paring overtime. But, variations in cluster pairings (as evident in the QCA results) suggests an absence of policy harmonization with other exogamous economic policy models (delta convergence).

Yet, in other cases, similar prime implicants are evident across the two intervals (2000 to 2008(t_0) and 2008 to 2015 (t_1). For instance, Grenada and Antigua and Barbuda (both island countries) converged economically throughout the period under discussion with consistency in above threshold score for FDI% and RP%, and below threshold score for gdp. Similarly, Nicaragua and Haiti converged socially throughout the period under discussion with consistency in above threshold scores for ADR, IMR, PGA and REC. And, consistency in below threshold scores for atcct, ate, asee, che, dhe, epr, ope, bdw and bss. This demonstrates varying convergent factors and effects across LAC cases. As such, for the baseline assessment of convergence across LAC countries, it is concluded that, multiple factors influence convergence. The subsequent section looks at stability in variable threshold[62] and interactions between cases when IMF interventions are added. The aim is to test hypothesis 2 (**H2**)[63]. A comparative analysis of country performance compared to the average is conducted and threshold scores are equated to average variable scores. Variable code definitions can be identified in Table 4.1 and Table 4.2 (page 152 of Chapter Four or Appendix J.3).

---

[62] Stability in variable thresholds signify stability of variable trend over time. That is to say, when a variable score for a cluster (or group of countries) consistently remains above or below threshold, across different time points.

[63] H2. The implementation of an IMF intervention is a sufficient, but not necessary, condition for convergence in variable threshold scores over time across IMF interested areas.

> Overall Socioeconomic Threshold Stability for LAC Economies with IMF Interventions

Table 5.24 (below) shows the overall threshold stability[64] for LAC case studies comparing key economic variables with IMF interventions during the period before the financial crisis. Stability in this context is explained as consistency in variable scores (i.e. remaining consistently above or below threshold) for an individual case over the three time points. As such, this does not imply normative stability or policy stability. The data has been sorted in order of IMF Interventions; number of IMF interventions; LEB; GDP; IACP%; IACPI; FDI% and ODA.

Table 5.24 Overall Socioeconomic Policy Variable Threshold Stability with IMF Variables 2000 – 2008

Country	GDP	IACP%	IACPI	FDI%	ODA	LEB	IMF Interventions (Yes - 1/ No - 0)	№ of IMF Interventions
El Salvador		BELOW	ABOVE	BELOW	ABOVE	ABOVE	0	0
Mexico	ABOVE		BELOW	BELOW	BELOW	ABOVE	0	0
Costa Rica	ABOVE	ABOVE	BELOW	ABOVE	BELOW	BELOW	0	0
Jamaica	BELOW		ABOVE	ABOVE	BELOW	ABOVE	0	0
Suriname	BELOW	ABOVE	BELOW	BELOW	ABOVE		0	0
St. Kitts and Nevis	BELOW	BELOW	ABOVE	ABOVE	ABOVE	ABOVE	0	0
Antigua and Barbuda	BELOW	BELOW	ABOVE	ABOVE	ABOVE	BELOW	0	0
Haiti	BELOW	ABOVE		BELOW	ABOVE	BELOW	1	1
Honduras	BELOW	ABOVE	ABOVE	ABOVE	ABOVE	BELOW	1	1
Grenada	BELOW	BELOW	ABOVE	ABOVE	ABOVE	BELOW	1	1
Bolivia			ABOVE		ABOVE		1	2
Colombia	ABOVE			BELOW	BELOW		1	2
Brazil	ABOVE		ABOVE		BELOW	BELOW	1	2
Guatemala	ABOVE		BELOW	BELOW	ABOVE	ABOVE	1	2
Ecuador	ABOVE		BELOW	BELOW	BELOW		1	2
Dominican Republic	ABOVE	ABOVE	BELOW	ABOVE	BELOW		1	2
Nicaragua	BELOW	ABOVE	ABOVE	ABOVE	ABOVE	BELOW	1	2
Paraguay	BELOW	ABOVE	BELOW	BELOW	BELOW		1	2
Dominica	BELOW	BELOW		ABOVE	ABOVE	BELOW	1	2
Argentina	ABOVE		BELOW	BELOW	BELOW	ABOVE	1	3
Peru	ABOVE	BELOW			BELOW	ABOVE	1	4
Uruguay	ABOVE	BELOW	BELOW		BELOW		1	4
				TOTAL IMF:			*15*	*32*

---

[64] Here, stability in variable thresholds signify stability of variable trend over time. That is to say, when a variable score for a cluster (or group of countries) consistently remains above or below threshold, across different time points.

From Table 5.24, the impact of IMF interventions (and the number of interventions) on GDP, is observed in countries that implemented an IMF intervention between the period before the financial crisis. The analysis reveals consistency in above threshold scores for GDP and below threshold score for ODA in cases were more than two IMF interventions were implemented. No significant pattern emerges when the interactions between IACPI and IMF interventions are considered. However, an examination of the interactions with IACP% suggest that Peru and Uruguay, both had four IMF interventions, demonstrate stability in below threshold scores for IACP%. With ODA, a general sense of stability is observed across all country cases (either below or above). But countries that have had a total of three and four IMF interventions also demonstrate stability in below threshold scores for ODA whereas countries that implemented one IMF intervention show stability in above threshold scores.

Contingent causality is also observed as similar patterns are achieved irrespective of the number of IMF interventions. For instance, Honduras and Nicaragua share similarities in longitudinal stability (below) in GDP and LEB and above for IACP%, IACPI, FDI% and ODA. Honduras experienced one IMF intervention while Nicaragua experienced two. Comparably, although Grenada experienced one IMF intervention it shows similar patterns for GDP, and IACP% (both below threshold), and above threshold scores for IACPI, FDI% and ODA as compared with Antigua and Barbuda and St. Kitts and Nevis even though they did not experience an IMF intervention during this period. Similarly, while showing dissimilarity in threshold score for LEB and addition to the number of IMF interventions, Costa Rica and Dominican Republic also show similarities in above longitudinal threshold scores (above) for GDP IACP% and FDI% and below for IACPI and ODA.

With regards to convergence, there is no significant pattern in IMF interventions that can be linked to case convergence and threshold stability. For cases that did not experience IMF interventions (El Salvador; Mexico; Costa Rica; Jamaica; Suriname; St. Kitts and Nevis; and Antigua and Barbuda), in addition to ODA, threshold stability in IACPI and FDI% can be observed (either above or below). For LEB, cases that had one IMF intervention (Haiti, Honduras, and Grenada) show consistency in

below threshold scores for LEB. Lastly, Antigua and Barbuda; Dominican Republic; Nicaragua; Paraguay; Honduras; Grenada; St. Kitts and Nevis; Costa Rica; and Suriname can be identified as 'stable' economies as variables threshold scores remain stable (either above or below throughout the three years) irrespective of IMF interventions or otherwise.

Comparing the patterns of economic convergence during the period before the financial crisis (as reflected in Table 5.13 - above) with the overall variable threshold stability, variable stability can be correlated to patterns of convergence. For instance, Argentina and Uruguay have a similar above threshold stable score for GDP and below threshold stability score for IACPI and ODA. Colombia and Peru also have similar above threshold stable scores for GDP and below threshold for ODA. Likewise, Honduras and Nicaragua have the same stable threshold scores for FDI%, GDP, IACP%, IACPI and ODA. Similarly, Costa Rica, Dominican Republic, and Guatemala also show similarities in threshold stability for GDP and IACPI. Lastly, the convergence between Antigua and Barbuda, and Grenada is also demonstrated with similarities in threshold stability scores for FDI%, GDP, IACP%, IACPI, and ODA.

Acknowledging the above, Table 5.25 (below) shows the overall threshold stability for the period after the financial crisis. The data has been sorted in the same order as the previous period. From this, a general reduction in the number of IMF interventions is noticeable. A substantial amount of threshold instability (as reflected in the blank spaces) is observed across all cases irrespective of IMF interventions. ODA seems to be relatively unstable across a larger number of country cases as compared to the period before the financial crisis. LEB shows some stability. Despite having implemented only one IMF intervention, Antigua and Barbuda maintained threshold stability across the five key economic variables. On the other hand, although no IMF intervention was implemented in El Salvador during the period before the financial crisis, it managed to maintain stability in threshold scores for IACP% and FDI% (both below), and IACPI and ODA (both above). During the period after

the financial crisis however, El Salvador implemented two IMF interventions and yet had complete threshold instability across the five economic variables under discussion.

Table 5.25. Overall Socioeconomic Policy Variable Threshold Stability with IMF Variables 2008 – 2015

Country	GDP	IACP%	IACPI	FDI%	ODA	LEB	IMF Interventions (Yes - 1/ No - 0)	№ of IMF Interventions
Dominica					ABOVE	ABOVE	0	0
Peru				ABOVE	BELOW	BELOW	0	0
Uruguay			BELOW		BELOW	ABOVE	0	0
Argentina		ABOVE	BELOW	BELOW		BELOW	0	0
Brazil		BELOW		BELOW	BELOW	BELOW	0	0
Bolivia	ABOVE			BELOW		ABOVE	0	0
Ecuador	ABOVE	BELOW		BELOW	BELOW	ABOVE	0	0
Paraguay	BELOW	ABOVE				ABOVE	0	0
Suriname	BELOW	ABOVE			ABOVE	ABOVE	0	0
Nicaragua	BELOW	ABOVE	ABOVE		ABOVE		0	0
Haiti				BELOW		ABOVE	1	1
St. Kitts and Nevis		BELOW				BELOW	1	1
Dominican Republic	ABOVE				BELOW	BELOW	1	1
Guatemala	ABOVE	ABOVE	BELOW			ABOVE	1	1
Costa Rica	ABOVE	ABOVE	BELOW		BELOW		1	1
Antigua and Barbuda	BELOW	BELOW	ABOVE	ABOVE	ABOVE	BELOW	1	1
El Salvador						BELOW	1	2
Jamaica	BELOW		ABOVE	ABOVE		ABOVE	1	2
Grenada	BELOW	BELOW		ABOVE	ABOVE	BELOW	1	2
Honduras	BELOW		ABOVE		ABOVE	BELOW	1	3
Colombia		BELOW	ABOVE			BELOW	1	4
Mexico	ABOVE		BELOW	BELOW		ABOVE	1	5
TOTAL IMF:							12	24

Table 5.26 (below) presents the overall threshold stability for country cases and their corresponding total number of IMF interventions across the three years. No significant pattern of interaction can be identified when considering each key economic indicator and LEB with IMF interventions. Antigua and Barbuda remain the only cases with consistency in stable variable threshold

scores across all economic variables with a single IMF intervention. Contingent causality is observed when considering Colombia, Bolivia and El Salvador. Despite experiencing the highest number of IMF interventions (6), Colombia demonstrates similar patterns in consistency in unstable threshold scores for economic variables as Bolivia and El Salvador. Overall, the general sense of inconsistency and instability across threshold scores reflects the complex causalities that influence convergence.

From Table 5.26 below, there is an absence of empirical evidence suggesting the implementation of an IMF intervention would result in sustained longitudinal convergence (as reflected in variable threshold score) across IMF interested areas (**H2**). However, three observations are made from the above results. First, as observed in the baseline assessment of convergence (**H1**) across LAC countries, multiple factors influence convergence. This could be geographical proximity, similar problem pressures, and similar domestic conditions inter alia. Evident in the QCA results, these convergent factors vary from time to time. The observance of equifinality (when an outcome can be reached by varying conditions) across LAC cases when IMF interventions are considered alongside socioeconomic indicators suggests the presence of an IMF intervention may aid countries in achieving convergence. Thus, in some cases, an IMF intervention could serve as a catalyst for convergence.

For instance, although Grenada and Antigua and Barbuda converge, Grenada experienced three IMF interventions while Antigua and Barbuda had one IMF intervention. Both cases also exhibited similarities in above threshold scores for FDI% and ODA as well as below threshold scores for GDP and IACP%. Hypothetically, along with other factors, if Grenada did not experience the three IMF interventions it may have not achieved its threshold scores and converged. Similarly, Honduras and Nicaragua exhibit similar patterns across the three years. They converged with stable above threshold scores for GDP, IACPI, ODA and FDI%. However, Honduras had four IMF interventions, Nicaragua had only two. Haiti also experienced two IMF interventions but still maintained its heterogeneity, outlying throughout the three periods.

Table 5.26. Overall Socioeconomic Policy Variable Threshold Stability with IMF Variables 2000 - 2015

Country	GDP	IACP%	IACPI	FDI%	ODA	LEB	IMF Interventions	Total № of IMF Interventions
Suriname	BELOW	ABOVE			ABOVE	BELOW	BELOW	0
St. Kitts and Nevis		BELOW				ABOVE		1
Costa Rica	ABOVE	ABOVE	BELOW		BELOW	ABOVE		1
Antigua and Barbuda	BELOW	BELOW	ABOVE	ABOVE	ABOVE			1
Bolivia						ABOVE		2
El Salvador								2
Dominica					ABOVE	BELOW		2
Brazil					BELOW	ABOVE		2
Ecuador	ABOVE			BELOW	BELOW			2
Jamaica	BELOW		ABOVE	ABOVE				2
Paraguay	BELOW	ABOVE				BELOW		2
Nicaragua	BELOW	ABOVE	ABOVE		ABOVE	BELOW		2
Haiti				BELOW		BELOW	ABOVE	2
Argentina			BELOW	BELOW		ABOVE		3
Dominican Republic	ABOVE				BELOW	BELOW	ABOVE	3
Guatemala	ABOVE		BELOW				ABOVE	3
Grenada	BELOW	BELOW		ABOVE	ABOVE	BELOW	ABOVE	3
Peru					BELOW	ABOVE		4
Uruguay			BELOW		BELOW			4
Honduras	BELOW		ABOVE		ABOVE	BELOW	ABOVE	4
Mexico	ABOVE		BELOW	BELOW		ABOVE		5
Colombia							ABOVE	6
OVERALL TOTAL IMF:							27	56

Second, the observance of contingent causality (similar patterns resulting in varying outcomes), highlighted in the lack of consistency across all social and economic cluster groupings, QCA results, and the longitudinal threshold scores, highlights the influence of multiple contextual factors on convergence. Viewed this way, in some cases, variations in these contextual factors influence the outcome of an IMF intervention. For instance, when countries that experienced two IMF interventions are considered, El Salvador and Paraguay remain converged and demonstrate patterns of instability in FDI%, IACPI and ODA – this supports the first observation. However, the issue arises when the remaining LAC countries with two interventions are considered: Bolivia, Dominica, Brazil, Ecuador, Jamaica, and Nicaragua. These cases do not maintain any pattern of convergence over the three years. The same can be said for cases that experienced three interventions.

Lastly, the number of IMF interventions a country has does not have an explicit effect on longitudinal variable threshold stability. Thus, the presence of an IMF intervention does not guarantee a country would perform consistently above the average of its peers. Throughout the period under study, Colombia had the highest number of IMF interventions (6) yet shows instability in variable patterns GDP, IACP%, IACPI, FDI%, ODA, and LEB. Colombia did not maintain consistency in either above or below the variable average of the other LAC countries over the three years. Additionally, Mexico, with the second highest number of IMF interventions, displays consistency in above threshold score for GDP and LEB, and below threshold scores for FDI% and IACPI with the rest remaining unstable. When factoring in the financial crisis, Antigua and Barbuda had no IMF intervention before the financial crisis but exhibited stability in each variable threshold scores. However, after the financial crisis, Antigua and Barbuda had one IMF intervention and still exhibited consistency in variable threshold stability.

Comparably, Suriname did not have a single IMF intervention during the period under study but has demonstrated an overall above threshold stability for IACP% and ODA; an overall below threshold stability in GDP; and lastly, an overall threshold instability for FDI% and IACPI. The above observations emphasize complexity in the domestic settings. Likewise, the observation of varying IMF intervention outcomes implies the need for a calibrated approach to coercive policy transfer. This is because, as observed across LAC cases, IMF interventions do not always provide sustained longitudinal stability in socioeconomic indicators. Acknowledging these observations, the proceeding section considers whether similar observations can be identified across Sub-Saharan African countries.

5.3. The Empirical Results for Sub-Saharan Africa Economic and Social Policy Variables

This section presents the empirical results for the application of dynamic pattern synthesis on the SSA economic and social policy variables. The same DPS approach used in the presentation of LAC empirical results are repeated with SSA cases. Variable code definitions can be identified in Table 4.1 and Table 4.2 (page 152 of Chapter Four or Appendix J.3). Again, the term similar is used to represent cases showing identical patterns (clustered together) at the same time point, without

considering trajectory over time. Convergence implies that cases become similar across two time points, over time (sigma convergence). Club convergence or club clusters indicates a group of similar cases at a given point in time, without considering their trajectory.

➤ DPS Results for Sub-Saharan Africa Economic Policy Variables, 2000

Figure 5.14 (below) presents the results of the cluster analysis for SSA macroeconomic indicators for the first time period, 2000. From this, two club cluster formations emerge at point 25 of the rescale distance. From Madagascar to Sierra Leone, and then from Angola to Sao Tome and Principal. Nevertheless, majority of the smaller cluster formations fall below the rescale distance of point 5. For this reason, as reflected in Table 5.27 (below), nine cluster groupings are proposed. The first five clusters are dominated by West African economies. Out of a total of seventeen countries there are only three Central African, one South African and three East African nations. The three Central African countries – Cameroon, Central African Republic and Chad – are geographically located close to the Economic Community of West African States. This could be a reason for their economic similarities.

Table 5.27. Proposed SSA Cluster Membership for Economic Policy Variables 2000

Cluster	Cluster Members
Cluster 1	Cameroon, Central African Republic, Madagascar, Mali
Cluster 2	Benin, Gambia, Guinea-Bissau, Rwanda
Cluster 3	Cote d'Ivoire, Guinea
Cluster 4	Burkina Faso, Burundi, Chad, Lesotho, Niger
Cluster 5	Comoros, Togo
Cluster 6	Ethiopia, Ghana, Kenya, Malawi, Mozambique, Tanzania, Uganda, Zambia
Cluster 7	Congo, Dem. Rep., Sierra Leone
Cluster 8	Angola, Nigeria
Cluster 9	Cabo Verde, Congo, Rep., Gabon, Liberia, Sao Tome and Principe, Seychelles,

The sixth cluster, from Ghana to Tanzania, is also dominated by East African countries with D.R Congo and Sierra Leone outlying between point 10 and 15 of the rescale distance. These two

cases form the seventh cluster. Within the second club cluster formation (based on the horizontal line
- Angola to Sao Tome and Principe) a relatively diverse group of countries is observed. Convergence
within this group occurs mainly between point 4 and 15 of the rescale distance, and then ultimately
joining at the next stage of clustering slightly above point 20 of the rescale distance. Here, Angola and
Nigeria are outliers and as such two additional clusters are proposed.

Figure 5.14. Dendrogram of Cluster Formations: SSA Economic Variables 2000
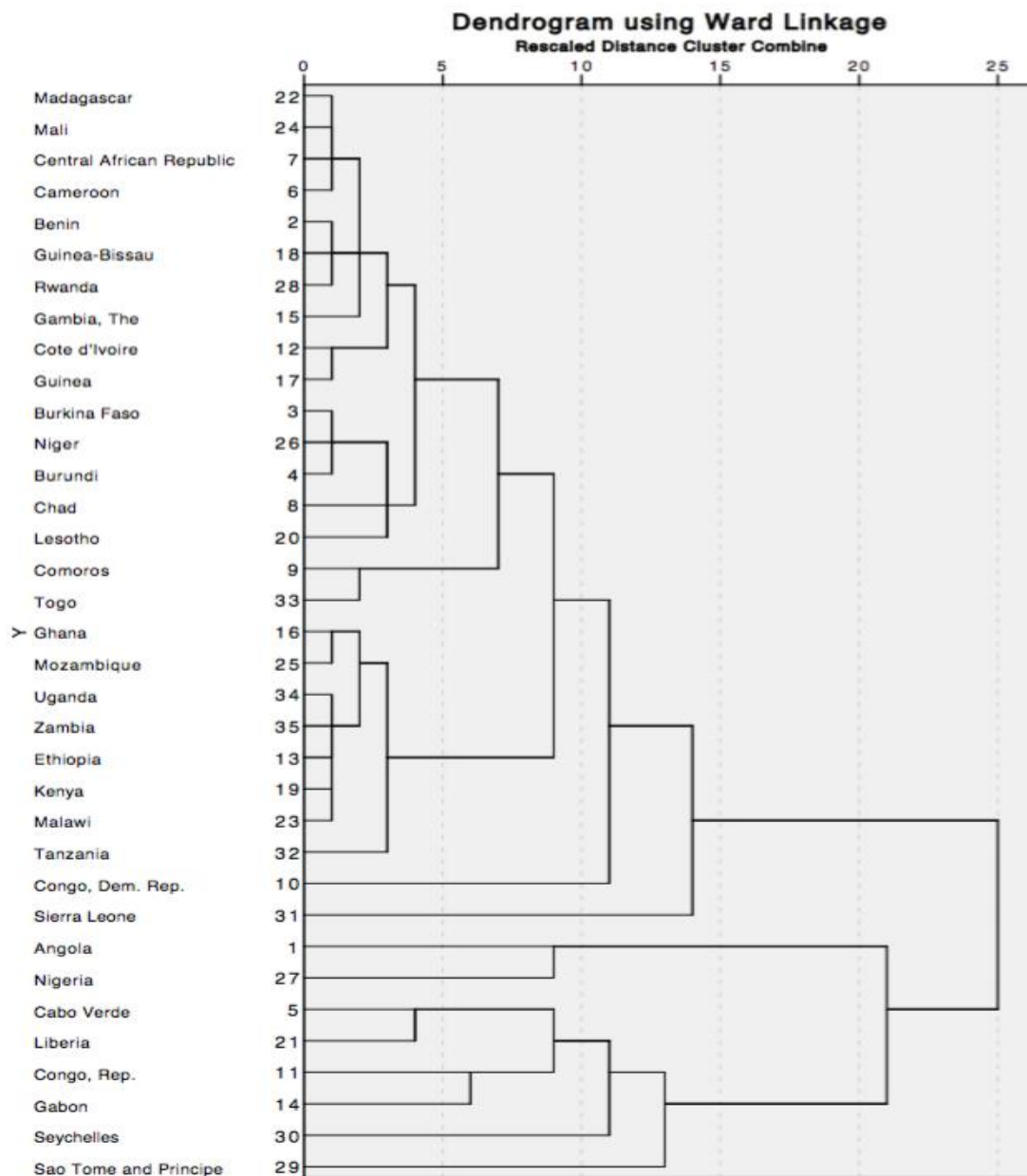
Table 5.28. Boolean Simplification for SSA Economic Policy Cluster Variables 2000

Cluster	Boolean Simplification
Cluster 1	fdi% * GDPDI * IACPI
Cluster 2	FPI * GDPPC% * gdp * ODA * rp%
Cluster 3	GDP * ggr * gge * IACPI * NBTT * nm * oda
Cluster 4	iacpi * oda * RP%
Cluster 5	GDPDI * gdp * ggnlb * ggr * gge * nbtt * NM * odaa * RP%
Cluster 6	gdpdi * ODA
Cluster 7	gdpdi * gpdpcc * ggr * gge * IACPI * RP%
Cluster 8	fpi * FDI * FDI% * gdpdi * GDPPCC * GDP * GGNLB * GGR* GGE *IACP% * iacpi * nbtt * oda * rp%
Cluster 9	GDPDI * odaa * rp%

Validating these cluster groupings, a closer look at the QCA results shows the prime implicants influencing cluster memberships (see Table 5.28 above). From this, it can be observed that, clusters with larger memberships have fewer prime implicants as compared with smaller cluster grouping. This is similar to the finding in LAC cases. The Boolean simplifications also provide a comparison of cluster performances as against the average (see Appendix B.1. for the threshold conversion). From this, Clusters 5 and 7 appear to be performing below the average as majority of prime implicants fall below the threshold. The economic variables that emerged above the threshold (NM, RP%, and IACPI) also reflect low performance as compared to the average. Cluster 3 and 8 demonstrate relatively better performance as most prime implicants are above the average. Despite the relatively diverse nature of cluster membership in the second club cluster formations, i.e. Angola to Sao Tome and Principe, all cases display similarities in below threshold score in Rural population, percentage of total population (RP%).

➢ DPS Results for Sub-Saharan Africa Economic Policy Variables, 2008.

Figure 5.15 (below) shows the economic cluster formations for the second time period, 2008. From this, it is observed that, during the period of the financial crisis a similar pattern of SSA clustering groupings remains as compared to the year 2000. West African economies still dominate the first club cluster, i.e. from Benin to Nigeria. These include Benin, Burkina Faso, Togo, Cote d'Ivoire, and Ghana

amongst others. A similar number of Central and Eastern African economies are also observed within this club cluster as compared to the previous year. Thus, Cameroon, Central African Republic and Chad, all of which are Central African economies. However, with regards to the East African economies, Comoros maintained its position while Madagascar leaves, and Malawi joined.

Figure 5.15 Dendrogram of Cluster Formations: SSA Economic Variables 2008
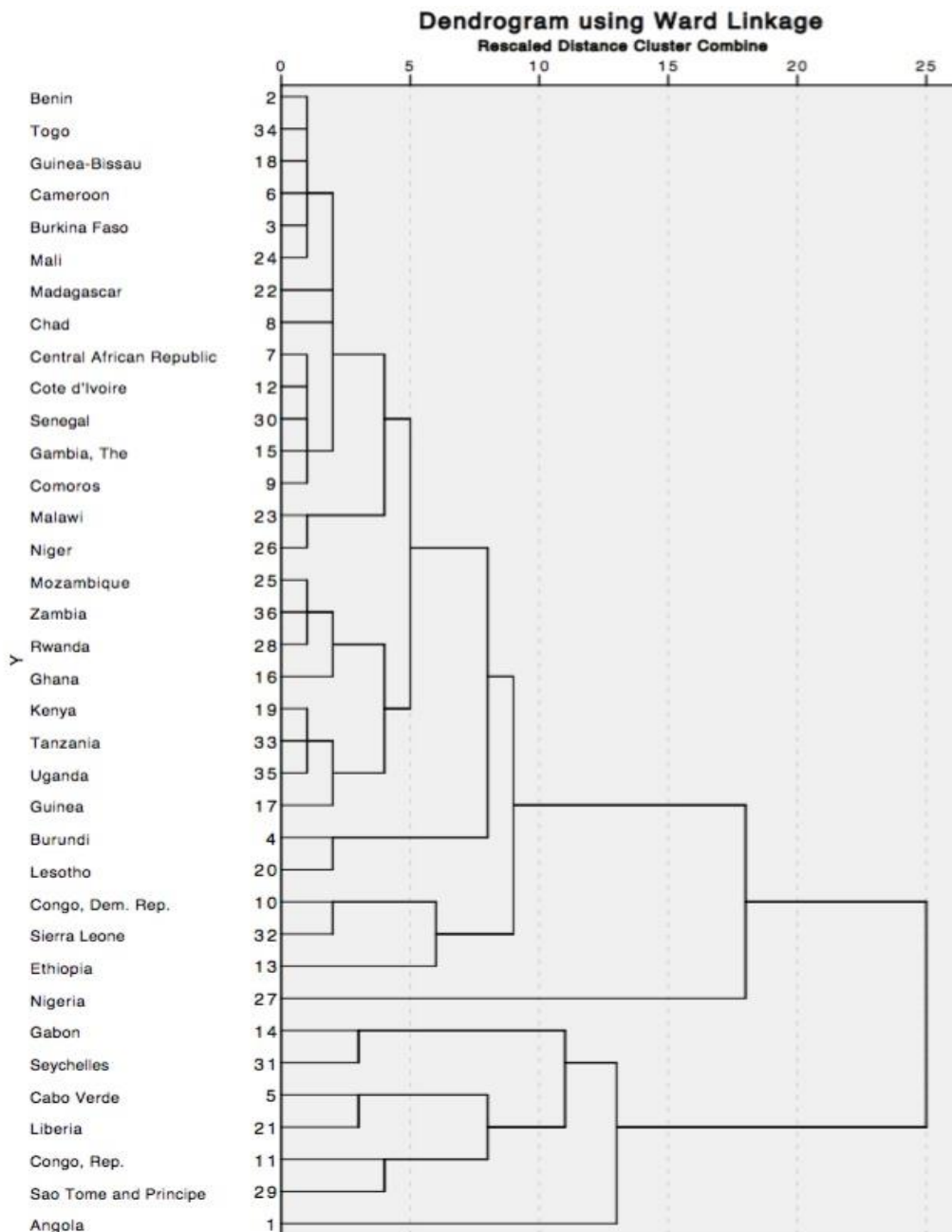
Similarly, the clustering of Ghana, Mozambique, Rwanda, and Zambia is dominated by East African economies. Another noteworthy movement is Nigeria, although maintaining its position as an outlier, in 2008 it exhibits a greater amount of similarity to the first half of the cluster formations (based on the horizontal line - Benin to Ethiopia) rather than the second half - as observed in the previous year – thereby losing its grouping with Angola. Based on the cluster formations in Figure 5.15. nine cluster groups with one outlier are proposed as listed in Table 5.29. QCA results are then used to validate the proposed clusters and identify the prime implicants influencing cluster memberships. Appendix A.2. shows the SSA economic variable threshold conversion for the year 2008 and Table 5.30. provides the Boolean simplifications for economic convergence based on the threshold conversion and proposed cluster formations.

Table 5.29. Proposed SSA Cluster Membership for Economic Policy Variables 2008

Cluster	*Cluster Members*
Cluster 1	Benin, Burkina Faso, Cameroon, Guinea-Bissau, Mali, Togo
Cluster 2	Chad, Madagascar
Cluster 3	Central African Republic, Comoros, Cote d'Ivoire, The Gambia, Senegal
Cluster 4	Malawi, Niger
Cluster 5	Guinea, Kenya, Tanzania, Uganda
Cluster 6	Ghana, Mozambique, Rwanda, Zambia
Cluster 7	Burundi, Lesotho
Cluster 8	Congo, Dem. Rep., Ethiopia, Sierra Leone
Cluster 9	Nigeria
Cluster 10	Angola, Cabo Verde, Congo, Rep., Gabon, Liberia, Sao Tome and Principe, Seychelles

Table 5.30. Boolean Simplification for SSA Economic Policy Cluster Variables 2008

Cluster	*Boolean Simplification*
Cluster 1	FPI * fdi
Cluster 2	FDI * FDI% * GDPDI * gge * iacp% * NM * oda * RP%
Cluster 3	fpi * gdppc% * iacp%
Cluster 4	FPI * gdpcc * GDPC%
Cluster 5	gge * nm * oda * RP%
Cluster 6	GDPPC% * ODAA
Cluster 7	fpi * fdi% * fdi * gdp *GGR * GGE * iacpi * IACP% * ODA * odaa * RP%
Cluster 8	gdppcc * gdppc% * ggr * gge * IACP% * IACPI
Cluster 9*	
Cluster 10	NM * rp%

From this, it appears that all cluster groupings exhibit economic similarities on the bases of at least two prime implicants. Isolating a few clusters, Clusters 5 and 8 have majority of their prime implicants below the threshold while Clusters 2 and 6 have majority of similar variables above the threshold score. Comparing cluster groupings in 2000 to those in 2008 (Table 5.27), it can be observed that Burundi and Lesotho which are both relatively smaller economies (geographically) exhibit patterns of convergence across the two years. In the year 2000 there was a convergence in IACPI, ODA and RP%. During the financial crisis, convergence of these three variables still persists despite the addition of other prime implicants and the change in threshold score for ODA. Similarly, Kenya, Tanzania, and Uganda, located in Cluster 6 in the year 2000 and Cluster 5 in the year 2008, show some similarities in ODA trends. Cabo Verde, Congo Rep., Gabon, Liberia, Sao Tome and Principe, and Seychelles - located in Cluster 7 for the year 2000 and Cluster 10 for the year 2008 - also show similarities in RP% convergence.

➤ <u>DPS Results for Sub-Saharan Africa Economic Policy Variables, 2015.</u>

Considering the preliminary DPS results highlighting some patterns of economic convergence, the next step is to consider patterns of economic convergence after the financial crisis before comparing convergent patterns between 2000/08 and 2008/15. Figure 5.16 (below) provides a visual representation of cluster formations during the year 2015. From this, two club cluster formations can be identified at point 15 of the rescaled distance, the first, and larger, cluster formation consisting of Benin to Nigeria and the second Angola to Lesotho. Focusing on the first half of the dendrogram, similar patterns in cluster groupings for the results for cluster formations in the year 2000 and 2008 are observed.

West African economies play an integral part of the first cluster. Nevertheless, a migration of East African economies can also be observed closer to the middle of the dendrogram, as compared to previous years, is also evident. For this reason, there is much more diversity in cluster grouping across the second half of the dendrogram with little to no clear distinction in country groupings based on their

geographical locations. Based on these cluster formations ten cluster groups have been proposed in Table 5.31 (below). The convergent patterns, evident in the QCA results, reemphasize the fact that smaller cluster grouping have more similarities (prime implicants) as compared to larger cluster groupings.

Figure 5.16 Dendrogram of Cluster Formations: SSA Economic Variables 2015
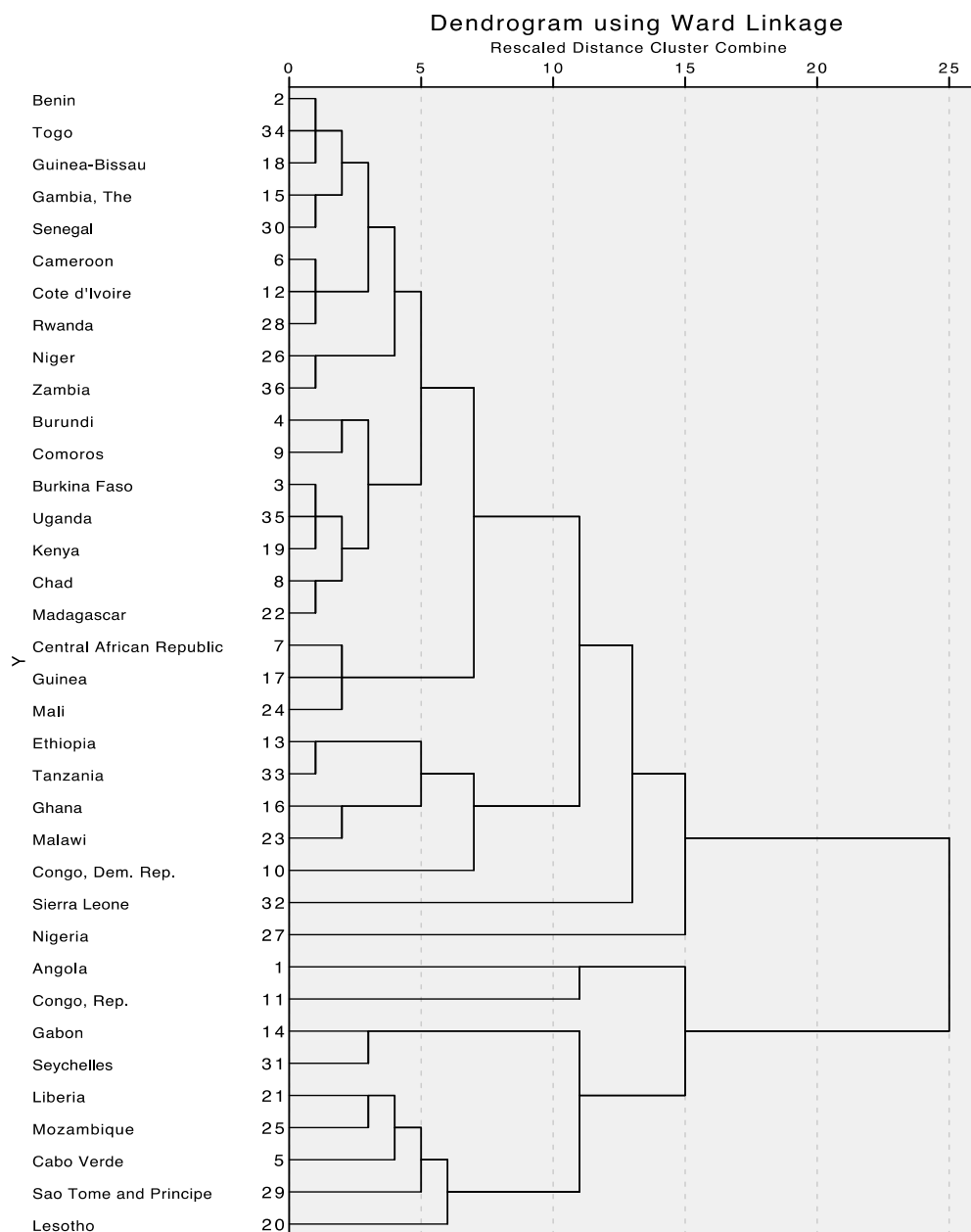
Table 5.31. Proposed SSA Cluster Membership for Economic Policy Variables 2015

Cluster	Cluster Members
Cluster 1	Benin, Gambia, Guinea-Bissau, Senegal, Togo
Cluster 2	Cameroon, Cote d'Ivoire, Rwanda
Cluster 3	Niger, Zambia
Cluster 4	Burundi, Comoros
Cluster 5	Burkina Faso, Chad, Kenya, Madagascar, Uganda
Cluster 6	Central African Republic, Guinea, Mali
Cluster 7	Congo, Dem. Rep., Ethiopia, Ghana, Malawi, Tanzania
Cluster 8	Sierra Leone, Nigeria
Cluster 9	Angola, Congo, Rep.
Cluster 10	Cabo Verde, Gabon, Lesotho, Liberia, Mozambique, Sao Tome and Principe, Seychelles

Table 5.32. Boolean Simplification for SSA Economic Policy Cluster Variables 2015

Cluster	Boolean Simplification
Cluster 1	fdi * nbtt *
Cluster 2	fdi% * gdpdi * GDPPC% * iacp% * NBTT * rp%
Cluster 3	FPI * FDI% * FDI * gdppc% * ggnlb * GGE *NBTT * oda * ODAA * RP%
Cluster 4	fpi * fdi * fdi% * GDPDI * gdppcc * gdppc% * gdp * GGR * GGE * NBTT * odaa * RP%
Cluster 5	GDPPPP * RP%
Cluster 6	fdi * fdi% * gdppc * GDPPC% * ggr * gge * nm * RP%
Cluster 7	FDI * IACP% * ODAA
Cluster 8	FPI * gdppc% * ggr * gge * IACP% * IACPI * ODAA
Cluster 9	FPI * FDI% * FDI * GDPDI * GDPPCC * gdppc% * GGR * GGE * iacpi * NBTT * oda * odaa * rp%
Cluster 10	FDI% * GGR * NM

Some key trends include the observance of similarities in cluster grouping for clusters 9 and 10 in 2000; and 2008 and 2015 respectively. Here, although Cabo Verde, Gabon, Liberia, Sao Tome and

Principe, and Seychelles converge over the three years, convergent factors (prime implicants) change over time. Similarities in below threshold scores for rural population (% of total population) is noted for the 2000/08 period and similarities in above average (threshold) for net migration (NM) for the 2008/15 period. The same can be observed in the Benin and Guinea-Bissau grouping. While maintaining cluster groupings, cluster 2 in 2000 and cluster 1 in 2008 and 2015, both cases performed above the average for food production index (FPI) in 2000/08 and below average for foreign direct investment (FDI) in the 2008/15 time period. This suggests varying convergent factors. In order to gain a better analysis of these observations, consideration is given to the degree of convergence and the patterns that emerge during each time interval.

➢ Patterns of Economic Policy Variable Convergence between 2000 - 2008 and 2008 – 2015.

The empirical results discussed above have shown that although similar patterns of economic convergence emerged during the period before the financial crisis there is a general sense of instability as a large number of countries change cluster memberships and remain heterogenous. In order to assess the degree of economic convergence Figure 5.20 (below) compares the economic convergence during the period before the financial crisis as reflected in the dendrograms for the year 2000 and 2008. From this, a high degree of divergence in cluster parings is observed. Liberia and Cabo Verde show consistency in convergence across the two time periods although when considering the proposed SSA economic cluster membership (Table 5.27, Table 5.29 and Table 5.31 - above) twenty SSA countries maintain cluster groupings including both cases. Comparably, a total of seventeen SSA cases also changed cluster memberships (Table 5.33 - below). It is important to emphasise that the degree of economic convergence is observed when the dendrograms are placed alongside each other. This identifies the occurrence of cluster pairings over time. Not the emergence of similar groupings.

Figure 5.17. Dendrogram Comparison – SSA Economic Policy Variables 2000 – 2008
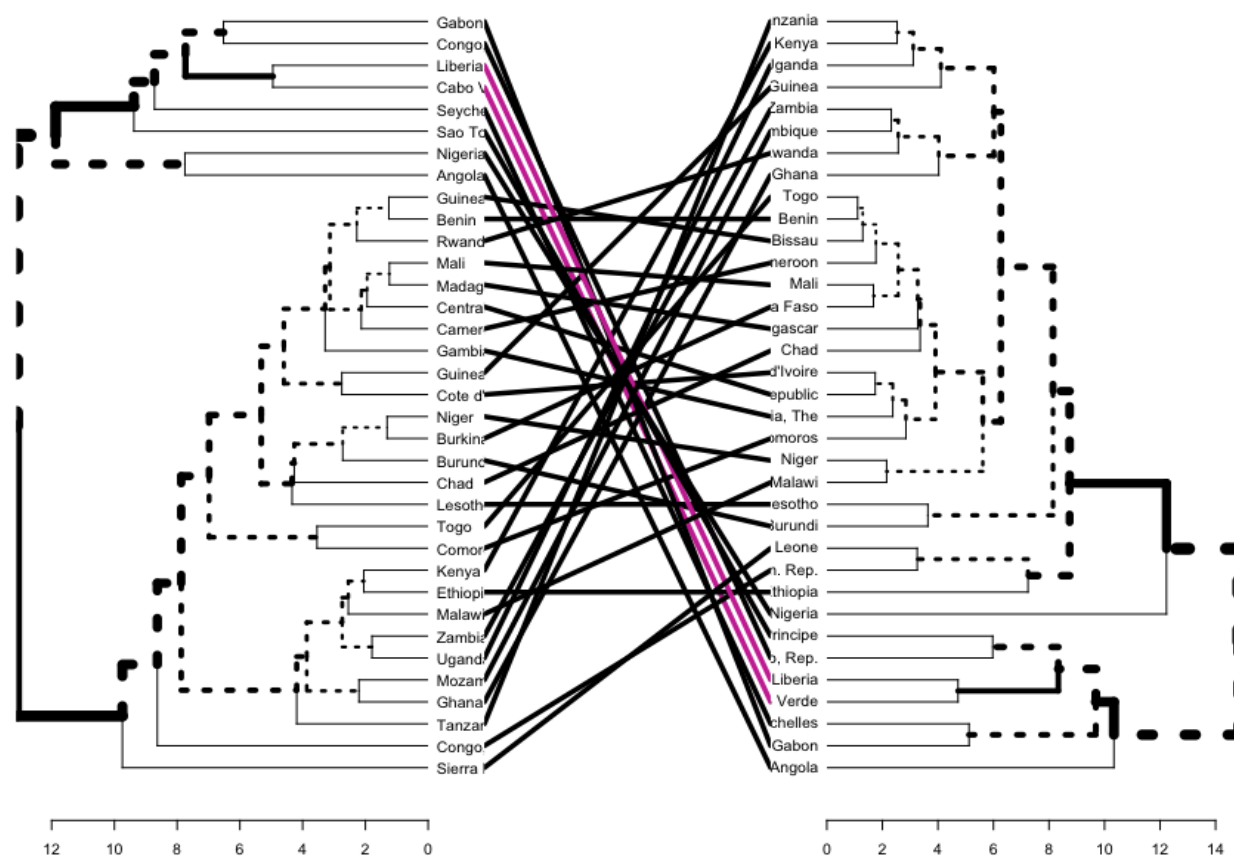
Table 5.33. SSA Patterns of Economic Policy Convergence During the 2000 – 2008 Time Interval

Patterns of Convergence	Patterns of Divergence
Burundi, Lesotho	Central African Republic; Madagascar; Rwanda; Gambia; Benin; Guinea; Cote d'Ivoire; Angola; Nigeria; Burkina Faso; Chad; Lesotho; Niger; Comoros; Togo; Ethiopia; Malawi
Cameroon, Mali	
Benin, Guinea-Bissau	
Kenya, Tanzania, Uganda	
Ghana, Mozambique, Zambia	
Cabo Verde, Congo, Rep., Gabon, Liberia, Sao Tome and Principe, Seychelles,	
Congo, Dem. Rep., Sierra Leone	

Figure 5.18. (below) compares the dendrograms for the period after the financial crisis (2008 – 2015). Similar to the period before the financial crisis a high level of divergence in cluster groupings

can be observed. Out of the thirty-six SSA cases, only Benin, Guinea-Bissau and Togo; and Gabon and Seychelles show consistency in convergence across the two time periods. The extent of divergence during this time interval is also evident in the proposed SSA economic cluster membership (Table 5.29 for 2008 and Table 5.31 for 2015 - above). Here, twenty countries change cluster parings (Table 5.34 below).

Figure 5.18. Dendrogram Comparison – SSA Economic Policy Variables 2008 – 2015
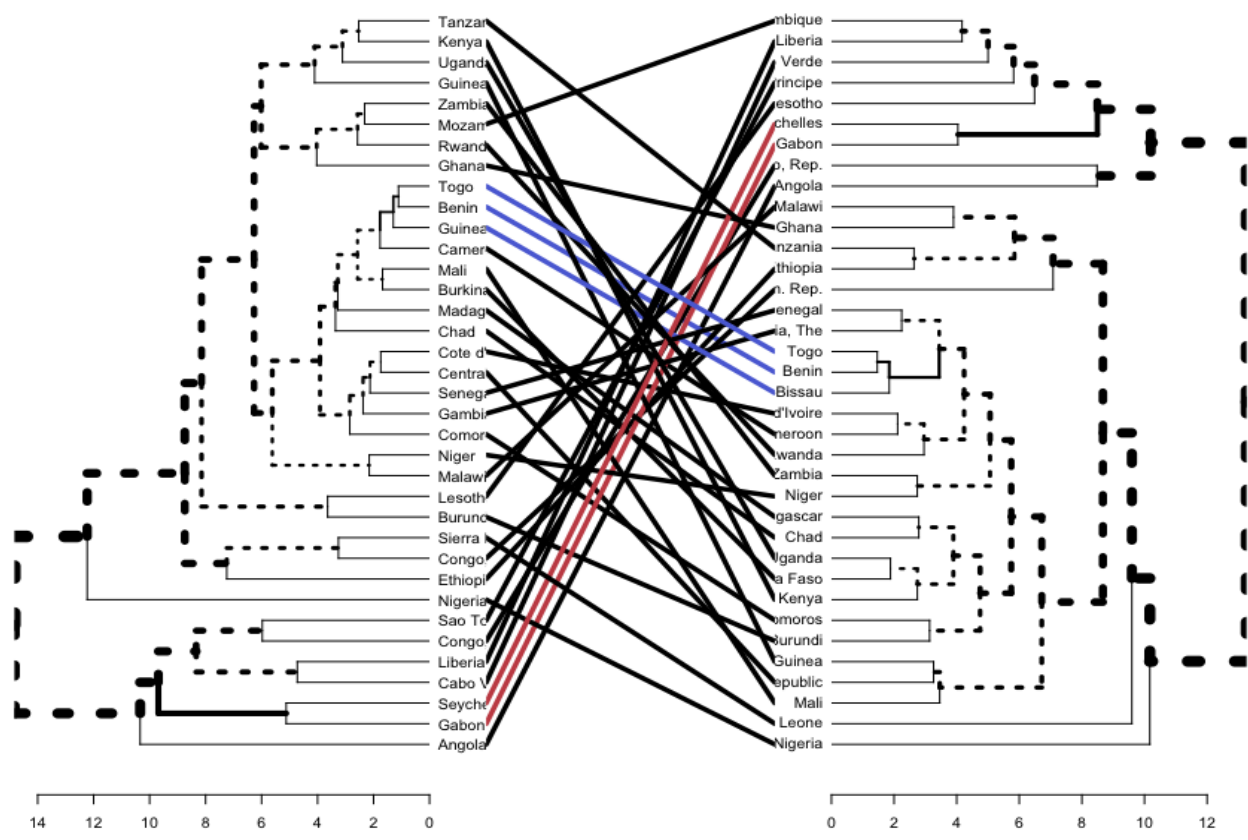
Figure 5.19 (below) compares convergence during the commencement of the MDGs to its conclusion as reflected in the dendrograms for the year 2000 and 2015. From this, a high level of divergence can be observed. This is reflected in the proposed convergence SSA economic cluster

membership (Table 5.35 - below). Here, only nine countries maintained economic cluster groups throughout the three years.

Figure 5.19. Dendrogram Comparison – SSA Economic Policy Variables 2000 – 2015
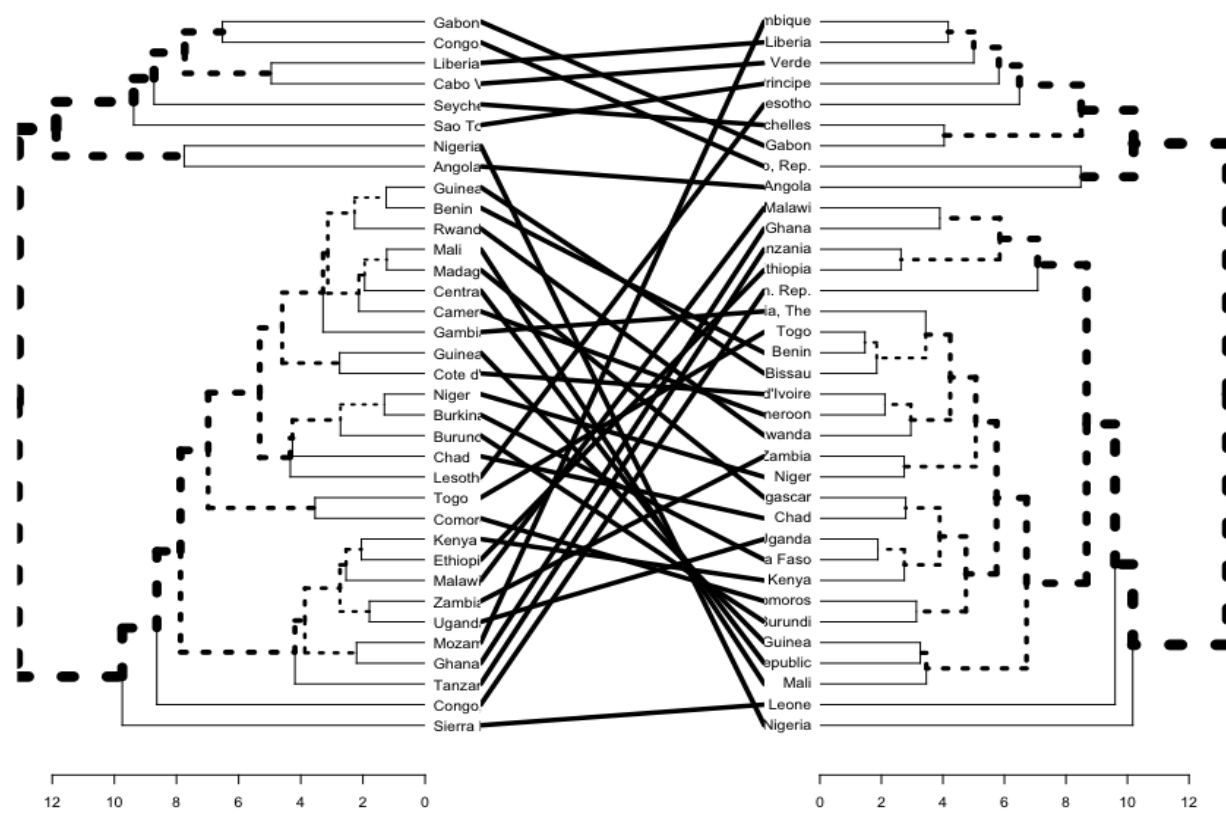
Table 5.34. SSA Patterns of Economic Policy Convergence During the 2008 – 2015 Time Interval

Patterns of Convergence	Patterns of Divergence
Chad, Madagascar	Malawi; Niger; Zambia; Nigeria; Sierra Leone; Burundi; Comoros; Lesotho; Central African Republic; Guinea; Mali; Cameroon; Cote d'Ivoire; Rwanda; Burkina Faso; Chad; Madagascar; Tanzania; Ghana; Mozambique
Angola, Congo, Rep.	
Gambia, Senegal	
Benin, Guinea-Bissau, Togo	
Kenya, Uganda	
Congo, Dem. Rep., Ethiopia	
Cabo Verde, Gabon, Liberia, Sao Tome and Principe, Seychelles	

Table 5.35. SSA Patterns of Economic Policy Convergence During the 2000 – 2015 Time Interval

Patterns of Convergence	Patterns of Divergence
Kenya, Uganda	Chad; Tanzania; Central African Republic; Madagascar; Rwanda; Gambia; Benin; Guinea; Cote d'Ivoire; Angola; Nigeria; Burkina Faso; Chad; Lesotho; Niger; Comoros; Togo; Ethiopia; Malawi; Burundi; Lesotho; Mali; Cameroon; Ghana; Zambia; Mozambique; Congo, Rep.; Liberia; Sierra Leone; Congo, Dem. Rep.; Senegal; Kenya; Uganda
Benin, Guinea-Bissau	
Cabo Verde, Gabon, Liberia, Sao Tome and Principe, Seychelles	

From the above, the overall pattern of convergence during the time period under study (2000-2015) shows more instability then what was observed across economic indicators in the LAC region. Acknowledging this, the proceeding sub-section considers the patterns of social policy convergence by repeating the DPS.

➢ DPS Results for Sub-Saharan Africa Social Policy Variables, 2000.

Figure 5.20 (below) shows the results of HCA for SSA social policy indicators for the first time period, 2000. From this, two club clusters have been constructed below point 25 of rescale distance. This high rescale distance suggests a clear distinction between the two convergent club clusters. Looking closer at the dendrogram, five main cluster formations are noticed below point 5 of the rescale distance. These are, from Chad to Togo; from Ethiopia to Angola; from Cameroon to Lesotho (forming the first club cluster); from Mozambique to Senegal; and lastly from Cabo Verde to Gabon (making the second club cluster). These observations suggest a greater level of social convergence as compared to economic convergence across SSA nations during the same time period. Nevertheless, the development of sub-clusters around point 2 of the rescale distance suggest eight cluster groupings (as proposed in Table 5.36)

Figure 5.20. Dendrogram of Cluster Formations: SSA Social Policy Variables 2000

Dendrogram using Ward Linkage
Rescaled Distance Cluster Combine
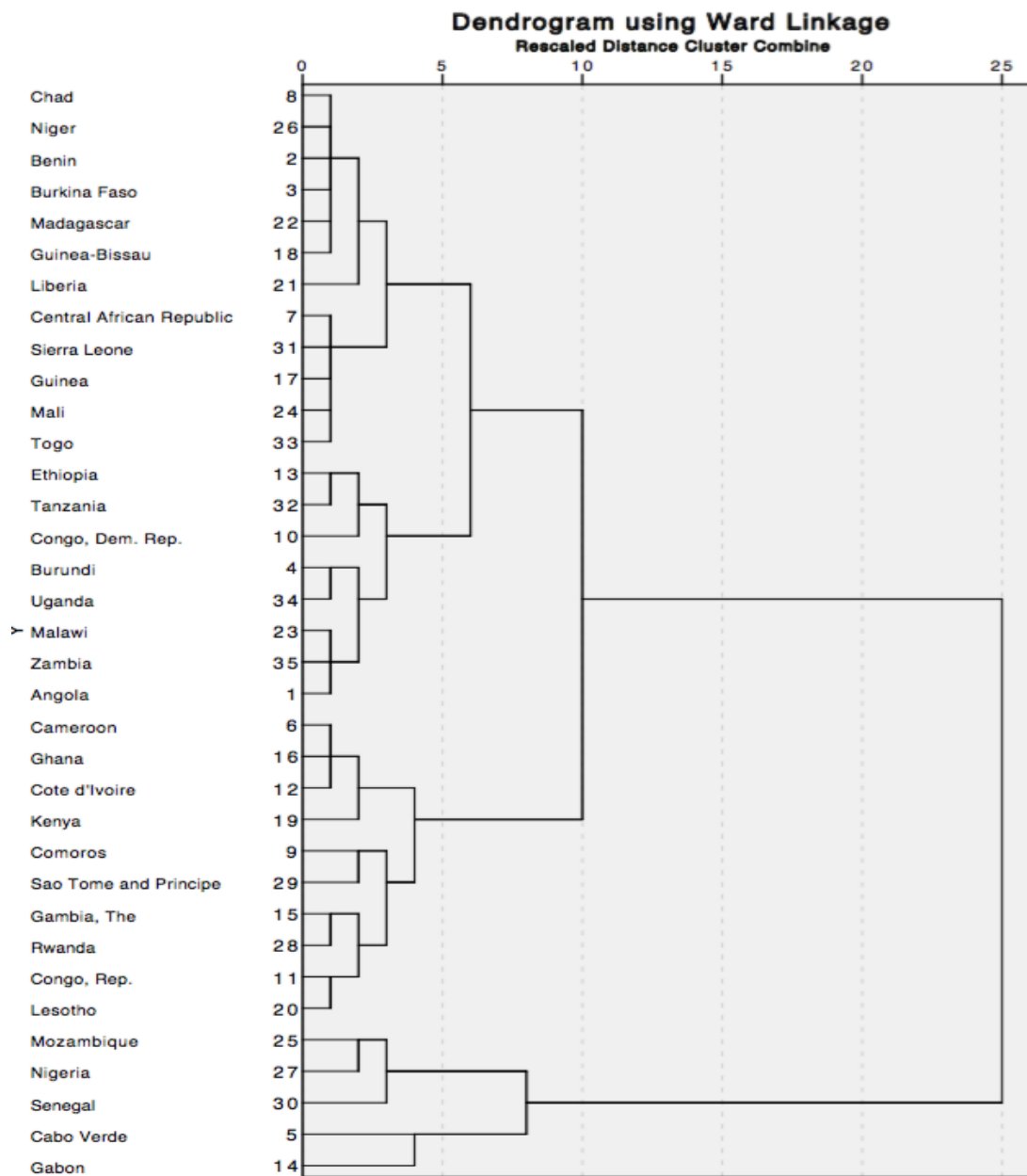
From this, it is observed that membership to clusters 1 and 2, as well as clusters 7 and 8 are predominately West African nations. That is from Chad to Togo and then from Mozambique to Gabon respectively. Cluster formations between these two appear to be a mixture of Eastern, Western and Central African economies. A closer look at the QCA results (as shown in Appendix A.4.) emphasises the prime implicants that validate the clustering. Table 5.37 (below) provides a summary of prime implicants influencing cluster memberships in Boolean simplification.

Table 5.36. Proposed SSA Cluster Membership for Social Policy Variables 2000

Cluster	Cluster Members
Cluster 1	Benin, Burkina Faso, Chad, Guinea-Bissau, Liberia, Madagascar, Niger
Cluster 2	Central African Republic, Guinea, Mali, Sierra Leone, Togo
Cluster 3	Congo, Dem. Rep., Ethiopia, Tanzania
Cluster 4	Angola, Burundi, Malawi, Uganda, Zambia
Cluster 5	Cameroon, Cote d'Ivoire, Ghana, Kenya
Cluster 6	Comoros, Congo, Rep., Gambia, Lesotho, Rwanda, Sao Tome and Principe
Cluster 7	Mozambique, Nigeria, Senegal
Cluster 8	Cabo Verde, Gabon

Table 5.37. Boolean Simplification for SSA Social Policy Cluster Variables 2000

Cluster	Boolean Simplification
Cluster 1	ope * bss
Cluster 2	atcct * che% * dhe * OPE% * bss
Cluster 3	ate * ASEE * CHE% * dhe * ope * bdw * REO * REC
Cluster 4	ADR * IMR * ope% * bdw * REO
Cluster 5	ASEE * CHE * OPE * OPE%
Cluster 6	epr * imr * BDW * rec
Cluster 7	ATCCT * ATE * ASEE * adr * CHE% * imr * OPE * ope% * BDW * BSS * pga * rec
Cluster 8	ATCCT * ATE * CHE * DHE * DHE% * imr * LEB * OPE * BDW * BSS * pga * rec

It is observed that Cluster 1 and 2, which are joined at the next stage of clustering, share similarities in their percentage population of people using at least basic sanitation services. This is below the average (threshold). Similarly, Cluster 3 and 4, which are also grouped at the next stage of clustering, share below average percentage of population using at least basic drinking water and above average REO as prime implicants. Cluster 5 and 6 have no noticeable mutually inclusive prime implicant. Clusters 7 and 8 also exhibit a high level of similarities across variables, such as ATCCT, ATE, imr, OPE, BDW, BSS, pga, and rec. Comparing these patterns of social policy convergence to economic policy convergence during the same year (2000), groups such as the clustering of Benin and

Guinea-Bissau; Burkina Faso, Chad and Niger; Central African Republic and Mali; Ethiopia and Tanzania; Malawi, Uganda and Zambia; Ghana and Kenya; Gambia, Rwanda, Sao Tome and Principe; as well as Cabo Verde and Gabon suggest socioeconomic similarities across a number of SSA economies during this period.

➢ DPS Results for Sub-Saharan Africa Social Policy Variables, 2008.

The dendrogram in Figure 5.21 (below) shows the social policy cluster formations for the second time period, 2008. Similar to cluster formations in the previous year, two club clusters emerge at point 25 of the rescale distance. The first consisting of two cluster groupings, that is, from Ethiopia to Cote d'Ivoire and from Angola to The Gambia; and for the second Cape Verde to Senegal. East African countries dominate the Ethiopia to Cote d'Ivoire cluster. Within the Angola to The Gambia cluster formation, the dominance of West African nations is also observed. This suggests that during the period of the financial crisis (2008) East African nations show more cluster proximity as against West African nations. A combination of East, West and Central African countries is also observed in the Ethiopia to Cote d'Ivoire cluster. This was similar to the previous year. Within the Cape Verde to Senegal cluster, other West African nations dominate as cluster membership remain the same.

Some noteworthy trends can also be seen in the path travelled by some country groupings between the year 2000 and 2008. For instance, before the financial crisis although grouped together Ethiopia and Tanzania were clustered with Congo, Dem. Rep but during the financial crisis both countries appear to exhibit similarity with Madagascar. Burundi, Malawi and Zambia which were previously grouped with Angola and Uganda, cluster 4, are now grouped with Congo, Dem. Rep., Ethiopia, Madagascar and Tanzania. The movement of Benin and Guinea-Bissau along with Burkina Faso, Chad and Niger from the top half of first club cluster (clustered with Liberia, Madagascar, Niger) to the cases in the middle of the diagram (clustering with Uganda) is also a noteworthy trend. Central African Republic, Sierra Leone, Guinea and Togo also clustered with Mali in 2000 and then cluster

with Cameroon in 2008. These observations suggest a greater level of social convergence amongst East African nations during this time period. Deconstructing these club clusters, eight main cluster groupings are proposed in Table 5.38 (below).

Figure 5.21. Dendrogram of Cluster Formations: SSA Social Policy Variables 2008
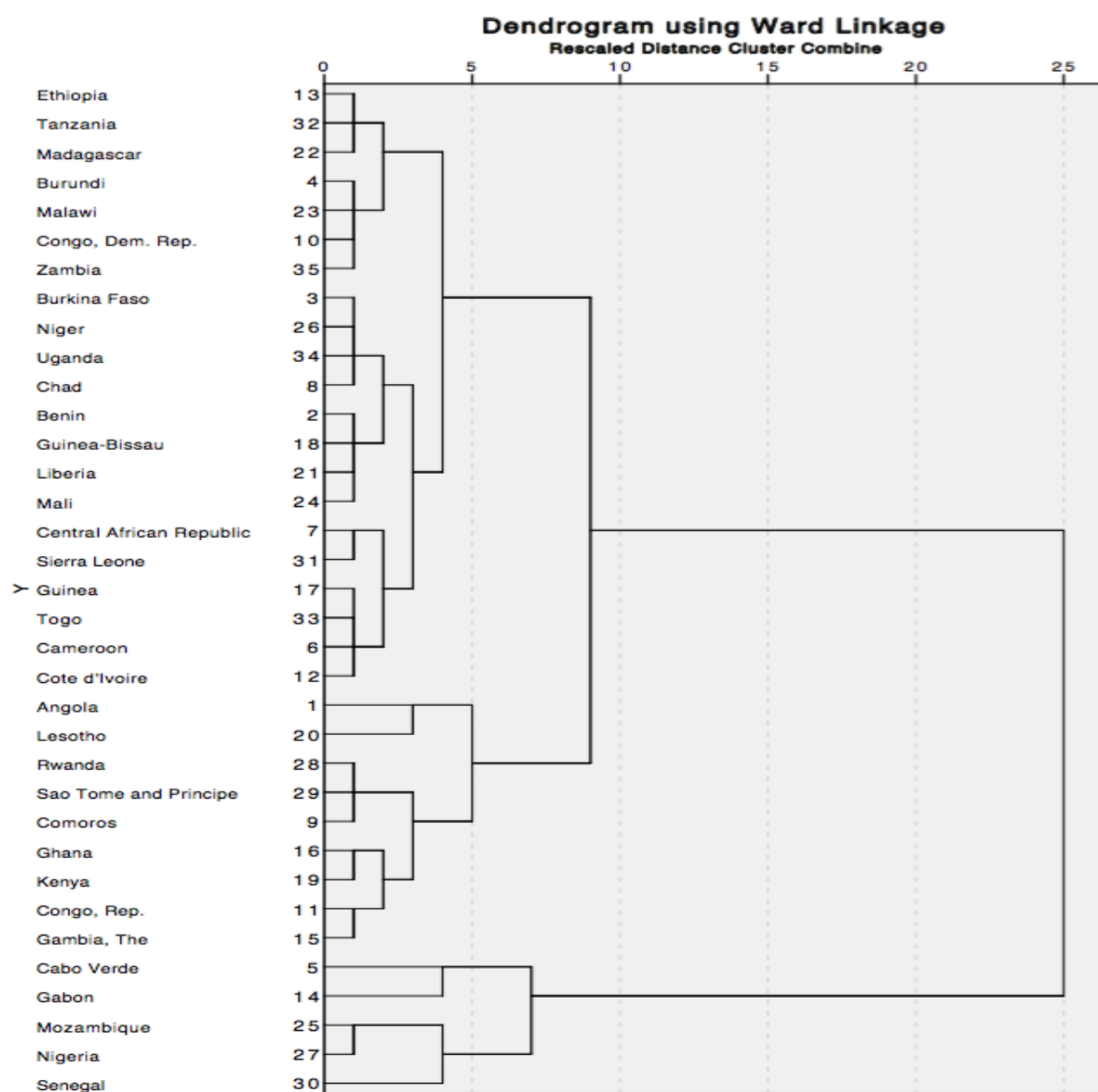
Table 5.38. Proposed SSA Cluster Membership for Social Policy Variables 2008

Cluster	Cluster Members
Cluster 1	Burundi, Congo, Dem. Rep., Ethiopia, Madagascar, Malawi, Tanzania, Zambia
Cluster 2	Burkina Faso, Chad, Niger, Uganda
Cluster 3	Benin, Guinea-Bissau, Liberia, Mali
Cluster 4	Cameroon, Central African Republic, Cote d'Ivoire, Guinea, Sierra Leone, Togo
Cluster 5	Angola, Lesotho
Cluster 6	Comoros, Congo, Rep., Gambia, Ghana, Kenya, Rwanda, Sao Tome and Principe
Cluster 7	Cabo Verde, Gabon
Cluster 8	Mozambique, Nigeria, Senegal

Table 5.39. Boolean Simplification for SSA Social Policy Cluster Variables 2008

Cluster	Boolean Simplification
Cluster 1	ate * ADR * ope * bdw * REC
Cluster 2	ate * ADR * EPR * leb * bdw * bss * PGA * REC
Cluster 3	IMR * BDW * bss * reo
Cluster 4	IMR * pga
Cluster 5	ATCCT * ASEE * CHE * DHE * DHE% * epr * IMR * ope% * BSS * REO * rec
Cluster 6	ATE * LEB
Cluster 7	ATCCT * ATE * adr * CHE * DHE * DHE% *epr * imr * LEB * OPE * BDW * BSS * reo
Cluster 8	ATCCT * ATE * ASEE * adr * imr * OPE * BDW * BSS * pga * rec

Appendix A.5. shows the SSA social policy indicators threshold conversion for the year 2008 and Table 5.39 (above) provides the summary of clusters and Boolean simplifications for social convergence based on the threshold conversion and the proposed cluster memberships. From this, it appears that Cluster 1 and 2 have ATE, ADR, BDW and REC as similar prime implicants. Cluster 2 and 3 have BSS as a mutual prime implicant. Cluster 3, 4 and 5 have IMR as a similar prime implicant.

Cluster 5 and 6 do not share any mutual prime implicants but Cluster 6 and 7 both have ATE and LEB. Clusters 7 and 8 share strong similarities in ATCCT, ATE, ADR, IMR, OPE, BDW and BSS.

Another noteworthy trend is the convergence of countries over the two time periods (2000/08) and the changes in prime implicants. For instance, Congo Dem. Rep., Ethiopia and Tanzania remain closely grouped before and during the financial crisis and exhibit convergent trends in threshold scores for ATE, OPE, BDW and REC despite the addition and subtraction of other variables. Similarly, Malawi and Zambia display convergence in threshold scores for ADR and BDW over the two time periods. Likewise, QCA results for convergence between Cabo Verde and Gabon, and Mozambique, Nigeria and Senegal over the two time periods show similarities in ATCCT, ATE, IMR, OPE, BDW and BSS with threshold scores also remaining consistent.

Interestingly, it is observed that although Comoros, Congo Rep., and The Gambia maintain their proximity in cluster grouping during both time periods, QCA results show changes in variable influences on convergence, as prime implicants change from EPR, IMR, BDW and REC in the period before the financial crisis to ATE and LEB during the financial crisis. The same can be said for Central African Republic, Guinea, Sierra Leone and Togo which remain grouped over the two periods but QCA results show a change in variable patterns from ATCCT, CHE%, DHE, OPE% and BSS in the first year to IMR and PGA in the second year. Burkina Faso, Chad and Niger also maintain groupings but QCA results show that BSS remains a prime implicant at both time periods, while other prime implicants change. This suggest changes in convergent social policy indicators.

A comparison of economic similarities for 2008 with social policy variables suggests socioeconomic convergence in countries like Congo Dem Rep and Ethiopia; Benin, Guinea-Bissau and Mali; Cameroon and Togo; Central African Republic and Cote d'Ivoire; Cabo Verde and Gabon; Comoros and Gambia; Ghana and Rwanda; and lastly, Sao Tome and Principe and Congo Dem Rep. It is also important to point out that both Benin and Guinea-Bissau, as well as Cabo Verde and Gabon display similar trends in socioeconomic patterns of convergence during the period of 2000 and 2008.

> DPS Results for Sub-Saharan Africa Social Policy Variables, 2015.

Figure 5.22 (below) provides a visual representation of HCA results for SSA social policy variables for the final year, 2015. As illustrated, patterns of cluster formations in the period after the financial crisis differ from the previous year. Although two club clusters emerge at point 25 of the rescale distance (i.e. Guinea to Zambia; and Mozambique to Lesotho), the number of countries that constitute each club cluster is slightly even in the year 2015 as compared to the previous years.

As reflected on the rescale distance (point 25), countries constituting the first club cluster (Guinea to Zambia) seem to exhibit great convergence as compared to the second club cluster (Mozambique to Lesotho). A preliminary analysis of the positioning of countries on the dendrogram reveals the re-emergence of West African nations into the top half of the first cluster (i.e. Guinea to Sierra Leone). A mixture of countries is also located in the second half of this club cluster (i.e. Madagascar to Zambia) and the second club cluster (i.e. Mozambique to Lesotho). Some key trends in country movement include the movement of Ghana and Kenya. They were members of the first club cluster in 2008 and join the second club cluster in 2015. Central African Republic and Sierra Leone also continue to remain closely grouped. Benin, Liberia and Mali were previously grouped with Guinea-Bissau but share similarities with Burkina Faso and Cote d'Ivoire in 2015. Based on these patterns in cluster formations eight cluster groups have been proposed in Table 5.40 (below).

Table 5.40. Proposed SSA Cluster Membership for Social Policy Variables 2015

Cluster	Cluster Members
Cluster 1	Cameroon, Chad, Guinea, Guinea-Bissau, Niger, Togo
Cluster 2	Benin, Burkina Faso, Cote d'Ivoire, Liberia, Mali
Cluster 3	Central African Republic, Sierra Leone
Cluster 4	Burundi, Congo, Dem. Rep., Ethiopia, Madagascar, Malawi, Tanzania, Uganda, Zambia
Cluster 5	Mozambique, Nigeria, Senegal
Cluster 6	Cabo Verde, Gabon
Cluster 7	Comoros, Gambia, Rwanda, Sao Tome and Principe
Cluster 8	Angola, Congo, Rep., Ghana, Kenya, Lesotho

Figure 5.22. Dendrogram of Cluster Formations: SSA Social Policy Variables 2015

Dendrogram using Ward Linkage
Rescaled Distance Cluster Combine
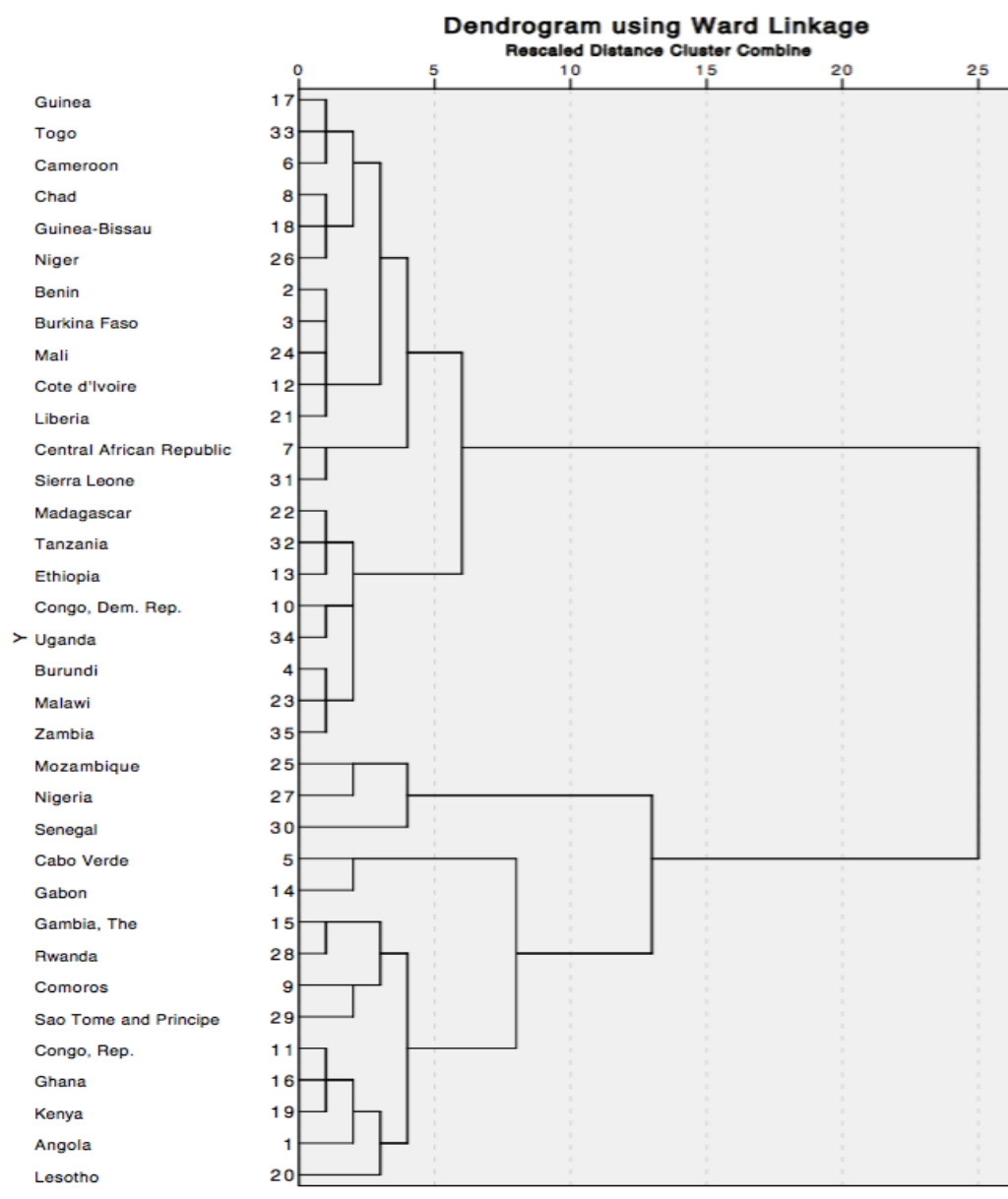
Table 5.41 Boolean Simplification for SSA Social Policy Cluster Variables 2015

Cluster	Boolean Simplification
Cluster 1	IMR * leb * OPE%
Cluster 2	CHE% * IMR
Cluster 3	atcct * ate * asee * che% * dhe * dhe% * IMR * leb * OPE% * bdw * bss * pga * REO * REC
Cluster 4	atc * bdw
Cluster 5	ATCCT * ATE * ASEE * adr * imr * ope * BDW * BSS * pga * rec
Cluster 6	ATCCT * ATE * adr * CHE * DHE * DHE% * epr * imr * LEB * OPE * ope% * BDW * BSS * reo
Cluster 7	ATE * asee * epr * LEB * BDW * BSS * reo * rec
Cluster 8	ATCCT * CHE * DHE * DHE% * REO

Appendix A.6. shows the SSA social policy variables threshold conversion for the year 2015 and Table 5.41 (above) provides the summary of clusters and Boolean simplifications for social policy indicators. From this, it can be seen that Cluster 1, 2 and 3 share a mutual variable in IMR which is above the threshold. Cluster 4, which predominantly has the largest number of cluster members appears to have a below threshold score of ATC and BDW as prime implicants. Whereas Clusters 5, 6 and 7 also share an above threshold score for ATC. The social policy performance of Cluster 8 is also noteworthy as members converged socially with ATCCT, CHE, DHE, DHE% and REO as above threshold score prime implicants.

Another trend to note is the convergence of countries over the two years and the changes in prime implicants. For instance, Angola and Lesotho appear to be closely grouped in 2008 and remain grouped after the crisis with similar prime implicants for both years. ATCCT, CHE, DHE, DHE% and REO remain the same across both years. Similarly, Cabo Verde, Gabon, Mozambique, Nigeria and Senegal are clustered around each other at both time points. QCA results also show a convergence in prime implicants as these countries share similarities in ATCCT, ATE, IMR, BDW and BSS. Likewise, despite having a number of changes in prime implicants Chad and Niger are clustered together in 2008 and 2015 with LEB as a mutually inclusive variable for both years. An interesting trend in the convergence of Congo Rep., Ghana and Kenya. QCA results reveal a change from ATE and LEB in 2008 to ATCCT, CHE, DHE, DHE% and REO in 2015. Comparing economic convergence for the 2015 with social policy indicators at the same time point. Socioeconomic convergence is observed across Guinea-Bissau and Togo; Congo Dem. Rep., Ethiopia, Malawi and Tanzania; Madagascar and Uganda; Angola and Congo Rep.; and lastly, Cabo Verde and Gabon. Distinctively, Cabo Verde and Gabon also maintained cluster groupings across the three years. The above results emphasize the conclusions from LAC cases. That is, although convergence may occur, variations in convergent factors may develop over time. In order to gain a better analysis of these observations,

consideration is given to the degree of convergence and the patterns that emerge during each time interval.

➢ Patterns in Social Policy Variable Convergence between 2000 - 2008 and 2008 – 2015.

The empirical results for each time period have so far shown some significant patterns regarding the journeys travelled by some cluster groupings and the dynamics that exist between SSA countries over time. Figure 5.23 (below) shows the patterns of social policy convergence when the dendrograms for the year 2000 and 2008 are placed alongside each other. From this,

Tanzania and Ethiopia; Central African Republic and Sierra Leone; and Cabo Verde, Gabon, Mozambique, Nigeria and Senegal remain closely paired. This differs from economic convergence observed between Liberia and Cabo Verde during the same period.

Figure 5.23. Dendrogram Comparison – SSA Social Policy Variables 2000 – 2008
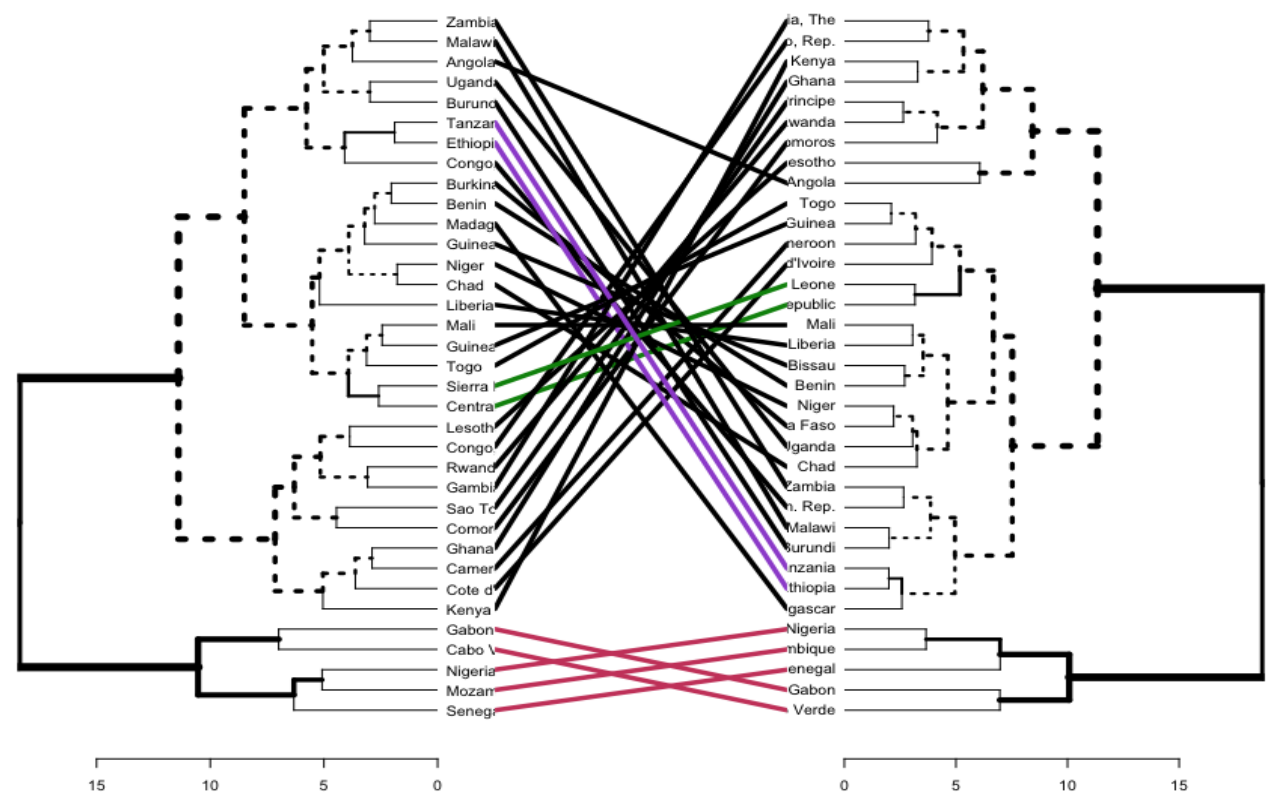
For the period after the financial crisis (Figure 5.24.) it can be observed that Togo, Cameroon, and Guinea; and Malawi and Burundi remain similar during this period while Central African Republic and Sierra Leone; and Cabo Verde, Gabon, Mozambique, Nigeria and Senegal remain consistently grouped together.

Figure 5.24. Dendrogram Comparison – SSA Social Policy Variables 2008 – 2015
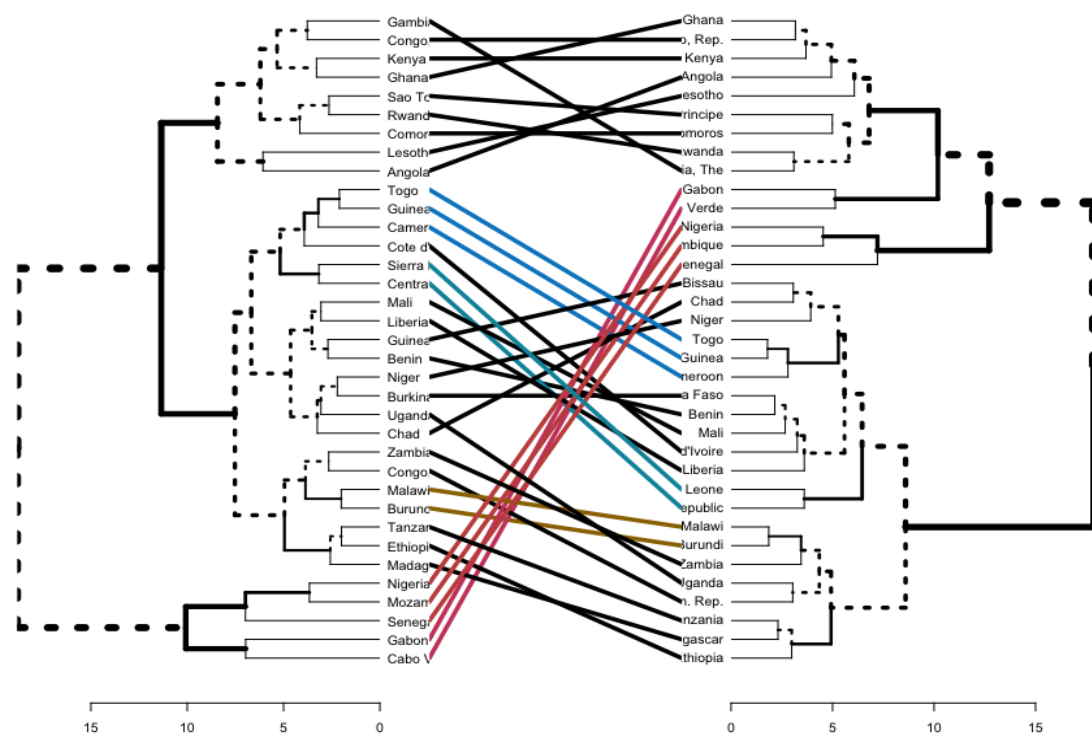
Figure 5.25 (below) highlights convergent cases when the dendrograms for the year 2000 and 2015 are placed alongside each other. This shows similar cluster groupings between Benin and Burkina Faso; Comoros, Gambia, Rwanda and Sao Tome and Principe. In addition, both Central African Republic and Sierra Leone; and Cabo Verde, Gabon, Mozambique, Nigeria and Senegal converge across social policy indicators throughout the period of analysis. Comparing the proposed patterns of social policy convergence between each time interval (as represented in Tables 5.42 and Table 5.43 below) there are no significant change in the patterns of country convergence before and after the financial crisis.

Figure 5.25. Dendrogram Comparison – SSA Social Policy Variables 2000 – 2015
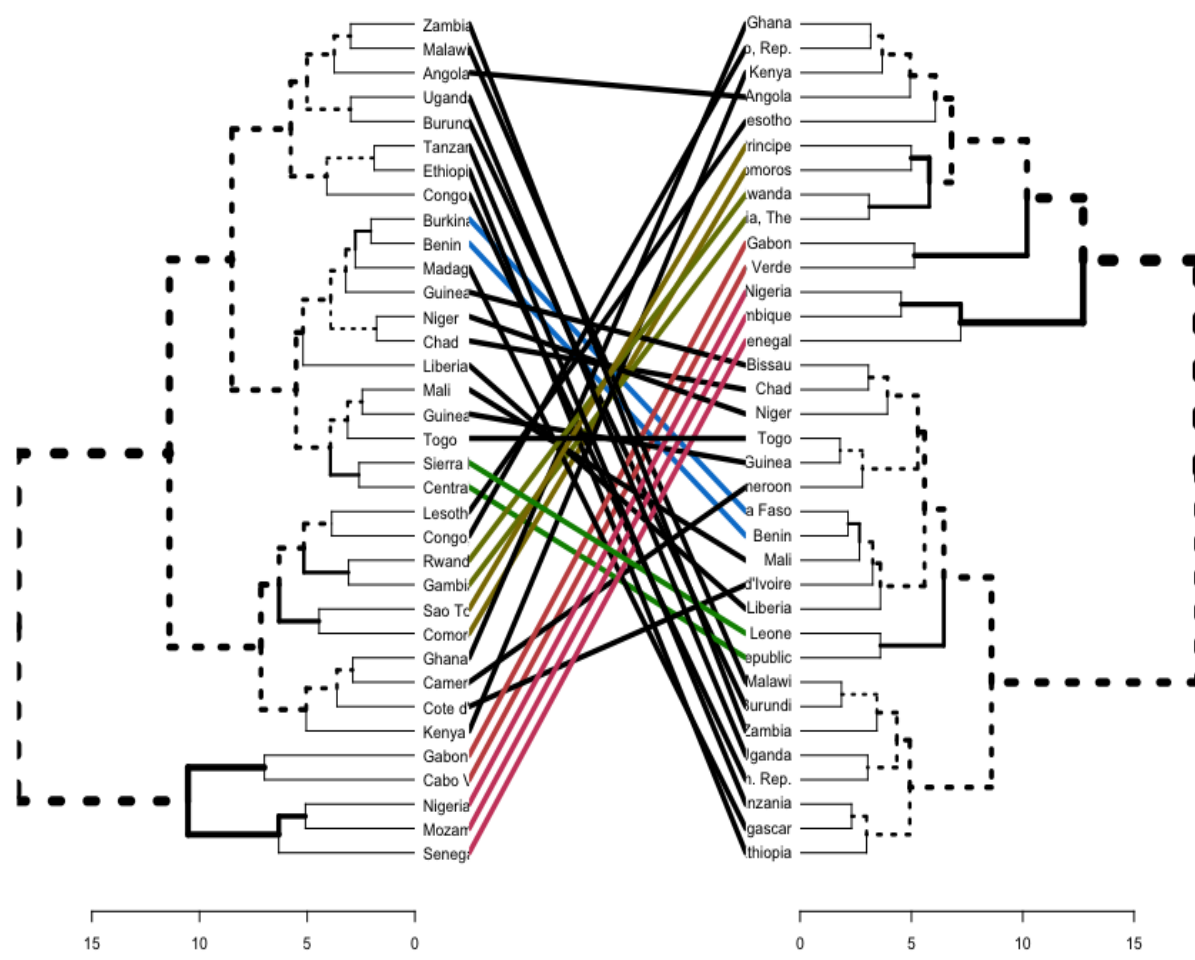
Table 5.42. SSA Patterns of Social Policy Convergence During the 2000 – 2008 Time Interval

Patterns of Convergence	Patterns of Divergence
Congo, Dem. Rep., Ethiopia, Tanzania	Madagascar
Burundi, Malawi, Zambia	Angola
Cabo Verde, Gabon	Uganda
Mozambique, Nigeria, Senegal	Lesotho
Cameroon, Cote d'Ivoire	Mali
Ghana, Kenya	
Benin, Guinea-Bissau, Liberia	
Burkina Faso, Chad, Niger	
Comoros, Congo, Rep., Gambia	
Rwanda, Sao Tome and Principe	
Central African Republic, Guinea, Sierra Leone, Togo	

Table 5.43. SSA Patterns of Social Policy Convergence During the 2008 – 2015 Time Interval

Patterns of Convergence	Patterns of Divergence
Angola, Lesotho	Uganda
Congo, Rep., Ghana, Kenya	Burkina Faso
Comoros, Gambia, Rwanda, Sao Tome and Principe	Cote d'Ivoire
Cabo Verde, Gabon	Guinea-Bissau
Mozambique, Nigeria, Senegal	
Burundi, Congo, Dem. Rep., Ethiopia, Madagascar, Malawi, Tanzania, Zambia	
Chad, Niger	
Central African Republic, Sierra Leone	
Cameroon, Guinea, Togo	
Benin, Liberia, Mali	

Table 5.44. SSA Patterns of Social Policy Convergence During the 2000 – 2015 Time Interval

Patterns of Convergence	Patterns of Divergence
Ghana, Kenya	Madagascar
Cabo Verde, Gabon	Angola
Chad, Niger	Uganda
Benin, Liberia	Lesotho
Congo, Dem. Rep., Ethiopia, Tanzania	Mali
Burundi, Malawi, Zambia	Burkina Faso
Mozambique, Nigeria, Senegal	Cote d'Ivoire
Guinea, Togo	Guinea-Bissau
Central African Republic, Sierra Leone	Congo, Rep.
Comoros, Gambia	Cameroon
Rwanda, Sao Tome and Principe	

An important next step would however be to compare the extent of economic convergence amongst SSA economies with the social policy results to see if any patterns may emerge. From this, the overall longitudinal trend in social policy convergence is however relatively stable as compared to economic indicators over the 3 years. Only 10 countries change cluster memberships across social policy indicators (Table 5.44) while majority of cases in economic policy indicators diverge (Table 5.35). Comparing the HCA results - as reflected in the economic and social policy dendrograms - secondary cluster formations emerge between point 0 and 5 of the rescale distance as compared to the

economic indicators. This suggests that SSA countries share greater similarities socially than economically. The dominant role of convergence between geographical clusters, that is to say regional groupings, is also emphasized with Western and Eastern African nations continuously clustering around each other in both social and economic DPS results.

With regards to patterns of convergence before and after the financial crisis, results show that there is a stronger sense of convergence patterns in social policy variables as compared to economic policy variables. For the period before the financial crisis, Cabo Verde and Gabon as well as Benin and Guinea-Bissau converged socioeconomically. For the period after the financial crisis, there is a socioeconomic convergence of Congo Dem. Rep. and Ethiopia; and Cabo Verde and Gabon. Overall, a general sense of longitudinal socioeconomic convergence can be observed within the proximate grouping of Cabo Verde and Gabon.

Linking this to the socioeconomic convergence hypothesis outlined in Chapter One (**H1**)[65], the above results emphasize the conclusions from LAC cases. That is, similarities in socioeconomic settings, as well as geographical proximity - neighbouring countries - may foster convergence. Across SSA cases, geographical proximity intensifies convergence in economic and social policy indicators. Neighbouring countries, such as Kenya and Uganda, maintained economic cluster grouping throughout the three years. This was similar to findings in LAC cases. Interestingly, Collier (2008) identifies a countries 'neighbourhood' as part of the conditions for poor levels of economic growth or otherwise. Thus, countries are more likely to be influenced by those they share a border with.

However, whereas LAC cases highlighted the impact of problem pressures, as reflected in the implementation of CCT programs, within SSA cases, it is also evident that convergence may also occur as a result of memberships to regional integrations. For instance, convergence across variables

---

[65] H1. The greater the similarities in socioeconomic settings/conditions/problem pressures experienced across 'n' countries at a point in time (t_o), the more likely it is that variable threshold stability in certain macro socioeconomic indicators will converge (t_1).

suggest regional integrations like the East African Federation (Kenya, Rwanda, Tanzania, Uganda e.t.c), and the Economic Community of West Africa (Benin, Burkina Faso, Ghana, Guinea-Bissau, Ivory Coast, e.t.c) are evident in cluster groupings. Evidently social policy convergence across both Cabo Verde, Gabon, and Liberia; and Benin and Guinea-Bissau are observed through the three years. These countries are all ECOWAS member states.

In addition, similar to LAC cases, the QCA results also highlights variations in convergent factors across SSA cases (see Appendix L for an overview of SSA economic and social policy clustering and Boolean simplification). Although countries show similarities (based on cluster groupings) at a particular point in time (for instance before the crisis) the specificity of these similarities change over time (e.g. Ghana and Kenya). This is evident when prime implicants are observed. For instance, Congo, Dem. Rep., Ethiopia and Tanzania converged across social policy indicators before, during and after the financial crisis. However, convergent factors for the period before the crisis 2000/08 showed similarities in above threshold scores for REC, and below threshold scores for ate, ope and bdw. For the second time interval (2008/15), below threshold scores for ate and bdw where the convergent factors.

Yet, in other cases, similar prime implicants are more evident across the two intervals (2000/08 and 2008/15). For instance, Mozambique, Nigeria and Senegal converged across social policy indicators throughout the period under discussion. They shared consistency in above threshold score for ATCCT, ATE, ASEE, BDW and BSS, and below threshold score for adr, imr, pga and rec throughout the three years. Similarly, Cabo Verde and Gabon also converged socially throughout the period under discussion with consistency in above threshold scores for ATCCT, ATE, CHE, DHE, DHE%, LEB, OPE, BDW and BSS. And, consistency in below threshold scores for imr. This demonstrates varying convergent factors and effects across SSA cases. In conclusion, the findings for the baseline assessment of convergence (H1) suggests convergence is caused by multiple factors. Although countries exhibit similar features over time, these similarities vary from time to time,

although in some cases they remain the same. These findings are consistent across both SSA and LAC cases. The subsequent section looks at stability in variable threshold and interactions between cases when IMF interventions are added. This is aimed at testing the hypothesis that IMF interventions may have an influence on these patterns of convergence (H2[66]). Threshold scores are equated to average variable scores and stability is explained as consistency in variable scores (remaining consistently above or below threshold) for an individual case over the three time points. Variable code definitions can be identified in Table 4.1 and Table 4.2 (page 152 of Chapter Four or Appendix J.3).

➤ Overall Socioeconomic Threshold Stability for SSA Economies with IMF Interventions.

Table 5.45 (below) shows the overall threshold stability[67] for SSA case studies comparing key economic variables with Life Expectancy at Birth (LEB) and the number of IMF interventions during the period before the financial crisis (2000/08). Observing the impact of IMF interventions (and the number of interventions) on GDP, it is evident that IMF interventions do not necessarily influence GDP. Cases that do not experience an intervention during the period before the financial crisis (Angola, Liberia, Seychelles, Togo, and Comoros) seem to experience consistency in below threshold scores for GDP (with exception of Angola). Nevertheless, cases experiencing three interventions show consistency in above threshold score for GDP.

Cases with four interventions also demonstrate consistency in below threshold score for IACPI. This could be indications of IMF emphasis on economic policies that creates a low inflation regime. Nevertheless, there is no correlation between the number of IMF interventions and LEB. When considering cases that converged (maintained cluster grouping) during the 2000/08 period, thus, for instance Cameroon and Mali; Benin and Guinea-Bissau; Kenya and Uganda; Cabo Verde and Liberia,

---

[66] H2. Policy Intervention Mechanism and Convergence Hypothesis: The implementation of an IMF intervention is a sufficient condition for stability in variable threshold scores across IMF interested areas

[67] Stability in variable thresholds signify stability of variable trend over time. That is to say, when a variable score for a cluster (or group of countries) consistently remains above or below threshold, across different time points.

Cameroon had three IMF interventions and Mail had one intervention, yet they both had consistency in below threshold scores for IACP%, FDI%, and LEB as well as consistency in above threshold scores for GDP and IACP. Similarly, both Benin and Guinea-Bissau demonstrate similarities in below threshold scores for GDP, IACP and FDI as well as an above threshold score for ODA and had one and two IMF interventions respectively. For Cabo Verde and Liberia, a convergence in below threshold stability for GDP and above threshold for IACPI, FDI% and LEB is revealed. However, with Kenya and Uganda a different pattern emerges as a convergence in above threshold stability for GDP. Aside this, no other variable convergence can be observed. Lastly, Seychelles, Mali, Kenya, Sao Tome and Principe, Cabo Verde, Gambia, Chad, Benin, Zambia and Senegal all show consistency in threshold scores, either above or below, for GDP, IACP%, IACPI, FDI%, ODA and LEB irrespective of IMF interventions. For Life expectancy (LEB), only Angola, Burundi, Guinea-Bissau and Rwanda show inconsistency in variable threshold scores. With regards to the number of IMF interventions, no patterns can be identified to suggest that IMF interventions have positive or negative impact on LEB.

When considering cases that maintained cluster grouping during the 2000/08 interval, thus, for instance Cameroon and Mali; Benin and Guinea-Bissau; Kenya and Uganda; Cabo Verde and Liberia. Cameroon had three IMF interventions and Mali had one intervention, yet they share consistency in below threshold scores for IACP%, FDI%, and LEB as well as consistency in above threshold scores for GDP and IACP. Similarly, although Benin had one IMF intervention and Guinea-Bissau had two IMF interventions. Both cases share similarities in below threshold scores for GDP, IACP and FDI as well as an above threshold score for ODA. Cabo Verde and Liberia converge with below threshold scores for GDP and above threshold for IACPI, FDI% and LEB. In view of the above, Table 5.46 (below) shows the overall threshold consistency for the period after the financial crisis (2009/15). The data has been sorted in the same order as the previous time period. From Table 5.46, a general reduction in the number of IMF interventions is noticeable (from 62 during the period before the financial crisis to 50 after the crisis).

Table 5.45. Overall Socioeconomic Policy Variable Threshold Stability with IMF Variables 2000 – 2008

Country	GDP	IACP%	IACPI	FDI%	ODA	LEB	IMF Interventions (Yes – 1/ No – 0)	№ of IMF Interventions
Angola	ABOVE	ABOVE	BELOW		BELOW		0	0
Liberia	BELOW	ABOVE	ABOVE	ABOVE		ABOVE	0	0
Seychelles	BELOW	ABOVE	BELOW	ABOVE	ABOVE	ABOVE	0	0
Togo	BELOW	BELOW	BELOW		BELOW	ABOVE	0	0
Comoros	BELOW		ABOVE	BELOW	ABOVE	ABOVE	0	0
Congo, Dem. Rep.	ABOVE	ABOVE	ABOVE		BELOW	BELOW	1	1
Ghana	ABOVE	ABOVE	BELOW	ABOVE		ABOVE	1	1
Mali	ABOVE	BELOW	ABOVE	BELOW	ABOVE	BELOW	1	1
Cote d'Ivoire	ABOVE	BELOW	ABOVE		BELOW	BELOW	1	1
Congo, Rep.	ABOVE	BELOW	BELOW			ABOVE	1	1
Ethiopia	ABOVE		ABOVE	BELOW	BELOW	ABOVE	1	1
Burundi	BELOW	ABOVE	BELOW	BELOW			1	1
Lesotho	BELOW	ABOVE	BELOW			BELOW	1	1
Guinea-Bissau	BELOW		BELOW	BELOW	ABOVE		1	1
Kenya	ABOVE	ABOVE	ABOVE	BELOW	BELOW	ABOVE	1	2
Nigeria	ABOVE	ABOVE	BELOW		BELOW	BELOW	1	2
Madagascar	ABOVE		ABOVE		BELOW	ABOVE	1	2
Burkina Faso	ABOVE		BELOW	BELOW		BELOW	1	2
Sao Tome and Principe	BELOW	ABOVE	ABOVE	ABOVE	ABOVE	ABOVE	1	2
Cabo Verde	BELOW	BELOW	ABOVE	ABOVE	ABOVE	ABOVE	1	2
Gambia, The	BELOW	BELOW	ABOVE	ABOVE		ABOVE	1	2
Central African Republic	BELOW	BELOW	ABOVE		BELOW	BELOW	1	2
Chad	BELOW	BELOW	BELOW	ABOVE	BELOW	BELOW	1	2
Benin	BELOW	BELOW	BELOW	BELOW	ABOVE	ABOVE	1	2
Malawi	BELOW		ABOVE	BELOW	ABOVE	BELOW	1	2
Sierra Leone	BELOW		ABOVE		ABOVE	BELOW	1	2
Niger	BELOW		BELOW		BELOW	BELOW	1	2
Guinea		ABOVE	ABOVE		BELOW	BELOW	1	2
Mozambique				ABOVE	ABOVE	BELOW	1	2
Gabon	ABOVE	BELOW		ABOVE	BELOW	ABOVE	1	2
Zambia	ABOVE	ABOVE	BELOW	ABOVE	ABOVE	BELOW	1	3
Cameroon	ABOVE	BELOW	ABOVE	BELOW		BELOW	1	3
Senegal	ABOVE	BELOW	BELOW	BELOW	ABOVE	ABOVE	1	3
Tanzania	ABOVE		ABOVE	ABOVE		ABOVE	1	3
Uganda	ABOVE		BELOW	ABOVE		BELOW	1	4
Rwanda	BELOW		BELOW	BELOW	ABOVE		1	4
						TOTAL IMF:	*31*	*62*

Table 5.46. Overall Socioeconomic Policy Variable Threshold Stability with IMF Variables 2008 – 2015

Country	GDP	IACP%	IACPI	FDI%	ODA	LEB	IMF Interventions (Yes - 1/ No - 0)	№ of IMF Interventions
Nigeria	ABOVE	ABOVE		BELOW	BELOW	BELOW	0	0
Cameroon	ABOVE	BELOW	ABOVE	BELOW	BELOW	BELOW	0	0
Gabon	ABOVE	BELOW	BELOW	ABOVE		ABOVE	0	0
Madagascar	ABOVE		ABOVE	ABOVE	BELOW	ABOVE	0	0
Ethiopia	ABOVE	ABOVE	ABOVE	BELOW	BELOW	ABOVE	1	1
Kenya	ABOVE	ABOVE	ABOVE	BELOW		ABOVE	1	1
Angola	ABOVE	ABOVE	BELOW		BELOW	ABOVE	1	1
Ghana	ABOVE	ABOVE		ABOVE		ABOVE	1	1
Zambia	ABOVE	ABOVE		ABOVE			1	1
Senegal	ABOVE	BELOW	BELOW	BELOW	ABOVE	ABOVE	1	1
Congo, Dem. Rep.	ABOVE		ABOVE	ABOVE	BELOW	BELOW	1	1
Guinea	BELOW	ABOVE	ABOVE		BELOW	BELOW	1	1
Comoros	BELOW	BELOW	ABOVE	BELOW	ABOVE	ABOVE	1	1
Guinea-Bissau	BELOW	BELOW	BELOW	BELOW	ABOVE	BELOW	1	1
Benin	BELOW	BELOW	BELOW	BELOW			1	1
Togo	BELOW	BELOW	BELOW		BELOW		1	1
Cabo Verde	BELOW	BELOW		ABOVE	ABOVE	ABOVE	1	1
Gambia, The	BELOW		ABOVE			ABOVE	1	1
Central African Republic	BELOW		ABOVE			BELOW	1	1
Lesotho	BELOW		BELOW			BELOW	1	1
Congo, Rep.		BELOW	BELOW	ABOVE		ABOVE	1	1
Chad			BELOW	ABOVE	BELOW	BELOW	1	1
Uganda	ABOVE	ABOVE	BELOW		BELOW	BELOW	1	2
Mozambique	ABOVE	BELOW	ABOVE	ABOVE	ABOVE	BELOW	1	2
Cote d'Ivoire	ABOVE	BELOW		BELOW	BELOW	BELOW	1	2
Burkina Faso	ABOVE		BELOW	BELOW	ABOVE	BELOW	1	2
Liberia	BELOW	ABOVE	ABOVE	ABOVE	ABOVE	ABOVE	1	2
Sao Tome and Principe	BELOW	ABOVE	ABOVE	ABOVE	ABOVE	ABOVE	1	2
Sierra Leone	BELOW	ABOVE	ABOVE		ABOVE	BELOW	1	2
Burundi	BELOW	ABOVE	BELOW	BELOW		BELOW	1	2
Niger	BELOW		BELOW	ABOVE	BELOW	BELOW	1	2
Rwanda	BELOW		BELOW	BELOW	ABOVE	ABOVE	1	2
Mali	ABOVE	BELOW		BELOW	ABOVE	BELOW	1	3
Tanzania	ABOVE		ABOVE		BELOW	ABOVE	1	3
Malawi	BELOW		ABOVE		ABOVE		1	3
Seychelles	BELOW		BELOW	ABOVE	ABOVE	ABOVE	1	3
					TOTAL IMF:		*32*	*50*

Similarly, threshold scores for LEB appear to be relatively consistent across a larger number

of country cases as with the period before the financial crisis. Cases with no IMF intervention share

similarities in constant above threshold scores for GDP. Most cases with two IMF interventions show

stability in below threshold scores for GDP, with the exception of Uganda, Mozambique, Cote d'Ivoire and Burkina Faso. Nevertheless, when considering cases that maintain cluster groupings during the 2008/15 period. That is, Chad and Madagascar; Gambia and Senegal; Benin, Guinea-Bissau and Togo; Kenya and Uganda; Cabo Verde and Liberia. It is evident, that irrespective of the number of IMF interventions some cases exhibit similar patterns of convergence.

For instance, Chad and Madagascar both show consistency in above threshold scores for FDI% and below threshold scores for ODA although Chad experienced one IMF intervention and Madagascar had no intervention during this period. While experiencing similarities in the number of IMF interventions (one each), Gambia and Senegal only share similarities in above variable threshold stability for LEB. Similarly, Benin, Guinea-Bissau, and Togo all experienced one IMF intervention and share similarities in variable threshold stability with below threshold scores for GDP, IACP%, and IACPI. These findings show that there is no clear correlation between the number of IMF interventions on variable threshold stability across key macroeconomic indicators, life expectancy at birth, or convergence. This shows that IMF interventions do not necessarily guarantee economic stability, nor have a direct impact on social policy indicators such as life expectancy at birth. This was similar to the third observation across LAC cases.

Furthermore, similar to LAC cases, contingent causality (similar patterns resulting in varying outcomes) is also observed across SSA cases as a lack of consistency across social and economic cluster groupings, QCA results, and the longitudinal threshold scores highlights the influence of multiple contextual factors on convergence. In some cases, variations in these contextual factors influence the outcome of an IMF intervention. For instance, when countries that experienced two IMF interventions are considered, Liberia and Sao Tome and Principe remain economically converged with consistency in above threshold scores for IACP%, IACPI, FDI%, ODA and LEB, and below threshold scores for GDP. However, when the remaining SSA countries with two interventions are considered: Uganda, Mozambique, Cote d'Ivoire, Burkina Faso, Sierra Leone, Burundi, Niger and Rwanda. These

cases do not maintain economic convergence over the three years. The same can be observed in some cases that experienced three interventions. Here, it is evident that the presence of an IMF intervention does not necessarily guarantee longitudinal variable stability.

Nevertheless, in addition to the above similarities with LAC cases, contingent causality is also observed across SSA cases when considering the time period within which an IMF is implemented – 2000/08 and 2008/15 – may also result in varying outcomes. For instance, Chad experienced two IMF interventions during the 2000/08 period and demonstrated below threshold stability for all key macroeconomic variables and LEB, and consistency in above threshold scores for FDI%. During the period after the financial crisis (2008/15), Chad experienced only one IMF intervention but exhibited inconsistency in threshold scores for GDP and IACP%, stability in below threshold scores for IACPI and ODA, and lastly, stability in above threshold scores for FDI% and LEB. Also, Sao Tome and Principe experienced two IMF interventions during both periods. However, during the period before the financial crisis it showed stability in above threshold scores for all key variables except GDP which was stable but below the threshold score. For the period after the financial crisis the same variable pattern was observed. This suggests that, the context, in terms of location and time period, within which an IMF intervention is implemented could also affect the outcome.

5.4. Convergence in Diversity - Case Stability and Variable Interactions:

Following each continental analysis, a longitudinal truth table was produced to assess the overall socioeconomic variable threshold stability with IMF variables. This made allowances for identifying the impact of IMF interventions on consistency in variable stability over time. However, as Haynes (2017, p.177) suggests, this viewpoint "is not a single reference point overview of stability as it ignores the detail of the cross-sectional perspectives offered at each time point". For this reason, a longitudinal truth table on its own cannot be used to assess dynamic patterns in cross case synthesis. As such, to conclude this chapter, consideration is given to some key features to consider when synthesizing systemic interactions. As demonstrated above, these are case patterns; variable trends;

and a combination of stability in case interactions and variable stability (Haynes, 2017). Accordingly, this section considers the various typologies of dynamic patterns that can be observed. To aid in the interpretation of the typologies of systemic interactions, Haynes (2017, p.177) provides four types of system dynamics evident in the DPS method: Stable Dynamics; Case Instability; Cluster Resilience; and System instability. These are summarised in Table 5.47 (below) using Appendix L to identify evidence.

Table 5.47 Typologies of Dynamic Patterns

Type of System Dynamics	Variable Pattern	Case Pattern	Nature of dynamics	Case Evidence (without IMF Interventions)
Stable Dynamics	Stable	Stable	Cases tend towards staying in the same cluster grouping throughout the DPS and the same variable patterns are associated with the construction of these clusters	Grenada and Antigua and Barbuda for economic variables. Haiti and Nicaragua; Cabo Verde and Gabon; and Mozambique, Nigeria and Senegal for social policy indicators.
Case Instability	Stable	Unstable	Most cases experience cluster membership change over time, and there is a lack of consistent change to case cluster patterns. Change is cyclic or random with individual variable trends over time being fairly stable at the level of scale (i.e.: stable sample averages). This change is mostly incremental in key variables, but case patterns still move around a lot over time.	Argentina; and Costa Rica for social policy indicators.
Cluster Resilience – despite variable instability	Unstable	Stable	Despite considerable change in variable trends, most cases stay in the same clusters over time and case-based interactions and similarities are resilient to changes in variables	Ghana and Kenya for social policy indicators. Gabon and Cabo Verde for socio-economic indicators
System Instability	Unstable	Unstable	Many of the cases in the sample experience changes of the cluster membership over time and this instability is associated with changes in variable trends and how variables define cluster membership	Suriname for social policy indicators

Note. Table representation of the Typologies of Dynamic Patterns. From Haynes, P. (2017) *Social Synthesis: Finding Dynamic Patterns in Complex Social Systems.* Routledge.

Given the scope of this research – as highlighted in the overall research conceptual framework (Figure 4.2 in Chapter 4) – the examination of the typologies of dynamic patterns is placed on variable stability when considering IMF specialized areas and socioeconomic convergent patterns during the period of analysis. For this reason, Table 5.48 and Table 5.49 (below) show the social and economic cluster convergence and overall socioeconomic variable threshold stability for LAC cases respectively. The dynamic case interactions seen across LAC cases suggests an element of cluster resilience as some cases remain clustered overtime, but they do not necessarily share consistent variable scores overtime. Nicaragua and Haiti; Paraguay, Honduras, Guatemala and Bolivia; and Dominican Republic and Ecuador remain converged when considering social policy clustering (Table 5.48). Similarly, although exhibiting stability in case patterns, Nicaragua and Haiti exhibit stability in below average threshold scores for LEB although instability in variable threshold scores can be observed in IMF specialized areas despite experiencing the same number of IMF interventions.

Table 5.48. LAC Social Cluster Convergence and Overall Socioeconomic Variable Threshold Stability with IMF Variables 2000 – 2015

Social Cluster Convergence	GDP	IACP%	FDI%	IACPI	ODA	LEB	IMF Interventions	Total № of IMF Interventions
Nicaragua	BELOW	ABOVE		ABOVE	ABOVE	BELOW		2
Haiti			BELOW			BELOW	ABOVE	2
Paraguay	BELOW	ABOVE				BELOW		2
Honduras	BELOW			ABOVE	ABOVE	BELOW	ABOVE	4
Guatemala	ABOVE			BELOW			ABOVE	3
Bolivia						ABOVE		2
Dominican Republic	ABOVE				BELOW	BELOW	ABOVE	3
Ecuador	ABOVE		BELOW		BELOW			2

When considering case dynamics across economic cluster convergence (Table 5.49 - below), a high degree of stable case dynamics can be observed between Nicaragua and Honduras; Peru and

Colombia; and Antigua and Barbuda and Grenada. Despite variations in IMF interventions and the amount of interventions, Nicaragua and Honduras demonstrate the highest degree of stable variable dynamics. Thus, stability in above and below threshold scores for IACPI and ODA, and GDP and LEB respectively while inconsistency in FDI% threshold scores and an unstable variable pattern for IACP% can also be observed. Antigua and Barbuda and Grenada both show stability in below threshold scores for GDP, IACP% and above threshold scores for ODA. Likewise, Argentina and Uruguay; Peru and Colombia; El Salvador and Paraguay; Nicaragua and Honduras; Costa Rica, Dominican Republic and Guatemala; Antigua and Barbuda and Grenada maintain cluster pairings economically (Table 5.49). and some, to a limited extent, share variable threshold scores over time.

Table 5.49. LAC Economic Cluster Convergence and Overall Socioeconomic Variable Threshold Stability with IMF Variables 2000 – 2015

Economic Cluster Convergence	GDP	IACP%	FDI%	IACPI	ODA	LEB	IMF Interventions	Total № of IMF Interventions
Argentina			BELOW	BELOW		ABOVE		3
Uruguay				BELOW	BELOW			4
Peru					BELOW	ABOVE		4
Colombia							ABOVE	6
El Salvador								2
Paraguay	BELOW	ABOVE				BELOW		2
Nicaragua	BELOW	ABOVE		ABOVE	ABOVE	BELOW		2
Honduras	BELOW			ABOVE	ABOVE	BELOW	ABOVE	4
Costa Rica	ABOVE	ABOVE		BELOW	BELOW	ABOVE		1
Dominican Republic	ABOVE				BELOW	BELOW	ABOVE	3
Guatemala	ABOVE			BELOW			ABOVE	3
Antigua and Barbuda	BELOW	BELOW	ABOVE	ABOVE	ABOVE			1
Grenada	BELOW	BELOW	ABOVE		ABOVE	BELOW	ABOVE	3

While there are variations in stable threshold scores for ODA and LEB, Peru and Colombia show variable instability in threshold scores for GDP, IACP%, FDI% and IACPI. Argentina and Uruguay also show variable pattern instability in GDP and IACP%, and stability in below threshold scores for IACPI. Costa Rica, Dominican Republic and Guatemala also show stability in variable

patterns for GDP. For this reason, considering the complexity in the results, the type of system dynamics observed across LAC cases when considering IMF specialized areas would suggest a degree of cluster resilience and an element of stable dynamics. This is because, although a large number of LAC cases remain grouped together, variable patterns remain stable in certain indicators while changes in other indicators are observed.

Table 5.50. and Table 5.51 (below) show the economic and social cluster convergence, and overall socioeconomic variable threshold stability for SSA cases respectively. When considering case patterns, an element of case stability can be observed. However, unlike LAC cases, two cases show case stability when considering SSA socioeconomic clustering. Thus, Gabon and Cabo Verde maintained close proximity in cluster pairing throughout the period under analysis. Similar to LAC cases, for patterns in variable stability a similar display of threshold stability in specific variable patterns across convergent cases can be observed while other variables exhibit threshold instability.

Table 5.50 SSA Economic Cluster Convergence and Overall Socioeconomic Variable Threshold Stability with IMF Variables 2000 - 2015

Economic Cluster Convergence	GDP	IACP%	IACPI	FDI%	ODA	LEB	IMF Interventions	Total № of IMF Interventions
Uganda	ABOVE		BELOW			BELOW	ABOVE	6
Kenya	ABOVE	ABOVE	ABOVE	BELOW		ABOVE	ABOVE	3
Guinea-Bissau	BELOW		BELOW	BELOW	ABOVE		ABOVE	2
Benin	BELOW	BELOW	BELOW	BELOW			ABOVE	3
Gabon	ABOVE	BELOW		ABOVE		ABOVE		3
Seychelles	BELOW		BELOW	ABOVE	ABOVE	ABOVE		3
Liberia	BELOW	ABOVE	ABOVE	ABOVE		ABOVE		2
Sao Tome and Principe	BELOW	ABOVE	ABOVE	ABOVE	ABOVE	ABOVE	ABOVE	4
Cabo Verde	BELOW	BELOW		ABOVE	ABOVE	ABOVE	ABOVE	3

For instance, although exhibiting stability in economic case patterns (Table 5.50. - above), Sao Tome and Principe, Gabon, Seychelles, Liberia and Cabo Verde displayed stable variable patterns in above Threshold scores for FDI% and LEB while demonstrating unstable patterns for IACP%, IACPI

and ODA. Likewise, consistent patterns in below threshold score for GDP can also be observed across Seychelles, Sao Tome and Principe, Liberia and Cabo Verde while Gabon performed above the threshold. Despite remaining economically converged, Guinea-Bissau and Benin also share similar patterns in IMF interventions although the number of interventions vary. These cases also show parallel patterns in below threshold scores for GDP, IACPI and FDI% while demonstrating unstable variable patterns for IACP% and ODA.

Table 5.51 SSA Social Cluster Convergence and Overall Socioeconomic Variable Threshold Stability with IMF Variables 2000 - 2015

Social Cluster Convergence	GDP	IACP%	IACPI	FDI%	ODA	LEB	IMF Interventions	Total № of IMF Interventions
Ghana	ABOVE	ABOVE		ABOVE		ABOVE	ABOVE	2
Kenya	ABOVE	ABOVE	ABOVE	BELOW		ABOVE	ABOVE	3
Gabon	ABOVE	BELOW		ABOVE		ABOVE		3
Cabo Verde	BELOW	BELOW		ABOVE	ABOVE	ABOVE	ABOVE	3
Chad			BELOW	ABOVE	BELOW	BELOW	ABOVE	3
Niger	BELOW		BELOW		BELOW	BELOW	ABOVE	4
Liberia	BELOW	ABOVE	ABOVE	ABOVE		ABOVE		2
Benin	BELOW	BELOW	BELOW	BELOW			ABOVE	3
Congo, Dem. Rep.	ABOVE		ABOVE		BELOW	BELOW	ABOVE	2
Ethiopia	ABOVE		ABOVE	BELOW	BELOW	ABOVE	ABOVE	2
Tanzania	ABOVE		ABOVE			ABOVE	ABOVE	6
Zambia	ABOVE	ABOVE		ABOVE			ABOVE	4
Malawi	BELOW		ABOVE		ABOVE		ABOVE	5
Burundi	BELOW	ABOVE	BELOW	BELOW			ABOVE	3
Mozambique				ABOVE	ABOVE	BELOW	ABOVE	4
Nigeria	ABOVE	ABOVE			BELOW	BELOW		2
Senegal	ABOVE	BELOW	BELOW	BELOW	ABOVE	ABOVE	ABOVE	4
Guinea		ABOVE	ABOVE		BELOW	BELOW	ABOVE	3
Togo	BELOW	BELOW	BELOW		BELOW			1
Central African Republic	BELOW		ABOVE			BELOW	ABOVE	3
Sierra Leone	BELOW		ABOVE		ABOVE	BELOW	ABOVE	4
Comoros	BELOW		ABOVE	BELOW	ABOVE	ABOVE		1
Gambia, The	BELOW		ABOVE			ABOVE	ABOVE	3
Rwanda	BELOW		BELOW	BELOW	ABOVE		ABOVE	6
Sao Tome and Principe	BELOW	ABOVE	ABOVE	ABOVE	ABOVE	ABOVE	ABOVE	4

Nevertheless, when considering case dynamics across social cluster convergence (Table 5.51-above), a degree of stable case dynamics can be observed. Ghana and Kenya show stable variable patterns in above threshold scores for GDP, IACP% and LEB while showing unstable patterns in IACPI and FDI%. Although experiencing three IMF interventions each, Gabon and Cabo Verde share similarities in stable variable patterns for IACP% and LEB. Both cases also show instability in variable threshold scores for IACPI and unstable variable patterns for GDP and ODA.

From the above findings, it appears that: first, there is no consistent configurations over time for IMF interventions impacting GDP and LEB, and also, its relationship with FDI and IACP% is unclear. Second, cluster resilience is not directly influenced by the number of IMF interventions as cases with a similar number of IMF interventions do not cluster around each other. Third, IMF interventions do not directly influence stable dynamics as these interventions do not guarantee longitudinal stability in variable patterns. Lastly, IMF interventions are not tailored to contextual settings. This is because impacts do not remain the same at different time points within the same case. As such, an IMF intervention is only one of many elements contributing to the social and economic performance and cluster groupings.

As highlighted in Part One, the IMF utilises a strong-armed approach to coercive policy transfer in its development assistance lending activities. This considered the intervention mechanism (policy approach) of the IMF. The DPS results have demonstrated the presence of 'multiple conjunctural causation' (Ragin, 1997) across cases. Thus, a causation that is not necessarily permanent and subject to different circumstances which may result in the same or different outcomes. This considered the interactions between cases and the number of IMF interventions implemented. Given that this research seeks to realistically evaluate the impact of IMF interventions the proceeding section considers the intervention context. For this reason, the next chapter explores the two most convergent

cases (Gabon and Cabo Verde) by focusing on the policy implementation context as reflected in the overall research conceptual framework (Figure 4.2 – in Chapter Four).

Chapter Six

Case Study Analysis: Calibrating Coercive Policy Transfer

6.1. Introduction

As reflected in the overall research conceptual framework (Figure 4.2.), it was assumed that a strong sense of stable dynamics would be observed across cases when IMF interventions fit well with the domestic settings of implementing nations. This would be the case when countries with IMF interventions converge with similar variable patterns informing their similarities. When considering IMF impact areas, although showing a degree of stable case dynamics and stable variable patterns over time in overall threshold scores for IACP% and FDI, Gabon and Cabo Verde demonstrated unstable variable patterns over time in overall threshold scores for GDP and ODA. This suggests that, although demonstrating some similarities in longitudinal variable threshold scores, the dynamic patterns of convergence experienced between these cases also reflects a degree of misfit, as a divergence in some variable patterns can also be observed. Using the goodness-of-fit hypothesis to explain policy compatibility, a number of deductions were made in Chapter One regarding the nature of interactions that could influence the compatibility of policies which are coercively transferred. It was deduced that the ease of adaptation to the implementation of an IMF intervention depends upon the extent to which these interventions fit with national policies and institutions (**H3**).

In this chapter the aim is to search IMF Letters of Intent for content that can be associated with the absorptive capacity of implementing nations and whether or not there was a need for domestic policy alignment and an ease of adaptation – as reflected in the use of ex ante and ex post conditionalities – as well as the impacts these elements could have had on convergence. It is necessary to see these elements (absorptive capacity, policy alignment, and ease of adaptation) as interrelated and an essential starting point when considering discussions on policy compatibility. As highlighted in the research methodology chapter (Section 4.5) at the first stage of documentary analysis a content

analysis approach was applied to test for the frequency in word occurrences within the letters of intent to identify similarities and differences. Subsequently, a thematic approach was applied to explore in detail the content of the documents. For this, an initial checklist of contextual questions (Table 6.1 - below) was developed with reference to the CIMO configuration (see Chapter Four) and guided by earlier discussions on policy transfer (see Chapter Two) and IMF interactions with developing economies (see Chapter Three).

Table 6.1. Search Criteria for Thematic Interview Approach to Analysing IMF Letter of Intent

Context/Intervention Context		
Definition of the Problem	Was there a global issue that led to the request for IMF support? Was there a specific national issue that led to the request for IMF support?	
Evidence	Is there evidence of the above-mentioned problem in the data?	
Mechanism		
Analytical Criteria	Absorptive Capacity	Were there any qualitative conditionalities that show a need for institutional reconfiguration?
	Policy Alignment	Are there any ongoing national programs in the country that the IMF intervention is meant to support? Are there any national policies that had to be changed/implemented before the IMF intervention was implemented?
	Policy Transfer	Are there any elements suggesting the type of policy transfer?
	Ease of Adaptation	Are there any ex ante conditionalities attached to the IMF intervention?
Outcome		
Did the IMF intervention provide stability in specialised areas (FDI, GDP, Inflation)?		

6.2. Unspecified Content Analysis Results

This subsection presents the corpus of the country Letters of Intent published by the IMF on interventions implemented between 2000 and 2014 for Gabon and Cabo Verde. These Letters of Intent and their accompanying Memorandum of Understanding can be identified as the main go-to source to

gain insights on the economic and structural policy reforms implemented within a country during the period within which an IMF-supported arrangement was implemented. Previous academic scholarship has built on the content of IMF documents to study policy advice and conditionalities (Rodrik, 2006; Roy & Almeida Ramos, 2012; Ortiz et al., 2015; Kentikelenis et al., 2016) and compare conventional macroeconomic intervention measures over a period of time (Mihalyi & Mate, 2019). An overview of key descriptive statistics in the corpus of country letters of intent are presented below.

➤ Data Reduction, Data Display and Key Themes (Gabon and Cabo Verde):

For the first step, a database of published relevant IMF Letters of Intent was created, and the documents are converted into text format. The text data was then cleaned and converted into a document term matrix (DTM) and analysed for frequency in word occurrences. Appendix K.1. provides an extract from the created matrix on the most frequent words in the seven Letters of Intent submitted to the IMF by Gabon and the fifteen Letters of Intent submitted to the IMF by Cabo Verde. This matrix was then used to produce a word cloud image of emerging patterns in the data (Figure 6.2; Figure 6.3 - below).

From Table 6.2 and Table 6.3 (below), it can be observed that the words 'government', 'debt', and 'program' frequently occur across both cases. This can be linked to activities of the IMF as it interacts with governments on financial issues (debt) and possible responses through the implementation of macroeconomic and structural programs. The Gabonese economy is dominated by the extractive industry, such as the extraction of petroleum, manganese mining, and timber processing. Oil production accounts for a large amount of its GDP. However, the unreliability and volatility in oil prices has caused a need for economic diversification. Table 6.2 and Figure 6.1 emphasize this as the words 'oil' and 'nonoil' frequently occur within the text.

Table 6.2. Frequency in Word Occurrence (Gabon)

Word	Government	Debt	Program	Oil	Percent	Budget
Occurrence	654	293	281	268	268	258

Table 6.3. Frequency in Word Occurrence (Cabo Verde)

Word	Government	External	Debt	Program	Central	Domestic
Occurrence	1114	761	659	636	464	446

Figure 6.1. Word Cloud Extract from Gabon's Letters of Intent
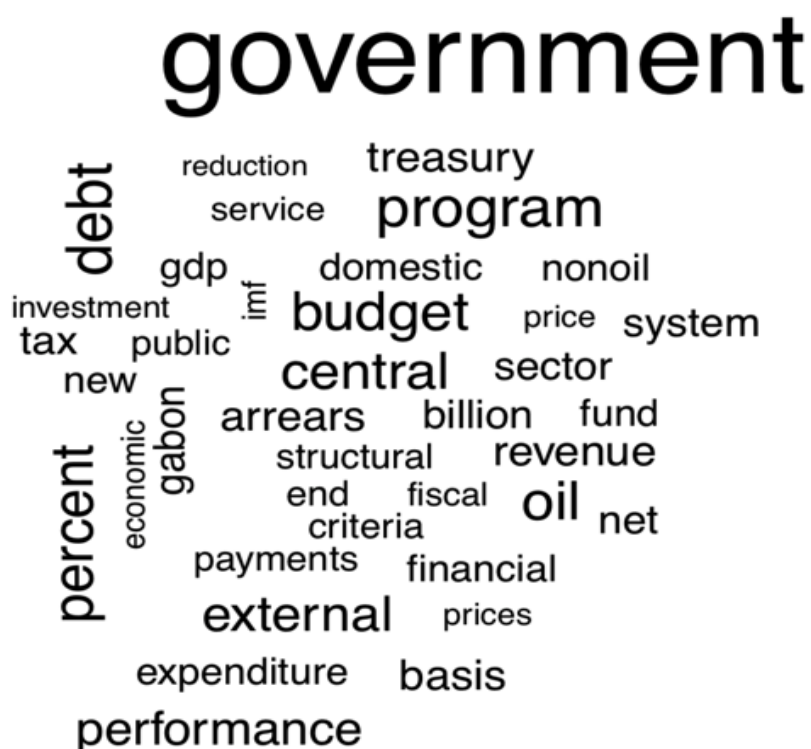
Figure 6.2. Word Cloud Extract from Cape Verde's Letters of Intent
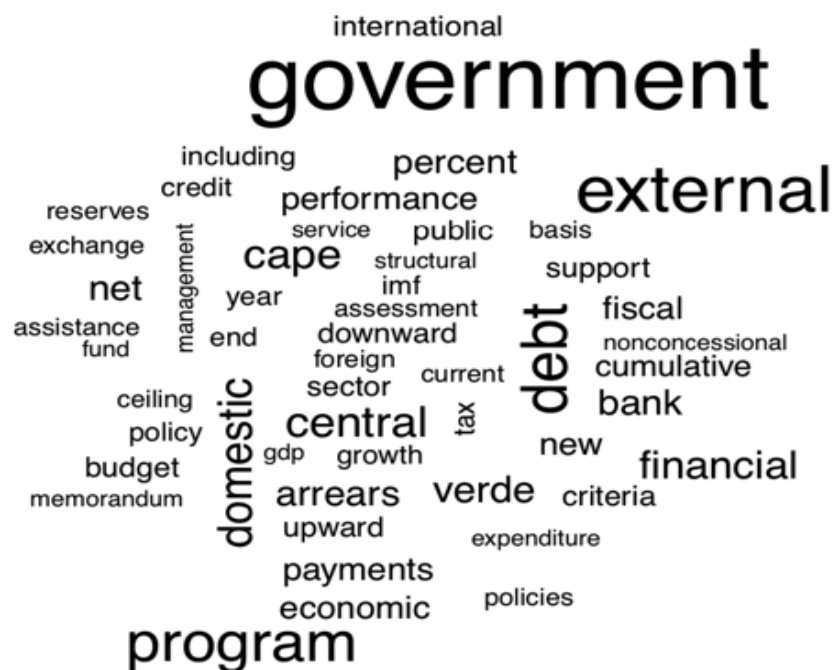
The frequency in the occurrence of the word 'budget' and other measurement criteria as reflected in the use of words like 'performance', and 'percent' can be linked to the fact that the Gabonese government has been criticised for its overspending on off-budget entities and over-borrowing from its central bank and other international agencies while holding off its schedule for privatization and administrative reform. Cabo Verde also often has an annual trade deficit usually compensated by remittances and foreign assistance. As such, the country remains at high risk of external debt distress. While Cabo Verde has few natural resources, it is rapidly becoming established as one of the most exciting new markets for tourism development. For this reason, Cabo Verde seeks to diversify within and beyond the tourism sector so as to absorb economic shocks (Kshetri, 2020). Surprisingly, a detailed look at the results for Cabo Verde (Table 6.3.; Figure 6.2 - above) does not reflect the domestic issues – as compared to that of Gabon – but rather provides a general use of words linked to the activities of the IMF.

The word cloud (Figure 6.1; Figure 6.2 - above) also show a high similarity in the use of macroeconomic and quantifiable words across both cases. This emphasises the economic and

monetary focus of the IMF and questions the apparent extension of IMF conditionalities to cover a collection of policy areas including welfare policy, labor market reforms, and governmental transparency and accountability (see Rodrik, 2002; Stiglitz, 2002; Chang, 2006; Serra & Stiglitz, 2008; Babb, 2013). The word cloud for both cases also illustrates the importance of government – thus, the involvement of the soliciting nation; the issue the IMF seeks to tackle – external debt (Balance of Payment); the use of structural and fiscal reforms as well as the macroeconomic programs; and the use of performance indicators to measure progress. Attention should also be placed on the lack of occurrence in human development indicators such as health and education amongst others in either of the cases.

6.3. Case-study Analysis of IMF Interventions

In this subsection a comparative case study approach is used to analyse IMF interventions in Gabon and Cabo Verde. An application of the thematic search criteria – highlighted in Table 6.1 (above) – is used to search for emerging thematic patterns in the IMF letters of intent to identify similarities and differences in policy interventions. Additional qualitative data obtained from the Observatory of Economic Complexity, the Worldwide Governance Indicators, and the World Bank ease of doing business indicators as well as trends in GDP, foreign direct investment and inflation during the period of analysis are used to gauge the policy capacity (**H4**) and economic stability of each case. In addition to this, consideration is given to the impacts of IMF interventions on certain human development indicators. Here, trends in life expectancy at birth, infant mortality ratio, people with least basic sanitation services, and unemployment rates are used to assess IMF intervention impacts.

6.3.1. IMF Interventions in Gabon

➢ *Background (Context)*

Located in Central Africa, Gabon borders the Republic of the Congo, Equatorial Guinea and Cameroon by land and Sao Tome and Principe by sea. Like many Sub-Saharan African countries, the Gabonese economy is dominated by the extractive industry with oil production accounting for a greater

part of its GDP. According to the Observatory of Economic Complexity[68], Gabon is the 108th largest export economy in the world. Its top exports are Crude Petroleum, Manganese Ore, Sawn Wood and Refined Petroleum amongst others to China, Australia, Indonesia, Malaysia, India etc. Oil accounts for most of its exports and GDP production. Although having a GDP per capita four times that of most Sub-Saharan African countries, its economy is considered to be relatively unstable due to declines in oil production rates.

Similar to many other oil-producing economies, Gabon has been going through a cycle of booms and busts as frequent fluctuations in oil prices, timber, and manganese exports have reflected in its economic performance. A rebound in oil prices from 2001 to 2013 helped growth, but declining production, as some fields passed their peak production, has hampered Gabon from fully realizing potential gains. As reflected in Figure 6.3 (below), GDP grew over the 2010-14 period but reduced significantly in 2015. This was due to the decline in oil prices. Low oil prices also weakened government revenue and negatively affected GDP and FDI. Politically, since gaining independence from the French in 1960, the Democratic Party (Parti démocratique gabonais PDG) has dominated the political scene. Omar Bongo held the presidency for 41 years (1968–2009), and his son, Ali Bongo Ondimba, won the presidential elections in August 2009. As at the time of writing, Ali Bongo was still in power.

Considering the period of analysis, Gabon was ranked as approximately 70, 54 and 48 for political stability and violence[69], and approximately 32, 23 and 26 for government effectiveness[70] by the Worldwide Governance Indicators (WGI)[71]. Gabon was also ranked 144th out of 178 countries for

---

[68] OEC - The Observatory of Economic Complexity. (2020). Retrieved 9 September 2019, from https://oec.world/

[69] Political Stability and Absence of Violence/Terrorism measures perceptions of the likelihood of political instability and/or politically motivated violence, including terrorism.

[70] Reflects perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.

[71] Percentile rank among all countries (ranges from 0 (lowest) to 100 (highest) rank) with higher values corresponding to better outcomes.

2008 and 144th out of 189 countries for the year 2015 by the World Bank in terms of ease of doing business. These ranks demonstrate a general decline in the policy capacity of Gabon. Amongst many other factors, it is for this reason Freedom House classifies Gabon as 'Not Free'[72].

➢ *Problematisation and Response - IMF Interventions in Gabon*

During the period under analysis, the Gabonese government implemented three IMF interventions. These were all Stand-By Arrangements (SBA) adapted in October 2000, May 2004 and May 2007. However, eight Letters of Intent dating from October 2003 to March 2005 were available on the IMF website. From these, five were progress reports, one was a supplementary Letter of Intent and two were letters requesting an IMF intervention for the second and third SBA. For this reason, focus was placed on the Letter of Intent requesting an IMF intervention in 2004 and 2007 as the Letter of Intent for the October 2000 SBA was not available.

The introduction to Gabon's (2004) Letters of Intent indicates that Gabon was facing economic challenges as a result of a decline in the production of oil which resulted in a high external debt service; and low social indicators. For this, an IMF staff-monitored program was executed during the second half of 2003 - thus, before the IMF supported arrangement was implemented. Consequently, the Government of Gabon implemented policies based on vigorous fiscal adjustments and in-depth structural reforms. These policies are reflected in the quote:

> *"As part of its fiscal adjustment effort, the government will endeavour to bolster non-oil revenue and reduce nonpriority expenditure in order to free sufficient resources for investment and for social and economic infrastructure, and to normalize its relations with its domestic and external creditors" … "To tap this potential, structural reforms will be focused on factors that are crucial for*

---

[72] Freedom House. (n.d.). Countries and Territories. Retrieved 9 September 2019, from https://freedomhouse.org/countries/freedom-world/scores

attracting investment and improving the business climate, in particular good governance and transparency, the restructuring and privatization of public enterprises, the reduction of costs in the economy, and removal of the obstacles to the development of the private sector, with emphasis on improving the legal and regulatory framework." (Gabon, 2004, p.1)

Under the outlined program for 2004-05 was a collection of macroeconomic objectives and policies consisting of fiscal, monetary and financial sector policies while foreign trade policy was linked to balance of payments and debt sustainability. Structural reforms came in the form of changes in forestry concessions in the forestry sector, public enterprise restructuring and privatization, private sector development, good governance, and a Poverty- Reduction Strategy Paper (PRSP) preparation process.

In the third intervention, the government of Gabon acknowledged improvements in its economic performance and a reduction in its external debt. However, it recognised the need for further economic reforms in anticipation of a further decline in oil production and highlighted the pressing need to reduce poverty and improve the quality of life of the Gabonese people. For this reason, the main objective of this intervention was to foster socioeconomic development and steer the transition toward the post-oil era (Gabon, 2007). Thus, based on the successful economic reforms implemented earlier focus was diverted from economic stability to social policy issues reflected in Gabon's economic growth, and PRSP. Accordingly, the economic policies for 2007 – 2010 were constructed around three main objectives:

- *"significantly lowering the non-oil fiscal deficit to a sustainable level by the end of the program;*
- *strengthening public financial management, notably to ensure the inclusion of all revenue and expenditure in the government budget and to improve the quality and effectiveness of spending;*

- *and accelerating structural reforms to foster private sector development, the principal engine of job creation and poverty reduction." (Gabon, 2007, p. 4)*

To achieve this, a package of fiscal policies, public financial management reforms and increasing governance transparency in addition to other structural reforms were outlined. However, unlike the second IMF intervention, a staff-monitored program was not executed before the IMF supported arrangement was initiated despite the fact that trends in GDP, FDI and inflation took a downturn in 2006 (see Figure 6.3 - below). The absence of a staff-monitored program could be due to the performance of the Gabonese economy during the previous intervention. As such, there was no need for an ease of adaptation. Nevertheless, in the configurational analysis (Chapter Five), during the 2000/08 period GDP and FDI remained above the average (threshold) while inflation fell below the threshold. It is also important to note that, comparing the two Letters of Intent, the 2007 letter did not make mention of the upcoming financial crisis and the Gabonese government showed a shift from predominately economic undertakings to social policy issues.

➢ *National Participation, Domestic Changes and Regional Governance*

In relation to national participation, domestic changes and regional governance influences, the implementation of a staff monitoring program prior to the second interventions can be considered as an ease of adaptation and a measure to ensure policy alignment. Staff monitoring programs are part of the IMFs policy support instrument (PSI). According to the IMF, the PSI offers member nations that do not want (or need) IMF financial assistance, a flexible tool that enables them to secure policy advice and support without a borrowing arrangement. This non-financial instrument helps countries design effective economic programs that deliver clear signals to donors, multilateral development banks, and markets of the Fund's endorsement of the strength of a nation's policy capacity.

In addition to this, domestic programs such as the Medium-Term Adjustment Program in 2003 (Gabon, 2004, p. 1) and the establishment of an oil revenue monitoring committee (COSUREP); the Large Taxpayer Unit (LTU); the National Commission Against Illicit Enrichment (CNLCEI); as well as the "enhanced role" given to the Audit Court, the highest fiscal oversight agency (Gabon, 2007, p. 9) amongst others, show elements of institutional reconfiguration. Thus, institutional changes (calibrations) implemented within a country needed to facilitate the successful monitoring and implementation of the IMF programs.

With regards to the type of policy transfer and national participatory interactions exhibited within IMF interventions in Gabon, it is important to note that aside a change in the words 'sufficient' (as reflected in the quotation below), the phase below was present in both letters of intent. As pointed out in Chapter Three, the fact that a soliciting nation submits a Letter of Intent outlining policies and structural reforms it seeks to implement may suggest that the power relations between the IMF and the soliciting nation maybe one of mutual benefit and as such an absorbed form of coercive policy transfer. However, considering the language used, "*…stands ready to take any further measures…*" a weighted bargain power relation becomes evident.

> *"The government believes that the policies and measures described in the attached memorandum are **sufficient** to attain the program objectives, but it stands ready to take any further measures that may become appropriate for this purpose. The government will consult with the Fund periodically, in accordance with Fund policies on such consultations and will provide the Fund staff with any information that it may request for monitoring progress in program implementation." (Gabon, 2004. p. 1 & 2007. p. 1)*

Furthermore, this is questionable given the fact that an IMF staff monitoring program or policy support instrument was implemented prior to the submission of the Letter of Intent. This program provides technical assistance on government policy reforms and structural adjustments so as to set the

stage of an IMF intervention. For this reason, a strong-arm form of coercive policy transfer is identified.

Additionally, it is important to note the observance of neo-liberal ideologies adopted in the form of privatization, economic deregulation and, trade and financial liberalization as well as governmental transparency and accountability were observed in the Letters of Intent. For instance, in Gabon (2004) the government acknowledged progress made in its privatization process of the rubber plantation company (HEVEGAB) and the palm oil company (AGROGABON). Likewise, in Gabon (2007) the government acknowledged the liquidation and privatization of Air Gabon and Gabon Telecom respectively. As pointed out in Chapter Three, this economic approach has been widely criticized (see for instance. Barr, 1993; Barnett, 2005; Stiglitz, 2008; Barnett, 2010; Birch & Mykhnenko, 2010; Stiglitz, 2012). Also, due to Gabon's membership to the Economic and Monetary Community of Central Africa, monetary policy was aligned with that of the Bank of Central African States. Governmental transparency of oil revenue was also said to have improved by the country's participation in the Extractives Industries Transparency Initiative (EITI).

➢ *Program Monitoring*

With regards to the monitoring and implementation process, in both letters, progress was monitored on a quarterly basis using quantitative and structural performance criteria and benchmarks. These consisted of a set of prior actions in addition to a package of structural performance criteria and structural performance benchmarks with time limits. Quarterly reviews are undertaken by IMF staff and the reports of these reviews are openly published on the IMF website.

➢ *Outcome*

From Figure 6.3 (below) observing the trends in percentage change in GDP, FDI and Inflation, based on the scope of this research, it can be concluded that the first IMF intervention implemented in

Gabon during the period of analysis was not very successful given the decline in FDI. This is because, if the presence of an IMF intervention serves as a 'seal of economic and institutional approval' which thereby encourages FDI, one could hypothesize that this was failure. But, a look at the institutional and policy capacity of Gabon, based on the additional qualitative data, would show a decline in institutional/national capacity making it difficult for investors. This suggest that an existence of institutional incompatibility can be assumed as the implementing nation was unable to provide the fertile ground for effective policy execution. It is also important to note that after this intervention, a drop in all three indicators is observed between 2005 and 2006.

Figure 6.3 Trends in GDP, FDI and Inflation, Gabon
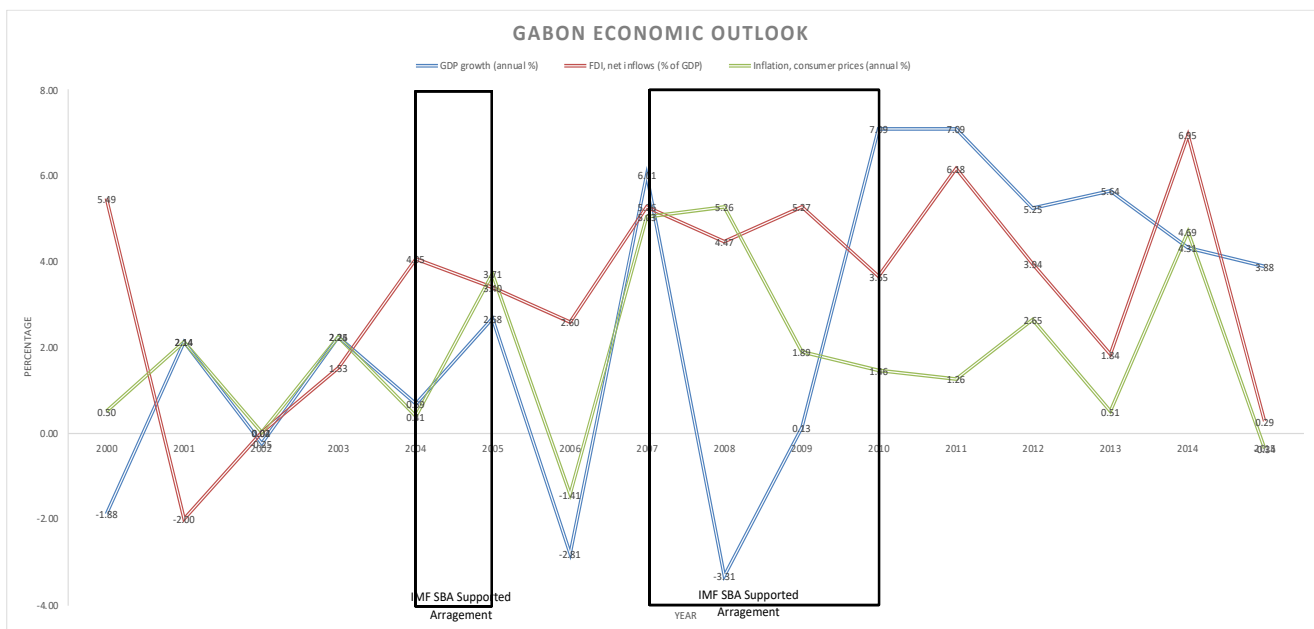
At the beginning of the second intervention, a rapid rise in GDP and inflation – moving from -2.81% and -1.41 in 2006 to 6.01 and 5.06 in 2007 respectively – can be observed with an increase in FDI. Subsequently, in 2008 GDP and Inflation drop significantly while FDI fluctuates steadily. This drop in GDP and inflation can be linked to the impact of the 2008 financial crisis. Nevertheless, a substantial rise in GDP and a fairly stable inflation rate can be seen at the end of the period of implementation. Although one may assume that the IMFs presence in Gabon should have mitigated

such negative impacts, it is important to note that as stated in the Letter of Intent the implementation of the standby arrangement was mainly for economic diversification – and not in response to the crisis. For these reasons, overall, it can be assumed that the first IMF intervention was not very successful while the second remains inconclusive due to the global economic climate at the time of policy intervention.

Figure 6.4 (below) shows the trends in human development indicators for Gabon. Positive trends can be observed in the rise in life expectancy at birth, and a decline in infant mortality rates. An increase in the percentage of people using at least basic sanitations services is also observed. Although the progress highlighted by these indicators demonstrate MDG achievements, it is evident that IMF interventions do not have a significant effect on these indicators. However, considering the anticipated economic effects of an IMF intervention, trends in unemployment rates suggest that IMF interventions in Gabon did not necessarily produce any effects on employment. A slight drop in unemployment rates can be observed during the first intervention. Yet, when considering the second intervention, halfway through the program unemployment rates begin to rise. However, this rise in unemployment rates began after the financial crisis and cannot be directly linked to the IMF.

Figure 6.4 Trends in Human Development Indicators, Gabon
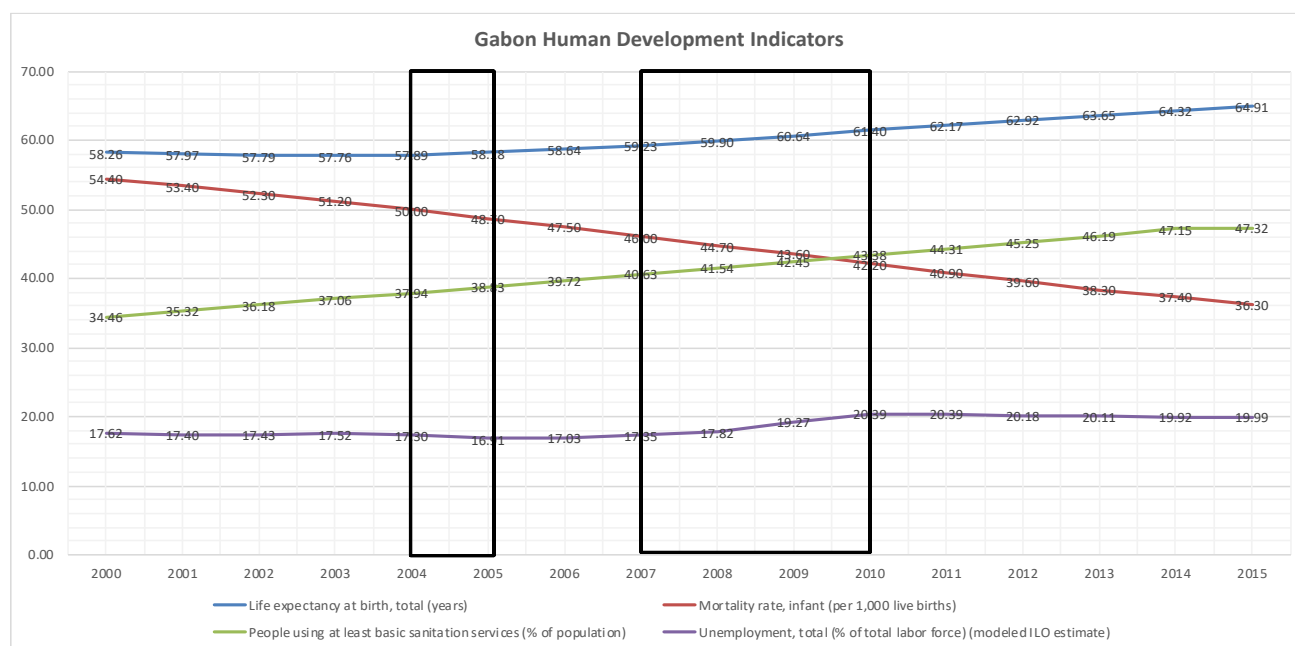
<u>6.3.2. Analysis of IMF Interventions in Cabo Verde</u>

➢ *Background (Context)*

Located approximately 500 kilometres off the coast of West Africa, Cabo Verde is an archipelago of 10 islands and borders Mauritania, Gambia and Senegal by sea. The country possesses limited mineral resources and only 10% of its territory is classified as arable land. According to the Observatory of Economic Complexity, Cabo Verde is the 184th largest export economy in the world. Its top exports are processed fish, planes, helicopters, and/or spacecraft, amongst others to European economies and the United States. Politically, Cabo Verde remains one of Africa's most stable democratic governments (Baker, 2006). Elections are considered free and fair, and parties in power alternate regularly, and since its independence from Portugal in 1975 there has not been a single coup d'état. The economy of Cabo Verde is driven by tourism with its population spread across nine islands that are scattered within a large water area creating constraints to economic growth and development. Cabo Verde's monetary policy is closely aligned with Europe. Its local currency pegged to the Euro and its inflation expectancies are comparatively low. Regulatory pressures on the peg, monetary policy also remain accommodative.

Despite the above mentioned, as demonstrated in Figure 6.5 (below), Cabo Verde showed astonishing economic growth between 2000 and 2007. However, as a result of the financial crisis economic growth decelerated significantly. According to the World Bank (n.d), countercyclical fiscal policy measures have been unable to restore economic growth and instead resulted in a severe increase in debt. In addition to this, recurrent droughts have caused major social policy issues and stimulated heavy emigration. Although performing comparatively better than Gabon, during the period of analysis, Cabo Verde was ranked at approximately 90, 78 and 74 for political stability and violence, and approximately 66, 65 and 60 for government effectiveness by the Worldwide Governance Indicators (WGI). This was consistently above the average SSA country. Cabo Verde was also ranked 132nd out of 178 countries for 2008 and 122nd out of 189 countries for the year 2015 by the World

Bank in terms of ease of doing business. These trends reveal a slight decrease in the governance indicators and an increase in ease of doing business. For this reason, Cabo Verde demonstrates a comparatively higher policy capacity. Likewise, unlike Gabon, Cabo Verde has been classified as 'free' by Freedom House throughout the period under discussion.

➤ *Problematization and Response - IMF Interventions in Cabo Verde*

During the period under analysis, Cabo Verde implemented three IMF interventions. These consisted of a three-year arrangement under the Poverty Reduction and Growth Facility (PRGF) in 2002; while the second and third interventions were to maintain a close policy dialogue with the IMF under the Policy Support Instrument (PSI). Twelve Letters of Intent dating from October 2002 to March 2012 were available on the IMF website. From these, nine were progress reports, and three were letters describing the country's situation and requesting for an IMF supported arrangement. For the analysis of IMF interventions in Cabo Verde, focus is placed on the Letters of Intent requesting an IMF support during the period between 2002 and 2012.

In the run up before the first IMF intervention, Cabo Verde experienced a legislative and presidential elections which saw a change in government and as such the implementation of economic and structural reforms was delayed. It was noted that this delay resulted in a considerable deterioration of the country's macroeconomic situation. Additionally, given that the Cabo Verde economy is dominated predominately by tourism, the events of September 11, 2001 also had negative impacts on economic growth. For this reason, the implementation of the National Poverty Alleviation Plan (NPAP) – also known as the '*Grandes Opções do Plano*' – outlined the government's sectoral objectives into five priorities: (i) the promotion of good governance; (ii) support for private sector-led growth and the broadening of the productive base; (iii) the development of human capital; (iv) the promotion of a holistic approach to fighting poverty; and (v) a balanced development of infrastructure

across the territory of Cape Verde (Cabo Verde, 2002, p. 4). A Medium-Term Program was implemented in alignment with the IMF PRGF. The objectives of this program were to:

> *"(i) increase the annual rate of economic growth from 3 percent in 2001 to 4l/2-5 percent by 2004; (ii) reduce the annual rate of inflation from 4 percent in 2001 to that of Cape Verde's major trading partners by 2004 (2-2l/2 percent); (iii) reduce the external current account deficit (including grants) from 10l/2 percent of GDP in 2001 to 5l/2 percent in 2004; and (iv) increase gross international reserves from 1.6 months of imports of goods and services in 2001 to 2.2 months in 2004. The improvement in growth would be supported by a rebound in domestic investment from 20 percent of GDP in 2001 to 22-22l/2 percent in 2004. The program also targets a broad-based reduction in poverty, including, in particular, a sustained reduction in infant mortality rates and an increase in life expectancy." (Cabo Verde, 2002, p. 4)*

To achieve this, a package of fiscal policies, monetary and financial sector reforms in addition to structural policies and domestic debt-reduction operations were outlined. A staff monitored program was also executed before the commencement of the IMF supported arrangement. Figure 6.5 (below) reveals that Cabo Verde showed an increase in annual percentage change for inflation during 2000 and 2001. Yet, a gradual drop was observed in the period afterwards (2001 – 2004). Contrarily, during the period between 2000 and 2001, GDP and FDI drop significantly. This can be linked with the impact of the September 11 terror attack which had a negative effect on the tourism industry. However, in the aftermath (2001), although fluctuating, GDP rose significantly while FDI maintained a stable upward trend.

For the second intervention (2006 – 2009), the government of Cabo Verde acknowledged progress made under the first IMF supported arrangement stating that the overall results under the program were considerably better than expected as it resulted in the significant improvements that Cape Verde had experienced in terms of macroeconomic performance, policy credibility, and external financial support (Cabo Verde, 2006, p. 1). However, the government also noted with concern that, despite its strong record of governance and policy performance through the PRGF intervention, Cape Verde was not considered eligible for external debt relief under multilateral initiatives. This was due to Cabo Verde's positive socioeconomic performance, as such, Cabo Verde did not meet the minimum criteria for debt relief. For this reason, due to the apparent economic stability achieved, the government sought to maintain close policy dialogue with the IMF under the Policy Support Instrument (PSI) so as to gain further policy credibility without financial assistance from the IMF.

Like the first IMF intervention, a medium-term government program was implemented in alignment with the PSI. The key objectives of this program were directed at boosting economic growth and reducing poverty through private sector-led development and diversification of economic activities. In support of these goals, the Government's policy priorities consisted of the following:

> *"(i) building human capacities through improving access to education, training, and health care; (ii) strengthening infrastructure and institutions, including to support service sector growth in areas such as tourism, financial services, and communications; and (iii) improving governance and the capacity of the public sector to implement policy reforms and program mandates" (Cabo Verde, 2006, p. 4).*

It should be noted that, at the end of the second intervention, Cabo Verde submitted another Letter of Intent reaffirming its commitment to the policy priorities of the PSI and formally request a one-year extension of the PSI syncing it to the third intervention. That is to say, during the period between 2006 and 2012, IMF was present in Cabo Verde providing policy support under the PSI

facility. The purpose of the extension, and third intervention (2010 -2012) included the management of domestic government debt, a further increase in international reserves, and structural reforms to improve debt management, rationalize tax incentives, enhance monetary operations, and strengthen the financial sector (Cabo Verde, 2010, p. 1).

Data trends show that, as compared to Gabon, Cape Verde's economy was quite resilient to the impact of the global financial crisis (Figure 6.5 – below). Despite the significant drop in GDP – from approximately 15% in 2007 to -1% in 2009 – percentage change in FDI and inflation was not as drastic. All three variables stabilized during the period after the financial crisis. It is important to note that a staff monitored program was not implemented prior to both PSI interventions. This could either be as a result of the limited duration between the first and second intervention and the extension of the second intervention into the third. Or the fact that staff monitoring programs are PSI's in nature and the interventions did not have financial attachments.

However, an important detail to note here is the fact that the economic challenges faced by the government of Cabo Verde during the period under discussion can be linked to the domestic policy capacity (credibility) rather than a need for monetary assistance although this was linked to Cabo Verde's inability to receive external debt relief under multilateral initiatives. For this reason, the government sought to gain further policy credibility through the policy support function of the IMF. In this sense, it is important to reflect on the role of the IMF in development assistance (see Chapter 3 section 3.5). Here, it was acknowledged that from the political economic perspective, through its surveillance activities, the justification for the IMF's interest in developing nations lies within its ability to provide investors and donors with important information on the political economy of these developing nations. This emphasizes the IMF's de facto role in constantly engaging in close discussions with national regimes to determine the state of their economies and the quality of their policies.

➢ *National Participation, Domestic Changes and Regional Governance*

Like the Gabonese experience, with regards to the type of policy transfer and national participatory interactions exhibited within IMF interventions in Cabo Verde, the phrase below was present in the first Letters of Intent while a similar phrase was also identified in the PSI Letters of Intent. Considering the language used, "…*will take any further measures that may prove necessary for this purpose"* a weighted bargain power relation becomes evident. Yet, this is also questionable given the fact that an IMF staff monitoring program or policy support instrument was implemented prior to the submission of the Letters of Intent for the first intervention, and the second and third interventions were PSIs. For this reason, a strong-arm form of coercive policy transfer is identified.

> *"In this context, the government will consult regularly with the IMF staff and keep it informed of the progress in the implementation of economic and social policies. The government believes that the policies and measures described in the attached memorandum are adequate to achieve its program objectives but will take any further measures that may prove necessary for this purpose."*
>
> *(Cabo Verde, 2002. p. 1; see also 2006. p. 1 & 2010. p. 1)*

It is also important to note the neo-liberal ideologies adopted in the form of privatization, economic deregulation and, trade and financial liberalization as well as governmental transparency and accountability (in public finance) which are observed in the case of Cabo Verde. For instance, in Cabo Verde (2002, p. 8) the government acknowledge that a major component of the program was the liberalization of external tariff regimes which, based on the combined impact of the introduction of the VAT and the lowering of tariff rates, was expected to be revenue neutral. In addition to this, state owned companies; the EMPA (the food import and distribution company) and TRANSCOR (an urban transport company) were slated to be liquidated in 2002. While SALMAR (a cold storage company) and CERIS (the brewery) were sold in late 2001. A second cold storage company (INTERBASE), the

shipyards (CABMAR/CABNAV), and the national airline (TACV) were made ready for privatization. Nevertheless, noticeable social policy measures were also reflected in the quotation below:

> *"The government is committed to improving the delivery of social services, including specific policies aimed at (i) increasing the poor's access to social services; (ii) containing the spread of HIV/AIDS; and (iii) strengthening food security programs. This will be accomplished, first, by undertaking an extensive review of current expenditure policies by July 2002 and developing a medium-term expenditure plan to protect these services." (Cabo Verde, 2002. p. 8)*

Also, in terms of policy alignment, IMF interventions were aligned to the implementation of a national Medium-Term Program. In addition to this, for the first PSI, amongst many other fiscal and structural reforms outlined in the Letter of Intent, the government of Cabo Verde undertook an array of reforms shaped in part by the Country Financial Accountability Assessment (CFAA) action plan, which was ongoing with the support of other international donors such as the World Bank, and the Netherlands. Additionally, other trade reforms were undertaken in the context of WTO accession. This demonstrates the assimilation and alignment of IMF interventions with domestic policy programs and other international involvements. Also, institutional changes were undertaken through the liberalization of the telecom market and the removal of administrative barriers to private sector initiatives, including the introduction of a modern information technology in the provision of public services under the e-government initiative.

➢ *Program Monitoring*

Similar to the Gabonese experience, with regards to the monitoring and implementation process, in the three letters of intent, progress was monitored on a quarterly bases using quantitative performance criteria and benchmarks. A focus was placed on government finances; and ceilings on

non-concessional external debt contracted amongst others for the PRGF. The PSI interventions were monitored through semi-annual reviews conducted by the IMF Executive Board. A PSI monitoring committee was also created at the national level to ensure effective program implementation. Likewise, program reviews for the three interventions were undertaken by IMF staff and the reports of these reviews are openly published on the IMF website.

➢ *Outcome*

From Figure 6.5 (below), observing the trends in percentage change in GDP, FDI and Inflation, it can be concluded that IMF interventions implemented in Cabo Verde during the period of analysis were to some extent successful. Despite fluctuations in economic indicators, social policy indicators are progressing slowly in a stable manner towards the right direction (Figure 6.6 – below). Trends in percentage change in GDP, FDI and inflation with IMF interventions shows an upward trend until the period of the global financial crisis. Focusing on the first intervention, asides a decrease in inflation in 2004, progress was observed in the long run. FDI increased significantly. Although GDP grew, it fluctuated overtime. Observably, economic performance in Cabo Verde took a downward turn during the second intervention and stabilised in the third intervention. Although these interventions did not involve financial assistance, the resilience of Cabo Verde's economy to the financial crisis can be correlated to the presence of the IMF and the economic undertakings (context) of Cabo Verde.

For trends in human development indicators (Figure 6.6 - below), IMF interventions in Cabo Verde do not seem to have an effect on LEB, IMR and BSS. Although the percentage of the population with least basic sanitation increased, there was no significant change in life expectancy at birth. Infant mortality ratios also dropped while unemployment rates fluctuated. Considering the anticipated economic effects of an IMF intervention, trends in unemployment rates suggest that IMF interventions in Cabo Verde did not necessarily produce any effects on employment.

Figure 6.5. Trends in GDP, FDI and Inflation, Cabo Verde
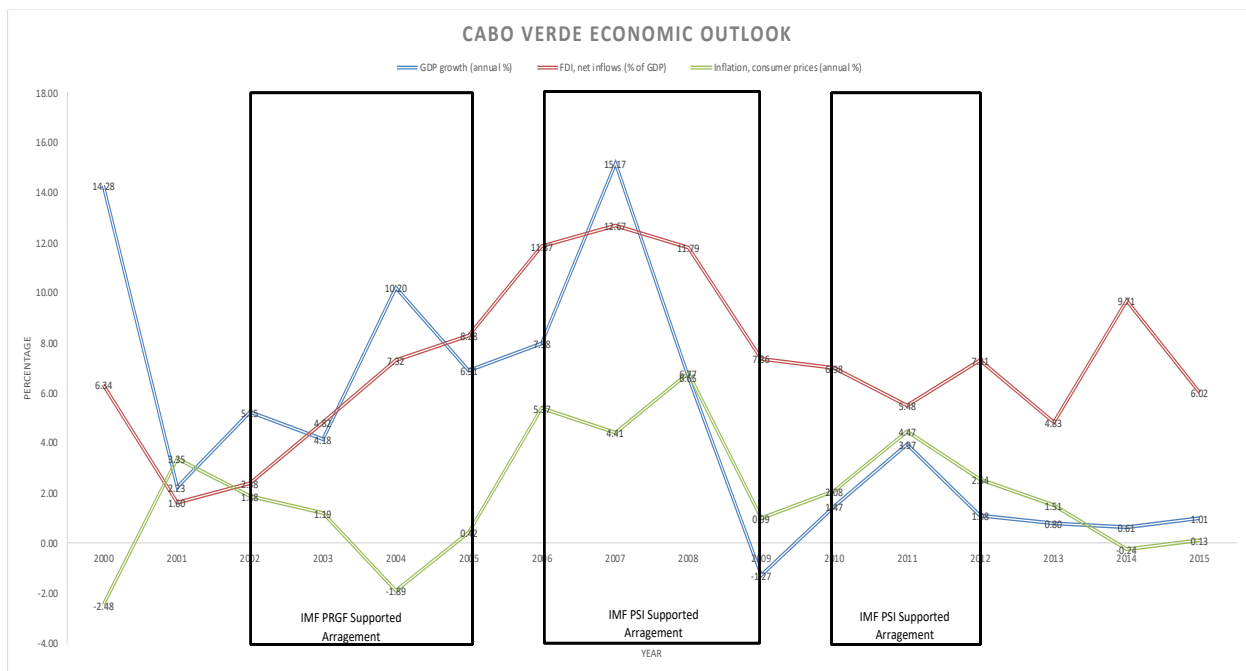
Figure 6.6. Trends Human Development Indicators, Cabo Verde
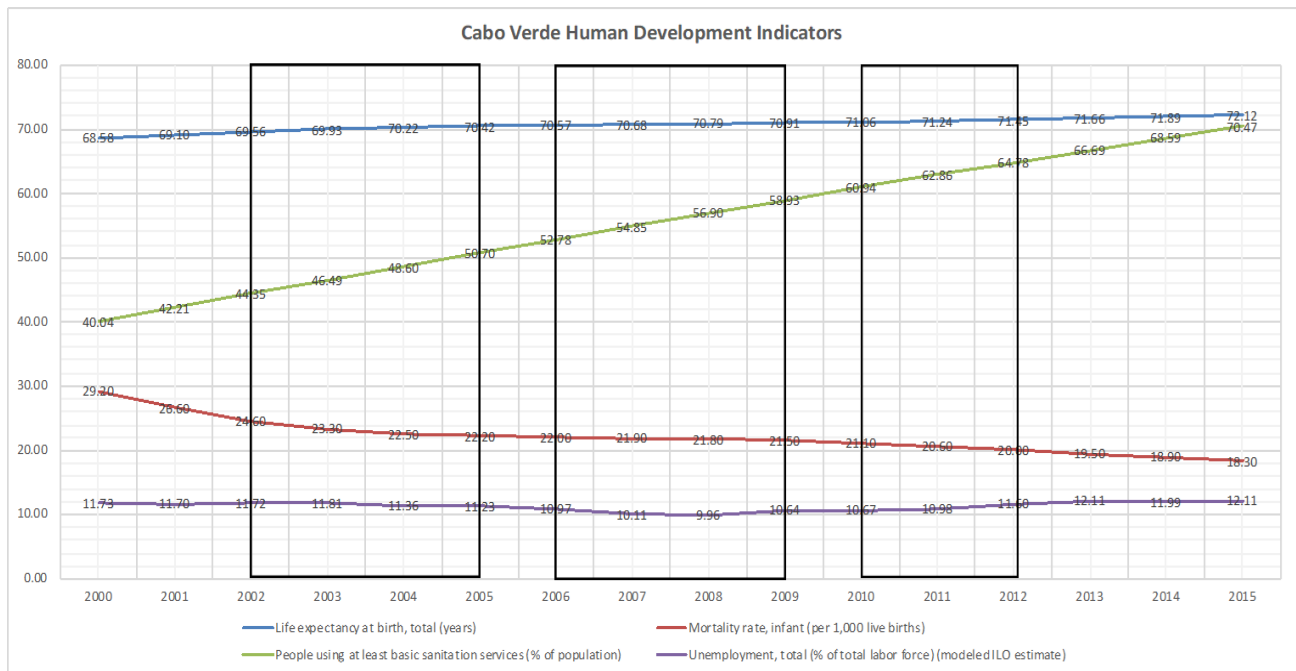
6.4. Cross-case Comparison of IMF Interventions

In the above sections, an attempt was made at realistically evaluating IMF interventions in Gabon and Cabo Verde by integrating the context, intervention context, national participation and

intervention outcomes using additional qualitative and quantitative data in the framework of earlier discussions made within this research (Chapter Two and Chapter Three). Based on the above analysis, an element of diversity in convergence is observed. What this means is, although the DPS results (Chapter Five) identified 'convergence in divergence' as Gabon and Cabo Verde emerged as the most socio-economically converged cases in the midst of some dissimilarities, the result of the qualitative case study analysis showed that both countries differ in terms of their domestic context and specificity of IMF interventions. However, one thing that comes through these cases is the relative stability and incremental progression of social policy indicators, while economic data fluctuates, and seems unstable.

In the context of economic undertakings, both Gabon and Cabo Verde sought to diversify their economy. However, their economic dependence differed in oil production and tourism respectively. For this reason, both cases were subjected to varying impacts from global economic trends. On one hand, in the Gabonese experience, it is observed that through a rigorous process of domestic policy surveillance prior to an intervention – as reflected in staff monitoring programs and regular reviews – the IMF tries to stimulate compatibility in its policy interventions. However, global trends and externalities may cause negative policy intervention outcomes. In addition to this, in the case of Gabon, the national policy capacity and economic undertakings have a significant effect on the success or otherwise of an IMF intervention.

On the other hand, with Cabo Verde a similar impact in global trends and externalities is seen to emerge although the actual country-specific impacts are closely associated with the domestic economic activities. Interestingly, Cabo Verde also demonstrated a comparatively high level of stability in GDP, FDI and Inflation as well as showing a comparatively better policy capacity although initially seeking financial assistance from the IMF and then proceeding with only technical and policy support for the subsequent interventions. Yet, for Gabon, although implementing three SBA's, it demonstrated higher levels of volatility in GDP, FDI and inflation. However, a look at the qualitative indicators show that the

policy capacity of Gabon was relatively worse than that of Cabo Verde. This is evident in the Freedom House[73] classification of Gabon and Cabo Verde as 'not free' and 'free' respectively. Additionally, the lack of freedom in a country could it be associated with greater levels of corruption. It is for this reason Transparency International (n.d) ranks Cabo Verde as 41/180 and Gabon as 123/180[74]. This reveals the interactions between the economic and political context, as well as the national policy responses and the type of IMF intervention sought.

Considering the results of the text-analysis, and upon reading through the IMF Letters of Intent for Gabon and Cabo Verde, one would acknowledge the economic and technical role of the IMF in terms of the discourse used in the Letters of Intent. Trends in the quantitative data, to a large extent, also highlight the supportive function of the IMF as a detailed look at trends in GDP, FDI and Inflation showed that, in some cases, an IMF intervention stabilises the economy. This was also evident in the DPS results. But a closer look at the influence of trends in global economic growth – as with the case of fluctuations in oil prices for Gabon the September 11 terror attack for Cabo Verde, and the impact of the global financial crisis for both cases – influences the outcome of an IMF intervention. Nevertheless, a combination of the quantitative analysis (as reflected in the DPS results) and qualitative data, does not necessarily provide overarching evidence of the IMFs adjunctive/supportive function. Yet, trends in annual percentage change in GDP, FDI and inflation may suggest an element of contingent causality as an IMF intervention may lead to variations in outcomes. For instance, although Gabon demonstrated a high level of economic instability, Figure 6.3 (above) showed that despite facing a period of instability, at the end of an IMF intervention a rise in GDP is observed as compared to the period prior to the intervention. Yet, an increase in percentage change in inflation can

---

[73]Freedom House. (n.d). Countries and Territories. Retrieved 9 September 2019, from https://freedomhouse.org/countries/freedom-world/scores

[74] These ranks reflect the 2019 ranks. Retrieved 9 September, from https://www.transparency.org/en/countries/gabon

also be observed during the end of the 2004 intervention, while in 2007 inflation is seen to have moderately stabilised. Likewise, FDI stabilised during the period of both interventions.

However, it can further be argued that the observance of multifinality can be linked to externalities. Gabon's monetary (inflation) undertakings are regulated by the Economic and Monetary Community of Central Africa (CEMAC) and GDP can be linked to oil price fluctuations. Also, complementary qualitative data obtained from the Worldwide Governance Indicators and the World Bank ease of doing business indicators both demonstrate a decline in the policy capacity of Gabon and Cabo Verde. This is evident especially in the case of Gabon. Interestingly, Cabo Verde implemented an IMF PSI intervention during the 2006 – 2012 period, yet indicators showed a reduction in rank from 78 for 2007 to 74 for 2012 for political stability and violence. But when one considers the fact that this had dropped from 90 to 78 between 2000 and 2007, and stabilised during the 2007 - 2012 period, this may suggest that the presence of the IMF has an effect on political stability and violence. Evidently, during this period, Cabo Verde rose in its ranks in the World Bank's ease of doing business indicators (from 132nd out of 178 countries for 2008 and 122nd out of 189 countries for the year 2015).

Likewise, it is important to recall earlier discussions in Chapter Three on the critiques of 'new' conditionalities and the IMF's mission creep (see Chapter Three Section 3.5). Here, the IMF was seen to have transitioned from operating in accordance to the 'doctrine of economic neutrality'[75], to a phase were conditionalities were in the form of project lending (Buira, 2002). However, in response to the changes in the geo-political and socioeconomic environment of the 1980's, IMF activities expanded. This led to the introduction of policy-based lending which empowered the IMF with the ability to encourage the removal or alteration of certain domestic policies that were considered essentially as policy-induced obstacles to socioeconomic growth and development. This expansion of IMF policy

---

[75] This suggests that although the IMF helped nations facing macroeconomic problems, "how the government brought down the deficit, by raising taxes or cutting expenditure, and the particular taxes or expenditure at issue [remained] the government's responsibility" (Polak, 1991, p.39)

conditionalities was parallel to the increasing influence of neo-liberal ideologies in the form of the Washington Consensus (Woods, 2006a; Carroll, 2010). However, validating its involvement in aiding developing nations achieve the Millennium Development Goals, the IMF announced that lending programmes would encourage 'policy space' insofar as national actors reach the standard that members' policies must meet in order to qualify for IMF support.

Although emphasizing the tailored approach to IMF interventions, the above analysis of the letters of intent suggests that the privatization, economic deregulation and, trade and financial liberalization across policy interventions still play a key role in IMF activities. This stresses the totalizing logic (Kontopoulos, 1993) of the IMF as its fundamental principles fall back to an overarching neoliberal approach to problem solving. In addition to this, from a detailed look at the letters of intent, one can also evidence the IMF to be a neoliberal institution with its association with economic liberalism and free markets. Additionally, the IMF seems to focus predominately on the economic undertakings of a country without considering the social policy consequences, (although attempting to complement economic strategies with positive social results). But it is important to note that the IMF was established to tackle economic and monetary issues, and not directly for the purpose of achieving social policy outcomes. A detailed look at trends in human development indicators also showed that IMF interventions do not necessarily have an impact on such indicators.

Focusing on the issue of policy ownership, in Chapter Three, it was identified that there has been an increasing emphasis on the notion of policy 'ownership' with issues regarding IMF interventions. Here, ownership was defined "as the extent to which a country is interested in pursuing reforms independently of any incentives provided by multilateral lenders" (Drazen, 2002. p. 37). In this sense, domestic policy actors are seen to be involved in the policy decision making process. This suggested an absorbed form of coercive policy transfer rather than a strong-armed approach (see section 2.3.4. on the dimensions of coercive policy transfer). Nevertheless, it was further pointed out that, the distinction between the absorbed and strong-arm coercive policy transfer perspectives

proposed by this research lies within the ability of policy actors to collectively undertake policy decision-making, as well as the power relations that exist during these policy decision-making processes. And, as such, the 'politics' of coercive policy transfer. During the document analysis, it was observed that in the case of both Gabon and Cabo Verde there was a statement in the Letters of Intent explicitly stating that the government was willing to take any further measures – in addition to those outlined in the Memorandum of Economic and Financial Policies – which the IMF deemed necessary to achieve the program objectives. This statement shows that although exhibiting elements of an absorbed approach to coercive policy transfer, however, considering the above findings regarding the totalizing logic (Kontopoulos, 1993) of the IMF, a strong-armed form of coercive policy transfer becomes evident.

In addition to the above, it is also important to highlight the systemic interactions between the global and domestic context. As highlighted in Figure 4.3 (see Chapter Four), a global contextual emulation of the CIMO configuration was used in the analysis of IMF interventions across a set of low-income and developing economies. Earlier discussions in Chapter Three examined the international dependence model of development. This emphasized that an analysis of the kind of interactions between nations and the flow of economic resources could be beneficial or detrimental to a country. Here, whatever the interventions and policies implemented, countries are to a large extent dependent on external marker factors (see for instance Oliveira & Frascaroli, 2020). For this reason, economic development should be studied from a broader spectrum, a world system perspective. Here, it was suggested that in order to understand the relations that exist between nations and development, one must take into consideration a global perspective (Wallerstein, 1979; 2004). The above results have demonstrated the linkage between globalization and domestic economic growth. Limited economic diversification in exports and the broader structure of the economy has been an underlying characteristic of both cases. Export structures were less diversified in both cases. Gabon was dependent on oil while Cabo Verde faced resource constraints. The case study analysis shows that export

diversification may promote economic growth and reduce economic volatility. Furthermore, the analysis demonstrates that, in some cases, national economic volatility and growth are highly intertwined with global sub-systemic spillovers. Additionally, a lack of diversification may also increase a countries exposure to adverse external shocks and macroeconomic instability. This illustrates the limited ability of IMF loans and interventions to impact country outcomes in a mechanistic way.

Part Three:

Developing a Policy Compatibility Model

Chapter Seven

Conclusion

7.1. Introduction

As reflected in the title of the thesis "Calibrating Coercive Policy Transfer: An Introduction to Policy Compatibility", this thesis seeks to conceptualize policy compatibility through the theoretical lens of policy transfer. Using the analytical framework discussed in Chapter 1, this section examines the conditions determining compatibility and attempts to develop a conceptual framework. This Chapter draws on discussions in Part One which explored the domestic policy implications of globalization undertaken within the framework of IMF interventions in Low Income and Developing Economies, specifically the set of discussions surrounding the use of policy transfer (Chapters Two and Three) and the findings identified in Chapters Five and Six. This chapter assesses the importance of institutional ideology and the conflicting influence of variations in domestic socioeconomic settings as well as national capacity. These provide an explanation for the disparities in IMF intervention outcomes and highlight the need for a compatibility framework.

7.2. Conditions Determining Compatibility

Evident within this research is the fact that global interactions have had an effect on nation states. The effects of these interactions on a nation's domestic undertakings are twofold. First, countries are becoming increasingly dependent on global conditions, thus, the behaviour of a country is sensitive to slight changes in its global environment or changes in the global policy agenda could lead to changes at national level (Dery, 1998; Howlett & Ramesh, 2002; Williams, 2009). The DPS results demonstrated this phenomenon, showing that countries exhibit sensitive dependence to global conditions, for instance the 2008 global financial crisis was observed to have had an effect on convergence. Additionally, the qualitative case study analysis in Chapter Six established that the economic undertakings of a country are sensitive to slight changes in global economic conditions. As

such, a slight change in the global context could lead to changes at the national level. Although these interactions do not have the same effects across cases, the DPS results showed that neighbours are likely to influence each other. Cases sharing close geographical proximity or with memberships to similar regional blocks demonstrated a higher level of convergence. Interestingly, Collier (2008) identifies a country's 'neighbourhood' as amongst a number of reasons for varying levels of economic growth. Thus, countries are more likely to be influenced by those they share a border with. In public policy analysis, the effects of these global interactions on nation states are more profound as this phenomenon could manifest in multiple variations. For instance, policy decisions made within dominant sovereign states or superpowers can have wide ranging effects at the national, international, and global spheres. Factors beyond the state are now influencing and shaping domestic policies as the viewpoints of policy-actors, especially in the context of globalization and cross-border interactions play an important role in the formulation, implementation, and evaluation of domestic public policy (Dolowitz & Marsh, 2000; Evans 2004; Hay, 2008).

Secondly, when global policy subsystems advocate adherence to a particular policy agenda, every member in agreement or otherwise is required to alter domestic policies to reflect subsystem changes. This illustrates how global policy decisions and ideologies influence policy implications at the domestic level. Here, global interactions are seen to have consequential implications on a country's internal policy situation. This can be observed when one considers the global influence of the IMF (as discussed in Chapter Three). It is also important to remember that the research scope was situated within the context of the Millennium Development Goals (MDGs). These goals were seen as a set of targets agreed by the international community to be reached within low income and emerging nations by 2015. Here, interactions at the global level are seen to have convergent effects on smaller simple settings (i.e. countries). As reflected in the DPS results, cases demonstrated a greater level of convergence when considering human development indicators as compared to macroeconomic variables (see Chapter Five). This was also evident in the incremental progress of social policy

indicators in Chapter Six. When considering the impact of IMF interventions on convergence, it became evident that IMF interventions can sometimes perform a supportive function. However, a closer look at the dynamic interactions within the most converged cases showed that IMF interventions did not have a significant impact on certain human development indicators. And, an analysis of the economic effects of IMF interventions produced some diverse and complex results. Nevertheless, the policy impact of the IMF subsystem is evident when considering its approach to policy transfer and the domestic conditions.

➢ The Role of Policy Transfer and Subsystem Ideology in Determining Compatibility

As this research has shown, policy conditionalities play a key role in IMF interventions. These conditionalities are coercive in nature. A closer look at the coercive approach to policy transfer shows that the IMF imposes policy agendas with little national democratic or sovereignty considerations. Although national policy actors are seen to submit a letter of Intent outlining policies to be undertaken if funds are released, the content analysis of these documents demonstrates that the policies were similar in their ideological substance and in the policies proposed by applicant countries (see discussions in Chapter Six). Considering the complex interactions which transpire between the IMF and national policy actors, this similarity in ideological content can be explained from the following.

First, the similarities in the Letters of Intent highlight the fact that interactions between nations are more likely to be influenced by local relations (Cilliers, 1998). Here, one can think of local system relations being the reality that neighbours are extremely important. The literature suggests that countries are now seen to transfer successful policies implemented elsewhere (Dolowitz & Marsh, 2000; Evans, 2004) and learn lessons from unsuccessful policies (Rose, 1991; 2004). This is evident in the DPS results as countries sharing geographical borders were more likely to cluster in close proximity. This has led to a convergence in one or more characteristics of a certain policy (e.g. policy objectives, policy instruments, policy settings) across a given set of political jurisdictions (supranational institutions, states, regions, local authorities) over a given period of time (Knill, 2005).

For this reason, based on 'positive feedback', interactions like the type of requests made to the IMF are more likely to be transferred across countries facing similar pressures. Thus, countries may copy policy ideas, including approaches negotiated with monetary lenders like the IMF.

For instance, during the document analysis, it was observed that in the case of both Gabon and Cabo Verde a similar package of macroeconomic policies was outlined in the Letters of Intent. The Letters of Intent also explicitly state that the governments were willing to take any further measures – in addition to those outlined in the Memorandum of Economic and Financial Policies – which the IMF deemed necessary to achieve the program objectives. Such similarities in policy interventions and negotiation statements outlined in the policy documents may be used to check for feedback and to create what Meadows (2009) calls 'balancing feedback'. That is to say, for instance, if Gabon was successful in obtaining assistance from the IMF based on the Letters of Intent it submitted, then Cabo Verde could copy aspects of this and submit a similar letter as the positive feedback received in the Gabonese case is likely to result in a similar outcome. IMF interventions might be sometimes thought of in this way. Likewise, the implementation of a staff monitored program prior to the submission of a Letter of Intent is likely to influence national policy approaches given that, during this period, IMF advisors recommend policy interventions to stabilize the economy and facilitate the release of funds.

Secondly, it is important to recognise the history of the IMF and its behaviours, as nations are also influenced by past interactions (Cilliers, 1998). March & Olsen (1989) have shown that institutions are identified by their various characteristics, as the members of these institutions seem to share a common purpose, the same code of conduct, norms, etc. which smoothens or limits interactions. Daugbjerg & Swinbank (2015) also pointed out that the institutional values of external policy-making bodies may be in conflict with the values of the state. As outlined in Chapter Two, the public policy process is complex at its domestic level. It involves the continuous analysis and evaluation of not only emerging policies but also pre-existing policies to ensure their effectiveness. This is reflected in the portrayal of the public policy process as a web of decisions (Easton, 1953). The

complex and rigid nature of this process seeks to ensure that national policies are aimed at combatting societal issues and reflect the domestic culture, customs, and values of implementing nations. Similarly, global institutions like the IMF would equally have evolving institutional values. These values are normally embedded implicitly within the purpose for which they were established. Consequently, these values are reflected in the policies they formulate and could offer conflicting ideologies with the domestic intrinsic values of policies within the implementing state (Stiglitz, 2007). The content analysis has stressed the 'totalizing logic' (Kontopoulos, 1993) of the IMF as its fundamental principles fall back to an overarching neoliberal approach to problem solving (Kelton, 2020). As such, the institutional ideology (logic) of the IMF can conflict with the domestic (national) ideology.

Focusing on the fundamental purpose and function of the IMF. That is to say, a multilateral money lender to governments experiencing currency instabilities as well as stimulating foreign direct investment (De Vries, 1987; Feldstein, 1998). Institutions like the IMF are normally denoted by path dependency which depicts the trajectory of institutional development (Liew, 2005; Stiglitz, 2007; Daugbjerg & Swinbank, 2015). The IMF was set up in July 1944. While its purpose was to assist with the rebuilding of shattered post-war economies and to promote international economic collaborations (see section 3.4 of Chapter 3), it has been criticized for exhibiting path dependency with the implementation of 'one size fits all' policies (Stiglitz, 2007). As the context analysis has shown, IMF policies are ideologically orientated. It is for this reason the IMF is seen to focus predominately on the economic undertakings of a country. As such, nations approach the IMF with reservations relating to its function, that is, the restoration or sustainability of FDI viability and macroeconomic stability while setting the stage for sustained, high-quality growth and, in low-income countries, reducing poverty. That is not to say alternative approaches to the eradication of currency instability and balance of payment deficits do not exist. But, as reflected in Chapter Three, the expansion of IMF policy conditionalities was parallel to the increasing influence of neoliberal ideologies as development

financial institutions adopted aspects of this agenda to their conditionalities. These conditionalities were collectively referred to as the Washington Consensus (Summers and Pritchett, 1993; Toye, 1994; Babb & Buira, 2005). Although the IMF claims that lending programmes now encourage 'policy space' to authorities within recipient nations, it is insofar as these recipient nations reach the standards that members' policies must meet in order to qualify for IMF support (IMF, 2004). In light of this, it is based on this ideology that countries structure their Letters of Intent when approaching the IMF (Vreeland, 2007; Koenig-Archibugi, 2010).

Significantly, as reflected in the documentary analysis, IMF monitored programs are sometimes implemented within member nations before a Letter of Intent is submitted. As noted, IMF monitoring programs are part of its policy support instrument. They offer member nations a tool that enables them to secure policy advice and support. This instrument helps countries design economic programs that deliver clear signals to donors. Here, interactions between actors can have an influence on the content of conditionalities being transferred. It can be assumed that the implementation of a monitoring program makes way for delayed effects, as an ease of adaptation is implemented, thereby stimulating effective policy transplantation. Nevertheless, from this, it becomes evident that during this ease of adaptation, national actors are more likely to emulate the ongoing policy advice given to them by IMF staff, especially given the discussion on the institutional role of the IMF (see section 3.5. Chapter Three).

➢ Domestic Factors Influencing Compatibility

Demonstrating the utilization of conditionalities alongside its lending activities, it is important to acknowledge discussions in Chapter Three on the complexities and contextualities of national policies within international policy frameworks. Scholars have argued that the policies of developing nations are inconsistent with development and as such the need for ex ante policies to be implemented before loans are disbursed (Sachs, 1989; Diwan & Rodrik, 1992). Pronk (2001) argues that quality is

the only thing that matters, be it quality in the amount of aid, quality in the policies attached to aid, or quality in the policies of the recipient nations. The underlining focus of discussion relevant to this research is that, depending on how well these conditionalities fit with the domestic settings of implementing states, the implementation of coercively transferred policies may cause alterations in, or ignore, the domestic structure of an implementing nation and, in consequence, result in unintended policy outcomes. This raises questions regarding the compatibility of such conditionalities as external policies may emerge as misfits with the domestic policy environment. Jørgensen, Pollack & Rosamond (2007) identified that goodness of fit can be assessed from two viewpoints. Firstly, policy misfit, where domestic policies are contradictory to externally coerced policies (Börzel, & Risse, 2000; Börzel, & Risse, 2003). Secondly, externally coerced policies may conflict with institutional structures, causing an institutional misfit.

Policy misfit is observed in the qualitative analysis of IMF interventions in Gabon and Cabo Verde. For instance, in the case of Gabon, it was observed that the implementation of a staff monitoring program prior to the second intervention can be considered as an ease of adaptation and a measure to ensure policy alignment. This non-financial instrument helps countries design effective economic programs that deliver clear signals to donors, multilateral development banks, and markets of the Fund's endorsement of the strength of a nation's policy capacity. For this reason, in this research, it is assumed that the implementation of a staff monitoring program demonstrates a level of policy misfit as national policies are aligned to those of the IMF in order to stimulate effective policy transplantation. Here, if a good fit was observed, there would be no need to implement an ease of adaptation (staff monitored program) before the disbursement of loans as the policy capacity (facilitating factor) of Gabon would be considered as adequate.

Likewise, domestic programs such as the Medium-Term Adjustment Program implemented in 2003 (Gabon, 2004, p. 1) and the establishment of an oil revenue monitoring committee (COSUREP); the Large Taxpayer Unit (LTU); the National Commission Against Illicit Enrichment (CNLCEI); as

well as the 'enhanced role' given to the Audit Court, the highest fiscal oversight agency (Gabon, 2007, p. 9) amongst others show elements of institutional reconfiguration. These constitute institutional changes (calibrations) implemented within a country needed to facilitate the successful monitoring and implementation of the IMF programs. These policies and institutional changes may contradict the domestic way of doing things or ignore certain contextual barriers. In this sense, 'misfit' occurs when donor intentions (ideologies) are not in alignment with those of the recipient, or when the domestic policy capacity needed to ensure the effective utilization of monetary assistance is incompatible with the requirements of the donor. For this reason, a discussion on the domestic factors influencing compatibility would consider the context of policy intervention.

Discussions in Chapter Three demonstrated that development assistance interventions can only be beneficial if the recipient nation provides an enabling policy environment (Collier & Dollar, 2001; Lloyd et. al., 2001; Islam, 2003; McGillivray, 2003). Here, the effectiveness of development assistance is dependent on the policy environment (Burnside & Dollar, 2000). Scholars like Hansen and Tarp (2000; 2001), Lensink and White (2000), Lu and Ram (2001) argued that development assistance had shown substantial positive outcomes on economic growth irrespective of the policy environment of recipient nations. Ehrenpreis and Isenman (2003) found that aid had positive impacts on the economic growth of recipient nations. Yet, further research conducted by McGillivray (2003) and Kosack (2003) showed that although development assistance had positive impacts on socioeconomic growth, impact became higher in economies that were democratic and had a stable political system. Here, McGillivray & Morrissey (2000) and Burnside & Dollar (1996; 2000) argued that the absorption rate of aid is conditional on domestic factors such as human capital, the political environment, institutional infrastructure, policy capacities and the microeconomic policy environment of recipient nations. Applying these considerations to the case study (Gabon and Cabo Verde), it was evident that the absorption rate of aid is influenced by domestic factors. However, country interactions with the global market place also affects development interventions (Wallerstein, 2004; Kelton, 2020).

Discussions on the theories of socioeconomic development and growth highlighted the features of the various degrees of development based on a country's socioeconomic undertakings (see section 3.2. of Chapter Three). Although, similarities in above threshold scores for human development indicators (as reflected in the DPS results) may show that, within the methodological scope of this research, both cases exhibit high levels of human development, a closer look at their economic undertakings shows that Cabo Verde would be classified as a 'core' country and Gabon a 'periphery' economy (using the World-System Theory, see section 3.2 of Chapter Three). Here, core nations are seen to import raw materials, export manufactured goods, and have a high investment (ease of doing business index and FDI). Periphery nations export raw materials and import manufactured goods. This is also evident when looking at their political settings. Core nations are often seen to have a democratic system of governance while the periphery nations are more likely to have authoritarian governments.

As discussed, Cabo Verde remains one of Africa's most democratic governments. Likewise, utilizing the policy capacity indicators[76], Cabo Verde performed comparatively better than Gabon. Additionally, a look at the impact of global trends also demonstrated the economic volatility of both countries as well as their resistance to external shocks. Although the cluster analysis results showed that both cases converged during the periods before and after the financial crisis, the QCA results in Chapter Five also demonstrated changes in the convergent factors (prime implicants). Data trends in Chapter Six (Figure 6.3 and Figure 6.5) also show variations in the vulnerability of each country to economic shock. Trends in GDP showed higher levels of volatility for Gabon as compared to Cabo Verde. Both cases also had their monetary policies pegged to regional blocs and suffered from a decline in foreign direct investment. These trends also highlighted the resilience of the Cabo Verde economy while emphasising the volatility of the Gabonese economy. For this reason, an implementation of

---

[76] The Worldwide Governance Indicators; The World Bank Ease of Doing Business Indicators; and The Freedom House Classification

similar policy interventions governed predominately by neoliberal ideologies are unlikely to produce the same outcome.

In addition to this, the realistic methodological approach applied within this thesis (see section 4.2. Chapter 4) stressed that unlike orthodox scientific research that can be tried and tested in a laboratory - with an experimental and a controlled group, the complexity of social systems does not permit social scientists to effectively partake in experimental approaches. Here, a social system is described as the patterns of relationships that make up a rational whole that occurs between individuals, groups and institutions (Talcott, 2013). Critical social science discourse has however shown that these patterns of relationships are highly diverse and case specific. As such, it is evidently impossible for a social science researcher to have a controlled and experimental group that are similar and share exactly the same or similar patterns to make inferences that, based on what worked for one group should seemingly work for another. Given the 'totalizing logic' (Kontopoulos, 1993) applied by the IMF in its approach to conditionalities, it is evident from a detailed analysis of both cases that there are clear disparities in the economic undertaking of a country as well as its vulnerability to externalities. It is for this reason that conditionalities governed by an ideological set of principles are unlikely to produce the same outcome, be it positive or negative.

Likewise, the literature on policy transfer suggests that the mode of transfer is dependent on similarities. This could be similarities between the place of policy origination and destination as well as similarities in the problems they face (see Chapter Two). Here, a transferred policy is likely to be more compatible with the domestic settings if similarities are high. This research has demonstrated that although similarities may exist at the macro level (as with the DPS results for Gabon and Cabo Verde), a more detailed evaluation of national activities could demonstrate diversity in convergence. For instance, from the DPS results, Gabon and Cabo Verde demonstrated economic similarities in above threshold score for gross domestic product (deflator index) and below threshold scores for net official development assistance and official aid received for the year 2000; and above threshold scores

for Foreign Direct Investment, net inflows; and general government revenue for the year 2015. In addition to this, similarities in below threshold scores for rural population for the year 2000 and 2008 as well as above threshold score for net migration for the years 2008 and 2015 were also observed.

Both cases also showed strong similarities in human development indicators as they demonstrated a convergence in above threshold scores for: access to clean fuels and technologies for cooking; access to electricity; current health expenditure per capita; domestic general government health expenditure; life expectancy at birth; out-of-pocket expenditure per capita; people using at least basic drinking water services; and people using at least basic sanitation services; across the three time periods. Yet, the qualitative analysis undertaken in Chapter Six showed that although both countries shared similar socioeconomic convergent patterns, and as such, similar socioeconomic problems, the details of these problems varied on the basis of their context. Here, it was observed that although both nations acknowledged the need for domestic economic diversification, this need was based on the specificity of their economic activities.

7.3. The International Monetary Fund and 'Goodness of Fit': Towards a Conceptual Framework

In light of the above discussions, the threat to the dominance of domestic policy actors and national policy-making authorities posed by inappropriate assertion of authority by global institutions like the IMF and their ideological dispositions was demonstrated by this thesis. This raises fundamental questions that have not been explicitly considered in public policy analysis and international relations. That is, what is Policy Compatibility? And, how can compatibility be assessed when policies are coercively transferred? These questions must be considered in terms of the various forms of policy transfer interventions and the unique context of implementation.

Policy compatibility attempts to synthesize aspects of both the intervention context and mechanism, to test for goodness of fit (Figure 7.1 - below). Utilizing the 'top-down' sub-systemic perspective to the analysis of the policy effects of globalization (Stone, 2008; Koenig-Archibugi, 2010), this research evidences the proposal by Moran & Wood (1996). They define internationalization

as "a process through which the authority and autonomy of the state is challenged or supplanted by structures, process or policy developments which cut across national boundaries" (p. 125). Here, internationalization is understood to be the prioritization of the global (sub-system) policy interests over those based on national socioeconomic conditions and policy ideologies (see Chapter One). For this reason, given that coercive policy transfer was seen to be manifest within the European process (see Chapter Two), this research favors a similar conceptual approach to the analysis of the domestic impacts of IMF interventions. Exploiting scholarly works on the domestic impact of Europeanization (Kohler-Koch, 1998; Kohler-Koch & Eising, 1999; Radaellli, 2000; Cowles et al., 2001; Featherstone & Radaelli, 2003), this research uses the distinction between policies, politics and polity to ascertain the three dimensions of compatibility (Table 7.1).

Table 7.1. Domestic Effects of Internationalization

Internationalization Processes, Policies, and Institutions		
Policies	*Politics*	*Polity*
- Standards - Instruments - Problem-solving approaches - Policy narratives and discourses	Processes of - Interest formation - Interest aggregation - Interest representation - Public discourses	- Political institution - Intergovernmental relations - Judicial structures - Public administration - State traditions - Economic institutions - State-society relations - Collective identities

Discussions in Chapter One and Chapter Two have emphasized the domestic impacts of globalization while Chapter Three stressed the role of the IMF within this discourse. Clearly, whether focus is placed on policy, politics or polity, the general consensus is that globalization has varying domestic impacts (Lopez & Hathie, 1998; Easterly, 2000; Skogstad, 2000; Easterly, 2002; Hay, 2008; Shah, 2013). Therefore, the issue is not whether internationalization matters but how it matters. This thesis focused on the causal mechanisms through which internationalization operates, thus through the process of policy transfer, placing emphasis on the IMF. The overarching conceptual framework, discussed in Chapter Four, applied within this thesis conceptualized the possible dynamics and forms

of external policy effects on convergence (see Figure 4.2 in Chapter Four). While placing emphasis on the use of coercive policy transfer by the IMF to stimulate convergence, it was assumed that IMF interventions are likely to result in domestic changes. That is to say, it may be perceived that there is some form of 'misfit' between IMF interventions and implementation settings. Focusing on the longitudinal trends in case patterns; variable trends; and a combination of stability in case interactions and variable stability, the results of the DPS has shown a general sense of policy misfit evident in the lack of stable dynamics – that is, a lack of stability across both variable and case patterns – observed across both LAC and SSA cases. In addition to this, there was no consistent configuration over time for IMF interventions impacting GDP and LEB, and also, its relationship with FDI and IACP% was unclear (see Chapter Five). This calls into question whether similar and universal IMF approaches will work in an unstable global economic environment with a diversity of countries.

Figure 7.1. Conceptualizing Policy Compatibility
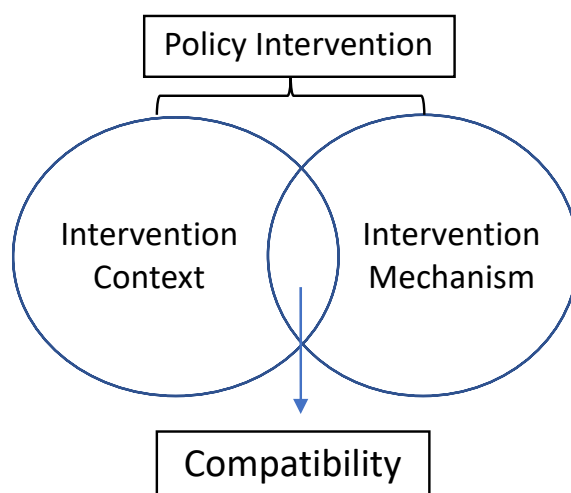
When considering the extent of policy misfit, which places focus on the absorptive capacity and degree of domestic policy calibration through an ease of adaptation within implementing states (see Figure 4.2 in Chapter Five), it was assumed that, on one hand, if the misfit is positive (i.e. IMF policy conditionalities are appropriate), case instability would be observed as variable trends remain stable while country patterns are unstable. This was also revealed when considering socioeconomic

clustering. It was also argued that, on the other hand, if the degree of misfit is negative, two possible outcomes may emerge. That is, if sustained convergence is observed (i.e. policy misfit is negative and low), policy conditionalities are considered to lead to convergence in either variable trends or case patterns. Likewise, if conditionalities are considered to be inappropriate (i.e. policy misfit is negative and high), and as such systemic instability becomes evident. Here, both variable trends and case patterns remain unstable or negatively stable across the period of analysis. Based on this, the overall DPS findings for both LAC and SSA cases suggests a high level of systemic instability – a high negative policy misfit – for socioeconomic convergence. Only Gabon and Cabo Verde demonstrated sustained convergence.

However, when macroeconomic and social policy clustering are considered separately, examples of sustained convergence become apparent. For instance, with LAC cases, when considering social policy clustering Nicaragua and Haiti; Paraguay, Honduras, Guatemala and Bolivia; and Dominican Republic and Ecuador remain converged over the period under analysis (see Table 5.48 in Chapter Five). Also, Argentina and Uruguay; Peru and Colombia; El Salvador and Paraguay; Nicaragua and Honduras; Costa Rica, Dominican Republic and Guatemala; Antigua and Barbuda, and Grenada maintain cluster pairings economically (see Table 5.49 in Chapter Five). Likewise, with SSA cases, Uganda and Kenya; Guinea-Bissau and Benin; Gabon, Seychelles, Sao Tome and Principe, Liberia and Cabo Verde remain economically converged over the period under analysis (see Table 5.50 in Chapter Five) while Ghana and Kenya; Gabon and Cabo Verde; Chad and Niger; Liberia and Benin amongst others maintain cluster pairings across social policy variables (see Table 5.51 in Chapter Five). Here, the sustained convergence exhibited across these cases demonstrated a low degree of misfit.

When observing the longitudinal trends in variable stability the dynamic interactions become more complex as stability may occur across convergent cases in some variables while other variables exhibit threshold instability. This demonstrates elements of multifinality as an IMF intervention may

lead to variations in convergent outcomes. Here, although country groups converge, they converge based on different variable scores. For instance, despite experiencing the same number of IMF interventions and demonstrating sustained economic convergence, Nicaragua and Haiti demonstrated stability in below threshold scores for LEB although instability in variable threshold scores can be observed when considering IMF specialized areas (see Table 5.48 in Chapter Five). Likewise, across SSA cases, when considering case dynamics across social policy cluster convergence (see Table 5.48 in Chapter Five), a high degree of low negative misfit (as reflected in the overall conceptual framework Figure 4.2. i.e. inopportune conditionalities/stable case dynamics) can be observed. In this sense, the goodness of fit between an IMF intervention and the domestic settings determines the degree of adaptation pressures caused by the complex interactions between an IMF intervention and the domestic settings (Figure 4.2.). Thus, the higher the adaptation pressures, the lower the compatibility between an IMF intervention and domestic policies, polity and politics (Table 7.1).

This suggestion holds that, if an IMF intervention fits perfectly well with the domestic settings of implementing states, then there is no need for domestic changes and conditionalities. For instance, the IMF claims that the principal aim of an intervention is to restore or sustain balance-of-payments viability and macroeconomic stability while setting the stage for sustained, high-quality growth and, in low-income countries, reducing poverty. For this reason, conditionalities are applied to adjust a country's economic policies so as to overcome the problems that led it to seek financial aid. These conditionalities also serve to ensure that the country will be able to repay the loan (see discussions in Chapter Three). However, if these conditionalities were collectively understood to be already policy compatible (based on the conceptual framework), as seen in the case of Gabon and Cabo Verde, and as such effectively implemented, there would be no need to raise issues of compliance or effective implementation through close program monitoring. Nor would the IMF provide constraints to domestic actors that would lead to the redistribution of domestic resources – through the privatization and liquidation of state-owned entities (as demonstrated in the qualitative case study of IMF

interventions in Gabon and Cabo Verde. See discussions in Chapter Six). Likewise, considering the probable outcome effect, that is to say, the impact the total number of IMF interventions could have had on cross case convergence, the DPS results also demonstrated that IMF interventions perform only a partial supportive function, rather than a mechanistic effect on outcome.

Viewed this way, the misfit argument and resulting adaptation pressures provides a starting point for the analysis of compatibility. Evidently, adaptation pressures materialize when the emerging IMF 'polity' embodied with ideological structures of imposing decision-making clash with national structures of policy-making. For this reason, implementing nations need to calibrate their domestic settings so as to absorb IMF directives. Particularly, an analysis of policy compatibility based on the unique context of implementation may differ in at least two ways. First, the contextual purpose of a policy transfer intervention could be seen as a result of similarities in socioeconomic problems and/or strong similarities in contextual settings. These similarities are evident in the policies, politics and polity of the country of policy origination and that of the implementing nation. Secondly, the importance of the policy capacity of an implementing state is much more complex when considering global institutions in at least three ways. Here, compatibility between the intervention mechanism, and the implementation context must also exist at least either at the polity; politics; and policy level (as reflected in Figure 7.2 below). In this sense, an analysis of compatibility across policy interventions would consider the intervention context as well as the type of intervention rather than considering each in isolation.

The intervention context describes the exact context or conditions within which an intervention is being implemented as well as the method of implementation. These features are also essential in evaluating which interventions produced which outcome and why. Likewise, the mechanism demonstrates the factors and methods used. These mechanisms may lead to a particular outcome pattern within a given context. In this sense, it is argued here that in assessing coercive policy transfer feedback responses, there is a need to consider not just the facilitating factors – as reflected in

similarities in origination and destination settings – and/or the societal problem the intervention seeks to address, but also, the policy transfer mechanism and its overarching policy, polity and politics. In policy analysis, this illustrates that the exchanges between the intervention context and the outcomes are triggered by the mechanism. Policy compatibility becomes more complex when considering global policy interactions, in that it has many more pieces. As demonstrated in this research, these could include ideological interests, economic volatility, and global systemic spill overs amongst others.

Figure 7.2. Conceptualizing IMF Policy Compatibility
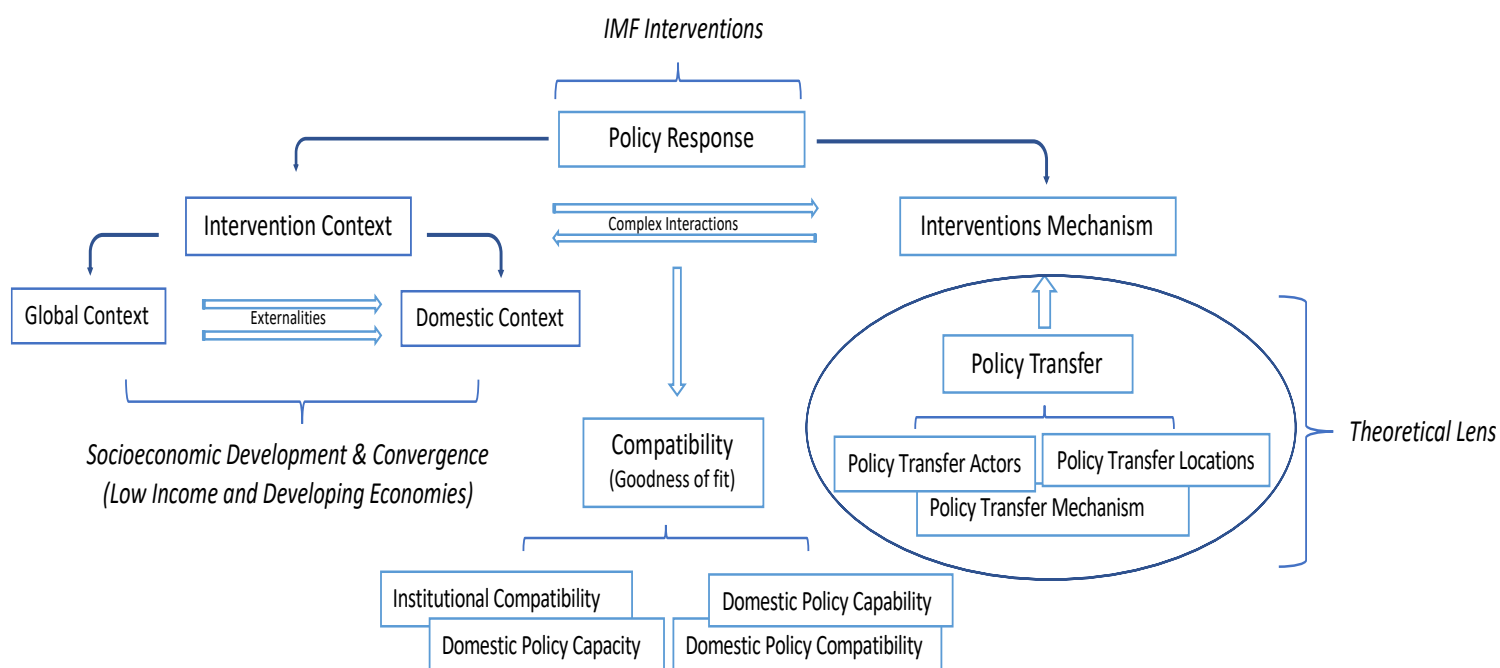
In this research, a sub-systemic layer was added which emphasised the complexity in policy analysis when considering interactions at the global level. As highlighted in Figure 7.2, using the IMF as a unit of analysis, this research sought to test for policy compatibility in IMF policy interventions. For the intervention context, focus was placed on the interactions between the domestic context and the global context. The findings showed that global externalities have varying domestic impacts ranging from systemic spill overs to systemic perturbations which may lead to unprecedented outcomes (Williams, 2009). Systemic spill overs occur when policy actions or events within one system affects another. Or, when policy issues surpass the domains of one system causing a need for

cross-system interactions. Here, events in heterogenous policy systems exceed their confines and disrupt the existing structures and behavior of other policy systems (Haas, 1976; Dery, 1998; Howlett & Ramesh, 2002; Williams, 2009). This was evident in the case of fluctuations in oil prices for Gabon, the September 11 terror attack for Cabo Verde, and the impact of the global financial crisis for both cases as well as the influences these global events had on the outcome of an IMF intervention.

Equally, systemic perturbations occur when external events – thus events external to the subsystem – draw new attention to a policy area (Sabatier & Weible, 2007). Here, focus is placed on the impact or influence of external events on conventional policy practices (Howlett & Ramesh, 2002). Sabatier argued that these "changes in the core aspects of a policy are usually the result of perturbations in non-cognitive factors external to the system such as macro-economic conditions or the rise of a new systemic governing coalition" (Sabatier, 1988. p. 134). These external factors include disasters like wars, and financial crisis; and natural disasters like floods and hurricanes; as well as changes in political regimes to list a few. Williams (2009) and Howlett & Ramesh (2002) note that these crises offer enhanced opportunities to policymakers. This is because they are required to look beyond routine and there is often not the time for extensive deliberations on the policy issue or for opposition to change to build up. In this sense, although facing similarities in their challenges in climbing up the ladder of development, low income and developing economies vary in the extent to which global challenges affect them domestically. This was emphasised in the results of the cluster analysis which factored in the 2008 financial crisis in the scope of the millennium development goals. And, the QCA results highlighted the varying policy outcomes. A detailed case study analysis also provided elements of distinctive global influences on the domestic economic and institutional policy compatibility, and economic capabilities of cases.

Considering the complexity in public policy-making, focusing on the intervention mechanism, this thesis applied the theory of policy transfer in the analysis of IMF conditionalities. Emphasis was placed on the policy transfer location (global sub-system), the policy transfer mechanism (coercive

policy transfer) and the policy transfer actor (IMF). Here, it was observed that through the process of policy transfer the IMF can be seen as a stimulus for neoliberal ideologies. However, the domestic settings of policy implementation may affect the policy intervention outcome. As the qualitative analysis of IMF interventions in Gabon and Cabo Verde demonstrated (see Chapter Six), the main impact on the success or failure of an IMF intervention was dependent on interactions within the intervention context and its global environment.

Nevertheless, beyond the ongoing global penetrations and systemic complexity which may push nations beyond their adaptive capacity, this research has shown that the IMF's retreat to classical economics (neoliberalism) seems to be a common response (Stiglitz, 2007). Unfortunately, such responses are dysfunctional in some cases. This is because advocating for a similar package of policy interventions across a wide range of varying cases is necessarily a simplification of reality, and in times of rapid economic change and complex global interactions are precisely when one cannot simplify reality, for one cannot know what elements of the chaotic real world can safely be ignored, and which are critical. A 'one size fits all' economic approach to problem solving is especially maladaptive in periods of rapid global economic changes. It can also be assumed that it is for this reason academic research has identified variations in the impacts of IMF interventions as interventions may be compatible in some cases and/or during a particular time period and incompatible in others.

7.4. Applicability of Policy Compatibility

Policy compatibility attempts to synthesize policy interventions with the context within which they are being implemented. While taking into consideration externalities, policy compatibility provides an effective way to assess the best policy intervention for a particular context. Policy transfer is explained as "the process in which knowledge about policies, administrative arrangements, institutions etc. in one time and/or place is used in the development of policies, administrative arrangements, and institutions in another time and/or place" (Dolowitz & Marsh,1996, p.343). For this reason, taking into consideration the various geographical locations of policy transfer, as highlighted

in Figure 2.2 (section 2.2. Chapter Two), policy compatibility is applicable at every level. In order to arrive at effective policy outcomes, an analysis of compatibility can be applied to the implementation of policies within and across the sub-national (county), cross-national (national), regional (as with the case of regional blocks), and international (global) levels.

Although the analysis undertaken within this thesis places emphasis on the coercive use of policy transfer, it is important to note that, academic scholarship has found that even when policies are transferred voluntarily, they sometimes produce some negative effects (May, 1992; Stone, 2001; James, & Lodge, 2003; Marsh, & Sharman, 2009). For this reason, an understanding of the interception between the location of policy transfer, the policy being transferred, and the location of policy implementation becomes crucial in preventing policy failure. This is also applicable in the evaluation of public policy. Here, while policy evaluators may focus on certain conditions, an application of the policy compatibility framework provides a systemic viewpoint, as it attempts to synthesize the dynamic interactions in undertaking public policy, making it also applicable at all sectors of public policy and within any given settings.

7.5. Concluding Remarks

Using a synthesis of a 'state-centric' and 'polycentric' perspective, this thesis adopted a realistic configurational methodological approach to model a compatibility framework by integrating policy intervention mechanisms and their intervention context so as to realistically assess their outcomes. With the purpose of addressing the research aims stated in Chapter One, as highlighted in Chapter Two, this research has shown that through the process of policy transfer, globalization can be seen as the driving force of public policy learning. Although the public policy-making process in its generic sense is noticeably complex and multi-layered, policy actors continuously search for solutions domestically as well as externally. Through the process of globalization, interactions between nation states has thereby provided a collaborative approach to problem solving. This has led to some similarity (convergence). Yet, cross-national integrations have eventually produced some unforeseen

consequences as nation states are seen to be reconfiguring to changes at the global level (**A1**). For this reason, Chapter Three placed focus on the undertakings of IMF – as a global institution – in stimulating convergence within the context of development assistance and socioeconomic growth.

Considering the IMF's influence on convergence (**A2**), the DPS results showed that, limited convergence may occur irrespective of whether or not a country has had an IMF intervention (see Chapter Five). This suggests that, in some cases, IMF interventions partially support countries in stabilizing their economy and maintaining convergence with other countries. This re-emphasizes the view that IMF interventions should be seen as a form of 'economic support' rather than as an 'economic advantage'. This is evident when IMF interventions were added to the QCA model to test for dynamics and stability. In addition to this, the dynamic case interactions observed across LAC and SSA cases when considering cluster groupings showed limited case stability in the economic models, although this was slightly more evidenced in the social policy model. When observing patterns in variable stability the dynamic interactions became more complex as stability may occur across convergent cases linked to some variables, while not linked to others. This highlighted an element of contingent causality (i.e. mulitfinality - similar patterns resulting in varying outcomes and equifinality - when an outcome can be reached by varying conditions).

When considering case dynamics across social policy cluster convergence, a higher degree of stable case dynamics was observed across LAC and SSA cases compared to economic cluster convergence. However, unlike LAC cases, convergence in diversity was observed across the SSA region as two countries showed case stability when considering socioeconomic clustering. Thus, Gabon and Cabo Verde maintained close proximity in cluster pairing throughout the period under analysis. To test for compatibility, a further qualitative analysis of IMF interventions in Gabon and Cabo Verde placed focused on the conditionalities (Letters of Intent) implemented in these countries. The results for the text-analysis, also reemphasised the economic and technical role of the IMF. Although this emphasized the IMF tailored approach, the analysis of the Letters of Intent suggests the

'totalizing logic' (Kontopoulos, 1993) of the IMF as its fundamental principles fall back to an overarching 'one-size-fits-all' neoliberal approach to problem solving. It was based on these findings that a compatibility framework was developed (Chapter Seven), thus answering the main research question.

➢ Methodological Reflections

The DPS method provides a researcher with the ability to assess and interpret country convergence as well as the changing patterns of convergence that exist within and between cases. This provides an avenue for the researcher to understand which cases converge with each other and why they converge or remain heterogeneous. Likewise, DPS also assists in inferring causation as it allows for considerations of 'complex causal configurations' and provides the researcher with the possibility of capturing complexity across sample cases. The combined longitudinal model of HCA and QCA and its qualitative interpretation make up the DPS methods (Haynes, 2017). However, such DPS interpretations are also subject to the researchers epistemological and ontological approach. In cases where complexity is high, such interpretations may be inadequate and need further research and theorizing. The application of documentary analysis not only provides an additional layer to the analysis of complexity across cases but can be used to "establish a history of policy and other processes in relation to each of the cases in a representative sample of areas" (Byrne & Uprichard 2007, p. 50). Here, the researcher is able to identify similarities and differences in policy documents. This can also be used to further interpret HCA and QCA results. In this study the documents are linked to an institutional ideology that is argued to be the totalizing logic of the IMF. Nevertheless, further research could consider the integration of interviews with relevant stakeholders to provide a more detailed understanding of actor interactions and experiences in such complex environments.

➢ Further Research

By showing the importance of the interactions between the domestic settings of an implementing nation and coercively transferred policies, this research has contributed to the

improvement of the theory and practice of coercive policy transfer. Yet, further research into this area could place focus on the interactions between policy actors at each level. For instance, although this research synthesized the literature on policy and power in international relations to identify tensions, a qualitative questionnaire could be given to a sample of policy actors to justify such conceptualization. Additional research could also be conducted to test the impact of IMF interventions on other geographical regions and other developmental levels to test for compatibility. As the idea of the IMF's totalizing logic (Kontopoulos, 1993) became evident in the qualitative analysis of IMF Letters of Intent for Gabon and Cabo Verde, further research into this could also be carried out on a larger scale to test for the degree of totalizing logic that informs IMF interventions. That is, is this evident in all IMF interventions? Alternatively, further research could ask whether the logic of IMF interventions discussed applies only to specific countries or to specific IMF arrangements. Further research could indeed explore the evolution of the IMF's thinking in policy implementation over time. For instance, Johnson (2019) and Kelton (2020) recent argument seems to suggest a change in IMF undertakings. This could be tested with empirical studies, such as textual analysis etc. These raise further questions regarding the role of the IMF in development assistance and the lack of consistency in its intervention outcomes.

Reference

Adato, M., & Hoddinott, J. (2010). *Conditional cash transfers in Latin America*. Intl Food Policy Res Inst.

Adelman, I. (2000). Fifty years of economic development: what have we learned. *ABCDE Europe*.

Anetor, F. O., Esho, E., & Verhoef, G. (2020). The impact of foreign direct investment, foreign aid and trade on poverty reduction: Evidence from Sub-Saharan African countries. *Cogent Economics & Finance*, *8*(1), 1737347.

Akanchise, D. A., (2017). *A Comparative Analysis of Disclosures in Sarbanes-Oxley Act and Similar Legislations* (Unpublished master's thesis). University of Portsmouth, United Kingdom.

Alberts, D. S., & Czerwinski, T. J. (1997). *Complexity, global politics, and national security.* National Defense Univ Washington Dc.

Alden, C. (2005). China in Africa. S*urvival*, *47*(3), 147-164.

Aldenderfer, M. S., & Blashfield, R. K. (1984). *Cluster analysis: Quantitative applications in the social sciences.* Beverly Hills: Sage Publication.

Alesina, A., & Dollar, D. (2000). Who gives foreign aid to whom and why?. *Journal of economic growth*, *5*(1), 33-63.

Allen, A. (1999). *The Power of Feminist Theory: Domination, Resistance, Solidarity*. Boulder, Colorado.

Allen, M., Setser, B., Keller, C., Rosenberg, C. B., & Roubini, N. (2002). *A balance sheet approach to financial crisis* (No. 2002-2210). International Monetary Fund.

Alter, K. J., & Meunier, S. (2009). The politics of international regime complexity. *Perspectives on Politics*, *7*(1), 13-24.

Amin, S. (1990). *Delinking: Towards a polycentric world*. Zed Books.

Amin, S. (1995). Fifty years is enough!. *Monthly Review*, *46*(11), 8.

Anderberg, M. R. (1973). Cluster analysis for applications (No. OAS-TR-73-9). *Office of the Assistant for Study Support Kirtland AFB N MEX*.

Anderson, C. J., & Reichert, M. S. (1995). Economic benefits and support for membership in the EU: A cross-national analysis. *Journal of Public Policy*, *15*(3), 231-249.

Alesina, A., & Dollar, D. (2000). Who gives foreign aid to whom and why?. *Journal of economic growth*, *5*(1), 33-63.

Andreewsky, E., & Bourcier, D. (2000). Abduction in language interpretation and law making. *Kybernetes, 29*(7/8), 836-845.

Appleton, J. V., & Cowley, S. (1997). Analysing clinical practice guidelines. A method of documentary analysis. *Journal of Advanced Nursing*, *25*(5), 1008-1017.

Arakali, S. (2012). *Can Conditional Cash Transfer Programs be Implemented on a Large Scale in India?* (Doctoral dissertation, Pennsylvania State University).

Archer, M., Bhaskar, R., Collier, A., Lawson, T., & Norrie, A. (2013). *Critical realism: Essential readings*. Routledge.

Archibugi, D., Held, D., & Köhler, M. (1998). *Re-imagining political community: studies in cosmopolitan democracy*. Stanford University Press.

Arthurs, H. W. (2001). The re-constitution of the public domain. *The Market or the Public Domain: Redrawing the Line*, *9*, 85.

Atieno, O. P. (2009). An analysis of the strengths and limitation of qualitative and quantitative research paradigms. *Problems of Education in the 21st Century, 13*(1), 13-38.

Audretsch, D., Lehmann, E., Richardson, A., & Vismara, S. (2015). *Globalization and Public Policy*. Springer International Publishing: Imprint: Springe.

Babb, S. (2013). The Washington Consensus as transnational policy paradigm: Its origins, trajectory and likely successor. *Review of International Political Economy*, *20*(2), 268-297.

Babb, S., & Buira, A. (2005). Mission creep, mission push and discretion: the case of IMF conditionality. *The IMF and the World Bank at sixty*, 59.

Bache, I., & Taylor, A. (2003). The Politics of Policy Resistance: Reconstructing Higher Education in Kosovo. *Journal of Public Policy, 23*(3), 279-300. doi:10.1017/S0143814X03003131

Baehr, P., Selbervik, H., & Tostensen, A. (1995). Responses to Human Rights Criticism: Kenya—Norway and Indonesia—the Netherlands. *Human Rights in Development Online*, *2*(1), 57-87.

Baisnée, O., & Pasquier, R. (2007). Européanisation et sociétés politiques nationales. *L'Europe telle qu'elle se fait. Européanisation et sociétés politiques nationales*.

Baker, B. (2006). Cape Verde: the most democratic nation in Africa?. *The Journal of Modern African Studies*, *44*(4), 493-511.

Bakvis, H. (2000). Rebuilding policy capacity in the era of the fiscal dividend: A report from Canada. *Governance,* 13(1), 71–103.

Baltodano, A. P. (1997). The study of public administration in times of global interpenetration: A historical rationale for a theoretical model. *Journal of Public Administration Research and Theory*, *7*(4), 615-638.

Baran, P.A. (1958) The Political Economy of Backwardness. In Agarwala, A. N., & Singh, S. P. (1958). *Economics of underdevelopment: a series of articles and papers*. Oxford University Press, London.

Barnett, M., & Duvall, R. (2005). Power in international politics. *International organization,* 59(1), 39-75.

Barnett, M., & Finnemore, M. (2004). *Rules for the world: International organizations in global politics*. Cornell University Press.

Barnett, C. (2005). The consolations of "Neoliberalism". *Geoforum*, *36*(1), 7–12.

Barnett, C. (2010). Publics and markets: What's wrong with neoliberalism? In S. Smith, R. Pain, S. Marston & J. Jones (Eds.), *The Sage handbook of social geographies* (vol. 12, pp. 269–297). London: Sage

Barr, N. (1993). *The economics of the welfare state*. Palo Alto, CA: Stanford University Press.

Bauer, P. T. (1976). *Dissent on development*. Harvard University Press.

Beck, U. (2015). *What is globalization*?. John Wiley & Sons.

Bender, K., Keller, S., & Willing, H. (2015). The role of international policy transfer and diffusion for policy change in social protection–a review of the state of the art. *IZNE Social Protection Working Paper*.

Bennett, C. J. (1991). How states utilize foreign evidence. *Journal of Public Policy*, *11*(1), 31-54.

Bennett, C. J. (1991). What is policy convergence and what causes it?. *British journal of political science, 21*(2), 215-233.

Benson, D., & Jordan, A. (2011). What have we learned from policy transfer research? Dolowitz and Marsh revisited. *Political studies review, 9*(3), 366-378.

Benson, D., & Jordan, A. (2012). Policy transfer research: still evolving, not yet through?. *Political studies review*, *10*(3), 333-338.

Berg, B.L. (2001). *Qualitative Research Methods – For the Social Sciences*, 4th ed., Pearson, Harlow.

Berg-Schlosser, D., De Meur, G., Rihoux, B., & Ragin, C. C. (2009). Qualitative comparative analysis (QCA) as an approach. *Configurational comparative methods: Qualitative comparative analysis (QCA) and related techniques*, *1*, 18.

Bevan, D. (2005). The IMF and low-income countries. *World Economics*, *6*(2), 67-85.

Biermann, F., Siebenhüner, B., & Schreyögg, A. (Eds.). (2009). *International organizations in global environmental governance* (Vol. 17). Routledge.

Birch, K. & Mykhnenko, V. (2010). *The rise and fall of neoliberalism: The collapse of an economic order?* London: Zed Books

Bird, G. (1987). Financing the Fund and reforming quotas. In *International Financial Policy and Economic Development* (pp. 150-188). Palgrave Macmillan, London.

Bird, G. (1996). The International Monetary Fund and developing countries: a review of the evidence and policy options. *International Organization, 50*(3), 477-511.

Bird, G. (2004). Growth, Poverty and the IMF. *Journal of International Development*, *16*(4), 621-636.

Bird, G., & Rowlands, D. (2006). IMF quotas: Constructing an international organization using inferior building blocks. *The Review of International Organizations, 1*(2), 153-171.

Bird, G., & Willett, T. D. (2004). IMF conditionality, implementation and the new political economy of ownership. *Comparative Economic Studies, 46*(3), 423-450.

Birdsall, N., Williamson, J., & Deese, B. (2002). *Delivering on debt relief: From IMF gold to a new aid architecture*. Peterson Institute.

Bitzenis, A, & Andronikidis, A. (2006). Cost and Benefits of Integration in the European Union and in the Economic Monetary Union (EMU). *Economics, Management, and Financial Markets Journal, 1*(2), 7-53.

Blair Commission for Africa (2005). *Our common interest: Report of the commission for Africa*. London: Penguin Books

Bleiklie, I. (2001). Towards European convergence of higher education policy. *Higher Education Management*, *13*(3).

Blumenthal, D., & Hsiao, W. (2005). Privatization and its discontents: the evolving Chinese health care system. *The New England journal of medicine*, *353*(11), 1165-1170.

Boesen, N., & Therkildsen, O. (2004). *Between naivety and cynicism. A Pragmatic Approach to Donor Support for Public Sector Capacity Development*. Report prepared for the Danish International Development Agency (DANIDA). Copenhagen: Ministry of Foreign Affairs.

Boone, P. (1996). *Politics and the Effectiveness of Foreign Aid.* European Economic Review 40 (2): 289–329.

Bordo, M. D., & James, H. (2000). *The International Monetary Fund: its present role in historical perspective* (No. w7724). National Bureau of Economic Research.

Borenstein, M., Hedges, L. V., Higgins, J. P., & Rothstein, H. R. (2011). *Introduction to meta-analysis*. Chichester: Wiley.

Börzel, T. A. (2005). Mind the gap! European integration between level and scope. *Journal of European Public Policy*, *12*(2), 217-236.

Börzel, T. A., & Risse, T. (2003). Conceptualizing the domestic impact of Europe. *The politics of Europeanization*, 57-80.

Börzel, T. A., & Risse, T. (2012). When Europeanisation meets diffusion: Exploring new territory. *West European Politics*, *35*(1), 192-207.

Börzel, T. A., & Risse, T. (2000). When Europe hits home: Europeanization and domestic change. *European integration online papers (EIoP)*, *4*(15).

Bourdieu, P. (2002). The social conditions of the international circulation of ideas. *Actes de la recherche en sciences sociales*, (5), 3-8.

Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative research journal*, *9*(2), 27-40.

Brinkerhoff, D. (2005). Institutional Dualism and International Development: A Revisionist Interpretation of Good Governance. *Administration & Society, 37* (2), 99–224.

Browne, S. (1999). *Beyond aid: from patronage to partnership.* Ashgate Pub Limited.

Buckley, B. (2000). *Canada's early nuclear policy: fate, chance, and character*. McGill-Queen's Press- MQUP.

Buira, A. (2002). An analysis of IMF conditionality. *Discussion paper series.* University of Oxford.

Buira, A. (2003). The Governance of the IMF in a Global Economy. *Challenges to the World Bank and IMF: developing country perspectives*, 13-36.

Bulíř, A., & Hamann, A. J. (2008). Volatility of development aid: From the frying pan into the fire?. *World Development*, *36*(10), 2048-2066.

Bull, B., Jerve, A. M., & Sigvaldsen, E. (2007). The World Bank's and the IMF's use of Conditionality to Encourage: Current Issues and Practices. *SUM report http://urn. nb. no/URN:* NBN: no-3604.

Burnside, C., & Dollar, D. (1996). *Aid, policies, and growth: revisiting the evidence*. The World Bank.

Burnside, C., & Dollar, D. (2000). Aid, policies, and growth. *American economic review*, *90*(4), 847-868.

Busch, P. O., & Jörgens, H. (2007). Decentralized policy coordination in the international system — causes, mechanisms and effects of the international diffusion of political innovations. In *Transfer, Diffusion and Convergence of* Policies (pp. 56-84). VS publishing house for social sciences.

Butkiewicz, J. L., & Yanikkaya, H. (2005). The effects of IMF and World Bank lending on long-run economic growth: An empirical analysis. *World Development, 33*(3), 371-391.

Byrne, D. (2002). *Interpreting quantitative data.* Sage.

Byrne, D. (2004). Complex and Contingent Causation–the Implications of Complex Realism for Quantitative Modelling. *Making realism work: Realist social theory and empirical research.*

Byrne, D. (2005). Complexity, configuration and cases. *Theory, Culture & Society*, *22*(5), 95-111.

Byrne, D., & Uprichard, E. (2007). Crossing levels: The potential for numerical taxonomy and fuzzy set approaches to study multi-level longitudinal change. *Methodological Innovations Online*, *2*(1).

Cabo Verde. (2002). *Letter of Intent, Memorandum of Economic and Financial Policies, and Technical Memorandum of Understanding*. Retrieved 3 August 2017, from. https://www.imf.org/external/np/cpid/default.aspx.

Cabo Verde. (2006). *Letter of Intent, Memorandum of Economic and Financial Policies, and Technical Memorandum of Understanding*. Retrieved 3 August 2017, from. https://www.imf.org/external/np/cpid/default.aspx.

Cabo Verde. (2010). *Letter of Intent, Memorandum of Economic and Financial Policies, and Technical Memorandum of Understanding*. Retrieved 3 August 2017, from. https://www.imf.org/external/np/cpid/default.aspx.

Campbell, D. T., & Russo, M. J. (1999). *Social experimentation* (Vol. 1). Sage Publications, Inc.

Campbell, D.T. (1969). Reforms as experiments. *American Psychologist, 24*(4), 409-429.

Carroll, P., & Common, R. (2013). Policy Transfer and Learning in Public Policy and Management: International Contexts, *Content and Development* (Vol. 14). Routledge.

Carroll, T. (2010). *Delusions of development: The World Bank and the post-Washington consensus in Southeast Asia*. Springer.

Cerny, P. G. (1997). Paradoxes of the competition state: The dynamics of political globalization. *Government and opposition, 32*(2), 251-274.

Cerny, P. G. (2006). Plurality, pluralism and power: elements of pluralist analysis in an age of globalization. *Pluralism: developments in the theory and practice of democracy*, 4, 81.

Chang, H. J. (2006). Policy space in historical perspective with special reference to trade and industrial policies. *Economic and Political Weekly*, 627-633.

Chang, H. J. (Ed.). (2003). *Rethinking development economics* (Vol. 1). Anthem Press.

Chau, D. (2014). *Exploiting Africa: The Influence of Maoist China in Algeria, Ghana, and Tanzania*. Naval Institute Press.

Chenery, H.B. and Strout, A., 1966, 'Foreign assistance and economic development', *American Economic Review*, Vol 56: 679–733

Cheru, F., & Obi, C. (2010). *The rise of China and India in Africa: Challenges, opportunities and critical interventions.* Zed Books/Nordiska Afrikainstitutet.

Christian Aid. (2006). Challenging conditions: A new strategy for reform at the World Bank and IMF. *London, July, http://www. christian-aid. org/indepth/607ifis/index. htm.*

Cilliers, P. (1998) *Complexity and postmodernism understanding complex systems*. London Routledge

Cilliers, P. (2001). Boundaries, hierarchies and networks in complex systems. *International Journal of Innovation Management, 5*(02), 135-147.

Clemens M. A., Radelet, S., & Bhavnani, R. (2004). *Counting chickens when they hatch: the short term effect of aid on growth* (No. 44). Working Paper.

Clemens, M. A., Radelet, S., Bhavnani, R. R., & Bazzi, S. (2012). Counting chickens when they hatch: Timing and the effects of aid on growth. *The Economic Journal*, *122*(561), 590-617.

Cochran, C. E., Mayer, L. C., Carr, T. R., & Cayer, N. J. (1999). American public policy. *An Introduction. NY*, 306-351.

Cochran, C. L. and Malone E. F. (1995) *Public Policy Perspectives and Choices*. New York, NY: McGraw-Hill, Inc.

Cohen, J. L. (2012). *Globalization and sovereignty: Rethinking legality, legitimacy, and constitutionalism*. Cambridge University Press.

Cohen, J., & Sabel, C. F. (2005). Global Democracy. *New York University Journal of International Law and Politics*, *37*, 763.

Colebatch, H. K. (2002). *Policy: Concepts in the social sciences*. Open University Press, Buckingham, Philadelphia, 2, 3-5.

Colebatch, H. K. (2006). *Beyond the policy cycle*. Sydney: Allen & Unwin.

Collier, A (1994). *Critical Realism: An Introduction to Roy Bhaskar's Philosophy*. London: Verso.

Collier, P. (2008). Global policies for the bottom billion. *A progressive agenda for global action*, 141-149.

Collier, P. (2008). *The bottom billion: Why the poorest countries are failing and what can be done about it.* Oxford University Press, USA.

Collier, P., & Dollar, D. (2001). Aid, risk and the special concerns of small states. *Small states in the global economy*, 11-38.

Corbin, J., & Strauss, A. (2008). Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory. Thousand Oaks, CA: Sage. *Organizational Research Methods*, *12*(3), 614-617.

Cowles, Maria Green, Caporaso, James and Risse, Thomas, eds (2001) *Transforming Europe: Europeanization and Domestic Change.* Ithaca, NY: Cornell University Press.

Craig, D., & Porter, D. (2003). Poverty reduction strategy papers: a new convergence. *World development*, 31(1), 53-69.

Dalgaard, C. J., & Hansen, H. (2001). On aid, growth and good policies. *Journal of development Studies*, *37*(6), 17-41.

Danaher, K. (1994). *Fifty Years is Enough: The Case Against the World Bank and the IMF*. Boston: South End.

Danermark, B., Ekstrom, M., & Jakobsen, L. (2005). *Explaining society: An introduction to critical realism in the social sciences.* Routledge.

Daugbjerg, C., & Swinbank, A. (2015). Globalization and new policy concerns: the WTO and the EU's sustainability criteria for biofuels. *Journal of European Public Policy, 22*(3), 429-446.

De Mesquita, B. B., & Downs, G. W. (2004). Why Gun-Barrel Democracy Doesn't Work. *Hoover Digest*, 2.

De Vries, M. M. G. (1987). *Balance of payments adjustment, 1945 to 1986: The IMF experience*. International Monetary Fund.

Degnbol-Martinussen, J., & Engberg-Pedersen, P. (2003). *Aid: understanding international development cooperation*. Zed Books.

Dery, D. (1998). Policy by the way: When policy is incidental to making other policies. *Journal of Public Policy*, *18*(2), 163-176.

Diaz-Alejandro, C. F. (1984). IMF Conditionality: What Kind?. *PIDE tidings*, *23*, 7-9.

DiMaggio, P. J., & Powell, W. W. (1991). Introduction. *The New Institutionalism in Organizational Analysis, University of Chicago Press, Chicago, IL*, 1-38.

Diwan, I., & Rodrik, D. (1992). *External debt, adjustment, and burden sharing: a unified framework*. International Finance Section, Department of Economics, Princeton University.

Dogan, K. (2015). Turkey offers cash rewards for marrying early. *Al-Monitor*. Retrieved 8 December 2017, from https://www.al-monitor.com/pulse/originals/2015/02/turkey-government-early-marriages.html

Dollar, D., & Svensson, J. (2000). What explains the success or failure of structural adjustment programmes. *The Economic Journal, 110*(466), 894-917.

Dolowitz, D. P. (2004). Bring back the states: Correcting for the omissions of globalization. In *International Public Policy and Management* (pp. 45-64). Routledge.

Dolowitz, D. P. (2009). Learning by observing: surveying the international arena. *Policy & Politics*, *37*(3), 317-334.

Dolowitz, D. P., & Marsh, D. (1996). Who learns what from whom: a review of the policy transfer literature. *Political studies, 44*(2), 343-357.

Dolowitz, D. P., & Marsh, D. (2000). Learning from abroad: The role of policy transfer in contemporary policy-making. *Governance*, 13(1), 5-23.

Domar, E. D. (1947). Expansion and employment. *The American Economic Review*, *37*(1), 34-55.

Doucouliagos, H., & Paldam, M. (2008). Aid effectiveness on growth: A meta study. *European journal of political economy*, *24*(1), 1-24.

Douglas, I. R. (1997). Globalisation and the End of the State?. *New Political Economy*, *2*(1), 165-177.

Drazen, A. (2002). Conditionality and ownership in IMF lending: a political economy approach. *IMF Staff Papers, 49*(1), 36-67.

Dreher, A. (2009). The development of IMF and World Bank conditionality. In L. Yueh (Ed.), *The law and economics of globalisation: new challenges for a world in flux*. Cheltenham: Edward Elgar. Chapter 6.

Dreher, A. (2004). A public choice perspective of IMF and World Bank lending and conditionality. *Public Choice, 119*(3-4), 445-464.

Dreher, A. (2006). IMF and economic growth: The effects of programs, loans, and compliance with conditionality. *World Development*, *34*(5), 769-788.

Drezner, D. W. (2001). Globalization and policy convergence. *International studies review*, 3(1), 53-78.

Drori, G. S., Meyer, J. W., & Hwang, H. (2006). *Globalization and organization: World society and organizational change*. Oxford University Press.

Dryzek, J. S. (1999). Transnational democracy. *Journal of political philosophy*, *7*(1), 30-51.

Dubois, A., & Gadde, L. E. (2017). "Systematic Combining": An approach to case research. *Journal of Global Scholars of Marketing Science, 27*(4), 258-269.

Duina, F. (1997). Explaining legal implementation in the European Union. *International Journal of the Sociology of law*, *25*(2), 155-179

Duina, F. G. (1999). *Harmonizing Europe: nation-states within the Common Market*. SUNY Press.

Dumoulin, L., & Saurugger, S. (2010). Les policy transfer studies: analyse critique et perspectives. *Critique internationale*, (3), 9-24.

Dunlop, C. A. (2009). Policy transfer as learning: capturing variation in what decision-makers learn from epistemic communities. *Policy studies*, *30*(3), 289-311.

Dussauge-Laguna, M. I. (2012). The neglected dimension: bringing time back into cross-national policy transfer studies. *Policy Studies*, *33*(6), 567-585.

Dye, T. R. (1992). *Understanding public policy*. Englewood Cliffs, NJ: Prentice Hall.

Easterly, W. (2000). The effect of IMF and World Bank programs on poverty. *Available at SSRN 256883*.

Easterly, W. (2002). How did heavily indebted poor countries become heavily indebted? Reviewing two decades of debt relief. *World Development, 30*(10), 1677-1696.

Easterly, W. (2005). What did structural adjustment adjust?: The association of policies and growth with repeated IMF and World Bank adjustment loans. *Journal of development economics, 76*(1), 1-22.

Easterly, W. (2007). Was Development Assistance a Mistake? *American Economic Review, 97* (2): 328–332.

Easterly, W. (2008). *Reinventing foreign aid* (Vol. 1). The MIT Press.

Easterly, W. (2009). How the millennium development goals are unfair to Africa. *World development*, *37*(1), 26-35.

Easterly, W., & Vásquez, I. (2013). The Tyranny of Experts: Economists. *Dictators, and the Forgotten*.

Easterly, W., Islam, R., & Stiglitz, J. E. (2001). Shaken and stirred: explaining growth volatility. In *Annual World Bank conference on development economics* (Vol. 2000, pp. 191-211). World Bank.

Easton, D. (1953). *The political system*. Alfred A.

Economic Community of West African States (n.d.). Vision 2020. *Ecowas.int*. Retrieved 7 December 2017, from http://www.ecowas.int/about-ecowas/vision-2020/.

Ehrenpreis, D., & Isenman, P. (2003). Aid effectiveness and selectivity: Integrating multiple objectives into aid allocations. *DAC Journal*, *4*(3), 7-40.

Eichengreen, B. (2019). *Globalizing capital: a history of the international monetary system*. Princeton University Press.

Elayah, M. 2014. *Donors-Promoted Public Sector Reform in Developing Countries and the Local Knowledge Syndrome: the Dutch–Yemen NPT Program for Developing the Higher Education Sector in Yemen*. Leiden: Leiden University and Smart Print.

Elayah, M. (2016). Lack of foreign aid effectiveness in developing countries between a hammer and an anvil. *Contemporary Arab Affairs,* 9(1), 82-99.

Ellison, N. (2017). Politics, power and policy transfer. *Journal of Asian Public Policy, 10*(1), 8-24.

Emmenegger, P., Schraff, D., & Walter, A. (2014, November). QCA, the truth table analysis and large-N survey data: The benefits of calibration and the importance of robustness tests. In *2nd international QCA expert workshop, November, Zurich, Switzerland*.

Erixon, F. (2005). Aid and development: Will it work this time. *International Policy Network*, 3-28.

Evans, M. (2004). *Policy transfer in global perspective.* Gower Publishing, Ltd..

Evans, M. (2006). At the Interface Between Theory And Practice–Policy Transfer And Lesson-Drawing. *Public administration, 84*(2), 479-489.

Evans, M. (2009). Policy transfer in critical perspective. *Policy studies*, *30*(3), 243-268.

Evans, M. (2018). *International policy transfer: between global and sovereign and between global and local.* researchgate.net

Evans, M., & Davies, J. (1999). Understanding policy transfer: A Multi-level, multi-disciplinary perspective. *Public administration, 77*(2), 361-385.

Falkner, G., Treib, O., Hartlapp, M., & Leiber, S. (2005). *Complying with Europe: EU harmonisation and soft law in the member states*. Cambridge University Press.

Farrell, M. (2009). EU policy towards other regions: policy learning in the external promotion of regional integration. *Journal of European Public Policy, 16*(8), 1165-1184.

Fawcett, P., & Marsh, D. (2012). Policy transfer and policy success: The case of the gateway review process (2001–10). *Government and opposition, 47*(2), 162-185.

Featherstone, K., & Radaelli, C. M. (Eds.). (2003). *The politics of Europeanization*. OUP Oxford.

Featherstone, M., Lash, S., & Robertson, R. (Eds.). (1995). *Global modernities* (Vol. 36). Sage.

Feeny, S., & McGillivray, M. (2011). Scaling-up Foreign Aid: Will the 'Big Push'Work?. *The World Economy, 34*(1), 54-73.

Feinberg, R. E. (1988). The changing relationship between the World Bank and the International Monetary Fund. *International Organization, 42*(3), 545-560.

Feldstein, M. (1998). Refocusing the IMF. *Foreign Affairs-New York-*, 77, 20-33.

Ferraro, V. (2008). Dependency theory: An introduction. *The development economics reader*, *12*(2), 58-64.

Finch, C. D. (1983). Adjustment policies and conditionality. *IMF Conditionality, Washington DC, Institute for International Econmics*.

Fischer, F., & Miller, G. J. (Eds.). (2006). *Handbook of public policy analysis: theory, politics, and methods*. crc Press.

Fischer, S., Meltzer, A. H., Sachs, J. D., & Stern, N. (2003). The future of the IMF and world bank: Panel discussion. *American Economic Review, 93*(2), 45-50.

Fiss, P., & Ragin, C. C. (2008). Using Qualitative Comparative Analysis (QCA) and Fuzzy Sets. *University of Southern California Presentation Report*.

Fitzpatrick, L. (2009). China's One-Child Policy. *Time Magazine on the web*.

Flint, D. J., & Mentzer, J. T. (2000). Logiticians as marketers: Their role when customers' desired value changes. *Journal of Business Logistics, 21*(2), 19.

Frank, A. G. (1966). *The development of underdevelopment* (pp. 76-84). Boston, MA: New England Free Press.

Fraser, A. (2005). Poverty reduction strategy papers: Now who calls the shots?. *Review of African Political Economy*, *32*(104-105), 317-340.

French, J. R., Raven, B., & Cartwright, D. (1959). The bases of social power. *Classics of organization theory*, *7*, 311-320.

Friedman, M. (1958). Foreign Economic Aid: Means and Objectives [in:] J. Bhagwati, R. Eck haus (ed.), 1970, *Foreign Aid*. Harmondsworth: Penguin.

Gabon. (2004). *Letter of Intent, Memorandum of Economic and Financial Policies, and Technical Memorandum of Understanding*. Retrieved 3 August 2017, from. https://www.imf.org/external/np/cpid/default.aspx.

Gabon. (2007). *Letter of Intent, Memorandum of Economic and Financial Policies, and Technical Memorandum of Understanding*. Retrieved 3 August 2017, from. https://www.imf.org/external/np/cpid/default.aspx.

Genschel, P., & Plumper, T. (1997). Regulatory competition and international co-operation. *Journal of European Public Policy*, *4*(4), 626-642.

Germain, R. D. (2000). *Globalization and its critics: perspectives from political economy*. Palgrave Macmillan.

Gerring, J. (2004). What is a case study and what is it good for?. *American political science review, 98*(2), 341-354.

Gerring, J., & Christenson, D. (2017). *Applied Social Science Methodology: An Introductory Guide*. Cambridge University Press.

Ghatak, S. (2003). *Introduction to development economics*. Routledge.

Gilbert, C. L., & Vines, D. (2000). The World Bank: an overview of some major issues. The World Bank: *Structure and Policies*, 3, 10.

Göksel, N. K. (2004). Globalisation and the State. *Perceptions: Journal of International Affairs*, *9*(1), 1-12.

Goldstein, M. (2001). IMF structural conditionality: How much is too much?. *Institute for International Economics Working Paper*, (01-04).

Gomanee, K., Girma, S., & Morrissey, O. (2005). Aid and growth in Sub-Saharan Africa: accounting for transmission mechanisms. *Journal of International Development*, *17*(8), 1055-1075.

Gray, T. (2005). *Canadian response to the US Sarbanes-Oxley Act of 2002: new directions for corporate governance.* Parliamentary Information and Research Service.

Gray, V. (1973). Innovation in the states: A diffusion study. *American political science review*, *67*(4), 1174-1185.

Griffin, K. (1971). Foreign capital, domestic savings and Economic development: reply. *Oxford Bulletin of Economics and Statistics*, *33*(2), 156-161.

Griffin, K. B., & Enos, J. L. (1970). Foreign assistance: objectives and consequences. *Economic development and cultural change*, *18*(3), 313-327.

Gunster, S. (2017). This changes everything: Capitalism vs. the climate. *Environmental Communication*, 11(1), 136–138.

Haas, E. B. (1976). Turbulent fields and the theory of regional integration. *International organization*, *30*(2), 173-212.

Haas, P. M. (1992). Introduction: epistemic communities and international policy coordination. *International organization*, *46*(1), 1-35.

Hadjiisky, M., Pal, L. A., & Walker, C. (2017). Introduction: traversing the terrain of policy transfer: theory, methods and overview. *In Public Policy Transfer.* Edward Elgar Publishing.

Haggard, S. (1985). The politics of adjustment: lessons from the IMF's Extended Fund Facility. *International Organization, 39*(3), 505-534.

Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (1998). *Multivariate data analysis* (Vol. 5, No. 3, pp. 207-219). Upper Saddle River, NJ: Prentice hall.

Hall, S. (1992). The question of cultural identity. *Modernity and its futures*, 274-316.

Hansen, H., & Tarp, F. (2000). Aid effectiveness disputed. *Journal of International development*, *12*(3), 375-398.

Hansen, H., & Tarp, F. (2001). Aid and growth regressions. *Journal of development Economics*, *64*(2), 547-570.

Hansen, T. B., & Scholl, B. (2002). Europeanization and domestic parliamentary adaptation: a comparative analysis of the Bundestag and the House of Commons. *European integration online papers (EIoP)*, *6*(16).

Harrison, L., & Callan, T. (2013). *Key research concepts in politics and international relations*. SAGE Publications Limited.

Harrison, N. E. (Ed.). (2012). *Complexity in world politics: Concepts and methods of a new paradigm.* SUNY Press.

Harrod, R. F. (1948). *Towards a Dynamic Economics: Some recent developments of economic theory and their application to policy*. MacMillan and Company, London.

Haverland, M. (2001). The impact of the European Union on national environmental policies: The state of the art. In *Kenneth Featherstone and Claudio Radaelli (eds.), The Politics of Europeanization, Oxford: Oxford University Press, 203-221.*

Havnevik, K. (1987). *The IMF and the World Bank in Africa: Conditionality, impact and alternatives*. Nordiska Afrikainstitutet.

Hay, C. (2008). *Globalization and Public Policy. In (Ed.), The Oxford Handbook of Public Policy.: Oxford University Press.* Retrieved 19 Dec. 2018, from http://www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199548453.001.0001/oxfordhb-9780199548453-e-029.

Hayes, M. T. (1992). *Incrementalism and public policy*. New York: Longman.

Haynes, P. (2014). Combining the Strengths of Qualitative Comparative Analysis with Cluster Analysis for Comparative Public Policy Research: With Reference to the Policy of Economic Convergence in the Euro Currency Area. *International Journal of Public Administration*, 37:9, 581-590, DOI: 10.1080/01900692.2014.880849

Haynes, P. (2015). *Managing Complexity in the Public Service*. Routledge.

Haynes, P. (2015b). The European Single Currency Project and the Concept of Convergence for European Welfare States- The Ideal and the Reality. *Social Policy & Administration, 49*(4), 466-489.

Haynes, P. (2017). *Social Synthesis: Finding Dynamic Patterns in Complex Social Systems*. Routledge.

Haynes, P. (2018). *Complex policy planning: the government strategic management of the social care market*. Routledge.

Haynes, P., & Haynes, J. (2016). Convergence and Heterogeneity in Euro Based Economies: Stability and Dynamics. *Economics. 4*(3), 16.

Healey, J., & Killick, T. (2000). Using aid to reduce poverty. *Foreign aid and development: Lessons learnt and directions for the future*, 223-270.

Heclo, H. H. (1972). Policy analysis. *British journal of political science*, *2*(1), 83-108.

Heichel, S., Pape, J., & Sommerer, T. (2005). Is there convergence in convergence research? An overview of empirical studies on policy convergence. *Journal of European public policy*, *12*(5), 817-840.

Heinze, T., & Knill, C. (2008). Analysing the differential impact of the Bologna Process: Theoretical considerations on national conditions for international policy convergence. *Higher education*, *56*(4), 493-510.

Held, D. (1997). Democracy and globalization. *Global governance*, 3, 251.

Held, D., McGrew, A., Goldblatt, D., & Perraton, J. (2000). Global transformations: Politics, economics and culture. *In Politics at the Edge* (pp. 14-28). Palgrave Macmillan, London.

Helleiner, E. (2010). A Bretton Woods moment? The 2007–2008 crisis and the future of global finance. *International affairs, 86*(3), 619-636.

Hensby, A., & O'Byrne, D. J. (2011). *Theorizing global studies.* Palgrave Macmillan.

Hill, M. (2013). *The public policy process*. Routledge.

Hirst, P., & Thompson, G. (1996). Globalisation: Ten frequently asked questions and some surprising answers. *Soundings-London-Lawrence And Wishart-*, 47-66.

Hirst, P., Thompson, G., & Bromley, S. (2015). *Globalization in question*. John Wiley & Sons.

HM Treasury (2020) *The Magenta Book: Supplementary Guide. Handling Complexity in Policy Evaluation*. London: HMT

Holzinger, K., & Knill, C. (2005). Causes and conditions of cross-national policy convergence. *Journal of European public policy*, *12*(5), 775-796.

Holzinger, K., Jörgens, H., & Knill, C. (2007). Transfer, diffusion and convergence: concepts and causal mechanisms. In *transfer, diffusion and convergence of policies* (pp. 11-35). VS publishing house for social sciences.

Howes, S., Otor, S. A., & Rogers, C. L. (2011). Does the World Bank have a micro-macro paradox or do the data deceive?. *Development Policy Centre Discussion Paper*, (5).

Howlett, M. (2000). Managing the "hollow state": Procedural policy instruments and modern governance. *Canadian Public Administration*, *43*(4), 412-431.

Howlett, M., & Lindquist, E. (2004). Policy analysis and governance: Analytical and policy styles in Canada. *Journal of Comparative Policy Analysis: Research and Practice, 6*(3), 225–249.

Howlett, M., & Ramesh, M. (2002). The policy effects of internationalization: A subsystem adjustment analysis of policy change. *Journal of Comparative Policy Analysis*, *4*(1), 31-50.

Howlett, M., & Rayner, J. (1995). Do ideas matter? Policy network configurations and resistance to policy change in the Canadian forest sector. *Canadian public administration*, *38*(3), 382-410.

Howlett, M., Ramesh, M., & Perl, A. (2003). *Studying public policy: Policy cycles and policy subsystems* (Vol. 3). Oxford: Oxford University Press.

Hudson, J. (2015). Consequences of aid volatility for macroeconomic management and aid effectiveness. *World Development*, *69*, 62-74.

Hudson, J., & Kühner, S. (2013). Beyond indices: The potential of fuzzy set ideal type analysis for cross-national analysis of policy outcomes. *Policy and Society, 32*(4), 303-317.

Hudson, J., & Lowe, S. (2009). *Understanding the policy process: analysing welfare policy and practice*. Policy Press.

Hulme, R. (2006). The role of policy transfer in assessing the impact of American ideas on British social policy. *Global Social Policy, 6*(2), 173-195.

IEO (2002). *Evaluation of Prolonged Use of IMF Resources*. IMF, Washington, DC: IMF Independent Evaluation Office.

IEO. (2007). *Structural Conditionality in IMF-Supported Programs*. IMF Washington, DC: IMF Independent Evaluation Office.

IMF. (2001). *IMF managing director's report to the International Monetary and Financial Committee Streamlining Conditionality and Enhancing Ownership'*. IMF. Retrieved 20 October 2018, from https://www.imf.org/exter nal/np/omd/2001/110601.htm

IMF. (2004). *Fund Conditionality a Provisional Update*, Washington, DC: International Monetary Fund.

IMF. (2009a). *Conditionality in Fund-Supported Programs: Purposes, Modalities, and Options for Reform*, Washington, DC: International Monetary Fund.

IMF. (2009b). Creating Policy Space Responsive Design and Streamlined Conditionality in Recent Low-Income Country Programs, Washington, DC: International Monetary Fund.

IMF. (2009c). *IMF key to crisis policy response, Strauss-Kahn says', International Monetary Fund.* Retrieved 20 October 2018, from https://www.imf.org/external/pubs/ft/survey/so/2009/NEW042409A.htm

IMF. (2009d). 'New rules of engagement for IMF loans', IMF Survey. Retrieved 20 October 2018, from https://www.imf.org/external/pubs/ft/survey/so/2009/POL041309A.htm

IMF. (2018). *IMF Conditionality*. IMF. Retrieved 25 October 2018, from https://www.imf.org/en/About/Factsheets/Sheets/2016/08/02/21/28/IMF-Conditionality

International Financial Institution Advisory Commission, (2000). *Final Report*. Washington: US Congress.

Islam, M. N. (2003). Political regimes and the effects of foreign aid on economic growth. *The Journal of Developing Areas*, 35-53.

Islam, M. S. (2013). *Development, power, and the environment: neoliberal paradox in the age of vulnerability*. Routledge.

Jaffee, D. (1998). *Levels of socio-economic development theory.* Greenwood Publishing Group.

James, O., & Lodge, M. (2003). The limitations of 'policy transfer'and 'lesson drawing'for public policy research. *Political studies review*, *1*(2), 179-193.

James, O., & Lodge, M. (2003). The limitations of 'policy transfer'and 'lesson drawing'for public policy research. *Political studies review, 1*(2), 179-193.

Janicke, M. (1988) 'Structural change and environmental impact: empirical evidence on thirty-one countries in East and West', *Environmental Monitoring and Assessment*,12: 99 114.

Jann, W., & Wegrich, K. (2007). Theories of the policy cycle. *Handbook of public policy analysis: Theory, politics and methods*, 43-62.

Jenkins, B. (1997). Policy analysis: Models and approaches. *The policy process: A reader*, *2*.

Johnson, D. (2006). Comparing the trajectories of educational change and policy transfer in developing countries. *Oxford Review of Education, 32*(5), 679-696.

Johnson, D., & Farmer, T. A. (2007). Researching educational leadership: A conceptual framework for doctoral program research. *The NCPEA Handbook of Doctoral Programs in Educational Leadership: Issues and Challenges*.

Johnson, S. (2019). The IMF supertanker may be changing course. *Financial Times*. Ft.com. Retrieved 6 December 2019, from https://www.ft.com/content/bd2c89da-103d-11ea-a7e6-62bf4f9e548a

Jones, T., & Newburn, T. (2002). Policy convergence and crime control in the USA and the UK Streams of influence and levels of impact. *Criminology and Criminal Justice, 2*(2), 173-203

Jones, T., & Newburn, T. (2007). *Policy Transfer and Criminal Justice: Exploring US Influence over British Crime Control Policy*. Maidenhead.

Jørgensen, K. E., Pollack, M., & Rosamond, B. (Eds.). (2007). *The SAGE Handbook of European Union Politics*. Sage.

Juma, T., & Onkware, K. (2015). The Challenges of Public Policy Formulation and Evaluation Through the Questions' What, Who, How, and When?'. *International Journal of Economics, Commerce and Management*, 830-841.

Kaimann, D. (2017). *Combining Qualitative Comparative Analysis and Shapley Value Decomposition: A Novel Approach for Modeling Complex Causal Structures in Dynamic Markets*. Universitätsbibliothek.

Kaluszynski, M., & Payre, R. (2013). *Knowledge of government: circulation (s), translation (s), reception (s)*. Government knowledge, 7-19.

Kargbo, P. M. (2012). *Impact of foreign aid on economic growth in Sierra Leone: Empirical analysis* (No. 2012/07). WIDER Working Paper.

Karras, G. (2006). Foreign aid and long-run economic growth: empirical evidence for a panel of developing countries. *Journal of International Development: The Journal of the Development Studies Association*, *18*(1), 15-28.

Kaufman, L., & Rousseeuw, P. J. (2009). *Finding groups in data: an introduction to cluster analysis* (Vol. 344). John Wiley & Sons.

Kelkar, V., Yadav, V., & Chaudhry, P. (2004). Reforming the governance of the international monetary fund. *The World Economy, 27*(5), 727–744.

Kelton, S. (2020). *The deficit myth: modern monetary theory and the birth of the people's economy*. Hachette UK.

Kenis, P., & Schneider, V. (1991). Policy networks and policy analysis: scrutinizing a new analytical toolbox. In *Policy networks: Empirical evidence and theoretical considerations* (pp. 25-59). Campus Verlag.

Kennedy, K. J., Chan, J. K. S., & Fok, P. K. (2011). Holding policy-makers to account: exploring 'soft' and 'hard' policy and the implications for curriculum reform. *London Review of Education, 9*(1), 41-54.

Kentikelenis, A. E., Stubbs, T. H., & King, L. P. (2016). IMF conditionality and development policy space, 1985–2014. *Review of International Political Economy, 23*(4), 543-582.

Kern, K. (2000). Die Diffusion yon Politikinnovationen. Umweltpolitische innovationen im Mehrebenensystem der USA. Opladen. *Dezentrale Politikkoordination im internationalen System*, *83*.

Kerr, C. (1983). *The future of industrial societies: Convergence or continuing diversity*?. Harvard University Press.

Killick, T. (1985). *Balance of payments adjustment and developing countries*. London: Overseas Development Institute.

Killick, T., Gunatilaka, R., & Marr, A. (1998). *Aid and the political economy of policy change*. Psychology Press.

Kim, S. Y., & Russett, B. (1996). The new politics of voting alignments in the United Nations General Assembly. *International Organization, 50*(4), 629-652.

Kirkeby, O.F. (1990), "Abduktion", in Andersen, H. (Ed.), *Vetenskapsteori och metodla˙ra. Introduktion,* (translated by Liungman, C.G.), Studentlitteratur, Lund

Klemm, K., Eguíluz, V. M., Toral, R., & San Miguel, M. (2005). Globalization, polarization and cultural drift. *Journal of Economic Dynamics and Control*, *29*(1-2), 321-334.

Klugman, J. (Ed.). (2002). *A sourcebook for poverty reduction strategies* (Vol. 2). Washington, DC: World Bank.

Knill, C. (2005). Introduction: Cross-national policy convergence: concepts, approaches and explanatory factors. *Journal of European public policy, 12*(5), 764-774.

Knill, C. and Lenschow A. (1998) 'Coping with Europe: the impact of British and German administrations on the implementation of EU environmental policy. *Journal of European Public Policy*, 5(4): 595 614.

Knill, C., & Lehmkuhl, D. (2002). The national impact of European Union regulatory policy: Three Europeanization mechanisms. *European Journal of Political Research, 41*(2), 255-280.

Koenig-Archibugi, M. (2010). Understanding the global dimensions of policy. *Global Policy*, 1(1), 16-28.

Kohler-Koch, Beate. (1998) *The Evolution and Transformation of European Governance. IHS Political Science Series No. 58, November 1998.* [Working Paper]

Kohler-Koch, B., & Eising, R. (Eds.). (1999). *The transformation of governance in the European Union* (Vol. 12). Psychology Press.

Kollman, K., & Waites, M. (2009). The global politics of lesbian, gay, bisexual and transgender human rights: An introduction. *Contemporary Politics, 15*(1), 1-17.

Kontopoulos, K. M. (1993). *The logics of social structure* (Vol. 6). Cambridge University Press.

Kosack, S. (2003). Effective aid: How democracy allows development aid to improve the quality of life. *World development*, *31*(1), 1-22.

Kotter, J. P. (2010). *Power and influence*. Simon and Schuster.

Kovács, G., & Spens, K. M. (2005). Abductive reasoning in logistics research. International Journal of *Physical Distribution & Logistics Management, 35*(2), 132-144.

Kraske, J. (Ed.). (1996). *Bankers with a mission: the presidents of the World Bank, 1946-91.* World Bank Publications.

Krasner, S. D. (1999). *Sovereignty: organized hypocrisy*. Princeton University Press.

Kshetri N. (2020) *Cabo Verde. In: The Statesman's Yearbook 2020. The Statesman's Yearbook.* Palgrave Macmillan, London.

Kühl, S. (2009). Capacity development as the model for development aid organizations. *Development and Change, 40*(3), 551-577.

Lacouture, A., Breton, E., Guichard, A., & Ridde, V. (2015). The concept of mechanism from a realist approach: a scoping review to facilitate its operationalization in public health program evaluation. *Implementation Science, 10*(1), 153.

Lagomarsino, G., Garabrant, A., Adyas, A., Muga, R., & Otoo, N. (2012). Moving towards universal health coverage: health insurance reforms in nine developing countries in Africa and Asia. *The Lancet*, *380*(9845), 933-943.

Lavenex, S., & Uçarer, E. M. (2004). The external dimension of Europeanization: The case of immigration policies. *Cooperation and conflict*, *39*(4), 417-443.

Lavinas, L. (2015). Latin America: anti-poverty schemes instead of social protection. *Contemporary Readings in Law and Social Justice*, *7*(1), 112-171.

Leleur, S. (2017). The Meaning of System: Towards a Complexity Orientation in Systems Thinking. In *Decision Management: Concepts, Methodologies, Tools, and Applications* (pp. 67-82). IGI global.

Lensink, R. and White, H., (2000). Assessing aid: a manifesto for aid in the 21st century?. *Oxford Development Studies*, *28*(1), pp.5-18.

Levy, M. J. (1967). Social patterns (structures) and problems of modernization. *Readings on social change*, 189-208.

Levy, V. (1988). Aid and growth in Sub-Saharan Africa: The recent experience. *European Economic Review*, *32*(9), 1777-1795.

Lewis P. K and College. C, (2012). "*Four Types of Power in International Relations: Coercive Power, Bargaining Power, Concerted Power, and Institutionalized Power",* Paper for IPSA, XXIInd World Congress of Political Science, Madrid.

Li, T. M. (2007). *The will to improve: Governmentality, development, and the practice of politics*. duke university Press.

Liew, L. (2005). China's engagement with neo-liberalism: Path dependency, geography and party self-reinvention. *The Journal of Development Studies, 41*(2), 331-352.

Lindblom, C. E. (1979). Still muddling, not yet through. *Public administration review, 39*(6), 517-526.

Lloyd, T., Morrisey, O., & Osei, R. (2001). *Aid, export and growth in ghana* (No. 01/01). CREDIT Research Paper.

Lodge, M. 2005. The importance of being modern: international benchmarking and national regulatory innovation. *Journal of European Public Policy,12*(4), 649-667.

Loewenson, R. (1993). Structural adjustment and health policy in Africa. *International Journal of Health Services*, *23*(4), 717-730.

Lombardi, D. (2005). *The IMF's Role in Low-Income Countries: Issues and Challenges* (No. 5-177). International Monetary Fund.

Longo, J. (2013). *Towards policy analysis 2.0* (Doctoral dissertation).

Lopez, R. A., & Hathie, I. (1998). Structural adjustment programs and peanut market performance in Senegal. *In AAEA annual meetings*, Salt Lake City, UT.

Loxley, J., & Sackey, H. A. (2008). Aid effectiveness in Africa. *African Development Review*, *20*(2), 163-199.

Lu, S., & Ram, R. (2001). Foreign aid, government policies, and economic growth: Further evidence from cross-country panel data for 1970-1993. *Economia Internazionale/International Economics*, *54*(1), 15-29.

Lundvall, B. Å., Joseph, K. J., Chaminade, C., & Vang, J. (Eds.). (2011). *Handbook of innovation systems and developing countries: building domestic capabilities in a global setting*. Edward Elgar Publishing.

Luo, Q., Catney, P., Lerner, D. (2009). Risk-based management of contaminated land in the UK: Lessons for China? *Journal of environmental management*. 90, 1123–1134. doi:http://dx.doi.org/10.1016/j.jenvman.2008.05.001.

Madon, S. (2000). The Internet and socio-economic development: exploring the interaction. *Information technology & people, 13*(2), 85-101.

Maggetti, M., & Gilardi, F. (2016). Problems (and solutions) in the measurement of policy diffusion mechanisms. *Journal of Public Policy, 36*(1), 87-107.

Magnin, M., Jeannot, E., Voahangy, R., & Stoll, B. (2018). A realistic evaluation approach highlighted the success factors and difficulties of an innovative and comprehensive malnutrition programme in Madagascar. *Acta Paediatrica*.

Major, C. H., & Savin-Baden, M. (2010). *An introduction to qualitative research synthesis: Managing the information explosion in social science research*. London. Sage.

Mansfield, E. D. (1993). Concentration, polarity, and the distribution of power. *International Studies Quarterly*, *37*(1), 105-128.

Maranga, D., Kennedy, M., Madison, D., & Denise, R. (2017). Globalization and its implications for global leadership. *Globalization and Its Implications for Global Leadership (June 3, 2017)*.

March, J. G., & Olsen, J. P. (1989). *The organizational basis of politics*. Free.

Marquand, D. (2004). Decline of the public: *The hollowing out of citizenship*. Blackwell Publishing.

Marsh, D., & Sharman, J. C. (2009). Policy diffusion and policy transfer. *Policy studies*, 30(3), 269-288

Mason, S. E., & Asher, E. R. (1973). *The World Bank since Bretton Woods: the origins, policies, operations, and impact of the International Bank for Reconstruction and Development and the other members of the World Bank Group* (No. 119684, pp. 1-946). The World Bank.

Massey, A. (2009). Policy mimesis in the context of global governance. *Policy Studies*, *30*(3), 383-395.

Masson, M. P. R. (2001). *Globalization facts and figures* (No. 1-4). International Monetary Fund.

Mastenbroek, E. (2005). EU compliance: Still a 'black hole'?. *Journal of European Public Policy*, *12*(6), 1103-1120.

Mastenbroek, E., & Kaeding, M. (2006). Europeanization beyond the goodness of fit: domestic politics in the forefront. *Comparative European Politics*, *4*(4), 331-354.

Mastenbroek, E., & van Keulen, M. (2006). Beyond the goodness of fit: a preference-based account of europeanization. In *European research reloaded: cooperation and europeanized states integration among europeanized states* (pp. 19-42). Springer, Dordrecht.

May, P. J. (1992). Policy learning and failure. *Journal of public policy, 12*(4), 331-354.

May, P. J., Sapotichne, J., & Workman, S. (2006). Policy coherence and policy domains. *Policy Studies Journal*, *34*(3), 381-403.

McCann, E., & Ward, K. (Eds.). (2011). *Mobile urbanism: cities and policymaking in the global age* (Vol. 17). U of Minnesota Press.

McGillivray, M. (2003). *Aid effectiveness and selectivity: Integrating multiple objectives into aid allocations* (No. 2003/71). WIDER Discussion Papers//World Institute for Development Economics (UNU-WIDER).

McGillivray, M., & Morrissey, O. (2000). Aid fungibility in assessing aid: red herring or true concern?. *Journal of international development*, *12*(3), 413-428.

McGuire, L. (2001). Service charters-global convergence or national divergence? A comparison of initiatives in Australia, the United Kingdom and the United States. *Public Management Review*, *3*(4), 493-524.

Meadows, D. H. (2009). *Thinking in systems: A primer*. Chelsea green publishing.

Mearsheimer, J. J. (2001). *The tragedy of great power politics*. WW Norton & Company.

Meernik, J. (1996). United States military intervention and the promotion of democracy. *Journal of Peace Research*, 33(4), 391-402.

Mekasha, T. J., & Tarp, F. (2011). Aid and Growth. *What Meta-Analysis Reveals, UNU-WIDER Working Paper*, *22*.

Merry, S., & Levitt, P. (2009). Vernacularization in Action: Using Global Women's Human Rights Locally. *Global Networks*, *9*(4).

Merton, R. K. (1957). On sociological theories of the middle range. In *On theoretical sociol-ogy: Five essays, old and new.* New York: Free Press

Meseguer, C. (2005). Policy learning, policy diffusion, and the making of a new order. *The Annals of the American Academy of Political and Social Science*, *598*(1), 67-82.

Meyer, A. D., Tsui, A. S., & Hinings, C. R. (1993). Configurational approaches to organizational analysis. *Academy of Management journal*, *36*(6), 1175-1195.

Mihalyi, D., & Mate, A. (2019). Text-Mining IMF Country Reports–An Original Dataset. *Available at SSRN 3268934*.

Milenkovic, N., Vukmirovic, J., Bulajic, M., & Radojicic, Z. (2014). A multivariate approach in measuring socio-economic development of MENA countries. *Economic Modelling*, 38, 604-608.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook*. sage.

Miles, R. E., Snow, C. C., Meyer, A. D., & Coleman Jr, H. J. (1978). Organizational strategy, structure, and process. *Academy of management review*, *3*(3), 546-562.

Miller, D. (2018). Challenging trends in configuration research: Where are the configurations?. *Strategic Organization*, *16*(4), 453-469.

Miller, D., & Friesen, P. H. (1978). Archetypes of strategy formulation. *Management science*, *24*(9), 921-933.

Miller, D., & Friesen, P. H. (1984). A longitudinal study of the corporate life cycle. *Management science*, *30*(10), 1161-1183.

Minoiu, C., & Reddy, S. G. (2009). Estimating poverty and inequality from grouped data: How well do parametric methods perform?. *Journal of Income Distribution*, *18*(2).

Moran, M., & Wood, B. (1996). The globalization of health care policy. *Globalization and public policy*, 125-42.

Moreira, S. B. (2005). Evaluating the impact of foreign aid on economic growth: A cross-country study. *Journal of Economic Development*, *30*(2), 25-48.

Morriss, P. (2002). *Power: a philosophical analysis*. Manchester University Press.

Moyo, D. (2009). *Dead aid: Why aid is not working and how there is a better way for Africa.* New York: Farrar, Straus and Giroux.

Mueller, J. L. (2011). The IMF, neoliberalism and hegemony. *Global Society*, 25(3), 377-402.

Mühleisen, M., Ghura, D., Nord, R., Hadjimichael, M. T., & Ucer, E. M. (1995). *Sub-Saharan Africa; Growth, Savings, and Investment, 1986-93* (No. 118). International Monetary Fund.

Maggiori, M., Neiman, B., & Schreger, J. (2019). The rise of the dollar and fall of the Euro as international currencies. In *AEA Papers and Proceedings* (Vol. 109, pp. 521-26).

Mundial, B. (1989). *Sub-Saharan Africa: from crisis to sustainable growth: a long-term perspective study.* World Bank.

Murray, A., Skene, K., & Haynes, K. (2017). The circular economy: An interdisciplinary exploration of the concept and application in a global context. *Journal of Business Ethics,* 140(3), 369-380.

Nair, G. G. (2003). Nurturing capacity in developing countries: From consensus to practice.

Nanz, P. and Steffek, J. (2004) 'Global Governance, Participation and the Public Sphere'. *Government and Opposition*, 314-335.

Narula, R., & Dunning, J. H. (2010). Multinational enterprises, development and globalization: some clarifications and a research agenda. *Oxford Development Studies*, 38(3), 263-287.

Nye Jr, J. S. (2002). Limits of American power. *Political Science Quarterly*, *117*(4), 545-559.

Nye Jr, J. S. (2004). *Soft power: The means to success in world politics*. Public affairs.

Nye Jr, J. S. (2007). The place of soft power in state-based conflict management. *Crocker, Hampson, and Aall*, *391*.

Neumayer, E. (2003). The determinants of aid allocation by regional multilateral development banks and United Nations agencies. *International Studies Quarterly*, *47*(1), 101-122.

O'Brien, R. (2009). Organizational politics, multilateral economic organizations and social policy. *The Global Social Policy Reader*, 167.

O'Dwyer, B. (2004). Qualitative data analysis: illuminating a process for transforming a 'messy' but 'attractive' 'nuisance'. In *The real life guide to accounting research* (pp. 391-407). Elsevier.

OHCHR | UPR . (n.d.). Ohchr.org. Retrieved 7 December 2017, from http://www.ohchr.org/EN/HRBodies/UPR/Pages/UPRMain.aspx

Ohmae, K. (1995). *The end of the nation state: The rise of regional economies*. Simon and Schuster.

O'Leary, Z. (2014). *The essential guide to doing your research project.* 2nd edition.

Oliver, R. W. (1975). *International Economic Co-operation and the World Bank*. London: Macmillan.

Olsen, J. P. (2002). The many faces of Europeanization. *JCMS: Journal of Common Market Studies*, *40*(5), 921-952.

Orenstein, M. A. (2009). Analysing transnational policy formation: the case of pensions privatization. *The Global Social Policy Reader*, 57.

Ortiz, I., Cummins, M., Capaldo, J., & Karunanethy, K. (2015). *The decade of adjustment: A review of austerity trends 2010-2020 in 187 countries.* Extension of Social Security Working Paper No. 53. Geneva: International Labour Office, South Centre and Initiative for Policy Dialogue, Columbia University.

Ostry, J. D., & Zettelmeyer, J. (2005). *Strengthening IMF crisis prevention* (Vol. 5). International Monetary Fund.

Otoo, S., Agapitova, N. & Behrens, J. (2009). *Capacity Development Results Framework*. World Bank, Washington, DC

Ougaard, M. (2010). The OECD's global role: Agenda-setting and policy diffusion. In *Mechanisms of Oecd Governance* (pp. 26-49). Oxford University Press.

Overseas Development Council Report (2000), *The Future Role of the IMF in Development.* Washington: DC.

Page, E. C. (2000). Future governance and the literature on policy transfer and lesson drawing. *ESRC Future Governance Papers*.

Painter, M., & Pierre, J. (Eds.). (2005). *Challenges to state policy capacity: Global trends and comparative perspectives*. London: Palgrave Macmillan.

Palvia, P., Baqir, N., & Nemati, H. (2018). ICT for socio-economic development: A citizens' perspective. *Information & Management*, *55*(2), 160-176.

Panayotou, T. (2016). Economic growth and the environment. *The environment in anthropology*, 140-148.

Parr, A. (2014). *The wrath of capital: Neoliberalism and climate change politics*. Columbia University Press.

Parsons, W. (2004). Not just steering but weaving: Relevant knowledge and the craft of building policy capacity and coherence. *Australian Journal of Public Administration*, 63(1), 43–57

Patton, M.Q. (2002), *Qualitative Evaluation and Research Methods*, 3rd ed., Sage, Newbury Park, CA.

Pawson, R. (2006). *Evidence-based policy: a realist perspective*. Sage.

Pawson, R., & Tilley, N. (1997). *Realistic evaluation*. Sage.

Peck, J. (2011). Geographies of policy: From transfer-diffusion to mobility-mutation. *Progress in human geography*, *35*(6), 773-797.

Peck, J., & Theodore, N. (2015). *Fast policy: Experimental statecraft at the thresholds of neoliberalism*. University of Minnesota Press.

Peet, R. (2009). *Unholy trinity: the IMF, World Bank and WTO*. Zed Books Ltd.

Pennings, P. (2017). Does immigration hollow out state legitimacy in times of economic crisis?. *European Politics and Society*, *18*(4), 497-510.

Peters, B. G., & Pierre, J. (Eds.). (2006). *Handbook of public policy*. Sage.

Petersen, K. (2012). Four Types of Power in International Relations Coercive Power, Bargaining Power, Concerted Power, and Institutionalized Power. In *A Paper for IPSA, XXIInd World Congress of Political Science, Madrid*.

Pettersson, J. (2007). Foreign sectoral aid fungibility, growth and poverty reduction. *The Journal of the Development Studies Association*, 19(8), 1074-1098.

Picciotto, R. (2005). The evaluation of policy coherence for development. *Evaluation*, *11*(3), 311-330.

Pierce, A. (1964). Durkheim and functionalism. *Essays on Sociology and Philosophy by Emile Durkheim et al*, 77-96.

Polak, J. J. (1991). *The changing nature of IMF conditionality*. Princeton, NJ: Princeton Essays in International Finance No. 184

Popper, K. (1945) *The Open Society and its Enemies*. Volume 2 Hegel and Marx, London: Routledge

Powell, J., & Taylor, P. J. (2017). *The World Bank*. Policy Press.

Pronk, J. P. (2001). Aid as a Catalyst. *Development and Change*, 32(4), 611-629.

Przeworski, A., & Vreeland, J. R. (2000). The effect of IMF programs on economic growth. *Journal of development Economics*, 62(2), 385-421.

Radaelli, C. M. (2000). Policy transfer in the European Union: institutional isomorphism as a source of legitimacy. *Governance*, 13(1), 25-43.

Radaelli, C. M. (2003). The Europeanization of public policy. *The politics of Europeanization*, 27-56.

Radelet, S., & Sachs, J. (1998). *The onset of the East Asian financial crisis* (No. w6680). National bureau of economic research.

Ragin, C. (1987). *The comparative method: Moving beyond qualitative and quantitative methods*. Berkeley: University of California.

Ragin, C. C. (1997). Turning the tables: how case-oriented methods challenge variable-oriented methods. *Comparative social research*, *16*(1), 27-42.

Ragin, C. C. (1999). Using qualitative comparative analysis to study causal complexity. *Health services research*, *34*(5 Pt 2), 1225.

Ragin, C. C. (2000). *Fuzzy-set social science*. University of Chicago Press.

Ragin, C. C., & Fiss, P. C. (2017). *Intersectional inequality: Race, class, test scores, and poverty*. University of Chicago Press.

Ragin, C. C., & Rihoux, B. (Eds.). (2009). *Configurational comparative methods: Qualitative comparative analysis (QCA) and related techniques*. Sage.

Rajan, R. G., & Subramanian, A. (2008). Aid and growth: What does the cross-country evidence really show?. *The Review of economics and Statistics*, *90*(4), 643-665.

Raven, B. H. (1958). Legitimate power, coercive power, and observability in social influence. *Sociometry*, *21*(2), 83-97.

Ray, J. L., & Singer, J. D. (1973). Measuring the concentration of power in the international system. *Sociological Methods & Research*, *1*(4), 403-437.

Rayner, J., Howlett, M., Wilson, J., Cashore, B., & Hoberg, G. (2001). Privileging the sub-sector: critical sub-sectors and sectoral relationships in forest policy-making. *Forest Policy and Economics*, 2(3-4), 319-332.

Rehman, S. (1968). *Basic democracies works programme and rural development in East Pakistan*. Bureau of Economic Research, University of Dacca.

Reynolds, M. (2012). *Relationships matter: the aid relationship in low-incomepost-communist countries* (Doctoral dissertation, SOAS, University of London).

Riddell, R. C. (2008). *Does foreign aid really work?*. Oxford University Press.

Rieffel, A. (1985). *The role of the Paris Club in managing debt problems*. International Finance Section, Department of Economics, Princeton University.

Rihoux, B., Rezsöhazy, I., & Bol, D. (2011). Qualitative comparative analysis (QCA) in public policy analysis: an extensive review. *German Policy Studies*, 7(3), 9-82.

Robert, E., Ridde, V., Marchal, B., & Fournier, P. (2012). Protocol: a realist review of user fee exemption policies for health services in Africa. *BMJ open*, 2(1), e000706.

Robertson, R. (1992). *Globalization: Social theory and global culture* (Vol. 16). Sage.

Rodrik, D. (2002). *After neoliberalism, what?*. Harvard University.

Rodrik, D. (2006). Goodbye Washington consensus, hello Washington confusion? A review of the World Bank's economic growth in the 1990s: learning from a decade of reform. *Journal of Economic literature*, 44(4), 973-987.

Rodrik, R. (1995). Trade and industrial policy reform. *Handbook of development economics*, 3, 2925-2982.

Rogers, E. M (2003). *Diffusion of Innovations*, 5th edition. New York: Free Press.

Rokach, L., & Maimon, O. (2005). Clustering methods. In *Data mining and knowledge discovery handbook* (pp. 321-352). Springer, Boston, MA.

Romesburg, C. (2004). *Cluster analysis for researchers*. Lulu. com.

Rondinelli, D. A., & Mandell, M. B. (1981). Meeting basic needs in Asia, Part I: Government capacity and performance. *Public Administration and Development*, 1(2), 133-150.

Ronit, K., & Schneider, V. (2013). Private organizations and their contribution to problem-solving in the global arena. In: *Private Organisations in Global Politics* (pp. 23-55). Routledge.

O'Reilly G. (2019) Development: Ideal and Basics. In: *Aligning Geopolitics, Humanitarian Action and Geography in Times of Conflict. Key Challenges in Geography* (EUROGEO Book Series). Springer, Cham. https://doi.org/10.1007/978-3-030-11398-8_8

Roodman, D. (2007). The anarchy of numbers: aid, development, and cross-country empirics. *The World Bank Economic Review*, *21*(2), 255-277.

Rose, R. (1991). What is lesson-drawing?. *Journal of public policy*, 11(01), 3-30.

Rose, R. (1993). *Lesson-drawing in public policy: A guide to learning across time and space* (Vol. 91). Chatham, NJ: Chatham House Publishers.

Rose, R. (2004). *Learning from comparative public policy: A practical guide*. Routledge.

Rose, R. (2005). *Learning from Comparative Public Policy: A Guide to Lesson-drawing*. Routledge.

Rosenstein-Rodan, P. (1976). The Theory of the Big Push. *Leading Issues in Economic Development*, 632-636.

Rosenstein-Rodan, P. N. (1961). International aid for underdeveloped countries. *The Review of Economics and Statistics*, *43*(2), 107-138.

Rosenzweig, M. R., & Zhang, J. (2009). Do population control policies induce more human capital investment? Twins, birth weight and China's "one-child" policy. *The Review of Economic Studies*, 76(3), 1149-1174.

Rostow, W. W. (1956). Rostow on Growth. *The Economist*, *15*.

Rostow, W. W. (1960). *The stages of growth: A non-communist manifesto*. Cambridge University Press.

Rostow, W. W. (1990). *The stages of economic growth: A non-communist manifesto*. Cambridge university press.

Roy, R., & Almeida Ramos, R. (2012). *IMF Article IV reports: an analysis of policy recommendations* (No. 86). Working Paper, International Policy Centre for Inclusive Growth.

Sabatier, P. A. (1988). An advocacy coalition framework of policy change and the role of policy-oriented learning therein. *Policy sciences*, *21*(2-3), 129-168.

Sabatier, P. A. (1998). The advocacy coalition framework: revisions and relevance for Europe. *Journal of European public policy,* 5(1), 98-130.

Sabatier, P. A., & Weible, C. M. (2007). The advocacy coalition framework. *Theories of the policy process*, *2*, 189-220.

Sachs, J. (2002). Resolving the debt crisis of low-income countries. *Brookings papers on economic activity,* 2002(1), 257-286.

Sachs, J. D. (1989). Front matter," Developing Country Debt and the World Economy. *In Developing Country Debt and the World Economy* (pp. 14-0). University of Chicago Press.

Sahoo, K. (2016). *Foreign Aid and Economic Development: Empirical Evidence from Select South Asian Economies* (Doctoral dissertation).

Saith, A. (2006). From universal values to millennium development goals: Lost in translation. *Development and change,* 37(6), 1167-1199.

Sapsford, D., Sarkar, P., & Singer, H. W. (1992). The prebisch-singer terms of trade controversy revisited. *Journal of International Development*, 4(3), 315-332.

Sassen, S. (1996). *Losing control?: Sovereignty in an age of globalization*. Columbia University Press.

Sauvé, S., Bernard, S., & Sloan, P. (2016). Environmental sciences, sustainable development and circular economy: Alternative concepts for trans-disciplinary research. *Environmental Development*, 17, 48-56.

Scammell, W. M. (1975). *International monetary policy: Bretton Woods and after* (No. 04; HG3881, S2.).

Schneider, C. Q., & Rohlfing, I. (2016). Case studies nested in fuzzy-set QCA on sufficiency: Formalizing case selection and causal inference. *Sociological Methods & Research*, *45*(3), 526-568.

Schneider, C.Q and Wagemann. C. (2010). Standards of Good Practice in QCA and Fuzzy Sets. *Comparative Sociology* 9:397-418

Schneider, C.Q. and Wagemann, C. (2006) Reducing complexity in QCA. *European Journal of Political Research*. 45: 751-86.

Scholte, J. A. (1997). Global capitalism and the state. *International affairs*, 73(3), 427-452.

Scholte, J. A. (2005). *The sources of neoliberal globalization* (Vol. 10). Geneva: UNRISD.

Sekaran, U. (2000). *Research Methods for Business; A skill business approach*. New York: John Willey & Sons.

Serra, N., & Stiglitz, J. E. (Eds.). (2008). *The Washington consensus reconsidered: Towards a new global governance*. OUP Oxford.

Shah, A. (2013). Structural adjustment—a major cause of poverty. *Global Issues*, 24.

Shaw, S., Elston, J., & Abbott, S. (2004). Comparative analysis of health policy implementation: the use of documentary analysis. *Policy Studies*, *25*(4), 259-266.

Shipan, C. R., & Volden, C. (2008). The mechanisms of policy diffusion. *American journal of political science,* 52(4), 840-857.

Simmons, B. A., & Elkins, Z. (2004). The globalization of liberalization: Policy diffusion in the international political economy. *American political science review*, *98*(1), 171-189.

Simon, H. A. (2000). Bounded rationality in social science: Today and tomorrow. *Mind & Society*, 1(1), 25-39.

Singer, O. (1990). Policy communities and discourse coalitions: The role of policy analysis in economic policy making. *Knowledge*, *11*(4), 428-458.

Skelcher, C. (2000). Changing images of the state: overloaded, hollowed-out, congested. *Public policy and administration*, *15*(3), 3-19.

Sklair, Leslie (1991), *Sociology of the Global System*. London: Harvester Wheatsheaf

Skogstad, G. (2000). Globalization and public policy: Situating Canadian analyses. *Canadian Journal of Political Science/Revue canadienne de science politique*, *33*(4), 805-828.

Slaughter, A. M. (2009). *A new world order*. Princeton University Press.

Soares, F. V., & Silva, E. (2010). *Conditional cash transfer programmes and gender vulnerabilities: Case studies of Brazil, Chile and Colombia* (No. 69). Working paper.

Steger, U., Amann, W., & Maznevski, M. L. (2007). *Managing complexity in global organizations* (Vol. 5). John Wiley & Sons.

Stiglitz, J. E. (2002). Participation and development: Perspectives from the comprehensive development paradigm. *Review of development economics*, 6(2), 163-182.

Stiglitz, J. E. (2003). Democratizing the International Monetary Fund and the World Bank: governance and accountability. *Governance*, *16*(1), 111-139.

Stiglitz, J. E. (2006). *Making globalisation work*. Esri.

Stiglitz, J. E. (2007). Making globalization work. WW Norton & Company.

Stiglitz, J. (2008). Is there a post-Washington Consensus consensus? In N. Serra & J. Stiglitz (Eds.), *The Washington consensus reconsidered: Towards a new global governance* (pp. 41–56). Oxford: Oxford University Press.

Stiglitz, J. (2012). *The price of inequality: How today's divided society endangers our future*. New York, NY: WW Norton.

Stoll, R. J., & Ward, M. D. (Eds.). (1989). *Power in world politics*. L. Rienner Publishers.

Stone, D. (2000). Non-governmental policy transfer: the strategies of independent policy institutes. *Governance*, 13(1), 45-70.

Stone, D. (2001). Learning lessons, policy transfer and the international diffusion of policy ideas. *Centre for the Study of Globalisation and Regionalisation working paper*, (69/01)

Stone, D. (2001). Think tanks, global lesson-drawing and networking social policy ideas. *Global social policy*, *1*(3), 338-360.

Stone, D. (2004). Transfer agents and global networks in the 'transnationalization' of policy. *Journal of European public policy*, 11(3), 545-566.

Stone, D. (2008). Global public policy, transnational policy communities, and their networks. *Policy studies journal*, *36*(1), 19-38.

Stone, D. (2012). Transfer and translation of policy. *Policy studies*, 33(6), 483-499.

Stone, R. W. (2008). The scope of IMF conditionality. *International Organization*, 62(04), 589-620

Strang, D. and Meyer, J. (1993) 'Institutional conditions for diffusion', *Theory and Society,* 22: 487 511.

Strange, S. (1997). The erosion of the state. *Current History*, *96*(613), 365.

Stromquist, N. P., & Monkman, K. (2014). Defining globalization and assessing its implications for knowledge and education, revisited. *Globalization and education: Integration and contestation across cultures*, 1-21.

Stubbs, R., & Underhill, G. R. (Eds.). (2000). *Political economy and the changing global order* (pp. 261-88). Toronto, Ontario, Canada: Oxford University Press.

Summers, L. H., & Pritchett, L. H. (1993). The structural-adjustment debate. *The American Economic Review*, 83(2), 383-389.

Sunkel, O. (1969). National development policy and external dependence in Latin America. *The Journal of Development Studies*, *6*(1), 23-48.

Swanborn, P. (2010). *Case study research: What, why and how?*. Sage.

Talcott, P. (2013). *The social system.* Routledge.

Tarp, F. (2011). On Aid and Growth: Reflections Ahead of Busan. *UNU-WIDER Angle*, *10*.

Taylor, I. (2007). *China and Africa: engagement and compromise* (Vol. 10). Routledge.

Taylor, L., Haynes, P., & Darking, M. (2020). English local government finance in transition: towards the 'marketization of income'. *Public Management Review*, 1-26.

Taylor, S.S., Fisher, D. and Dufresne, R.L. (2002), "The aesthetics of management storytelling: a key to organizational learning", *Management Learning*, Vol. 33 No. 3, pp. 313-30.

Tews, K. 2002. *The diffusion approach for comparative policy analysis. Wurzeln und Potentiale eines Konzepts. Eine Literaturstudie*, FU Berlin: Forschungsstelle für Umweltpolitik, FFU-Report - 02.

Thatcher, M. (2014). From old to new industrial policy via economic regulation. *Rivista della regolazione dei mercati*, *2*, 6-22.

Thomann, E. (2017). Qualitative comparative analysis (QCA) as an approach to comparative policy analysis. In edited by Guillaume Fontaine and B. Guy Peters. *Handbook of methodology for comparative policy analysis.* Cheltenham, UK/Northampton, MA, USA: Edward Elgar.

Thomann, E., & Maggetti, M. (2020). Designing research with qualitative comparative analysis (QCA): Approaches, challenges, and tools. *Sociological Methods & Research*, *49*(2), 356-386.

Thorbecke, E. (2007). The evolution of the development doctrine, 1950–2005. *In Advancing development* (pp. 3-36). Palgrave Macmillan, London.

Tilley, N. (2000). Realistic evaluation: an overview. In *founding conference of the Danish Evaluation Society* (Vol. 8).

Tiwari, M. (2015). Looking Back to Move Forward: The MDGS and the Road to Post-2015: Introduction to Journal of International Development Special Issue on Reflections on the Post-2015 Debate. *Journal of International Development*, 27(3), 313-319.

Todaro, M. P. (1994). *Economic development* (5th ed.). New York: Longman

Todaro, M., & Smith, S. (2009). *Urbanization and Rural-Urban Migration: Theory and Policy* (Eds.), Economic Development.

True, J. L. "Jones,. D., Baumgarter, FR (2007),'Punctuated-Equilibrium Theory: Explaining Stability and Change in Public Policymaking'." *PA Sabatier (Éd.), Theories of the Policy Process*: 155-188.

Ulrich, H. P. (2010). Enhancing the effectiveness of international development: a systems approach. *Development in Practice*, *20*(2), 251-264.

van Gerven, M., & Weiguo, Y. (2017). Teaching the Dragon? The Diffusion of European Union's Social and Employment Policies to China. In *Managing International Connectivity, Diversity of Learning and Changing Labour Markets* (pp. 245-261). Springer, Singapore.

Venner, M. (2015). The concept of 'capacity'in development assistance: new paradigm or more of the same?. *Global Change, Peace & Security*, 27(1), 85-96.

Viotti, P. R., & Kauppi, M. V. (2013). *International relations and world politics* (p. 207). Boston, MA: Pearson.

Vreeland, J. (2007). *The International Monetary Fund: Politics of Conditional Lending*. New York: Routledge

Vreeland, J. R. (2003). Why do governments and the IMF enter into agreements? Statistically selected cases. *International Political Science Review*, 24(3), 321-343.

Vreeland, J. R. (2006). *The International Monetary Fund (IMF): politics of conditional lending*. Routledge.

Walker, J. L. (1969). The diffusion of innovations among the American states. *American political science review*, *63*(3), 880-899.

Wallerstein, I. (1979). *The capitalist world-economy* (Vol. 2). Cambridge University Press.

Wallerstein, I. M. (2004). *World-systems analysis: An introduction*. Duke University Press.

Weible, C. M., Heikkila, T., DeLeon, P., & Sabatier, P. A. (2012). Understanding and influencing the policy process. *Policy sciences*, *45*(1), 1-21.

Weiss, J.A., Gruber, J.E., & Carver, R.H. (1986). Reflections on value: Policy makers evaluate federal information systems. *Public Administration Review*, 46, 497–505.

Weiss, M. A. (2004). *The Paris Club and International Debt Relief*. Congressional Research Service, Library of Congress.

Weisskopf, T. E. (1972). The impact of foreign capital inflow on domestic savings in underdeveloped countries. *Journal of international Economics*, *2*(1), 25-38.

Welle-Strand, A., & Kjøllesdal, K. (2010). Foreign aid strategies: China taking over?. *Asian Social Science*, *6*(10), 3–13.

Weyland, K. (2009). *Bounded rationality and policy diffusion: social sector reform in Latin America*. Princeton University Press.

Weyland, K. (2013). Latin America's authoritarian drift: the threat from the populist left. *Journal of democracy*, *24*(3), 18-32.

Wigblad, R. (2003). Praktikteori en möjlig forskningsstrategi?. In *The SIRA-conference, Interaktiv forskning utmaningar för akademin, Växjö, 27-28 november, 2003*.

Wilks, D. S. (2011). *Cluster analysis. In International geophysics (Vol. 100, pp. 603-616).* Academic press.

Williams, R. A. (2009). Exogenous shocks in subsystem adjustment and policy change: the credit crunch and Canadian banking regulation. *Journal of Public Policy*, 29(1), 29-53.

Williams, R. A. (2009). Exogenous shocks in subsystem adjustment and policy change: the credit crunch and Canadian banking regulation. *Journal of Public Policy*, *29*(1), 29-53.

Williamson, J. (1983). On seeking to improve IMF conditionality. *The American Economic Review*, *73*(2), 354-358.

Williamson, J. (1990). What Washington means by policy reform. *Latin American adjustment: How much has happened*, *1*, 90-120.

Williamson, J. (1994). *The political economy of policy reform*. Peterson Institute.

Wolff, M. J. (2013). Failure of the International Monetary Fund & World Bank to Achieve Integral Development: A Critical Historical Assessment of Bretton Woods Institutions Policies, Structures & Governance. *Syracuse J. Int'l L. & Com.,* 41, 71.

Wong, G., Greenhalgh, T., Westhorp, G., & Pawson, R. (2014). Development of methodological guidance, publication standards and training materials for realist and meta-narrative reviews: the RAMESES (Realist And Meta-narrative Evidence Syntheses–Evolving Standards) project. *BMC medicine*, *11*(1), 21.

Woods, N. (2006a). Bretton woods institutions. In *The Oxford Handbook on the United Nations*. Edited by: Weiss, T. G. and Daws, S. 327–361. Oxford, UK: Oxford University Press.

Woods, N. (2006b). *The globalizers: the IMF, the World Bank, and their borrowers*. Cornell University Press.

Woods, N. (2008). Whose aid? Whose influence? China, emerging donors and the silent revolution in development assistance. *International Affairs*, 84(6), 1205-1221.

Woolley, A. (2008). Legitimating public policy. *University of Toronto Law Journal*, 58(2), 153-184.

World Bank and International Monetary Fund. (2005). *Global monitoring report 2005: Millennium development goals: From consensus to momentum.* Washington, DC: World Bank.

World Bank. (2005). *Conditionality Revisited: Concepts, Experiences, and Lessons*. The World Bank.

World Bank. (n.d). *Country Overview (Cabo Verde)*. Retrieved 9 September 2019, from https://www.worldbank.org/en/country/caboverde/overview.

Wu, X., Ramesh, M., & Howlett, M. (2015). Policy capacity: A conceptual framework for understanding policy competences and capabilities. *Policy and Society*, 34(3-4), 165-171.

Xiao, C., & Dunlap, R. E. (2007). Validating a comprehensive model of environmental concern cross-nationally: A US-Canadian comparison. *Social science quarterly*, *88*(2), 471-493.

Yin, R. K. (2003). Case study research: design and methods, (3rd) Sage Publications. *Thousand Oaks, California*.

Yusuf, A. (2008). Impact of Globalization on Culture. *Unpublished Text*.

Zikmund, W. G. (2000). *Business Research Methods.* The Dryden Press: Orlando.

Calibrating Coercive Policy Transfer:

An Introduction to Policy Compatibility

(Appendixes)

DAVID ALEMNA

A thesis submitted in partial fulfilment of the
requirements of the University of Brighton
for the degree of Doctor of Philosophy

September 2020

Contents

Appendix A

List of Variables based on Policy Group and Indicator

Social Policy Variables (Human Development Indicators):

- Access to clean fuels and technologies for cooking (% of population)

- Access to electricity (% of population)

- Adjusted savings: education expenditure (current US$)

- Age dependency ratio (% of working-age population)

- Current health expenditure per capita (current US$)

- Current health expenditure (% of GDP)

- Domestic general government health expenditure per capita (current US$)

- Domestic general government health expenditure (% of current health expenditure)

- Employment to population ratio, ages 15-24, total (%) (modeled ILO estimate)

- Mortality rate, infant (per 1,000 live births)

- Life expectancy at birth, total (years)

- Out-of-pocket expenditure per capita (current US$)

- Out-of-pocket expenditure (% of current health expenditure)

- People using at least basic drinking water services (% of population)

- People using at least basic sanitation services (% of population)

- Population growth (annual %)

- Renewable electricity output (% of total electricity output)

- Renewable energy consumption (% of total final energy consumption)

Macro-Economic Policy Variables:

- Food production index (2004-2006 = 100)

- Foreign direct investment, net inflows (% of GDP)

- Foreign direct investment, net inflows (BoP, current US$)

- Gross domestic product, current prices

- Gross domestic product, deflator

- Gross domestic product per capita, current prices

- GDP per capita growth (annual %)

- Gross domestic product based on purchasing-power-parity (PPP) share of world total

- General government net lending/borrowing

- General government revenue

- General government total expenditure

- Inflation, average consumer prices

- Inflation, average consumer prices

- Net barter terms of trade index (2000 = 100)

- Net migration

- Net ODA received per capita (current US$)

- Net official development assistance and official aid received (current US$)

- Rural population (% of total population)

Appendix B

IMF Country Classification

Advanced countries (AC)
Emerging and developing countries (EDC)
Low-income developing countries (LIDC)
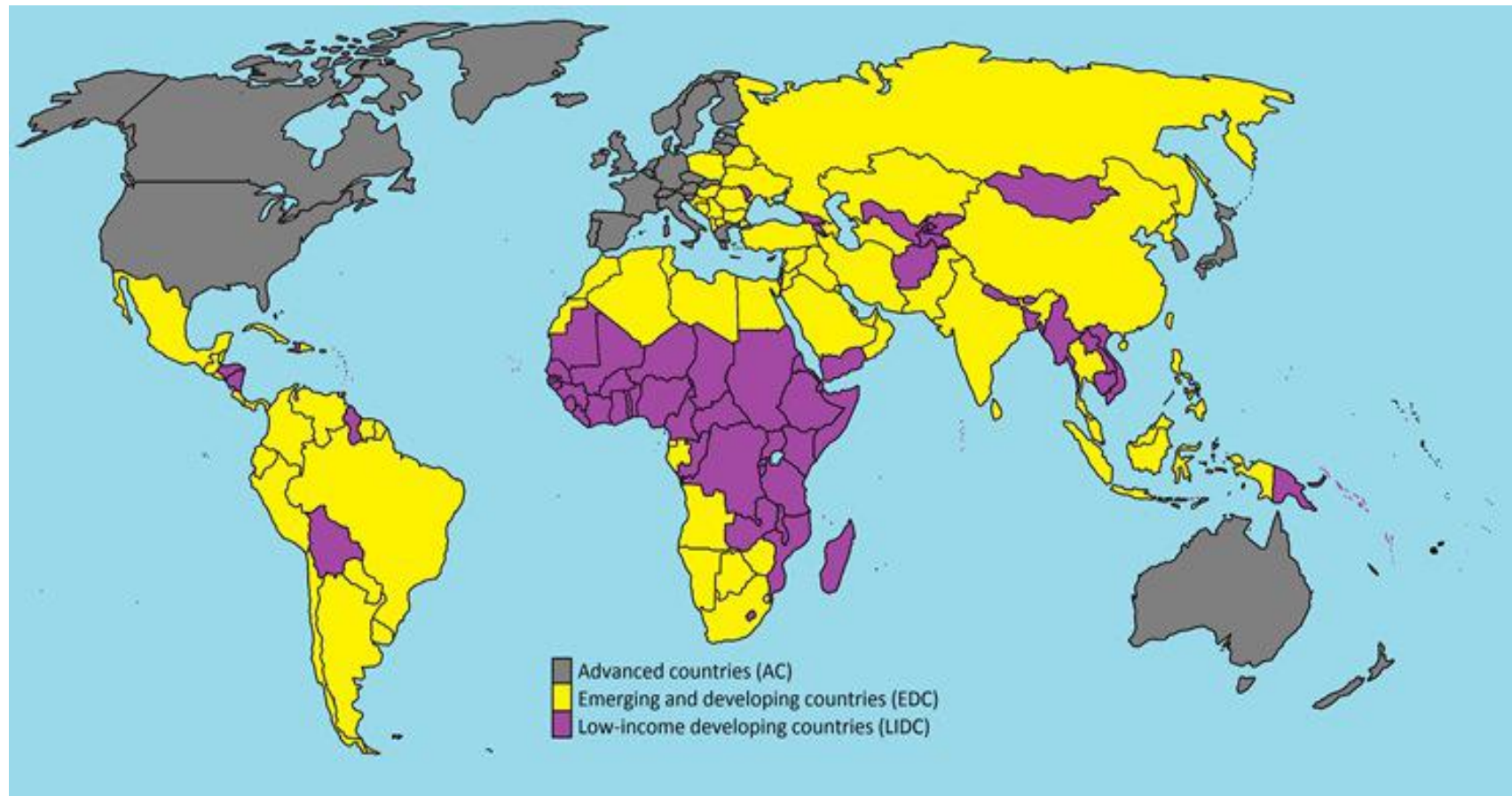
Appendix C

List of Country Cases Under Study

1. Angola
2. Benin
3. Burkina Faso
4. Burundi
5. Cabo Verde
6. Cameroon
7. Central African Rep.
8. Chad
9. Comoros
10. Democratic Rep. of the Congo
11. Republic of Congo
12. Côte d'Ivoire
13. Ethiopia
14. Gabon
15. The Gambia
16. Ghana
17. Guinea
18. Guinea-Bissau
19. Kenya
20. Lesotho
21. Liberia
22. Madagascar
23. Malawi
24. Mali
25. Mozambique
26. Niger
27. Nigeria
28. Rwanda
29. São Tomé and Príncipe
30. Senegal
31. Seychelles
32. Sierra Leone
33. Tanzania
34. Togo
35. Uganda
36. Zambia

Appendix D

Geographical Regions of Emerging and Developing Economies/Countries with International Monetary Fund-Supported Arrangement(s).

Emerging and Developing Economies in Sub-Saharan Africa		
1. Angola	14. Gabon	27. Nigeria
2. Benin	15. The Gambia	28. Rwanda
3. Burkina Faso	16. Ghana	29. São Tomé and Príncipe
4. Burundi	17. Guinea	30. Senegal
5. Cabo Verde	18. Guinea-Bissau	31. Seychelles
6. Cameroon	19. Kenya	32. Sierra Leone
7. Central African Rep.	20. Lesotho	33. Tanzania
8. Chad	21. Liberia	34. Togo
9. Comoros	22. Madagascar	35. Uganda
10. Democratic Rep. of the Congo	23. Malawi	36. Zambia
11. Republic of Congo	24. Mali	
12. Côte d'Ivoire	25. Mozambique	
13. Ethiopia	26. Niger	

Emerging and Developing Economies in Latin America and the Caribbean		
1. Antigua and Barbuda	9. Ecuador	18. Paraguay
2. Argentina	10. El Salvador	19. Peru
3. Bolivia	11. Grenada	20. St. Kitts and Nevis
4. Brazil	12. Guatemala	21. Suriname
5. Colombia	13. Haiti	22. Uruguay
6. Costa Rica	14. Honduras	
7. Dominica	15. Jamaica	
8. Dominican Republic	16. Mexico	
	17. Nicaragua	

Appendix A.1.

Marco-Economic Policy Variables Threshold Conversion for the Year 2000 – Sub-Saharan Africa

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTTI	NM	ODA	ODAA	RP%
Angola	62.63	878620000.00	9.62	19.96	2196.07	-0.02	0.08	2.80	52.42	49.62	325.03	2.71	92.60	172594.00	18.38	302210000.00	49.91
Benin	86.71	-12763065.75	-0.50	85.31	1320.87	2.75	0.02	-5.05	16.33	21.38	4.21	76.69	89.94	25005.00	35.65	244770000.00	61.67
Burkina Faso	68.05	23219874.87	0.88	99.20	852.38	-1.03	0.02	-3.41	18.89	22.30	-0.17	76.39	91.87	-125000.00	15.49	179780000.00	82.16
Burundi	90.79	11683518.19	1.34	59.95	523.82	-2.74	0.01	-6.44	18.21	24.65	25.52	29.92	81.98	50869.00	14.58	93310000.00	91.75
Cabo Verde	96.34	34202238.38	6.34	91.92	3089.01	11.97	0.00	-17.84	24.30	42.14	-2.40	100.00	99.48	-9859.00	217.55	94650000.00	46.57
Cameroon	77.78	159311348.00	1.58	94.00	2028.43	0.96	0.06	0.52	15.75	15.23	1.25	167.41	97.93	-54000.00	24.69	377160000.00	54.46
Central African Republic	92.66	889074.91	0.10	87.84	738.57	-4.53	0.01	-1.97	14.86	16.83	3.20	100.00	96.89	-24405.00	20.21	7590000.00	62.36
Chad	84.02	115172421.50	8.32	63.80	952.30	-4.45	0.01	-6.07	12.14	18.21	3.82	87.49	85.29	218966.00	15.74	131330000.00	78.36
Comoros	96.60	93636.12	0.05	100.00	1220.05	8.09	0.00	-1.91	14.43	16.34	5.90	100.00	63.43	-10000.00	35.60	19310000.00	71.92
Congo, Dem. Rep.	102.03	94190400.00	0.49	28.00	388.01	-9.24	0.04	-1.85	0.64	2.48	550.00	100.00	100.23	-241564.00	3.79	178440000.00	64.88
Congo, Rep.	83.20	-97897925.12	-3.04	261.16	4100.70	4.60	0.02	1.18	26.67	25.49	0.50	90.78	89.70	49674.00	9.97	32150000.00	41.31
Cote d'Ivoire	92.69	234701641.10	2.19	72.81	2439.02	-4.34	0.08	-1.15	16.65	17.80	2.53	100.00	110.55	-370000.00	21.03	350920000.00	56.85
Ethiopia	69.87	134640000.00	1.63	18.71	517.77	3.05	0.07	-8.88	16.72	25.60	0.66	100.00	92.14	-83182.00	10.34	687800000.00	85.26
Gabon	97.31	278061232.00	5.49	106.68	14394.51	-4.30	0.04	11.13	31.43	20.30	0.50	100.00	90.87	30783.00	9.63	11850000.00	21.12
Gambia, The	97.99	43520000.00	5.56	52.32	1228.74	2.38	0.00	-0.15	15.70	15.85	0.85	151.57	99.62	-13742.00	40.30	49640000.00	52.13
Ghana	78.74	165900000.00	3.33	32.17	1840.42	1.17	0.07	-6.06	12.18	18.24	25.11	19.89	106.95	165518.00	31.72	600650000.00	56.07
Guinea	85.24	9942000.00	0.33	24.40	1134.06	0.70	0.02	-2.46	10.20	12.66	6.77	160.55	97.09	-368004.00	17.42	153410000.00	69.13

Guinea-Bissau	88.48	702270.86	0.19	89.00	1150.08	3.52	0.00	-3.02	22.30	25.31	8.61	79.12	96.30	-39899.00	65.21	81070000.00	63.76
Kenya	72.01	110904550.40	0.87	52.37	1822.30	-2.12	0.11	-0.05	18.62	18.67	7.77	100.00	95.31	25144.00	16.34	513920000.00	80.11
Lesotho	105.74	32403928.09	3.65	46.81	1439.95	2.87	0.01	-0.96	36.86	37.82	6.06	37.46	100.15	-40000.00	19.89	37170000.00	80.45
Liberia	99.42	20800000.00	3.93	97.10	911.44	21.93	0.01	-0.08	14.20	14.28	5.30	100.00	100.82	-50000.00	23.37	67420000.00	55.67
Madagascar	88.86	82952580.71	2.14	100.00	1143.10	1.54	0.04	-2.81	15.51	18.32	10.67	100.06	90.53	-7500.00	20.58	324480000.00	72.88
Malawi	99.74	25999996.36	1.49	27.61	640.46	-1.39	0.02	-5.73	12.92	18.65	29.60	100.00	100.99	-36820.00	39.39	448150000.00	85.39
Mali	77.66	60181780.68	2.04	99.38	1151.23	-2.83	0.03	-2.64	16.75	19.39	-0.76	100.00	96.40	-67110.00	26.26	288040000.00	71.64
Mozambique	82.23	139200000.00	2.77	50.07	440.09	-1.04	0.02	-1.55	19.65	21.21	12.71	59.63	97.75	30004.00	50.22	907390000.00	44.82
Niger	68.91	15728052.19	0.87	100.00	599.33	-4.93	0.01	-4.05	14.28	18.33	2.92	79.09	100.44	-28497.00	18.43	209210000.00	83.81
Nigeria	80.11	1140167556.00	2.46	29.12	2324.01	2.71	0.55	4.07	28.81	24.74	6.94	32.24	87.26	-170000.00	1.42	173800000.00	44.67
Rwanda	98.53	8319040.47	0.48	35.94	666.70	2.53	0.01	-0.26	21.48	21.75	3.91	39.44	90.18	-72601.00	40.05	321460000.00	46.58
Sao Tome and Principe	106.27	3800000.00	4.19	100.00	1719.91	0.07	0.00	51.46	62.25	10.80	11.01	100.00	104.91	-5599.00	252.08	34940000.00	59.68
Senegal	Missing	81440916.06	1.74	100.00	1511.78	0.70	0.03	1.00	18.92	17.92	0.75	80.68	99.13	-151131.00	43.72	432150000.00	47.23
Seychelles	151.04	24326996.84	3.96	67.54	14309.84	0.61	0.00	-14.74	40.67	55.41	6.30	41.20	89.76	2513.00	290.89	23600000.00	49.57
Sierra Leone	44.33	39000824.52	6.13	65.93	586.01	3.70	0.01	-3.09	13.27	16.36	-0.92	509.97	94.10	500000.00	39.58	180640000.00	64.37
Tanzania	73.88	463400858.80	4.55	58.00	1223.29	2.22	0.08	-0.73	11.54	12.27	5.96	100.00	98.65	-295952.00	31.14	1064250000.00	77.69
Togo	83.05	52687148.92	4.07	88.95	1057.86	-3.67	0.01	-4.65	11.41	16.05	1.86	78.38	37.71	-9999.00	14.01	69630000.00	67.09
Uganda	85.72	160700000.00	2.59	48.79	1015.88	-0.15	0.04	-0.81	18.95	19.76	3.38	54.93	92.01	-5000.00	35.61	855930000.00	85.21
Zambia	85.61	121700000.00	3.38	23.63	1658.37	1.02	0.04	1.16	22.57	21.41	26.10	25.26	94.26	-93014.00	75.46	794650000.00	65.20
Mean	87.26	129386191.53	2.65	71.62	2064.90	0.90	0.04	-0.97	20.51	21.49	30.60	93.91	93.15	-30605.78	45.71	289199444.44	63.66
median	85.72	48103574.46	2.16	66.74	1185.64	0.70	0.02	-1.88	16.73	18.66	4.76	95.39	95.81	-19073.50	24.03	180210000.00	64.07
STDV	17.27	240238564.35	2.56	43.62	3121.27	5.32	0.09	10.23	11.82	10.23	103.95	80.42	12.41	156070.02	66.06	280868976.02	15.90

						Threshold conversion										

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTTI	NM	ODA	ODAA	RP%
Angola	0	1	1	0	1	0	1	1	1	1	1	0	0	1	0	1	0
Benin	1	0	0	1	1	1	0	0	0	1	0	0	0	1	1	1	0
Burkina Faso	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0	1
Burundi	1	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	1
Cabo Verde	1	0	1	1	1	1	0	0	1	1	0	1	1	1	1	0	0
Cameroon	0	1	0	1	1	1	1	1	0	0	0	1	1	0	1	1	0
Central African Republic	1	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0
Chad	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Comoros	1	0	0	1	1	1	0	0	0	0	1	1	0	1	1	0	1
Congo, Dem. Rep.	1	1	0	0	0	0	1	1	0	0	1	1	1	0	0	0	1
Congo, Rep.	0	0	0	1	1	1	1	1	1	1	0	0	0	1	0	0	0
Cote d'Ivoire	1	1	1	1	1	0	1	1	0	0	0	1	1	0	0	1	0
Ethiopia	0	1	0	0	0	1	1	0	0	1	0	1	0	0	0	1	1
Gabon	1	1	1	1	1	0	1	1	1	1	0	1	0	1	0	0	0
Gambia, The	1	0	1	0	1	1	0	1	0	0	0	1	1	1	1	0	0
Ghana	0	1	1	0	1	1	1	0	0	0	1	0	1	1	1	1	0
Guinea	0	0	0	0	0	1	1	0	0	0	1	1	1	0	0	0	1
Guinea-Bissau	1	0	0	1	0	1	0	0	1	1	1	0	1	0	1	0	0
Kenya	0	1	0	0	1	0	1	1	1	1	1	1	0	1	0	1	1
Lesotho	1	0	1	0	1	1	0	1	1	1	1	0	1	0	0	0	1

Liberia	1	0	1	1	0	1	0	1	0	0	1	1	1	0	0	0	0
Madagascar	1	1	0	1	0	1	1	0	0	0	1	1	0	1	0	1	1
Malawi	1	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1	1
Mali	0	1	0	1	0	0	1	0	1	1	0	1	1	0	1	1	1
Mozambique	0	1	1	0	0	0	0	1	1	1	1	0	1	1	1	1	0
Niger	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	1
Nigeria	0	1	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0
Rwanda	1	0	0	0	0	1	0	1	1	1	0	0	0	0	1	1	0
Sao Tome and Principe	1	0	1	1	1	0	0	1	1	0	1	1	1	1	1	Sao 0	0
Senegal	Missing	1	0	1	1	0	1	1	1	0	0	0	1	0	1	1	0
Seychelles	1	0	1	1	1	0	0	0	1	1	1	0	0	1	1	0	0
Sierra Leone	0	0	1	0	0	1	0	0	0	0	0	1	0	1	1	1	1
Tanzania	0	1	1	0	1	1	1	1	0	0	1	1	1	0	1	1	1
Togo	0	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	1
Uganda	0	1	1	0	0	0	1	1	1	1	0	0	0	1	1	1	1
Zambia	0	1	1	0	1	1	1	1	1	1	1	0	0	0	1	1	1

Appendix B.1.

Macro-Economic Policy Variables Truth Table and Cluster Pairings for the Year 2000 (Prime Implicants in Bold and Underlined) - Sub-Saharan Africa

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTTI	NM	ODA	ODAA	RP%	Cluster
Cameroon	0	1	_**0**_	_**1**_	1	1	1	1	0	0	0	_**1**_	1	0	1	1	0	1
Central African Rep.	1	0	_**0**_	_**1**_	0	0	0	0	0	0	0	_**1**_	1	0	0	0	0	1
Madagascar	1	1	_**0**_	_**1**_	0	1	1	0	0	0	1	_**1**_	0	1	0	1	1	1
Mali	0	1	_**0**_	_**1**_	0	0	1	0	1	1	0	_**1**_	1	0	1	1	1	1
Benin	_**1**_	0	0	1	1	_**1**_	_**0**_	0	0	1	0	0	0	1	_**1**_	1	_**0**_	2
Gambia, The	_**1**_	0	1	0	1	_**1**_	_**0**_	1	0	0	0	1	1	1	_**1**_	0	_**0**_	2
Guinea-Bissau	_**1**_	0	0	1	0	_**1**_	_**0**_	0	1	1	1	0	1	0	_**1**_	0	_**0**_	2
Rwanda	_**1**_	0	0	0	0	_**1**_	_**0**_	1	1	1	0	0	0	0	_**1**_	1	_**0**_	2
Cote d'Ivoire	1	1	1	1	1	0	_**1**_	1	_**0**_	_**0**_	0	_**1**_	_**1**_	_**0**_	_**0**_	1	0	3
Guinea	0	0	0	0	0	1	_**1**_	0	_**0**_	_**0**_	1	_**1**_	_**1**_	_**0**_	_**0**_	0	1	3
Burkina Faso	0	0	0	1	0	0	1	0	1	1	0	_**0**_	0	0	_**0**_	0	_**1**_	4
Burundi	1	0	0	0	0	0	0	0	1	1	1	_**0**_	0	1	_**0**_	0	_**1**_	4

Chad	0	1	1	0	0	0	0	0	0	0	0	***0***	0	1	***0***	0	***1***	4
Lesotho	1	0	1	0	1	1	0	1	1	1	1	***0***	1	0	***0***	0	***1***	4
Niger	0	0	0	1	0	0	0	0	0	0	0	***0***	1	0	***0***	1	***1***	4
Comoros	1	0	0	***1***	1	1	***0***	***0***	***0***	***0***	1	1	***0***	***1***	1	***0***	***1***	5
Togo	0	1	1	***1***	0	0	***0***	***0***	***0***	***0***	0	0	***0***	***1***	0	***0***	***1***	5
Ethiopia	0	1	0	***0***	0	1	1	0	0	1	0	1	0	0	0	***1***	1	6
Ghana	0	1	1	***0***	1	1	1	0	0	0	1	0	1	1	1	***1***	0	6
Kenya	0	1	0	***0***	1	0	1	1	1	1	1	1	0	1	0	***1***	1	6
Malawi	1	0	0	***0***	0	0	0	0	0	0	1	1	1	0	1	***1***	1	6
Mozambique	0	1	1	***0***	0	0	0	1	1	1	1	0	1	1	1	***1***	0	6
Tanzania	0	1	1	***0***	1	1	1	1	0	0	1	1	1	0	1	***1***	1	6
Uganda	0	1	1	***0***	0	0	1	1	1	1	0	0	0	1	1	***1***	1	6
Zambia	0	1	1	***0***	1	1	1	1	1	1	1	0	0	0	1	***1***	1	6
Congo, Dem. Rep.	1	1	0	***0***	***0***	0	1	1	***0***	***0***	1	***1***	1	0	0	0	***1***	7
Sierra Leone	0	0	1	***0***	***0***	1	0	0	***0***	***0***	0	***1***	0	1	1	1	***1***	7
Angola	***0***	***1***	***1***	***0***	***1***	0	***1***	***1***	***1***	***1***	***1***	***0***	***0***	1	***0***	1	***0***	8
Nigeria	***0***	***1***	***1***	***0***	***1***	1	***1***	***1***	***1***	***1***	***1***	***0***	***0***	0	***0***	0	***0***	8

Cabo Verde	1	0	1	_**1**_	1	1	0	0	1	1	0	1	1	1	1	_**0**_	_**0**_	9
Congo, Rep.	0	0	0	_**1**_	1	1	1	1	1	1	0	0	0	1	0	_**0**_	_**0**_	9
Gabon	1	1	1	_**1**_	1	0	1	1	1	1	0	1	0	1	0	_**0**_	_**0**_	9
Liberia	1	0	1	_**1**_	0	1	0	1	0	0	1	1	1	0	0	_**0**_	_**0**_	9
Sao Tome and Principe	1	0	1	_**1**_	1	0	0	1	1	0	1	1	1	1	1	_**0**_	_**0**_	9
Seychelles	1	0	1	_**1**_	1	0	0	0	1	1	1	0	0	1	1	_**0**_	_**0**_	9
Senegal	…	1	0	1	1	0	1	1	1	0	0	0	1	0	1	1	0	Missing

Appendix A.2.

Macro-Economic Policy Variables Threshold Conversion for the Year 2008 – Sub-Saharan Africa

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTTI	NM	ODA	ODAA	RP%
Angola	127.41	1678971010.00	1.99	499.38	5786.04	9.83	0.15	-4.46	50.94	55.39	12.47	71.47	432.93	85286.00	16.96	369040000.00	41.72
Benin	119.35	48016408.32	0.67	106.43	1768.86	1.97	0.02	-0.06	19.83	19.89	7.94	100.00	113.82	-48776.00	73.21	636720000.00	57.93
Burkina Faso	117.47	33056780.41	0.39	124.45	1299.22	4.10	0.02	-4.08	16.83	20.91	10.67	100.00	90.90	-125000.00	68.10	1000380000.00	76.47
Burundi	105.72	3833208.35	0.24	138.32	680.64	1.56	0.01	-2.70	38.46	41.16	24.41	59.81	122.40	102069.00	63.37	520430000.00	89.88
Cabo Verde	105.53	210903689.30	11.79	103.55	5793.49	5.50	0.00	-1.55	28.70	30.25	6.79	123.14	95.38	-17623.00	451.23	221880000.00	39.81
Cameroon	121.63	20910875.62	0.08	111.25	2743.60	0.69	0.06	1.97	18.72	16.75	5.34	206.72	141.21	-54000.00	29.18	551790000.00	49.65
Central African Republic	110.14	117110000.00	5.90	112.68	858.48	0.42	0.00	-1.26	15.15	16.41	9.26	131.19	83.71	-125614.00	59.92	260370000.00	61.49
Chad	111.07	466131000.00	4.50	123.45	1911.32	-0.26	0.02	3.61	22.41	18.80	8.31	108.34	218.89	75000.00	39.68	441810000.00	78.10
Comoros	107.82	4631824.19	0.89	140.19	1443.84	-1.98	0.00	-2.52	23.51	26.03	4.82	138.22	64.16	-10000.00	63.97	42040000.00	72.11
Congo, Dem. Rep.	102.01	1726800000.00	8.73	159.36	531.99	2.78	0.04	-0.41	11.53	11.94	17.97	1269.23	154.39	-43426.00	29.27	1766900000.00	61.02
Congo, Rep.	116.53	1940120151.00	16.36	385.39	5494.45	2.00	0.02	27.25	54.80	27.55	6.02	114.88	210.31	95864.00	118.25	486630000.00	37.65
Cote d'Ivoire	107.81	466489597.00	1.93	97.71	2550.22	0.38	0.06	-0.29	19.88	20.17	6.32	130.00	140.82	-220000.00	29.98	584630000.00	53.51
Ethiopia	114.99	108537544.00	0.40	37.44	924.00	7.88	0.09	-2.88	15.87	18.76	44.37	243.35	118.87	-50132.00	39.87	3316250000.00	83.49
Gabon	105.13	773000000.00	4.98	174.03	15590.35	-6.28	0.03	10.99	29.92	18.93	5.26	109.00	223.37	68720.00	41.73	64120000.00	15.64
Gambia, The	102.35	70792382.32	7.33	112.34	1483.75	2.44	0.00	-1.21	17.95	19.16	4.45	271.24	104.93	-13742.00	59.57	94630000.00	45.79
Ghana	112.74	2714916344.00	9.52	141.66	2826.29	6.35	0.08	-8.00	15.95	23.95	16.51	71.82	151.86	189259.00	56.32	1312170000.00	50.65
Guinea	111.77	381880000.00	5.45	83.80	1541.56	1.85	0.02	0.37	10.46	10.09	18.37	584.61	118.35	-300000.00	34.02	351220000.00	66.89

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTTI	NM	ODA	ODAA	RP%
Guinea-Bissau	119.38	6630074.03	0.77	114.73	1366.01	0.77	0.00	-0.81	23.07	23.87	10.45	100.00	74.12	-25002.00	91.63	135690000.00	60.68
Kenya	111.68	95585680.23	0.27	89.58	2393.89	-2.49	0.11	-3.38	19.45	22.83	15.10	170.39	86.38	-189330.00	34.83	1363400000.00	77.20
Lesotho	101.19	11009973.06	0.59	86.32	2300.86	5.80	0.01	7.60	57.18	49.58	10.69	67.27	74.84	-40000.00	72.36	144710000.00	76.20
Liberia	122.48	283536077.40	33.36	175.57	1063.57	2.76	0.00	-11.02	18.73	29.75	17.49	224.21	121.37	175585.00	341.36	1250410000.00	52.91
Madagascar	110.87	1134497642.00	12.05	226.75	1479.19	4.11	0.04	-1.96	15.94	17.90	9.30	222.70	69.32	-7500.00	42.37	847200000.00	69.33
Malawi	135.70	195424461.10	3.67	82.66	875.64	4.39	0.02	-3.69	28.08	31.77	8.72	265.38	78.96	-36820.00	64.80	924740000.00	84.67
Mali	129.34	266432781.90	2.73	129.44	1727.31	1.35	0.03	-1.99	16.98	18.97	9.12	126.33	125.42	-100823.00	68.45	967750000.00	65.60
Mozambique	107.82	641399415.80	5.58	98.94	818.48	3.80	0.02	-2.13	21.80	23.93	10.33	139.57	104.05	-40000.00	87.24	1993090000.00	43.48
Niger	139.28	281935056.40	5.22	130.09	841.66	5.56	0.01	1.49	24.13	22.64	11.29	100.00	168.84	-28497.00	40.41	615450000.00	83.77
Nigeria	129.45	8195499253.00	3.94	85.10	4403.02	3.49	0.78	5.70	20.08	14.38	11.58	85.10	246.31	-300000.00	8.60	1293720000.00	41.39
Rwanda	99.58	103346051.90	2.13	73.30	1228.96	8.18	0.01	0.88	24.82	23.94	15.44	74.80	185.42	-79101.00	96.36	935500000.00	37.32
Sao Tome and Principe	129.59	79143388.76	42.09	322.40	2417.44	5.72	0.00	13.65	44.10	30.45	31.99	337.53	120.57	-5599.00	283.32	47290000.00	57.05
Senegal	101.08	453902667.50	3.38	128.42	2077.47	0.88	0.03	-4.43	21.85	26.28	6.34	100.00	97.10	-166051.00	87.33	1065830000.00	45.45
Seychelles	100.17	179825444.20	18.59	150.89	18858.20	-4.31	0.00	7.88	34.87	26.99	36.97	66.92	79.79	-2511.00	86.14	7490000.00	47.38
Sierra Leone	108.21	53095074.15	2.12	117.48	1142.16	2.83	0.01	-3.47	12.70	16.16	14.83	974.42	65.60	60000.00	61.53	379340000.00	61.92
Tanzania	108.05	1383260000.00	5.05	115.94	1969.13	2.29	0.10	-1.95	16.56	18.50	10.28	157.94	117.35	-265317.00	53.87	2331150000.00	73.22
Togo	118.98	50687212.17	1.60	111.78	1110.40	-0.50	0.01	-0.81	16.26	17.07	8.70	100.00	115.51	-9999.00	53.58	330140000.00	63.41
Uganda	89.25	728860900.70	5.12	80.28	1727.79	5.02	0.06	-2.59	14.21	16.80	12.04	87.07	100.44	-135000.00	51.90	1643390000.00	81.62
Zambia	110.56	938620000.00	5.24	83.14	2761.50	4.84	0.04	-0.67	18.79	19.46	12.45	86.12	183.90	-124044.00	85.21	1114700000.00	61.63
Mean	113.11	718021999.13	6.52	140.39	2883.08	2.60	0.05	0.36	23.90	23.54	13.12	203.30	133.38	-47559.00	82.94	817000000.00	60.17
median	110.97	238668235.60	4.22	115.34	1727.55	2.60	0.02	-1.24	19.85	20.54	10.56	119.01	117.85	-38410.00	60.72	600040000.00	61.26
STDV	11.07	1437876655.18	8.93	89.66	3800.74	3.37	0.13	6.65	11.76	9.41	8.86	249.53	69.97	117859.67	89.89	728957764.55	16.88
Threshold conversion																	
Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTTI	NM	ODA	ODAA	RP%

Angola	1	1	0	1	1	1	1	0	1	1	1	0	1	1	0	0	0
Benin	1	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	0
Burkina Faso	1	0	0	1	0	1	1	0	0	1	1	0	0	0	1	1	1
Burundi	0	0	0	1	0	0	0	0	1	1	1	0	1	1	1	0	1
Cabo Verde	0	0	1	0	1	1	0	0	1	1	0	1	0	1	1	0	0
Cameroon	1	0	0	0	1	0	1	1	0	0	0	1	1	0	0	0	0
Central African Republic	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Chad	1	1	1	1	1	0	0	1	1	0	0	0	1	1	0	0	1
Comoros	0	0	0	1	0	0	0	0	1	1	0	1	0	1	1	0	1
Congo, Dem. Rep.	0	1	1	1	0	1	1	1	0	0	1	1	1	0	0	1	0
Congo, Rep.	1	1	1	1	1	0	1	1	1	1	0	0	1	1	1	0	0
Cote d'Ivoire	0	1	0	0	1	0	1	1	1	0	0	1	1	0	0	0	0
Ethiopia	1	0	0	0	0	1	1	0	0	0	1	1	1	0	0	1	1
Gabon	0	1	1	1	1	0	1	1	1	0	0	0	1	1	0	0	0
Gambia, The	0	0	1	0	0	0	0	1	0	0	0	1	0	1	0	0	0
Ghana	1	1	1	1	1	1	1	0	0	1	1	0	1	1	0	1	0
Guinea	1	1	1	0	0	0	0	1	0	0	1	1	1	0	0	0	1
Guinea-Bissau	1	0	0	0	0	0	0	1	1	1	0	0	0	1	1	0	0
Kenya	1	0	0	0	1	0	1	0	0	1	1	1	0	0	0	1	1
Lesotho	0	0	0	0	1	1	0	1	1	1	1	0	0	0	1	0	1
Liberia	1	1	1	1	0	1	0	0	0	1	1	1	1	1	1	1	0
Madagascar	0	1	1	1	0	1	1	0	0	0	0	1	0	1	0	1	1
Malawi	1	0	0	0	0	1	0	0	1	1	0	1	0	1	1	1	1
Mali	1	1	0	1	0	0	1	0	0	0	0	1	1	0	1	1	1

Mozambique	0	1	1	0	0	1	1	0	1	1	0	1	0	0	1	1	0
Niger	1	1	1	1	0	1	0	1	1	1	1	0	1	1	0	1	1
Nigeria	1	1	0	0	1	1	1	1	1	0	1	0	1	0	0	1	0
Rwanda	0	0	0	0	0	1	0	1	1	1	1	0	1	0	1	1	0
Sao Tome and Principe	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	0	0
Senegal	0	1	0	1	1	0	1	0	1	1	0	0	0	0	1	1	0
Seychelles	0	0	1	1	1	0	0	1	1	1	1	0	0	1	1	0	0
Sierra Leone	0	0	0	1	0	1	0	0	0	0	1	1	0	1	1	0	1
Tanzania	0	1	1	1	1	0	1	0	0	0	0	1	0	0	0	1	1
Togo	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1
Uganda	0	1	1	0	1	1	1	0	0	0	1	0	0	0	0	1	1
Zambia	0	1	1	0	1	1	1	1	0	0	1	0	1	0	1	1	1

Appendix B.2.

Macro-Economic Variable Truth Table and Cluster Pairings for the Year 2008 (Prime Implicants in Bold and Underlined) - Sub-Saharan Africa

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTTI	NM	ODA	ODAA	RP%	Cluster
Benin	***1***	0	***0***	0	1	0	0	1	0	0	0	0	0	0	1	1	0	1
Burkina Faso	***1***	0	***0***	1	0	1	1	0	0	1	1	0	0	0	1	1	1	1
Cameroon	***1***	0	***0***	0	1	0	1	1	0	0	0	1	1	0	0	0	0	1
Guinea-Bissau	***1***	0	***0***	0	0	0	0	1	1	1	0	0	0	1	1	0	0	1
Mali	***1***	1	***0***	1	0	0	1	0	0	0	0	1	1	0	1	1	1	1
Togo	***1***	0	***0***	0	0	0	0	1	0	0	0	0	0	1	0	0	1	1
Chad	1	***1***	***1***	***1***	1	0	0	1	1	***0***	***0***	0	1	***1***	***0***	0	***1***	2
Madagascar	0	***1***	***1***	***1***	0	1	1	0	0	***0***	***0***	1	0	***1***	***0***	1	***1***	2
Central African Republic	***0***	0	1	0	0	***0***	0	0	0	0	***0***	1	0	0	0	0	1	3
Comoros	***0***	0	0	1	0	***0***	0	0	1	1	***0***	1	0	1	1	0	1	3
Cote d'Ivoire	***0***	1	0	0	1	***0***	1	1	1	0	***0***	1	1	0	0	0	0	3

Gambia, The	**_0_**	0	1	0	0	**_0_**	0	1	0	0	**_0_**	1	0	1	0	0	0	3
Senegal	**_0_**	1	0	1	1	**_0_**	1	0	1	1	**_0_**	0	0	0	1	1	0	3
Malawi	**_1_**	0	0	0	**_0_**	**_1_**	**_0_**	0	**_1_**	**_1_**	0	1	0	**_1_**	1	**_1_**	**_1_**	4
Niger	**_1_**	1	1	1	**_0_**	**_1_**	**_0_**	1	**_1_**	**_1_**	1	0	1	**_1_**	0	**_1_**	**_1_**	4
Guinea	1	1	1	0	0	0	0	1	**_0_**	0	1	1	1	**_0_**	**_0_**	0	**_1_**	5
Kenya	1	0	0	0	1	0	1	0	**_0_**	1	1	1	0	**_0_**	**_0_**	1	**_1_**	5
Tanzania	0	1	1	1	1	0	1	0	**_0_**	0	0	1	0	**_0_**	**_0_**	1	**_1_**	5
Uganda	0	1	1	0	1	1	1	0	**_0_**	0	1	0	0	**_0_**	**_0_**	1	**_1_**	5
Ghana	1	1	1	1	1	**_1_**	1	0	0	1	1	0	1	1	0	**_1_**	0	6
Mozambique	0	1	1	0	0	**_1_**	1	0	1	1	0	1	0	0	1	**_1_**	0	6
Rwanda	0	0	0	0	0	**_1_**	0	1	1	1	1	0	1	0	1	**_1_**	0	6
Zambia	0	1	1	0	1	**_1_**	1	1	0	0	1	0	1	0	1	**_1_**	1	6
Burundi	**_0_**	**_0_**	**_0_**	1	0	0	**_0_**	0	**_1_**	**_1_**	**_1_**	**_0_**	1	1	**_1_**	**_0_**	**_1_**	7
Lesotho	**_0_**	**_0_**	**_0_**	0	1	1	**_0_**	1	**_1_**	**_1_**	**_1_**	**_0_**	0	0	**_1_**	**_0_**	**_1_**	7
Congo, Dem. Rep.	0	1	1	1	**_0_**	**_1_**	1	1	**_0_**	**_0_**	**_1_**	1	1	0	0	1	0	8
Ethiopia	1	0	0	0	**_0_**	**_1_**	1	0	**_0_**	**_0_**	**_1_**	1	1	0	0	1	1	8

Sierra Leone	0	0	0	1	_**0**_	_**1**_	0	0	_**0**_	_**0**_	_**1**_	1	0	1	1	0	1	8
Nigeria	1	1	0	0	1	1	1	1	1	0	1	0	1	0	0	1	0	9
Angola	1	1	0	1	1	1	1	0	1	1	1	0	1	_**1**_	0	0	_**0**_	10
Cabo Verde	0	0	1	0	1	1	0	0	1	1	0	1	0	_**1**_	1	0	_**0**_	10
Congo, Rep.	1	1	1	1	1	0	1	1	1	1	0	0	1	_**1**_	1	0	_**0**_	10
Gabon	0	1	1	1	1	0	1	1	1	0	0	0	1	_**1**_	0	0	_**0**_	10
Liberia	1	1	1	1	0	1	0	0	0	1	1	1	1	_**1**_	1	1	_**0**_	10
Sao Tome and Principe	1	0	1	1	1	1	0	1	1	1	1	1	1	_**1**_	1	0	_**0**_	10
Seychelles	0	0	1	1	1	0	0	1	1	1	1	0	0	_**1**_	1	0	_**0**_	10

Appendix A.3.

Macro-Economic Policy Variables Threshold Conversion for the Year 2015 – Sub-Saharan Africa

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTTI	NM	ODA	ODAA	RP%
Angola	181.06	9282167512.00	9.05	730.38	6955.33	-0.47	0.16	-3.30	27.33	30.63	10.29	149.91	148.82	87322.00	13.64	380060000.00	36.55
Benin	154.51	149642289.70	1.80	124.51	2121.02	-0.70	0.02	-7.62	17.30	24.92	0.27	112.67	112.34	-42268.00	40.67	430140000.00	54.31
Burkina Faso	122.18	231726245.40	2.22	140.80	1700.35	0.88	0.03	-2.37	20.74	23.11	0.91	108.22	130.62	-125000.00	55.05	996990000.00	72.47
Burundi	110.95	49622865.77	1.62	271.14	767.49	-6.82	0.01	-5.31	21.87	27.18	5.55	108.50	145.06	-70000.00	35.94	366540000.00	87.92
Cabo Verde	93.90	96071472.84	6.02	113.12	6395.88	-0.22	0.00	-4.56	26.89	31.45	0.13	137.89	109.65	-11052.00	286.76	152820000.00	35.70
Cameroon	168.99	693811395.40	2.24	126.78	3461.03	2.90	0.07	-4.42	16.48	20.90	2.70	242.69	141.07	-36000.00	29.04	663080000.00	45.42
Central African Republic	118.44	3000000.00	0.19	157.13	627.72	4.09	0.00	-0.63	14.32	14.95	4.50	183.51	76.81	-396129.00	107.07	486730000.00	59.72
Chad	145.39	600219798.80	5.46	115.87	2642.49	-0.46	0.03	-4.38	13.96	18.34	6.76	139.39	126.22	100000.00	43.30	606650000.00	77.49
Comoros	107.96	5146839.51	0.91	176.50	1551.76	-1.33	0.00	4.26	31.58	27.32	2.00	171.08	145.29	-10000.00	84.61	65780000.00	71.53
Congo, Dem. Rep.	109.15	1673500100.00	4.41	329.83	767.59	3.45	0.05	-0.25	16.75	17.00	0.96	2736.75	111.12	15060.00	34.11	2599040000.00	57.26
Congo, Rep.	135.25	4276601046.00	50.00	300.08	7301.94	0.09	0.03	-27.25	25.92	53.17	3.17	140.07	144.43	-60001.00	17.78	88800000.00	34.46
Cote d'Ivoire	131.65	494209964.30	1.49	122.77	3395.67	6.12	0.07	-2.82	19.99	22.81	1.24	147.55	172.86	60000.00	28.26	653060000.00	50.56
Ethiopia	168.70	2626520130.00	4.07	98.54	1806.96	7.62	0.14	-1.95	15.38	17.33	10.12	603.41	136.47	-60001.00	32.38	3233710000.00	80.57
Gabon	118.14	623890438.80	4.34	159.03	18655.26	0.95	0.03	-1.12	21.14	22.25	-0.14	122.85	134.52	85442.00	51.18	98780000.00	11.88
Gambia, The	101.24	-1692732.89	-0.19	160.01	1669.73	1.15	0.00	-8.12	21.61	29.73	6.81	390.23	103.73	-13476.00	54.45	107680000.00	40.77
Ghana	151.03	3192320531.00	8.55	393.46	4289.75	1.50	0.10	-5.37	19.59	24.96	17.15	151.02	166.16	-49999.00	64.12	1768690000.00	45.91
Guinea	132.81	-53167637.28	-0.60	134.00	1828.43	1.36	0.02	-6.91	14.86	21.77	8.15	1311.76	97.48	-250000.00	44.50	538040000.00	64.86

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTTI	NM	ODA	ODAA	RP%
Guinea-Bissau	140.22	18575499.45	1.77	142.80	1675.07	3.45	0.00	-2.99	20.40	23.39	1.48	107.89	92.40	-10003.00	53.68	95040000.00	57.88
Kenya	128.23	619724470.50	0.97	154.14	3227.00	3.01	0.12	-8.12	19.18	27.30	6.58	295.10	102.54	-50000.00	52.17	2464180000.00	74.34
Lesotho	97.69	113220010.40	4.52	136.06	3295.99	1.16	0.01	-1.00	47.21	48.22	4.30	94.16	82.12	-25000.00	38.23	83140000.00	73.09
Liberia	132.61	721033135.40	35.45	225.75	1366.10	-2.42	0.01	-4.38	31.68	36.06	7.74	381.38	117.41	-20000.00	243.23	1094430000.00	50.18
Madagascar	120.05	517269814.50	5.31	370.55	1466.42	0.38	0.03	-3.31	11.83	15.14	7.40	369.91	86.94	-7500.00	27.93	676970000.00	64.81
Malawi	150.41	516092796.50	8.10	249.72	1126.59	-0.15	0.02	-6.23	24.72	30.95	21.86	780.52	113.68	-30000.00	59.71	1049380000.00	83.69
Mali	159.53	275414523.60	2.10	175.22	2016.55	2.90	0.03	-1.82	19.12	20.94	1.44	144.41	151.99	-302449.00	68.93	1204130000.00	60.01
Mozambique	122.93	3868353885.00	26.14	131.08	1192.15	3.56	0.03	-7.18	28.05	35.23	2.39	199.69	89.72	-25000.00	64.79	1814740000.00	42.11
Niger	163.26	529263979.50	7.30	158.57	1086.48	0.41	0.02	-9.05	23.46	32.51	1.01	107.33	170.82	-28497.00	43.62	867990000.00	83.75
Nigeria	180.96	3137318700.00	0.65	136.40	6121.60	-0.02	0.95	-3.47	7.60	11.07	9.01	173.13	158.71	-300000.00	13.42	2431540000.00	39.25
Rwanda	113.16	223334652.80	2.70	100.29	1883.93	6.21	0.02	-2.76	24.64	27.40	2.51	103.13	171.67	-79101.00	93.33	1085330000.00	29.83
Sao Tome and Principe	163.80	27924059.14	8.85	609.73	2986.16	1.54	0.00	-6.26	28.01	34.27	5.26	688.94	162.86	-5599.00	250.32	48950000.00	54.14
Senegal	89.05	409001268.10	3.00	132.81	2448.10	3.39	0.03	-4.79	25.07	29.86	0.13	103.51	109.66	-99996.00	58.70	879120000.00	44.30
Seychelles	105.26	105893597.20	7.70	227.12	25988.13	2.62	0.00	1.87	34.23	32.36	4.04	104.04	73.71	-2201.00	72.58	6780000.00	44.60
Sierra Leone	173.09	252435829.40	5.98	254.06	1430.05	-22.33	0.01	-4.55	16.19	20.74	8.97	2190.15	43.00	-21000.00	130.76	946330000.00	59.17
Tanzania	194.28	1604581620.00	3.52	206.05	2909.94	3.70	0.12	-3.29	14.52	17.81	5.59	300.01	158.54	-199999.00	47.93	2582240000.00	68.38
Togo	145.46	257756356.30	6.31	123.55	1542.69	2.72	0.01	-8.83	21.83	30.66	1.79	116.06	117.75	-9994.00	26.91	199590000.00	59.90
Uganda	100.73	737652140.20	2.72	150.05	2267.22	1.75	0.07	-4.55	14.83	19.38	5.41	150.75	117.70	-150000.00	40.56	1628200000.00	77.94
Zambia	180.40	1582666667.00	7.48	146.70	3835.84	-0.15	0.05	-9.34	18.77	28.11	10.11	155.82	173.15	-34490.00	49.51	797140000.00	58.09
Mean	136.46	1096141757.34	6.73	207.90	3716.79	0.88	0.06	-4.78	21.58	26.37	5.21	375.65	124.92	-60470.31	68.31	921994722.22	57.02
median	132.71	505151380.40	4.21	155.64	2068.79	1.26	0.03	-4.40	20.57	26.07	4.40	150.88	121.99	-29248.50	50.34	670025000.00	57.99
STDV	28.70	1814589865.66	10.12	136.69	4965.76	4.76	0.16	4.90	7.41	8.67	4.79	573.22	32.68	109317.16	63.84	863716611.64	17.50
Threshold conversion																	
Country	*FPI*	*FDI*	*FDI%*	*GDPDI*	*GDPPCC*	*GDPPC%*	*GDP*	*GGNLB*	*GGR*	*GGE*	*IACP%*	*IACPI*	*NBTTI*	*NM*	*ODA*	*ODAA*	*RP%*

Angola	1	1	1	1	1	0	1	1	1	1	1	0	1	1	0	0	0
Benin	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Burkina Faso	0	0	0	0	0	0	1	1	1	0	0	0	1	0	1	1	1
Burundi	0	0	0	1	0	0	0	0	1	1	1	0	1	0	0	0	1
Cabo Verde	0	0	1	0	1	0	0	0	1	1	0	0	0	1	1	0	0
Cameroon	1	1	0	0	1	1	1	0	0	0	0	1	1	0	0	0	0
Central African Republic	0	0	0	1	0	1	0	1	0	0	1	1	0	0	1	0	1
Chad	1	1	1	0	1	0	1	1	0	0	1	0	1	1	0	0	1
Comoros	0	0	0	1	0	0	0	1	1	1	0	1	1	1	1	0	1
Congo, Dem. Rep.	0	1	1	1	0	1	1	1	0	0	0	1	0	1	0	1	0
Congo, Rep.	1	1	1	1	1	0	0	0	1	1	0	0	1	0	0	0	0
Cote d'Ivoire	0	0	0	0	1	1	1	1	0	0	0	0	1	1	0	0	0
Ethiopia	1	1	0	0	0	1	1	1	0	0	1	1	1	0	0	1	1
Gabon	0	1	1	1	1	0	1	1	1	0	0	0	1	1	1	0	0
Gambia, The	0	0	0	1	0	0	0	0	1	1	1	1	0	1	1	0	0
Ghana	1	1	1	1	1	1	1	0	0	0	1	1	1	0	1	1	0
Guinea	1	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	1
Guinea-Bissau	1	0	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0
Kenya	0	1	0	0	1	1	1	0	0	1	1	1	0	0	1	1	1
Lesotho	0	0	1	0	1	0	0	1	1	1	0	0	0	1	0	0	1
Liberia	0	1	1	1	0	0	0	1	1	1	1	1	0	1	1	1	0
Madagascar	0	1	1	1	0	0	1	1	0	0	1	1	0	1	0	1	1
Malawi	1	1	1	1	0	0	0	0	1	1	1	1	0	0	1	1	1
Mali	1	0	0	1	0	1	1	1	0	0	0	0	1	0	1	1	1

Mozambique	0	1	1	0	0	1	1	0	1	1	0	1	0	1	1	1	0
Niger	1	1	1	1	0	0	0	0	1	1	0	0	1	1	0	1	1
Nigeria	1	1	0	0	1	0	1	1	0	0	1	1	1	0	0	1	0
Rwanda	0	0	0	0	0	1	0	1	1	1	0	0	1	0	1	1	0
Sao Tome and Principe	1	0	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0
Senegal	0	0	0	0	1	1	1	0	1	1	0	0	0	0	1	1	0
Seychelles	0	0	1	1	1	1	0	1	1	1	0	0	0	1	1	0	0
Sierra Leone	1	0	1	1	0	0	0	0	0	0	1	1	0	1	1	1	1
Tanzania	1	1	0	1	1	1	1	1	0	0	1	1	1	0	0	1	1
Togo	1	0	1	0	0	1	0	0	1	1	0	0	0	1	0	0	1
Uganda	0	1	0	0	1	1	1	0	0	0	1	0	0	0	0	1	1
Zambia	1	1	1	0	1	0	1	0	0	1	1	1	1	0	0	1	1

Appendix B.3.

Macro-Economic Variable Truth Table and Cluster Pairings for the Year 2015 (Prime Implicants in Bold and Underlined) - Sub-Saharan Africa

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTTI	NM	ODA	ODAA	RP%	Clusters
Benin	1	**_0_**	0	0	1	0	0	0	0	0	0	0	**_0_**	0	0	0	0	1
Gambia, The	0	**_0_**	0	1	0	0	0	0	1	1	1	1	**_0_**	1	1	0	0	1
Guinea-Bissau	1	**_0_**	0	0	0	1	0	1	0	0	0	0	**_0_**	1	1	0	0	1
Senegal	0	**_0_**	0	0	1	1	1	0	1	1	0	0	**_0_**	0	1	1	0	1
Togo	1	**_0_**	1	0	0	1	0	0	1	1	0	0	**_0_**	1	0	0	1	1
Cameroon	1	1	**_0_**	**_0_**	1	**_1_**	1	0	0	0	**_0_**	1	**_1_**	0	0	0	**_0_**	2
Cote d'Ivoire	0	0	**_0_**	**_0_**	1	**_1_**	1	1	0	0	**_0_**	0	**_1_**	1	0	0	**_0_**	2
Rwanda	0	0	**_0_**	**_0_**	0	**_1_**	0	1	1	1	**_0_**	0	**_1_**	0	1	1	**_0_**	2
Niger	**_1_**	**_1_**	**_1_**	1	0	**_0_**	0	**_0_**	1	**_1_**	0	0	**_1_**	1	**_0_**	**_1_**	**_1_**	3
Zambia	**_1_**	**_1_**	**_1_**	0	1	**_0_**	1	**_0_**	0	**_1_**	1	1	**_1_**	0	**_0_**	**_1_**	**_1_**	3
Burundi	**_0_**	**_0_**	**_0_**	**_1_**	**_0_**	**_0_**	**_0_**	0	**_1_**	**_1_**	1	0	**_1_**	0	0	**_0_**	**_1_**	4
Comoros	**_0_**	**_0_**	**_0_**	**_1_**	**_0_**	**_0_**	**_0_**	1	**_1_**	**_1_**	0	1	**_1_**	1	1	**_0_**	**_1_**	4
Burkina Faso	0	0	0	0	0	0	**_1_**	1	1	0	0	0	1	0	1	1	**_1_**	5

Chad	1	1	1	0	1	0	***1***	1	0	0	1	0	1	1	0	0	***1***	5
Kenya	0	1	0	0	1	1	***1***	0	0	1	1	1	0	0	1	1	***1***	5
Madagascar	0	1	1	1	0	0	***1***	1	0	0	1	1	0	1	0	1	***1***	5
Uganda	0	1	0	0	1	1	***1***	0	0	0	1	0	0	0	0	1	***1***	5
Central African Republic	0	***0***	***0***	1	***0***	***1***	0	1	***0***	***0***	1	1	0	***0***	1	0	***1***	6
Guinea	1	***0***	***0***	0	***0***	***1***	0	0	***0***	***0***	1	1	0	***0***	0	0	***1***	6
Mali	1	***0***	***0***	1	***0***	***1***	1	1	***0***	***0***	0	0	1	***0***	1	1	***1***	6
Congo, Dem. Rep.	0	***1***	1	1	0	1	1	1	0	0	0	***1***	0	1	0	***1***	0	7
Ethiopia	1	***1***	0	0	0	1	1	1	0	0	1	***1***	1	0	0	***1***	1	7
Ghana	1	***1***	1	1	1	1	1	0	0	0	1	***1***	1	0	1	***1***	0	7
Malawi	1	***1***	1	1	0	0	0	0	1	1	1	***1***	0	0	1	***1***	1	7
Tanzania	1	***1***	0	1	1	1	1	1	0	0	1	***1***	1	0	0	***1***	1	7
Sierra Leone	***1***	0	1	1	0	***0***	0	0	***0***	***0***	***1***	***1***	0	1	1	1	1	8
Nigeria	***1***	1	0	0	1	***0***	1	1	***0***	***0***	***1***	***1***	1	0	0	1	0	8
Angola	***1***	***1***	***1***	***1***	***1***	***0***	1	1	***1***	***1***	1	***0***	***1***	1	***0***	***0***	***0***	9
Congo, Rep.	***1***	***1***	***1***	***1***	***1***	***0***	0	0	***1***	***1***	0	***0***	***1***	0	***0***	***0***	***0***	9
Cabo Verde	0	0	***1***	0	1	0	0	0	***1***	1	0	0	0	***1***	1	0	0	10

Gabon	0	1	*1*	1	1	0	1	1	*1*	0	0	0	1	*1*	1	0	0	10
Lesotho	0	0	*1*	0	1	0	0	1	*1*	1	0	0	0	*1*	0	0	1	10
Liberia	0	1	*1*	1	0	0	0	1	*1*	1	1	1	0	*1*	1	1	0	10
Mozambique	0	1	*1*	0	0	1	1	0	*1*	1	0	1	0	*1*	1	1	0	10
Sao Tome and Principe	1	0	*1*	1	1	1	0	0	*1*	1	1	1	1	*1*	1	0	0	10
Seychelles	0	0	*1*	1	1	1	0	1	*1*	1	0	0	0	*1*	1	0	0	10

Appendix A.4.

Social Policy Variables (Human Development Indicators) Threshold Conversion for the Year 2000 – Sub-Saharan Africa

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
Angola	37.27	22.84	222717392.20	99.48	13.90	6.76	7.60	54.63	26.43	122.60	47.11	17.42	25.01	37.77	20.49	3.03	63.11	74.62
Benin	1.83	20.67	68781131.35	93.78	15.99	5.03	4.09	25.59	59.62	88.60	55.39	29.33	51.98	60.06	9.97	2.98	2.38	70.29
Burkina Faso	2.83	9.22	75970501.46	98.16	7.53	5.87	2.45	32.58	69.41	91.50	50.49	11.92	42.16	46.71	9.59	2.84	25.18	85.41
Burundi	0.62	3.38	26676299.89	109.86	9.19	3.32	1.99	21.68	66.69	95.90	51.55	18.45	45.68	52.44	41.45	1.92	98.02	93.23
Cabo Verde	56.79	55.90	24875757.41	92.72	60.06	6.76	42.82	71.30	47.03	29.20	69.75	37.21	25.26	77.90	37.49	2.04	5.40	28.98
Cameroon	9.88	41.00	167981640.70	93.54	26.29	4.85	4.45	16.93	52.15	91.60	50.03	66.52	77.43	55.30	39.78	2.54	98.91	84.48
Central African Republic	0.57	6.00	14307721.01	85.31	8.55	4.32	3.35	39.22	45.14	113.00	43.94	12.89	56.53	52.09	15.02	2.11	78.50	85.07
Chad	3.29	2.90	27625331.39	107.07	10.24	3.51	4.25	41.50	52.84	100.90	47.59	27.33	56.27	39.00	9.90	3.67	0.00	97.16
Comoros	0.63	39.60	7452688.85	88.72	45.55	5.47	5.92	13.00	16.08	72.70	59.46	116.83	82.13	86.40	26.84	2.52	0.00	48.25
Congo, Dem. Rep.	3.57	6.70	194786595.20	94.15	18.44	12.12	0.48	2.62	42.21	107.50	50.04	3.32	55.03	34.37	22.36	2.53	99.95	97.94
Congo, Rep.	10.00	20.10	102726237.50	82.23	16.91	1.44	5.78	34.20	25.73	72.50	51.40	31.70	52.70	56.85	12.70	2.81	99.66	64.85
Cote d'Ivoire	18.41	47.62	382773780.50	86.38	36.43	6.54	5.20	14.28	47.02	98.70	46.67	77.53	58.50	71.86	22.38	2.34	36.75	63.72
Ethiopia	1.07	12.70	198828999.10	98.32	5.36	7.99	2.20	41.00	69.64	88.20	51.94	7.69	35.96	16.73	3.15	2.89	98.63	95.95
Gabon	58.72	73.60	131247467.90	87.29	119.37	4.40	46.63	39.07	14.29	54.20	59.30	204.08	49.93	78.71	39.01	2.50	61.60	72.78
Gambia, The	3.19	34.30	9935390.28	95.02	23.01	2.90	5.41	23.50	35.83	63.40	55.92	15.81	35.32	73.85	55.22	3.00	0.00	63.13

Ghana	5.89	44.68	221623710.40	81.10	21.85	3.62	4.70	21.50	45.09	64.10	56.99	95.37	64.16	64.36	11.16	2.47	91.50	71.62
Guinea	1.15	16.51	55814728.57	91.03	16.95	5.18	1.70	10.03	44.99	100.50	51.18	24.12	53.97	54.50	9.11	1.77	55.97	85.62
Guinea-Bissau	1.38	5.41	7897029.34	92.56	21.17	4.99	10.58	49.97	50.60	106.10	52.27	29.47	38.44	52.79	11.97	1.82	0.00	91.24
Kenya	1.99	15.91	645127096.90	91.61	21.20	5.80	7.85	37.02	39.07	64.00	51.75	41.54	46.83	46.39	31.01	2.74	46.98	79.04
Lesotho	18.14	4.26	81285102.90	84.38	28.54	5.78	14.34	50.25	44.63	82.50	48.41	29.82	35.39	66.37	7.22	0.98	100.00	56.70
Liberia	0.62	0.01	16678919.40	86.32	7.01	5.78	2.25	32.18	30.04	125.70	52.42	10.19	47.49	61.71	13.11	5.34	0.00	90.83
Madagascar	1.10	13.62	80331246.59	92.75	13.15	3.86	5.57	42.37	67.50	68.50	58.49	22.12	36.15	36.69	4.59	3.12	61.13	78.40
Malawi	1.75	4.80	76992771.86	98.85	6.67	5.35	3.50	52.47	49.06	101.10	46.45	3.58	11.99	51.60	34.49	2.96	84.26	82.47
Mali	1.30	10.28	84505079.62	99.44	13.74	4.35	2.81	20.48	36.65	115.30	48.07	43.62	73.72	49.22	19.34	2.81	30.36	85.39
Mozambique	34.08	72.83	114897415.20	76.89	9.89	6.74	8.17	82.63	44.04	31.50	48.35	63.32	44.08	80.63	60.43	1.55	21.40	58.37
Niger	1.01	6.48	51141716.37	102.50	8.58	5.22	2.23	26.03	64.24	96.50	49.87	20.76	64.18	38.00	5.99	3.63	0.00	87.69
Nigeria	44.49	89.02	342022421.70	74.41	14.62	5.65	2.94	20.12	51.72	28.00	46.27	127.12	45.80	75.03	71.91	2.01	100.00	70.41
Rwanda	17.66	52.90	57424219.17	98.75	10.02	4.19	2.50	24.99	32.28	56.00	48.42	45.75	27.31	66.92	20.87	1.98	26.05	54.73
Sao Tome and Principe	31.76	62.26	1674038.66	92.23	53.91	4.63	19.99	37.08	38.56	68.40	63.34	37.89	54.09	61.62	38.51	2.44	3.30	47.52
Senegal	51.96	99.84	140423762.60	51.59	21.94	9.74	8.06	36.75	31.07	10.90	57.80	110.01	29.61	91.82	97.56	-0.32	35.15	23.59
Seychelles	76.78	93.92	30503761.27	57.18	349.32	6.50	286.83	82.11	Missing	11.70	72.78	120.59	17.89	93.26	94.14	0.89	0.00	0.57
Sierra Leone	0.15	11.10	31297823.72	88.41	13.78	4.61	4.22	30.65	38.45	142.00	38.70	41.97	58.64	38.72	10.06	2.81	16.58	89.28
Tanzania	1.08	9.62	261224422.50	92.04	12.62	8.43	2.70	21.40	60.87	79.50	51.49	18.20	37.69	31.59	6.51	2.63	86.37	93.72
Togo	0.34	16.96	53267707.86	86.00	9.80	3.76	1.18	12.00	65.95	76.10	53.49	28.78	75.58	45.39	10.97	2.95	57.14	77.11
Uganda	1.01	8.40	155652278.00	109.37	18.84	4.62	4.60	24.43	52.94	88.40	47.08	25.29	37.68	30.01	15.44	3.24	99.61	93.91
Zambia	14.00	16.70	62658356.81	96.27	24.45	9.08	6.75	27.62	52.89	96.60	44.70	31.70	26.59	48.58	25.99	2.81	99.38	89.99
Mean	14.34	29.22	117475848.45	90.44	30.97	5.53	15.17	33.70	46.02	80.66	52.19	45.81	46.59	56.26	26.83	2.51	49.54	73.17

	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
median	3.01	16.61	76481636.66	92.40	16.45	5.20	4.53	31.41	45.14	88.30	51.29	29.65	46.31	53.64	19.92	2.58	51.47	78.72
STDV	20.61	28.62	130665357.67	12.00	58.46	2.05	47.62	18.59	14.47	31.14	6.84	43.57	16.80	18.41	23.70	0.92	39.76	22.24
Threshold conversion																		
Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
Angola	1	1	1	1	0	1	1	1	0	1	0	0	0	0	1	1	1	0
Benin	0	1	0	1	0	0	0	0	1	1	1	0	1	1	0	1	0	0
Burkina Faso	0	0	0	1	0	1	0	1	1	1	0	0	0	0	0	1	0	1
Burundi	0	0	0	1	0	0	0	0	1	1	1	0	0	0	1	0	1	1
Cabo Verde	1	1	0	1	1	1	1	1	1	0	1	1	0	1	1	0	0	0
Cameroon	1	1	1	1	1	0	0	0	1	1	0	1	1	1	1	0	1	1
Central African Republic	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0	0	1	1
Chad	1	0	0	1	0	0	0	1	1	1	0	0	1	0	0	1	0	1
Comoros	0	1	0	0	1	1	1	0	0	0	1	1	1	1	1	0	0	0
Congo, Dem. Rep.	1	0	1	1	1	1	0	0	0	1	0	0	1	0	1	0	1	1
Congo, Rep.	1	1	1	0	1	0	1	1	0	0	1	1	1	1	0	1	1	0
Cote d'Ivoire	1	1	1	0	1	1	1	0	1	1	0	1	1	1	1	0	0	0
Ethiopia	0	0	1	1	0	1	0	1	1	0	1	0	0	0	0	1	1	1
Gabon	1	1	1	0	1	0	1	1	0	0	1	1	1	1	1	0	1	0
Gambia, The	1	1	0	1	1	0	1	0	0	0	1	0	0	1	1	1	0	0
Ghana	1	1	1	0	1	0	1	0	0	0	1	1	1	1	0	0	1	0
Guinea	0	0	0	0	1	0	0	0	0	1	0	0	1	1	0	0	1	1
Guinea-Bissau	0	0	0	1	1	0	1	1	1	1	1	0	0	0	0	0	0	1

Kenya	0	0	1	0	1	1	1	1	0	0	1	1	1	0	1	1	0	1
Lesotho	1	0	1	0	1	1	1	1	0	0	0	1	0	1	0	0	1	0
Liberia	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	1
Madagascar	0	0	1	1	0	0	1	1	1	0	1	0	0	0	0	1	1	0
Malawi	0	0	1	1	0	1	0	1	1	1	0	0	0	0	1	1	1	1
Mali	0	0	1	1	0	0	0	0	0	1	0	1	1	0	0	1	0	1
Mozambique	1	1	1	0	0	1	1	1	0	0	0	1	0	1	1	0	0	0
Niger	0	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1	0	1
Nigeria	1	1	1	0	0	1	0	0	1	0	0	1	0	1	1	0	1	0
Rwanda	1	1	0	1	0	0	0	0	0	0	0	1	0	1	1	0	0	0
Sao Tome and Principe	1	1	0	0	1	0	1	1	0	0	1	1	1	1	1	0	0	0
Senegal	1	1	1	0	1	1	1	1	0	0	1	1	0	1	1	0	0	0
Seychelles	1	1	0	0	1	1	1	1	Missing	0	1	1	0	1	1	0	0	0
Sierra Leone	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	0	1
Tanzania	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	1	1	1
Togo	0	1	0	0	0	0	0	0	1	0	1	0	1	0	0	1	1	0
Uganda	0	0	1	1	1	0	1	0	1	1	0	0	0	0	0	1	1	1
Zambia	1	1	0	1	1	1	1	0	1	1	0	1	0	0	1	1	1	1

Appendix B.4.

Social Policy Variables (Human Development Indicators) Truth Table and Cluster Pairings for the Year 2000 (Prime Implicants in Bold and Underlined) - Sub-Saharan Africa

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC	Cluster
Benin	0	1	0	1	0	0	0	0	1	1	1	***0***	1	1	***0***	1	0	0	1
Burkina Faso	0	0	0	1	0	1	0	1	1	1	0	***0***	0	0	***0***	1	0	1	1
Chad	1	0	0	1	0	0	0	1	1	1	0	***0***	1	0	***0***	1	0	1	1
Guinea-Bissau	0	0	0	1	1	0	1	1	1	1	1	***0***	0	0	***0***	0	0	1	1
Liberia	0	0	0	0	0	1	0	1	0	1	1	***0***	1	1	***0***	1	0	1	1
Madagascar	0	0	1	1	0	0	1	1	1	0	1	***0***	0	0	***0***	1	1	0	1
Niger	0	0	0	1	0	1	0	0	1	1	0	***0***	1	0	***0***	1	0	1	1
Central African Republic	***0***	0	0	0	0	***0***	***0***	1	0	1	0	0	***1***	0	***0***	0	1	1	2
Guinea	***0***	0	0	0	1	***0***	***0***	0	0	1	0	0	***1***	1	***0***	0	1	1	2
Mali	***0***	0	1	1	0	***0***	***0***	0	0	1	0	1	***1***	0	***0***	1	0	1	2
Sierra Leone	***0***	0	0	0	0	***0***	***0***	0	0	1	0	1	***1***	0	***0***	1	0	1	2
Togo	***0***	1	0	0	0	***0***	***0***	0	1	0	1	0	***1***	0	***0***	1	1	0	2
Congo, Dem. Rep.	1	***0***	***1***	1	1	***1***	***0***	0	0	1	0	***0***	1	***0***	1	0	***1***	***1***	3
Ethiopia	0	***0***	***1***	1	0	***1***	***0***	1	1	0	1	***0***	0	***0***	0	1	***1***	***1***	3
Tanzania	0	***0***	***1***	0	0	***1***	***0***	0	1	0	1	***0***	0	***0***	0	1	***1***	***1***	3
Angola	1	1	1	***1***	0	1	1	1	0	***1***	0	0	***0***	***0***	1	1	***1***	0	4
Burundi	0	0	0	***1***	0	0	0	0	1	***1***	1	0	***0***	***0***	1	0	***1***	1	4
Malawi	0	0	1	***1***	0	1	0	1	1	***1***	0	0	***0***	***0***	1	1	***1***	1	4
Uganda	0	0	1	***1***	1	0	1	0	1	***1***	0	0	***0***	***0***	0	1	***1***	1	4
Zambia	1	1	0	***1***	1	1	1	0	1	***1***	0	1	***0***	***0***	1	1	***1***	1	4
Cameroon	1	1	***1***	1	***1***	0	0	0	1	1	0	***1***	***1***	1	1	0	1	1	5
Cote d'Ivoire	1	1	***1***	0	***1***	1	1	0	1	1	0	***1***	***1***	1	1	0	0	0	5
Ghana	1	1	***1***	0	***1***	0	1	0	0	0	1	***1***	***1***	1	0	0	1	0	5
Kenya	0	0	***1***	0	***1***	1	1	1	0	0	1	***1***	***1***	0	1	1	0	1	5
Comoros	0	1	0	0	1	1	1	0	***0***	***0***	1	1	1	***1***	1	0	0	***0***	6
Congo, Rep.	1	1	1	0	1	0	1	1	***0***	***0***	1	1	1	***1***	0	1	1	***0***	6

Gambia, The	1	1	0	1	1	0	1	0	*__0__*	*__0__*	1	0	0	*__1__*	1	1	0	*__0__*	6
Lesotho	1	0	1	0	1	1	1	1	*__0__*	*__0__*	0	1	0	*__1__*	0	0	1	*__0__*	6
Rwanda	1	1	0	1	0	0	0	0	*__0__*	*__0__*	0	1	0	*__1__*	1	0	0	*__0__*	6
Sao Tome and Principe	1	1	0	0	1	0	1	1	*__0__*	*__0__*	1	1	1	*__1__*	1	0	0	*__0__*	6
Mozambique	*__1__*	*__1__*	*__1__*	*__0__*	0	*__1__*	1	1	0	*__0__*	0	*__1__*	*__0__*	*__1__*	*__1__*	*__0__*	0	*__0__*	7
Nigeria	*__1__*	*__1__*	*__1__*	*__0__*	0	*__1__*	0	0	1	*__0__*	0	*__1__*	*__0__*	*__1__*	*__1__*	*__0__*	1	*__0__*	7
Senegal	*__1__*	*__1__*	*__1__*	*__0__*	1	*__1__*	1	1	0	*__0__*	1	*__1__*	*__0__*	*__1__*	*__1__*	*__0__*	0	*__0__*	7
Cabo Verde	*__1__*	*__1__*	0	1	*__1__*	1	*__1__*	*__1__*	1	*__0__*	*__1__*	*__1__*	0	*__1__*	*__1__*	*__0__*	0	*__0__*	8
Gabon	*__1__*	*__1__*	1	0	*__1__*	0	*__1__*	*__1__*	0	*__0__*	*__1__*	*__1__*	1	*__1__*	*__1__*	*__0__*	1	*__0__*	8
Seychelles	1	1	0	0	1	1	1	1	…	0	1	1	0	1	1	0	0	0	Missing

Appendix A.5.

Social Policy Variables (Human Development Indicators) Threshold Conversion for the Year 2008 – Sub-Saharan Africa

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
Angola	42.58	31.27	2152567818.00	98.84	135.38	5.58	87.16	64.39	38.44	86.40	56.19	43.46	21.63	39.65	30.52	3.56	75.41	58.11
Benin	4.19	30.62	278449825.40	90.01	30.31	6.27	6.33	20.87	45.03	73.90	58.65	30.85	47.19	63.84	12.01	2.82	1.31	54.76
Burkina Faso	5.16	13.78	255713407.60	95.88	29.78	6.29	8.72	29.29	60.07	71.90	55.62	21.10	30.96	50.28	16.30	3.02	21.94	82.94
Burundi	0.70	4.80	74741046.44	89.84	18.42	5.23	3.72	20.19	58.14	66.40	53.93	24.23	35.38	54.29	46.59	3.38	98.24	96.85
Cabo Verde	65.39	73.84	88331423.96	69.92	130.39	9.39	89.24	68.44	36.06	21.90	71.88	50.03	24.45	82.03	54.50	1.08	1.92	27.61
Cameroon	15.87	50.57	673327136.90	88.54	61.45	3.58	8.04	13.08	54.42	74.20	54.54	100.47	78.80	60.76	39.15	2.74	75.85	80.71
Central African Republic	0.73	9.35	24921971.17	85.98	19.98	4.98	6.41	32.08	45.86	105.30	46.19	14.28	39.19	53.21	21.36	1.61	85.09	80.58
Chad	3.23	5.45	124916253.50	106.50	37.88	4.37	7.54	19.91	52.96	88.70	49.18	46.78	68.82	40.80	9.64	3.27	0.00	90.07
Comoros	2.58	58.31	20875215.40	80.18	72.45	6.03	8.77	12.10	13.67	65.90	61.09	100.69	80.94	84.83	30.96	2.40	0.00	50.95
Congo, Dem. Rep.	3.68	11.49	254615896.00	96.29	12.29	9.10	3.20	26.00	43.22	89.20	55.74	9.92	45.18	38.35	20.90	3.29	98.72	96.97
Congo, Rep.	15.71	37.92	220955970.80	81.96	63.13	3.86	30.99	49.09	28.42	48.00	58.32	37.68	37.85	62.47	13.91	3.44	81.34	57.22
Cote d'Ivoire	18.61	55.84	994469438.10	88.02	76.06	7.50	10.35	13.60	40.25	80.80	49.32	96.27	61.25	72.38	26.33	2.14	34.76	74.32
Ethiopia	2.36	21.76	1034717675.00	94.36	13.41	6.21	1.77	13.21	73.09	60.80	59.58	14.62	38.48	28.46	5.14	2.66	87.64	94.52
Gabon	71.14	82.86	408590923.30	75.06	257.63	4.31	107.24	41.63	12.53	45.40	61.60	178.96	47.74	84.24	40.04	3.12	49.51	87.38
Gambia, The	3.16	37.77	19649759.15	95.91	35.96	2.55	11.84	32.92	36.44	51.20	58.99	18.50	20.93	77.27	47.49	3.16	0.00	55.75
Ghana	12.07	60.50	1423383868.00	77.03	78.44	5.92	27.87	35.52	49.54	52.60	60.13	85.68	48.93	71.73	12.87	2.60	74.42	55.86
Guinea	1.26	23.84	111238158.50	88.54	18.63	6.52	2.08	11.19	44.01	73.90	55.52	32.59	64.82	61.30	15.89	2.22	62.74	80.15

Guinea-Bissau	1.39	9.62	13144914.76	83.89	39.94	4.26	13.93	34.87	46.38	79.10	54.33	37.70	42.25	61.60	16.89	2.38	0.00	88.42
Kenya	6.39	25.26	2065737291.00	85.33	44.34	5.49	10.89	24.56	30.59	43.10	60.28	43.66	40.25	53.03	30.32	2.75	63.13	80.48
Lesotho	27.63	15.42	242901551.70	73.91	72.15	7.51	40.07	55.54	27.38	82.10	49.11	35.83	21.77	69.18	26.95	0.89	100.00	54.99
Liberia	0.63	1.75	25270122.30	87.03	25.59	7.51	6.26	24.48	30.86	76.50	58.17	23.49	41.64	66.16	15.09	4.18	0.00	91.49
Madagascar	0.99	16.14	247181873.30	88.65	21.79	7.00	7.62	34.96	73.43	47.10	62.51	24.39	36.03	43.71	7.20	2.86	54.94	82.33
Malawi	2.15	7.44	208687411.30	97.56	32.06	4.63	7.18	22.39	55.50	60.50	54.18	8.12	10.37	59.93	39.32	3.06	89.87	81.53
Mali	1.09	22.26	319171624.40	100.73	33.14	8.60	7.32	22.07	43.44	84.30	54.19	55.69	66.68	62.73	25.71	3.33	44.97	76.24
Mozambique	43.22	76.90	472101777.90	62.68	23.22	6.17	6.50	28.01	44.10	21.10	53.46	115.92	44.41	81.40	68.92	1.30	35.53	52.56
Niger	1.43	11.64	180724291.50	109.24	23.82	6.61	7.55	31.71	67.70	68.00	55.35	28.96	55.03	42.02	9.49	3.75	1.32	86.11
Nigeria	55.71	96.68	1639735000.00	63.48	81.44	6.71	18.29	22.46	55.34	23.30	49.89	190.57	52.41	88.27	82.52	1.35	100.00	66.63
Rwanda	22.18	58.17	163113124.30	92.49	47.31	5.17	8.63	18.24	29.02	36.90	60.57	43.69	36.55	73.91	31.03	2.31	16.84	46.04
Sao Tome and Principe	31.81	51.22	9378666.79	86.98	55.36	8.72	10.28	18.57	35.10	46.60	65.50	38.07	42.69	68.89	43.66	2.74	9.78	40.47
Senegal	65.27	99.62	643211220.60	47.51	47.03	4.87	18.66	39.67	21.03	6.90	62.76	420.13	35.10	90.11	96.00	-0.43	25.97	15.57
Seychelles	87.00	96.68	34486737.25	45.33	275.71	10.06	256.27	92.95	Missing	12.20	73.16	30.53	6.39	95.18	97.54	2.24	0.00	0.38
Sierra Leone	0.41	12.10	59146653.99	87.78	37.09	2.59	4.06	10.93	35.34	116.90	46.43	69.68	68.73	48.63	12.41	2.46	69.01	85.27
Tanzania	1.53	11.50	1052412335.00	93.57	35.32	5.75	9.50	26.90	62.46	51.90	59.16	34.05	32.92	41.40	15.21	3.16	60.42	91.05
Togo	2.98	31.90	105062208.10	82.91	23.66	4.61	4.44	18.77	63.91	62.20	56.17	32.34	61.65	54.70	12.48	2.70	75.61	76.52
Uganda	0.86	13.38	419417098.70	107.86	51.35	5.26	6.86	13.36	52.38	56.70	55.57	69.51	43.40	34.68	17.42	3.45	70.83	92.28
Zambia	15.25	22.71	175029991.10	98.26	55.77	7.94	9.69	17.37	54.19	57.90	53.75	35.50	31.48	55.42	28.78	2.76	99.87	92.18
Mean	17.68	35.84	451038324.48	86.06	58.83	6.03	24.31	29.48	44.58	60.83	56.97	62.33	43.40	61.58	31.13	2.61	49.08	70.15
median	3.94	24.55	231928761.25	88.28	38.91	5.97	8.68	24.52	44.10	61.50	55.96	37.69	41.94	61.45	26.02	2.75	57.68	80.31
STDV	24.11	29.05	574787733.83	14.63	58.61	1.82	46.96	17.90	15.32	24.96	5.97	74.52	17.63	17.10	23.67	0.91	36.96	23.52

										Threshold conversion								
Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
Angola	1	1	1	1	1	0	1	1	0	1	1	1	0	0	1	1	1	0
Benin	1	1	1	1	0	1	0	0	1	1	1	0	1	1	0	1	0	0
Burkina Faso	1	0	1	1	0	1	1	1	1	1	0	0	0	0	0	1	0	1
Burundi	0	0	0	1	0	0	0	0	1	1	0	0	0	0	1	1	1	1
Cabo Verde	1	1	0	0	1	1	1	1	0	0	1	1	0	1	1	0	0	0
Cameroon	1	1	1	1	1	0	0	0	1	1	0	1	1	0	1	0	1	1
Central African Republic	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1
Chad	0	0	0	1	0	0	0	0	1	1	0	1	1	0	0	1	0	1
Comoros	0	1	0	0	1	1	1	0	0	1	1	1	1	1	1	0	0	0
Congo, Dem. Rep.	0	0	1	1	0	1	0	1	0	1	0	0	1	0	0	1	1	1
Congo, Rep.	1	1	0	0	1	0	1	1	0	0	1	0	0	1	0	1	1	0
Cote d'Ivoire	1	1	1	0	1	1	1	0	0	1	0	1	1	1	1	0	0	0
Ethiopia	0	0	1	1	0	1	0	0	1	0	1	0	0	0	0	0	1	1
Gabon	1	1	1	0	1	0	1	1	0	0	1	1	1	1	1	1	0	1
Gambia, The	0	1	0	1	0	0	1	1	0	0	1	0	0	1	1	1	0	0
Ghana	1	1	1	0	1	0	1	1	1	0	1	1	1	1	0	0	1	0
Guinea	0	0	0	1	0	1	0	0	0	1	0	0	1	0	0	0	1	0
Guinea-Bissau	0	0	0	0	1	0	1	1	1	1	0	1	1	1	0	0	0	1
Kenya	1	1	1	0	1	0	1	1	0	0	1	1	0	0	1	1	1	1
Lesotho	1	0	1	0	1	1	1	1	0	1	0	0	0	1	1	0	1	0

Liberia	0	0	0	0	0	1	0	0	0	1	1	0	0	1	0	1	0	1
Madagascar	0	0	1	1	0	1	0	1	1	0	1	0	0	0	0	1	0	1
Malawi	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	1	1	1
Mali	0	0	1	1	0	1	0	0	0	1	0	1	1	1	0	1	0	0
Mozambique	1	1	1	0	0	1	0	1	0	0	0	1	1	1	1	0	0	0
Niger	0	0	0	1	0	1	0	1	1	1	0	0	1	0	0	1	0	1
Nigeria	1	1	1	0	1	1	1	0	1	0	0	1	1	1	1	0	1	0
Rwanda	1	1	0	1	1	0	0	0	0	0	1	1	0	1	1	0	0	0
Sao Tome and Principe	1	1	0	0	1	1	1	0	0	0	1	1	1	1	1	0	0	0
Senegal	1	1	1	0	1	0	1	1	0	0	1	1	0	1	1	0	0	0
Seychelles	1	1	0	0	1	1	1	1	Missing	0	1	0	0	1	1	0	0	0
Sierra Leone	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	1
Tanzania	0	0	1	1	0	0	1	1	1	0	1	0	0	0	0	1	1	1
Togo	0	1	0	0	0	0	0	0	1	1	1	0	1	0	0	0	1	0
Uganda	0	0	1	1	1	0	0	0	1	0	0	1	1	0	0	1	1	1
Zambia	1	0	0	1	1	1	1	0	1	0	0	0	0	0	1	1	1	1

Social Policy Variables (Human Development Indicators) Truth Table and Cluster Pairings for the Year 2008 (Prime Implicants in Bold and Underlined) - Sub-Saharan Africa

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC	Cluster	Revised Cluster
Burundi	0	**0**	0	**1**	0	0	0	0	1	1	0	**0**	0	**0**	1	1	1	**1**	1	1
Congo, Dem. Rep.	0	**0**	1	**1**	0	1	0	1	0	1	0	**0**	1	**0**	0	1	1	**1**	1	1
Ethiopia	0	**0**	1	**1**	0	1	0	0	1	0	1	**0**	0	**0**	0	0	1	**1**	1	1
Madagascar	0	**0**	1	**1**	0	1	0	1	1	0	1	**0**	0	**0**	0	1	0	**1**	1	1
Malawi	0	**0**	0	**1**	0	0	0	0	1	0	0	**0**	0	**0**	1	1	1	**1**	1	1
Tanzania	0	**0**	1	**1**	0	0	1	1	1	0	1	**0**	0	**0**	0	1	1	**1**	1	1
Zambia	1	**0**	0	**1**	1	1	1	0	1	0	0	**0**	0	**0**	1	1	1	**1**	1	1
Burkina Faso	1	**0**	1	**1**	0	1	1	1	**1**	1	**0**	0	0	**0**	**0**	1	0	**1**	2	2
Chad	0	**0**	0	**1**	0	0	0	0	**1**	1	**0**	1	1	**0**	**0**	1	0	**1**	2	2
Niger	0	**0**	0	**1**	0	1	0	1	**1**	1	**0**	0	1	**0**	**0**	1	0	**1**	2	2
Uganda	0	**0**	1	**1**	1	0	0	0	**1**	0	**0**	1	1	**0**	**0**	1	1	**1**	2	2
Benin	1	1	1	1	0	1	0	0	1	**1**	1	0	1	**1**	**0**	1	**0**	0	2	3
Guinea-Bissau	0	0	0	0	1	0	1	1	1	**1**	0	1	1	**1**	**0**	0	**0**	1	2	3
Liberia	0	0	0	0	0	1	0	0	0	**1**	1	0	0	**1**	**0**	1	**0**	1	2	3

Mali	0	0	1	1	0	1	0	0	0	***1***	0	1	1	***1***	***0***	1	***0***	0	2	3
Cameroon	1	1	1	1	1	0	0	0	1	***1***	0	1	1	0	1	***0***	1	1	3	4
Central African Republic	0	0	0	0	0	0	0	1	1	***1***	0	0	0	0	0	***0***	1	1	3	4
Cote d'Ivoire	1	1	1	0	1	1	1	0	0	***1***	0	1	1	1	1	***0***	0	0	3	4
Guinea	0	0	0	1	0	1	0	0	0	***1***	0	0	1	0	0	***0***	1	0	3	4
Sierra Leone	0	0	0	0	0	0	0	0	0	***1***	0	1	1	0	0	***0***	1	1	3	4
Togo	0	1	0	0	0	0	0	0	1	***1***	1	0	1	0	0	***0***	1	0	3	4
Angola	***1***	1	***1***	1	***1***	0	***1***	***1***	***0***	***1***	1	1	***0***	0	***1***	1	***1***	***0***	4	5
Lesotho	***1***	0	***1***	0	***1***	1	***1***	***1***	***0***	***1***	0	0	***0***	1	***1***	0	***1***	***0***	4	5
Comoros	0	***1***	0	0	1	1	1	0	0	1	***1***	1	1	1	1	0	0	0	5	6
Congo, Rep.	1	***1***	0	0	1	0	1	1	0	0	***1***	0	0	1	0	1	1	0	5	6
Gambia, The	0	***1***	0	1	0	0	1	1	0	0	***1***	0	0	1	1	1	0	0	5	6
Ghana	1	***1***	1	0	1	0	1	1	1	0	***1***	1	1	1	0	0	1	0	5	6
Kenya	1	***1***	1	0	1	0	1	1	0	0	***1***	1	0	0	1	1	1	1	5	6
Rwanda	1	***1***	0	1	1	0	0	0	0	0	***1***	1	0	1	1	0	0	0	5	6
Sao Tome and Principe	1	***1***	0	0	1	1	1	0	0	0	***1***	1	1	1	1	0	0	0	5	6
Cabo Verde	***1***	***1***	0	***0***	***1***	1	***1***	***1***	***0***	***0***	***1***	***1***	0	***1***	***1***	0	***0***	0	6	7
Gabon	***1***	***1***	1	***0***	***1***	0	***1***	***1***	***0***	***0***	***1***	***1***	1	***1***	***1***	1	***0***	1	6	7
Mozambique	***1***	***1***	***1***	***0***	0	1	0	1	0	***0***	0	***1***	1	***1***	***1***	***0***	0	***0***	7	7

Country																				
Nigeria	*1*	*1*	*1*	*0*	1	1	1	0	1	*0*	0	*1*	1	*1*	*1*	*0*	1	*0*	7	7
Senegal	*1*	*1*	*1*	*0*	1	0	1	1	0	*0*	1	*1*	0	*1*	*1*	*0*	0	*0*	7	7
Seychelles	1	1	0	0	1	1	1	1	…	0	1	0	0	1	1	0	0	0	Missing	Missing

Appendix A.6.

Social Policy Variables (Human Development Indicators) Threshold Conversion for the Year 2015 – Sub-Saharan Africa

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
Angola	47.36	42.00	3464853005.00	97.58	108.56	6.82	51.57	47.51	47.72	58.20	61.24	65.28	33.39	41.01	39.43	3.43	53.17	49.57
Benin	6.06	40.03	331433532.40	86.10	31.29	6.83	6.30	20.14	40.56	66.60	60.64	34.20	40.50	67.02	13.93	2.77	5.56	50.86
Burkina Faso	8.46	18.47	430061046.60	92.24	33.44	8.20	9.44	28.24	47.80	54.30	59.93	34.70	36.11	53.86	22.53	2.94	9.35	74.17
Burundi	0.83	7.25	158342649.80	89.59	24.29	5.45	9.43	38.82	51.16	45.90	57.09	12.15	19.07	55.93	50.46	3.06	82.71	95.68
Cabo Verde	70.63	90.24	75973785.58	55.37	145.83	8.24	98.89	67.81	29.26	16.90	72.60	71.92	23.17	86.46	65.21	1.22	20.21	26.58
Cameroon	21.98	58.87	816850462.50	85.87	63.63	4.85	9.20	14.46	51.24	58.20	57.58	113.57	69.74	65.28	38.83	2.64	76.12	76.54
Central African Republic	0.92	13.38	18293573.45	90.04	16.64	5.11	2.12	12.77	47.81	91.60	51.41	12.62	39.60	54.14	25.09	0.68	99.42	76.57
Chad	3.13	7.70	186520402.50	100.17	35.57	4.78	8.35	23.46	50.29	76.70	52.58	56.24	56.37	42.54	9.55	3.19	0.00	89.36
Comoros	8.15	75.38	24569268.71	75.55	58.54	6.19	7.84	13.40	12.41	54.90	63.47	90.56	74.81	83.70	34.17	2.35	0.00	45.33
Congo, Dem. Rep.	3.94	16.42	723611593.50	97.48	19.75	8.05	3.26	16.49	43.79	74.10	59.21	12.72	37.43	41.84	19.71	3.30	99.82	95.82
Congo, Rep.	22.74	60.40	213335553.40	84.48	58.79	4.27	25.41	43.22	35.21	36.90	64.11	88.85	43.84	68.34	15.01	2.52	53.34	62.40
Cote d'Ivoire	17.96	64.09	1570303035.00	83.78	75.45	8.15	16.47	21.83	34.73	67.80	53.05	68.29	36.02	73.06	29.93	2.53	16.73	64.53
Ethiopia	3.40	33.42	1849033579.00	82.12	24.28	6.91	6.52	26.87	70.58	44.20	65.04	24.80	37.81	39.12	7.08	2.54	99.96	92.16

Gabon	78.13	90.31	399884589.10	67.44	197.94	4.05	116.61	58.91	11.09	37.40	65.69	124.56	25.90	87.54	40.93	2.86	43.74	82.01
Gambia, The	3.23	46.49	23376788.48	92.30	31.88	2.68	14.84	46.56	35.61	43.30	60.95	23.16	20.31	80.06	41.69	3.07	0.00	51.51
Ghana	20.37	75.72	2152505998.00	72.96	79.59	6.75	27.81	34.95	51.45	38.90	62.45	90.02	36.11	77.80	14.28	2.27	50.89	41.41
Guinea	1.24	30.96	246875260.40	84.18	25.13	5.72	4.31	17.15	41.69	59.80	59.42	31.17	54.49	67.37	21.95	2.39	78.75	76.27
Guinea-Bissau	1.46	14.00	12221192.81	80.41	39.48	4.54	12.34	31.26	44.46	59.30	57.00	37.27	37.16	69.20	21.47	2.56	0.00	86.85
Kenya	12.76	41.60	3112055035.00	78.33	70.06	5.93	23.19	33.10	25.93	35.10	66.70	52.45	33.37	58.46	29.84	2.60	87.51	72.66
Lesotho	34.74	27.92	271009575.90	66.92	90.85	8.36	51.62	56.82	27.55	70.50	53.75	42.33	16.85	71.59	43.79	1.34	100.00	52.14
Liberia	0.70	13.84	64196400.00	83.18	69.29	8.36	5.13	7.41	28.86	59.30	62.01	25.09	19.64	69.90	16.89	2.45	0.00	83.85
Madagascar	0.90	19.04	194859322.50	80.11	21.05	6.09	9.50	45.15	73.72	34.90	65.54	16.62	21.66	50.62	9.69	2.69	54.60	70.17
Malawi	2.49	10.80	352950871.70	91.05	34.22	5.24	9.80	28.65	58.97	42.00	62.66	11.88	10.98	67.20	43.53	2.91	91.31	83.65
Mali	0.93	37.60	559046552.20	101.87	42.30	9.33	7.00	16.55	49.28	69.20	57.48	54.85	46.31	74.27	31.27	2.93	43.52	61.53
Mozambique	51.41	81.16	780008884.30	54.13	28.30	5.97	2.29	8.09	47.33	15.90	57.71	146.11	35.99	82.26	76.35	1.12	50.05	48.20
Niger	1.88	16.60	365244367.40	111.62	25.72	7.81	5.41	21.02	70.69	51.60	59.67	35.79	52.27	45.84	12.94	3.84	0.75	78.94
Nigeria	65.00	99.33	3981476500.00	56.63	97.31	7.17	16.08	16.53	48.99	19.00	52.99	264.27	36.49	98.89	91.22	1.31	100.00	61.68
Rwanda	17.88	64.51	279866852.30	86.75	56.66	4.95	12.11	21.37	29.01	27.10	66.70	36.00	11.67	79.70	40.10	2.22	10.47	41.06
Sao Tome and Principe	31.82	60.50	10956815.03	85.37	159.91	7.90	59.46	37.19	39.28	34.90	66.49	42.89	44.18	75.19	48.36	2.92	10.42	42.71
Senegal	75.02	99.98	880634766.20	49.19	36.08	9.84	11.45	31.75	16.38	5.50	66.78	537.26	40.59	91.18	94.64	-0.49	26.91	21.17
Seychelles	90.23	99.68	47391916.28	42.75	491.82	9.41	477.04	96.99	Missing	12.40	74.30	21.55	2.48	96.25	100.00	2.23	2.38	1.35
Sierra Leone	0.93	16.47	113782000.40	82.60	106.69	3.39	9.56	8.96	26.47	88.10	51.42	98.02	38.24	58.09	14.54	2.21	60.98	77.66
Tanzania	2.15	18.50	1673551911.00	93.43	31.74	6.55	11.20	35.30	69.61	41.00	64.95	25.23	26.15	50.15	23.53	3.10	34.15	85.71
Togo	6.24	45.03	207918890.90	81.22	36.65	6.12	10.26	28.00	61.78	51.90	59.95	48.74	50.96	62.82	13.95	2.57	75.31	71.26
Uganda	0.76	18.50	527065349.10	101.62	46.06	4.14	6.19	13.43	52.39	39.00	59.58	56.11	40.50	38.92	19.15	3.32	92.95	89.06

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
Zambia	16.31	31.10	220559285.70	91.87	69.37	9.22	25.36	36.56	47.23	44.20	61.40	55.89	27.53	61.23	31.11	3.02	96.99	87.99
Mean	20.34	44.09	731683905.89	82.12	71.78	6.48	32.87	30.74	43.44	47.96	60.93	71.20	35.49	66.30	34.78	2.46	48.00	65.79
median	7.20	38.82	305650192.35	84.33	44.18	6.37	10.03	28.12	47.23	45.05	60.80	45.82	36.30	67.28	29.89	2.58	50.47	71.96
STDV	26.23	29.61	1013348924.97	15.60	83.33	1.83	80.33	18.74	15.87	20.58	5.47	93.49	15.46	16.50	24.26	0.85	37.66	22.50
Threshold conversion																		
Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
Angola	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	0
Benin	0	1	1	1	0	1	0	0	0	1	0	0	1	0	0	1	0	0
Burkina Faso	1	0	1	1	0	1	0	1	1	1	0	0	0	0	0	1	0	1
Burundi	0	0	0	1	0	0	0	1	1	1	0	0	0	0	1	1	1	1
Cabo Verde	1	1	0	0	1	1	1	1	0	0	1	1	0	1	1	0	0	0
Cameroon	1	1	1	1	1	0	0	0	1	1	0	1	1	0	1	1	1	1
Central African Republic	0	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	1	1
Chad	0	0	0	1	0	0	0	0	1	1	0	1	1	0	0	1	0	1
Comoros	1	1	0	0	1	0	0	0	0	1	1	1	1	1	1	0	0	0
Congo, Dem. Rep.	0	0	1	1	0	1	0	0	0	1	0	0	1	0	0	1	1	1
Congo, Rep.	1	1	0	1	1	0	1	1	0	0	1	1	1	1	0	0	1	0
Cote d'Ivoire	1	1	1	0	1	1	1	0	0	1	0	1	0	1	1	0	0	0
Ethiopia	0	0	1	0	0	1	0	0	1	0	1	0	1	0	0	0	1	1
Gabon	1	1	1	0	1	0	1	1	0	0	1	1	0	1	1	1	0	1
Gambia, The	0	1	0	1	0	0	1	1	0	0	1	0	0	1	1	1	0	0
Ghana	1	1	1	0	1	1	1	1	1	0	1	1	0	1	0	0	1	0

Guinea	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	1
Guinea-Bissau	0	0	0	0	0	0	1	1	0	1	0	0	1	1	0	0	0	1
Kenya	1	1	1	0	1	0	1	1	0	0	1	1	0	0	0	1	1	1
Lesotho	1	0	0	0	1	1	1	1	0	1	0	0	0	1	1	0	1	0
Liberia	0	0	0	0	1	1	0	0	0	1	1	0	0	1	0	0	0	1
Madagascar	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	1	1	0
Malawi	0	0	1	1	0	0	0	1	1	0	1	0	0	0	1	1	1	1
Mali	0	0	1	1	0	1	0	0	1	1	0	1	1	1	1	1	0	0
Mozambique	1	1	1	0	0	0	0	0	1	0	0	1	0	1	1	0	0	0
Niger	0	0	1	1	0	1	0	0	1	1	0	0	1	0	0	1	0	1
Nigeria	1	1	1	0	1	1	1	0	1	0	0	1	1	1	1	0	1	0
Rwanda	1	1	0	1	1	0	1	0	0	0	1	0	0	1	1	0	0	0
Sao Tome and Principe	1	1	0	1	1	1	1	1	0	0	1	0	1	1	1	1	0	0
Senegal	1	1	1	0	0	1	1	1	0	0	1	1	1	1	1	0	0	0
Seychelles	1	1	0	0	1	1	1	1	Missing	0	1	0	0	1	1	0	0	0
Sierra Leone	0	0	0	0	1	0	0	0	0	1	0	1	1	0	0	0	1	1
Tanzania	0	0	1	1	0	1	1	1	1	0	1	0	0	0	0	1	0	1
Togo	0	1	0	0	0	0	1	0	1	1	0	1	1	0	0	0	1	0
Uganda	0	0	1	1	1	0	0	0	1	0	0	1	1	0	0	1	1	1
Zambia	1	0	0	1	1	1	1	1	0	0	1	1	0	0	1	1	1	1

Appendix B.6.

Social Policy Variables (Human Development Indicators) Truth Table and Cluster Pairings for the Year 2015 (Prime Implicants in Bold and Underlined) - Sub-Saharan Africa

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC	Cluster
Cameroon	1	1	1	1	1	0	0	0	1	***1***	***0***	1	***1***	0	1	1	1	1	1
Chad	0	0	0	1	0	0	0	0	1	***1***	***0***	1	***1***	0	0	1	0	1	1
Guinea	0	0	0	0	0	0	0	0	0	***1***	***0***	0	***1***	1	0	0	1	1	1
Guinea-Bissau	0	0	0	0	0	0	1	1	0	***1***	***0***	0	***1***	1	0	0	0	1	1
Niger	0	0	1	1	0	1	0	0	1	***1***	***0***	0	***1***	0	0	1	0	1	1
Togo	0	1	0	0	0	0	1	0	1	***1***	***0***	1	***1***	0	0	0	1	0	1
Benin	0	1	1	1	0	***1***	0	0	0	***1***	0	0	1	0	0	1	0	0	2
Burkina Faso	1	0	1	1	0	***1***	0	1	1	***1***	0	0	0	0	0	1	0	1	2
Cote d'Ivoire	1	1	1	0	1	***1***	1	0	0	***1***	0	1	0	1	1	0	0	0	2
Liberia	0	0	0	0	1	***1***	0	0	0	***1***	1	0	0	1	0	0	0	1	2
Mali	0	0	1	1	0	***1***	0	0	1	***1***	0	1	1	1	1	1	0	0	2
Central African Republic	***0***	***0***	***0***	1	0	***0***	***0***	***0***	1	***1***	***0***	0	***1***	***0***	***0***	***0***	***1***	***1***	3
Sierra Leone	***0***	***0***	***0***	0	1	***0***	***0***	***0***	0	***1***	***0***	1	***1***	***0***	***0***	***0***	***1***	***1***	3
Burundi	0	***0***	0	1	0	0	0	1	1	1	0	0	0	***0***	1	1	1	1	4
Congo, Dem. Rep.	0	***0***	1	1	0	1	0	0	0	1	0	0	1	***0***	0	1	1	1	4

Ethiopia	0	**_0_**	1	0	0	1	0	0	1	0	1	0	1	**_0_**	0	0	1	1	4
Madagascar	0	**_0_**	0	0	0	0	0	1	1	0	1	0	0	**_0_**	0	1	1	0	4
Malawi	0	**_0_**	1	1	0	0	0	1	1	0	1	0	0	**_0_**	1	1	1	1	4
Tanzania	0	**_0_**	1	1	0	1	1	1	1	0	1	0	0	**_0_**	0	1	0	1	4
Uganda	0	**_0_**	1	1	1	0	0	0	1	0	0	1	1	**_0_**	0	1	1	1	4
Zambia	1	**_0_**	0	1	1	1	1	1	0	0	1	1	0	**_0_**	1	1	1	1	4
Mozambique	**_1_**	**_1_**	**_1_**	**_0_**	0	0	0	0	1	**_0_**	0	**_1_**	0	**_1_**	**_1_**	**_0_**	0	**_0_**	5
Nigeria	**_1_**	**_1_**	**_1_**	**_0_**	1	1	1	0	1	**_0_**	0	**_1_**	1	**_1_**	**_1_**	**_0_**	1	**_0_**	5
Senegal	**_1_**	**_1_**	**_1_**	**_0_**	0	1	1	1	0	**_0_**	1	**_1_**	1	**_1_**	**_1_**	**_0_**	0	**_0_**	5
Cabo Verde	**_1_**	**_1_**	0	**_0_**	**_1_**	1	**_1_**	**_1_**	**_0_**	**_0_**	**_1_**	**_1_**	**_0_**	**_1_**	**_1_**	0	**_0_**	0	6
Gabon	**_1_**	**_1_**	1	**_0_**	**_1_**	0	**_1_**	**_1_**	**_0_**	**_0_**	**_1_**	**_1_**	**_0_**	**_1_**	**_1_**	1	**_0_**	1	6
Comoros	1	**_1_**	**_0_**	0	1	0	0	0	**_0_**	1	**_1_**	1	1	**_1_**	**_1_**	0	**_0_**	**_0_**	7
Gambia, The	0	**_1_**	**_0_**	1	0	0	1	1	**_0_**	0	**_1_**	0	0	**_1_**	**_1_**	1	**_0_**	**_0_**	7
Rwanda	1	**_1_**	**_0_**	1	1	0	1	0	**_0_**	0	**_1_**	0	0	**_1_**	**_1_**	0	**_0_**	**_0_**	7
Sao Tome and Principe	1	**_1_**	**_0_**	1	1	1	1	1	**_0_**	0	**_1_**	0	1	**_1_**	**_1_**	1	**_0_**	**_0_**	7
Angola	**_1_**	1	1	1	**_1_**	1	**_1_**	**_1_**	1	1	1	1	0	0	1	1	**_1_**	0	8
Congo, Rep.	**_1_**	1	0	1	**_1_**	0	**_1_**	**_1_**	0	0	1	1	1	1	0	0	**_1_**	0	8
Ghana	**_1_**	1	1	0	**_1_**	1	**_1_**	**_1_**	1	0	1	1	0	1	0	0	**_1_**	0	8
Kenya	**_1_**	1	1	0	**_1_**	0	**_1_**	**_1_**	0	0	1	1	0	0	0	1	**_1_**	1	8
Lesotho	**_1_**	0	0	0	**_1_**	1	**_1_**	**_1_**	0	1	0	0	0	1	1	0	**_1_**	0	8
Seychelles	1	1	0	0	1	1	1	1	…	0	1	0	0	1	1	0	0	0	missing

Appendix C.1.

Overall Social Policy Variables (Human Development Indicators) Longitudinal Truth Table Threshold (2000 To 2015) – Sub-Saharan Africa

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
2000																		
Angola	1	1	1	1	0	1	1	1	0	1	0	0	0	0	1	1	1	0
Benin	0	1	0	1	0	0	0	0	1	1	1	0	1	1	0	1	0	0
Burkina Faso	0	0	0	1	0	1	0	1	1	1	0	0	0	0	0	1	0	1
Burundi	0	0	0	1	0	0	0	0	1	1	1	0	0	0	1	0	1	1
Cabo Verde	1	1	0	1	1	1	1	1	1	0	1	1	0	1	1	0	0	0
Cameroon	1	1	1	1	1	0	0	0	1	1	0	1	1	1	1	0	1	1
Central African Republic	0	0	0	0	0	0	0	1	0	1	0	0	1	0	0	0	1	1
Chad	1	0	0	1	0	0	0	1	1	1	0	0	1	0	0	1	0	1
Comoros	0	1	0	0	1	1	1	0	0	0	1	1	1	1	1	0	0	0
Congo, Dem. Rep.	1	0	1	1	1	1	0	0	0	1	0	0	1	0	1	0	1	1
Congo, Rep.	1	1	1	0	1	0	1	1	0	0	1	1	1	1	0	1	1	0

Cote d'Ivoire	1	1	1	0	1	1	1	0	1	1	0	1	1	1	1	0	0	0
Ethiopia	0	0	1	1	0	1	0	1	1	0	1	0	0	0	0	1	1	1
Gabon	1	1	1	0	1	0	1	1	0	0	1	1	1	1	1	0	1	0
Gambia, The	1	1	0	1	1	0	1	0	0	0	1	0	0	1	1	1	0	0
Ghana	1	1	1	0	1	0	1	0	0	0	1	1	1	1	0	0	1	0
Guinea	0	0	0	0	1	0	0	0	0	1	0	0	1	1	0	0	1	1
Guinea-Bissau	0	0	0	1	1	0	1	1	1	1	1	0	0	0	0	0	0	1
Kenya	0	0	1	0	1	1	1	1	0	0	1	1	1	0	1	1	0	1
Lesotho	1	0	1	0	1	1	1	1	0	0	0	1	0	1	0	0	1	0
Liberia	0	0	0	0	0	1	0	1	0	1	1	0	1	1	0	1	0	1
Madagascar	0	0	1	1	0	0	1	1	1	0	1	0	0	0	0	1	1	0
Malawi	0	0	1	1	0	1	0	1	1	1	0	0	0	0	1	1	1	1
Mali	0	0	1	1	0	0	0	0	0	1	0	1	1	0	0	1	0	1
Mozambique	1	1	1	0	0	1	1	1	0	0	0	1	0	1	1	0	0	0
Niger	0	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1	0	1
Nigeria	1	1	1	0	0	1	0	0	1	0	0	1	0	1	1	0	1	0
Rwanda	1	1	0	1	0	0	0	0	0	0	0	1	0	1	1	0	0	0
Sao Tome and Principe	1	1	0	0	1	0	1	1	0	0	1	1	1	1	1	0	0	0
Senegal	1	1	1	0	1	1	1	1	0	0	1	1	0	1	1	0	0	0

Country																		
Seychelles	1	1	0	0	1	1	1	1	...	0	1	1	0	1	1	0	0	0
Sierra Leone	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	1	0	1
Tanzania	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	1	1	1
Togo	0	1	0	0	0	0	0	0	1	0	1	0	1	0	0	1	1	0
Uganda	0	0	1	1	1	0	1	0	1	1	0	0	0	0	0	1	1	1
Zambia	1	1	0	1	1	1	1	0	1	1	0	1	0	0	1	1	1	1

2008

Country																		
Angola	1	1	1	1	1	0	1	1	0	1	1	1	0	0	1	1	1	0
Benin	1	1	1	1	0	1	0	0	1	1	1	0	1	1	0	1	0	0
Burkina Faso	1	0	1	1	0	1	1	1	1	1	0	0	0	0	0	1	0	1
Burundi	0	0	0	1	0	0	0	0	1	1	0	0	0	0	1	1	1	1
Cabo Verde	1	1	0	0	1	1	1	1	0	0	1	1	0	1	1	0	0	0
Cameroon	1	1	1	1	1	0	0	0	1	1	0	1	1	0	1	0	1	1
Central African Republic	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	1	1
Chad	0	0	0	1	0	0	0	0	1	1	0	1	1	0	0	1	0	1
Comoros	0	1	0	0	1	1	1	0	0	1	1	1	1	1	1	0	0	0
Congo, Dem. Rep.	0	0	1	1	0	1	0	1	0	1	0	0	1	0	0	1	1	1
Congo, Rep.	1	1	0	0	1	0	1	1	0	0	1	0	0	1	0	1	1	0

Cote d'Ivoire	1	1	1	0	1	1	1	0	0	1	0	1	1	1	1	0	0	0
Ethiopia	0	0	1	1	0	1	0	0	1	0	1	0	0	0	0	0	1	1
Gabon	1	1	1	0	1	0	1	1	0	0	1	1	1	1	1	1	0	1
Gambia, The	0	1	0	1	0	0	1	1	0	0	1	0	0	1	1	1	0	0
Ghana	1	1	1	0	1	0	1	1	1	0	1	1	1	1	0	0	1	0
Guinea	0	0	0	1	0	1	0	0	0	1	0	0	1	0	0	0	1	0
Guinea-Bissau	0	0	0	0	1	0	1	1	1	1	0	1	1	1	0	0	0	1
Kenya	1	1	1	0	1	0	1	1	0	0	1	1	0	0	1	1	1	1
Lesotho	1	0	1	0	1	1	1	1	0	1	0	0	0	1	1	0	1	0
Liberia	0	0	0	0	0	1	0	0	0	1	1	0	0	1	0	1	0	1
Madagascar	0	0	1	1	0	1	0	1	1	0	1	0	0	0	0	1	0	1
Malawi	0	0	0	1	0	0	0	0	1	0	0	0	0	0	1	1	1	1
Mali	0	0	1	1	0	1	0	0	0	1	0	1	1	1	0	1	0	0
Mozambique	1	1	1	0	0	1	0	1	0	0	0	1	1	1	1	0	0	0
Niger	0	0	0	1	0	1	0	1	1	1	0	0	1	0	0	1	0	1
Nigeria	1	1	1	0	1	1	1	0	1	0	0	1	1	1	1	0	1	0
Rwanda	1	1	0	1	1	0	0	0	0	0	1	1	0	1	1	0	0	0
Sao Tome and Principe	1	1	0	0	1	1	1	0	0	0	1	1	1	1	1	0	0	0
Senegal	1	1	1	0	1	0	1	1	0	0	1	1	0	1	1	0	0	0

Seychelles	1	1	0	0	1	1	1	1	...	0	1	0	0	1	1	0	0	0
Sierra Leone	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	1	1
Tanzania	0	0	1	1	0	0	1	1	1	0	1	0	0	0	0	1	1	1
Togo	0	1	0	0	0	0	0	0	1	1	1	0	1	0	0	0	1	0
Uganda	0	0	1	1	1	0	0	0	1	0	0	1	1	0	0	1	1	1
Zambia	1	0	0	1	1	1	1	0	1	0	0	0	0	0	1	1	1	1
2015																		
Angola	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	1	1	0
Benin	0	1	1	1	0	1	0	0	0	1	0	0	1	0	0	1	0	0
Burkina Faso	1	0	1	1	0	1	0	1	1	1	0	0	0	0	0	1	0	1
Burundi	0	0	0	1	0	0	0	1	1	1	0	0	0	0	1	1	1	1
Cabo Verde	1	1	0	0	1	1	1	1	0	0	1	1	0	1	1	0	0	0
Cameroon	1	1	1	1	1	0	0	0	1	1	0	1	1	0	1	1	1	1
Central African Republic	0	0	0	1	0	0	0	0	1	1	0	0	1	0	0	0	1	1
Chad	0	0	0	1	0	0	0	0	1	1	0	1	1	0	0	1	0	1
Comoros	1	1	0	0	1	0	0	0	0	1	1	1	1	1	1	0	0	0
Congo, Dem. Rep.	0	0	1	1	0	1	0	0	0	1	0	0	1	0	0	1	1	1
Congo, Rep.	1	1	0	1	1	0	1	1	0	0	1	1	1	1	0	0	1	0

Cote d'Ivoire	1	1	1	0	1	1	1	0	0	1	0	1	0	1	1	0	0	0
Ethiopia	0	0	1	0	0	1	0	0	1	0	1	0	1	0	0	0	1	1
Gabon	1	1	1	0	1	0	1	1	0	0	1	1	0	1	1	1	0	1
Gambia, The	0	1	0	1	0	0	1	1	0	0	1	0	0	1	1	1	0	0
Ghana	1	1	1	0	1	1	1	1	1	0	1	1	0	1	0	0	1	0
Guinea	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	1	1
Guinea-Bissau	0	0	0	0	0	0	1	1	0	1	0	0	1	1	0	0	0	1
Kenya	1	1	1	0	1	0	1	1	0	0	1	1	0	0	0	1	1	1
Lesotho	1	0	0	0	1	1	1	1	0	1	0	0	0	1	1	0	1	0
Liberia	0	0	0	0	1	1	0	0	0	1	1	0	0	1	0	0	0	1
Madagascar	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	1	1	0
Malawi	0	0	1	1	0	0	0	1	1	0	1	0	0	0	1	1	1	1
Mali	0	0	1	1	0	1	0	0	1	1	0	1	1	1	1	1	0	0
Mozambique	1	1	1	0	0	0	0	0	1	0	0	1	0	1	1	0	0	0
Niger	0	0	1	1	0	1	0	0	1	1	0	0	1	0	0	1	0	1
Nigeria	1	1	1	0	1	1	1	0	1	0	0	1	1	1	1	0	1	0
Rwanda	1	1	0	1	1	0	1	0	0	0	1	0	0	1	1	0	0	0
Sao Tome and Principe	1	1	0	1	1	1	1	1	0	0	1	0	1	1	1	1	0	0
Senegal	1	1	1	0	0	1	1	1	0	0	1	1	1	1	1	0	0	0

Country																		
Seychelles	1	1	0	0	1	1	1	1	…	0	1	0	0	1	1	0	0	0
Sierra Leone	0	0	0	0	1	0	0	0	0	1	0	1	1	0	0	0	1	1
Tanzania	0	0	1	1	0	1	1	1	1	0	1	0	0	0	0	1	0	1
Togo	0	1	0	0	0	0	1	0	1	1	0	1	1	0	0	0	1	0
Uganda	0	0	1	1	1	0	0	0	1	0	0	1	1	0	0	1	1	1
Zambia	1	0	0	1	1	1	1	1	0	0	1	1	0	0	1	1	1	1

OVERALL Threshold Stability

Country																		
Angola	**ABOVE**	**ABOVE**	**ABOVE**	**ABOVE**			**ABOVE**	**ABOVE**		**ABOVE**			BELOW	BELOW	**ABOVE**	**ABOVE**	**ABOVE**	BELOW
Benin		**ABOVE**		**ABOVE**	BELOW		BELOW	BELOW		**ABOVE**		BELOW	**ABOVE**		BELOW	**ABOVE**	BELOW	BELOW
Burkina Faso		BELOW		**ABOVE**	BELOW	**ABOVE**		**ABOVE**	**ABOVE**	**ABOVE**	BELOW	BELOW	BELOW	BELOW	BELOW	**ABOVE**	BELOW	**ABOVE**
Burundi	BELOW	BELOW	BELOW	**ABOVE**	BELOW	BELOW	BELOW		**ABOVE**	**ABOVE**		BELOW	BELOW	BELOW	**ABOVE**		**ABOVE**	**ABOVE**
Cabo Verde	**ABOVE**	**ABOVE**	BELOW		**ABOVE**	**ABOVE**	**ABOVE**	**ABOVE**		BELOW	**ABOVE**	**ABOVE**	BELOW	**ABOVE**	**ABOVE**	BELOW	BELOW	BELOW
Cameroon	**ABOVE**	**ABOVE**	**ABOVE**	**ABOVE**	**ABOVE**	BELOW	BELOW	BELOW	**ABOVE**	**ABOVE**	BELOW	**ABOVE**	**ABOVE**		**ABOVE**		**ABOVE**	**ABOVE**
Central African Republic	BELOW	BELOW	BELOW		BELOW	BELOW	BELOW			**ABOVE**	BELOW	BELOW		BELOW	BELOW	BELOW	**ABOVE**	**ABOVE**
Chad		BELOW	BELOW	**ABOVE**	BELOW	BELOW	BELOW		**ABOVE**	**ABOVE**	BELOW		**ABOVE**	BELOW	BELOW	**ABOVE**	BELOW	**ABOVE**
Comoros		**ABOVE**	BELOW	BELOW	**ABOVE**			BELOW	BELOW		**ABOVE**	**ABOVE**	**ABOVE**	**ABOVE**	**ABOVE**	BELOW	BELOW	BELOW
Congo, Dem. Rep.		BELOW	**ABOVE**	**ABOVE**		**ABOVE**	BELOW		BELOW	**ABOVE**	BELOW	BELOW	**ABOVE**	BELOW			**ABOVE**	**ABOVE**
Congo, Rep.	**ABOVE**	**ABOVE**			**ABOVE**	BELOW	**ABOVE**	**ABOVE**	BELOW	BELOW	**ABOVE**			**ABOVE**	BELOW		**ABOVE**	BELOW

Country																		
Cote d'Ivoire	**ABOVE**	**ABOVE**	**ABOVE**	BELOW	**ABOVE**	**ABOVE**	**ABOVE**	BELOW		**ABOVE**	BELOW	**ABOVE**		**ABOVE**	**ABOVE**	BELOW	BELOW	BELOW
Ethiopia	BELOW	BELOW	**ABOVE**		BELOW	**ABOVE**	BELOW		**ABOVE**	BELOW	**ABOVE**	BELOW		BELOW	BELOW		**ABOVE**	**ABOVE**
Gabon	**ABOVE**	**ABOVE**	**ABOVE**	BELOW	**ABOVE**	BELOW	**ABOVE**	**ABOVE**	BELOW	BELOW	**ABOVE**	**ABOVE**		**ABOVE**	**ABOVE**			
Gambia, The		ABOVE	BELOW	**ABOVE**		BELOW	**ABOVE**		BELOW	BELOW	**ABOVE**	BELOW	BELOW	**ABOVE**	**ABOVE**	**ABOVE**	BELOW	BELOW
Ghana	**ABOVE**	**ABOVE**	**ABOVE**	BELOW	**ABOVE**		**ABOVE**			BELOW	**ABOVE**	**ABOVE**		**ABOVE**	BELOW	BELOW	**ABOVE**	BELOW
Guinea	BELOW	BELOW	BELOW				BELOW	BELOW	BELOW	**ABOVE**	BELOW	BELOW	**ABOVE**		BELOW	BELOW	**ABOVE**	
Guinea-Bissau	BELOW	**BELOW**	BELOW			BELOW	**ABOVE**	**ABOVE**		**ABOVE**					BELOW	BELOW	BELOW	**ABOVE**
Kenya			**ABOVE**	BELOW	**ABOVE**		**ABOVE**	**ABOVE**	BELOW	BELOW	**ABOVE**	**ABOVE**		BELOW		**ABOVE**		**ABOVE**
Lesotho	**ABOVE**	BELOW		BELOW	**ABOVE**	**ABOVE**	**ABOVE**	**ABOVE**	BELOW		BELOW		BELOW	**ABOVE**		BELOW	**ABOVE**	BELOW
Liberia	BELOW	BELOW	BELOW	BELOW		**ABOVE**	BELOW		BELOW	**ABOVE**	**ABOVE**	BELOW		ABOVE	BELOW		BELOW	**ABOVE**
Madagascar	BELOW	BELOW			BELOW			**ABOVE**	**ABOVE**	BELOW	**ABOVE**	BELOW	BELOW	BELOW	BELOW	**ABOVE**		
Malawi	BELOW	BELOW		**ABOVE**	BELOW		BELOW		**ABOVE**			BELOW	BELOW	BELOW	**ABOVE**	**ABOVE**	**ABOVE**	**ABOVE**
Mali	BELOW	BELOW	**ABOVE**	**ABOVE**	BELOW		BELOW	BELOW		**ABOVE**	BELOW	**ABOVE**	**ABOVE**			**ABOVE**	BELOW	
Mozambique	**ABOVE**	**ABOVE**	**ABOVE**	BELOW	BELOW					BELOW	BELOW	**ABOVE**		**ABOVE**	**ABOVE**	BELOW	BELOW	BELOW
Niger	BELOW	BELOW		**ABOVE**	BELOW	ABOVE	BELOW		**ABOVE**	**ABOVE**	BELOW	BELOW	**ABOVE**	BELOW	BELOW	**ABOVE**	BELOW	**ABOVE**
Nigeria	**ABOVE**	**ABOVE**	**ABOVE**	BELOW		**ABOVE**		BELOW	**ABOVE**	BELOW	BELOW	**ABOVE**		**ABOVE**	**ABOVE**	BELOW	**ABOVE**	BELOW
Rwanda	**ABOVE**	**ABOVE**	BELOW	**ABOVE**		BELOW		BELOW	BELOW	BELOW			BELOW	**ABOVE**	**ABOVE**	BELOW	BELOW	BELOW
Sao Tome and Principe	**ABOVE**	**ABOVE**	BELOW		**ABOVE**		**ABOVE**		BELOW	BELOW	**ABOVE**		**ABOVE**	**ABOVE**	**ABOVE**		BELOW	BELOW
Senegal	**ABOVE**	**ABOVE**	**ABOVE**	BELOW			**ABOVE**	**ABOVE**	BELOW	BELOW	**ABOVE**	**ABOVE**		**ABOVE**	**ABOVE**	BELOW	BELOW	BELOW

Country																	
Seychelles	ABOVE	ABOVE	BELOW	BELOW	ABOVE	ABOVE	ABOVE	ABOVE	BELOW	ABOVE		BELOW	ABOVE	ABOVE	BELOW	BELOW	BELOW
Sierra Leone	BELOW	BELOW	BELOW	BELOW		BELOW	BELOW	BELOW	BELOW	ABOVE	BELOW	ABOVE	ABOVE	BELOW	BELOW		ABOVE
Tanzania	BELOW	BELOW	ABOVE		BELOW			ABOVE	BELOW	ABOVE	BELOW	BELOW	BELOW	BELOW	ABOVE		ABOVE
Togo	BELOW	ABOVE	BELOW	BELOW	BELOW	BELOW		BELOW	ABOVE			ABOVE	BELOW	BELOW		ABOVE	BELOW
Uganda	BELOW	BELOW	ABOVE	ABOVE	ABOVE	BELOW		BELOW	ABOVE		BELOW		BELOW	BELOW	ABOVE	ABOVE	ABOVE
Zambia	ABOVE		BELOW	ABOVE	ABOVE	ABOVE	ABOVE					BELOW	BELOW	ABOVE	ABOVE	ABOVE	ABOVE

Appendix C.1.

Overall Macro-Economic Policy Variables Longitudinal Truth Table Threshold (2000 To 2015) – Sub-Saharan Africa

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTTI	NM	ODA	ODAA	RP%
2000																	
Angola	0	1	1	0	1	0	1	1	1	1	1	0	0	1	0	1	0
Benin	1	0	0	1	1	1	0	0	0	1	0	0	0	1	1	1	0
Burkina Faso	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0	1
Burundi	1	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	1
Cabo Verde	1	0	1	1	1	1	0	0	1	1	0	1	1	1	1	0	0
Cameroon	0	1	0	1	1	1	1	1	0	0	0	1	1	0	1	1	0
Central African Republic	1	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	0

Chad	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	1
Comoros	1	0	0	1	1	1	0	0	0	0	1	1	0	1	1	0	1
Congo, Dem. Rep.	1	1	0	0	0	0	1	1	0	0	1	1	1	0	0	0	1
Congo, Rep.	0	0	0	1	1	1	1	1	1	1	0	0	0	1	Congo, Rep.	0	0
Cote d'Ivoire	1	1	1	1	1	0	1	1	0	0	0	1	1	0	0	1	0
Ethiopia	0	1	0	0	0	1	1	0	0	1	0	1	0	0	0	1	1
Gabon	1	1	1	1	1	0	1	1	1	1	0	1	0	1	0	0	0
Gambia, The	1	0	1	0	1	1	0	1	0	0	0	1	1	1	1	0	0
Ghana	0	1	1	0	1	1	1	0	0	0	1	0	1	1	1	1	0
Guinea	0	0	0	0	0	1	1	0	0	0	1	1	1	0	0	0	1
Guinea-Bissau	1	0	0	1	0	1	0	0	1	1	1	0	1	0	1	0	0
Kenya	0	1	0	0	1	0	1	1	1	1	1	1	0	1	0	1	1
Lesotho	1	0	1	0	1	1	0	1	1	1	1	0	1	0	0	0	1
Liberia	1	0	1	1	0	1	0	1	0	0	1	1	1	0	0	0	0
Madagascar	1	1	0	1	0	1	1	0	0	0	1	1	0	1	0	1	1
Malawi	1	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1	1
Mali	0	1	0	1	0	0	1	0	1	1	0	1	1	0	1	1	1
Mozambique	0	1	1	0	0	0	0	1	1	1	1	0	1	1	1	1	0
Niger	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	1	1
Nigeria	0	1	1	0	1	1	1	1	1	1	1	0	0	0	0	0	0
Rwanda	1	0	0	0	0	1	0	1	1	1	0	0	0	0	1	1	0
Sao Tome and Principe	1	0	1	1	1	0	0	1	1	0	1	1	1	1	1	0	0
Senegal	…	1	0	1	1	0	1	1	1	0	0	0	1	0	1	1	0
Seychelles	1	0	1	1	1	0	0	0	1	1	1	0	0	1	1	0	0

Sierra Leone	0	0	1	0	0	1	0	0	0	0	0	1	0	1	1	1	1
Tanzania	0	1	1	0	1	1	1	1	0	0	1	1	1	0	1	1	1
Togo	0	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	1
Uganda	0	1	1	0	0	0	1	1	1	1	0	0	0	1	1	1	1
Zambia	0	1	1	0	1	1	1	1	1	1	1	0	0	0	1	1	1
2008																	
Angola	1	1	0	1	1	1	1	0	1	1	1	0	1	1	0	0	0
Benin	1	0	0	0	1	0	0	1	0	0	0	0	0	0	1	1	0
Burkina Faso	1	0	0	1	0	1	1	0	0	1	1	0	0	0	1	1	1
Burundi	0	0	0	1	0	0	0	0	1	1	1	0	1	1	1	0	1
Cabo Verde	0	0	1	0	1	1	0	0	1	1	0	1	0	1	1	0	0
Cameroon	1	0	0	0	1	0	1	1	0	0	0	1	1	0	0	0	0
Central African Republic	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Chad	1	1	1	1	1	0	0	1	1	0	0	0	1	1	0	0	1
Comoros	0	0	0	1	0	0	0	0	1	1	0	1	0	1	1	0	1
Congo, Dem. Rep.	0	1	1	1	0	1	1	1	0	0	1	1	1	0	0	1	0
Congo, Rep.	1	1	1	1	1	0	1	1	1	1	0	0	1	1	1	0	0
Cote d'Ivoire	0	1	0	0	1	0	1	1	1	0	0	1	1	0	0	0	0
Ethiopia	1	0	0	0	0	1	1	0	0	0	1	1	1	0	0	1	1
Gabon	0	1	1	1	1	0	1	1	1	0	0	0	1	1	0	0	0
Gambia, The	0	0	1	0	0	0	0	1	0	0	0	1	0	1	0	0	0
Ghana	1	1	1	1	1	1	1	0	0	1	1	0	1	1	0	1	0
Guinea	1	1	1	0	0	0	0	1	0	0	1	1	1	0	0	0	1

Guinea-Bissau	1	0	0	0	0	0	0	1	1	1	0	0	0	1	1	0	0
Kenya	1	0	0	0	1	0	1	0	0	1	1	1	0	0	0	1	1
Lesotho	0	0	0	0	1	1	0	1	1	1	1	0	0	0	1	0	1
Liberia	1	1	1	1	0	1	0	0	0	1	1	1	1	1	1	1	0
Madagascar	0	1	1	1	0	1	1	0	0	0	0	1	0	1	0	1	1
Malawi	1	0	0	0	0	1	0	0	1	1	0	1	0	1	1	1	1
Mali	1	1	0	1	0	0	1	0	0	0	0	1	1	0	1	1	1
Mozambique	0	1	1	0	0	1	1	0	1	1	0	1	0	0	1	1	0
Niger	1	1	1	1	0	1	0	1	1	1	1	0	1	1	0	1	1
Nigeria	1	1	0	0	1	1	1	1	1	0	1	0	1	0	0	1	0
Rwanda	0	0	0	0	0	1	0	1	1	1	1	0	1	0	1	1	0
Sao Tome and Principe	1	0	1	1	1	1	0	1	1	1	1	1	1	1	1	0	0
Senegal	0	1	0	1	1	0	1	0	1	1	0	0	0	0	1	1	0
Seychelles	0	0	1	1	1	0	0	1	1	1	1	0	0	1	1	0	0
Sierra Leone	0	0	0	1	0	1	0	0	0	0	1	1	0	1	1	0	1
Tanzania	0	1	1	1	1	0	1	0	0	0	0	1	0	0	0	1	1
Togo	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	1
Uganda	0	1	1	0	1	1	1	0	0	0	1	0	0	0	0	1	1
Zambia	0	1	1	0	1	1	1	1	0	0	1	0	1	0	1	1	1
2015																	
Angola	1	1	1	1	1	0	1	1	1	1	1	0	1	1	0	0	0
Benin	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Burkina Faso	0	0	0	0	0	0	1	1	1	0	0	0	1	0	1	1	1
Burundi	0	0	0	1	0	0	0	0	1	1	1	0	1	0	0	0	1

Country																	
Cabo Verde	0	0	1	0	1	0	0	0	1	1	0	0	0	1	1	0	0
Cameroon	1	1	0	0	1	1	1	0	0	0	0	1	1	0	0	0	0
Central African Republic	0	0	0	1	0	1	0	1	0	0	1	1	0	0	1	0	1
Chad	1	1	1	0	1	0	1	1	0	0	1	0	1	1	0	0	1
Comoros	0	0	0	1	0	0	0	1	1	1	0	1	1	1	1	0	1
Congo, Dem. Rep.	0	1	1	1	0	1	1	1	0	0	0	1	0	1	0	1	0
Congo, Rep.	1	1	1	1	1	0	0	0	1	1	0	0	1	0	0	0	0
Cote d'Ivoire	0	0	0	0	1	1	1	1	0	0	0	0	1	1	0	0	0
Ethiopia	1	1	0	0	0	1	1	1	0	0	1	1	1	0	0	1	1
Gabon	0	1	1	1	1	0	1	1	1	0	0	0	1	1	1	0	0
Gambia, The	0	0	0	1	0	0	0	0	1	1	1	1	0	1	1	0	0
Ghana	1	1	1	1	1	1	1	0	0	0	1	1	1	0	1	1	0
Guinea	1	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	1
Guinea-Bissau	1	0	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0
Kenya	0	1	0	0	1	1	1	0	0	1	1	1	0	0	1	1	1
Lesotho	0	0	1	0	1	0	0	1	1	1	0	0	0	1	0	0	1
Liberia	0	1	1	1	0	0	0	1	1	1	1	1	0	1	1	1	0
Madagascar	0	1	1	1	0	0	1	1	0	0	1	1	0	1	0	1	1
Malawi	1	1	1	1	0	0	0	0	1	1	1	1	0	0	1	1	1
Mali	1	0	0	1	0	1	1	1	0	0	0	0	1	0	1	1	1
Mozambique	0	1	1	0	0	1	1	0	1	1	0	1	0	1	1	1	0
Niger	1	1	1	1	0	0	0	0	1	1	0	0	1	1	0	1	1
Nigeria	1	1	0	0	1	0	1	1	0	0	1	1	1	0	0	1	0

Country																	
Rwanda	0	0	0	0	0	1	0	1	1	1	0	0	1	0	1	1	0
Sao Tome and Principe	1	0	1	1	1	1	0	0	1	1	1	1	1	1	1	0	0
Senegal	0	0	0	0	1	1	1	0	1	1	0	0	0	0	1	1	0
Seychelles	0	0	1	1	1	1	0	1	1	1	0	0	0	1	1	0	0
Sierra Leone	1	0	1	1	0	0	0	0	0	0	1	1	0	1	1	1	1
Tanzania	1	1	0	1	1	1	1	1	0	0	1	1	1	0	0	1	1
Togo	1	0	1	0	0	1	0	0	1	1	0	0	0	1	0	0	1
Uganda	0	1	0	0	1	1	1	0	0	0	1	0	0	0	0	1	1
Zambia	1	1	1	0	1	0	1	0	0	1	1	1	1	0	0	1	1

OVERALL Threshold Stability

Country																	
Angola		**ABOVE**			**ABOVE**		**ABOVE**		**ABOVE**	**ABOVE**	**ABOVE**	BELOW		**ABOVE**	BELOW		BELOW
Benin	**ABOVE**	BELOW	BELOW		**ABOVE**		BELOW		BELOW		BELOW	BELOW	BELOW				BELOW
Burkina Faso		BELOW	BELOW		BELOW		**ABOVE**				BELOW		BELOW				**ABOVE**
Burundi		BELOW	BELOW		BELOW	BELOW	BELOW	BELOW	**ABOVE**	**ABOVE**	**ABOVE**	BELOW				BELOW	**ABOVE**
Cabo Verde		BELOW	**ABOVE**		**ABOVE**		BELOW	BELOW	**ABOVE**	**ABOVE**	BELOW			**ABOVE**	**ABOVE**	BELOW	BELOW
Cameroon			BELOW		**ABOVE**		**ABOVE**		BELOW	BELOW	BELOW	**ABOVE**	**ABOVE**	BELOW			BELOW
Central African Republic		BELOW			BELOW		BELOW		BELOW	BELOW		**ABOVE**		BELOW		BELOW	
Chad		**ABOVE**	**ABOVE**			BELOW					BELOW		BELOW	**ABOVE**	BELOW	BELOW	**ABOVE**
Comoros		BELOW	BELOW	**ABOVE**			BELOW					**ABOVE**		**ABOVE**	**ABOVE**	BELOW	**ABOVE**
Congo, Dem. Rep.		**ABOVE**			BELOW		**ABOVE**	**ABOVE**	BELOW	BELOW		**ABOVE**				BELOW	
Congo, Rep.				**ABOVE**	**ABOVE**				**ABOVE**	**ABOVE**	BELOW	BELOW				BELOW	BELOW
Cote d'Ivoire					**ABOVE**		**ABOVE**	**ABOVE**		BELOW	BELOW		**ABOVE**		BELOW		BELOW

Country																	
Ethiopia			BELOW	BELOW	BELOW	**ABOVE**	**ABOVE**		BELOW			**ABOVE**			BELOW	BELOW	**ABOVE**	**ABOVE**
Gabon		**ABOVE**	**ABOVE**	**ABOVE**	**ABOVE**	BELOW	**ABOVE**	**ABOVE**	ABOVE		BELOW	**ABOVE**			BELOW			BELOW
Gambia, The		BELOW						BELOW				**ABOVE**		**ABOVE**	BELOW			BELOW
Ghana		**ABOVE**	**ABOVE**		**ABOVE**	**ABOVE**	**ABOVE**	BELOW	BELOW		**ABOVE**		**ABOVE**			**ABOVE**		BELOW
Guinea				BELOW	BELOW				BELOW	BELOW	**ABOVE**	**ABOVE**		BELOW	BELOW	BELOW		**ABOVE**
Guinea-Bissau	**ABOVE**	BELOW	BELOW		BELOW		BELOW					BELOW			**ABOVE**	BELOW		BELOW
Kenya			BELOW	BELOW	**ABOVE**		**ABOVE**			**ABOVE**	**ABOVE**	**ABOVE**	BELOW			**ABOVE**		**ABOVE**
Lesotho		BELOW		BELOW	**ABOVE**		BELOW	**ABOVE**	**ABOVE**	**ABOVE**		BELOW				BELOW		**ABOVE**
Liberia			**ABOVE**	**ABOVE**	BELOW		BELOW				**ABOVE**	**ABOVE**						BELOW
Madagascar		**ABOVE**		**ABOVE**	BELOW		**ABOVE**		BELOW	BELOW		**ABOVE**	BELOW	**ABOVE**	BELOW		**ABOVE**	**ABOVE**
Malawi	**ABOVE**				BELOW		BELOW	BELOW				**ABOVE**				**ABOVE**	**ABOVE**	**ABOVE**
Mali			BELOW	**ABOVE**	BELOW		**ABOVE**				BELOW		**ABOVE**	BELOW		**ABOVE**	**ABOVE**	**ABOVE**
Mozambique	BELOW	**ABOVE**	**ABOVE**	BELOW	BELOW				**ABOVE**	**ABOVE**						**ABOVE**	**ABOVE**	BELOW
Niger				**ABOVE**	BELOW		BELOW					BELOW	**ABOVE**			BELOW	**ABOVE**	**ABOVE**
Nigeria		**ABOVE**		BELOW	**ABOVE**		**ABOVE**	**ABOVE**			**ABOVE**			BELOW	BELOW			BELOW
Rwanda		BELOW	BELOW	BELOW	BELOW	**ABOVE**	BELOW	**ABOVE**	**ABOVE**	**ABOVE**		BELOW			BELOW	**ABOVE**	**ABOVE**	BELOW
Sao Tome and Principe	**ABOVE**	BELOW	ABOVE	**ABOVE**	**ABOVE**		BELOW		**ABOVE**		**ABOVE**	**ABOVE**	**ABOVE**	**ABOVE**	**ABOVE**	BELOW		BELOW
Senegal			BELOW		**ABOVE**		**ABOVE**		**ABOVE**		BELOW	BELOW		BELOW	**ABOVE**	**ABOVE**		BELOW
Seychelles		BELOW	**ABOVE**	**ABOVE**	**ABOVE**		BELOW		**ABOVE**	**ABOVE**		BELOW	BELOW	**ABOVE**	**ABOVE**	BELOW		BELOW
Sierra Leone		BELOW			BELOW		BELOW	BELOW	BELOW	BELOW		**ABOVE**	BELOW	**ABOVE**	**ABOVE**			**ABOVE**
Tanzania		**ABOVE**			**ABOVE**		**ABOVE**		BELOW	BELOW		**ABOVE**		BELOW			**ABOVE**	**ABOVE**
Togo					BELOW		BELOW				BELOW	BELOW	BELOW	**ABOVE**	BELOW	BELOW		**ABOVE**
Uganda	BELOW	**ABOVE**		BELOW			**ABOVE**					BELOW	BELOW			**ABOVE**	**ABOVE**	
Zambia		**ABOVE**	**ABOVE**	BELOW	**ABOVE**		**ABOVE**				**ABOVE**			BELOW		**ABOVE**	**ABOVE**	

Pearson Correlations 2000 (Social Policy Variables /Human Development Indicators) – Sub-Saharan Africa

		ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
ATCCT	Pearson Correlation	1	.845**	0.038	-.610**	.672**	0.241	.636**	.566**	-.402*	-.704**	.544**	.652**	-.405*	.656**	.736**	-.540**	-0.142	-.764**
	Sig. (2-tailed)		0.000	0.824	0.000	0.000	0.157	0.000	0.000	0.017	0.000	0.001	0.000	0.014	0.000	0.000	0.001	0.410	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
ATE	Pearson Correlation	.845**	1	0.120	-.711**	.521**	0.147	.462**	0.294	-.387*	-.827**	.505**	.779**	-0.151	.778**	.816**	-.587**	-0.182	-.781**
	Sig. (2-tailed)	0.000		0.487	0.000	0.001	0.393	0.005	0.081	0.022	0.000	0.002	0.000	0.378	0.000	0.000	0.000	0.288	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
ASEE	Pearson Correlation	0.038	0.120	1	-0.098	-0.107	0.270	-0.129	-0.154	-0.001	-0.137	-0.189	0.173	0.011	-0.131	0.067	-0.037	.359*	0.112
	Sig. (2-tailed)	0.824	0.487		0.570	0.535	0.111	0.454	0.369	0.995	0.425	0.271	0.312	0.951	0.448	0.696	0.832	0.031	0.517
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36

ADR	Pearson Correlation	-.610**	-.711**	-0.098	1	-.488**	-0.241	-.486**	-0.296	.348*	.621**	-.372*	-.568**	0.105	-.675**	-.649**	.603**	0.097	.692**
	Sig. (2-tailed)	0.000	0.000	0.570		0.003	0.156	0.003	0.079	0.040	0.000	0.025	0.000	0.541	0.000	0.000	0.000	0.574	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
CHE	Pearson Correlation	.672**	.521**	-0.107	-.488**	1	0.070	.979**	.448**	-.495**	-.465**	.649**	.512**	-0.247	.481**	.527**	-.340*	-0.236	-.642**
	Sig. (2-tailed)	0.000	0.001	0.535	0.003		0.687	0.000	0.006	0.002	0.004	0.000	0.001	0.146	0.003	0.001	0.042	0.165	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
CHE%	Pearson Correlation	0.241	0.147	0.270	-0.241	0.070	1	0.077	0.038	0.052	-0.092	0.011	-0.014	-0.290	-0.045	0.223	-0.261	0.142	-0.063
	Sig. (2-tailed)	0.157	0.393	0.111	0.156	0.687		0.655	0.826	0.768	0.592	0.947	0.934	0.086	0.796	0.191	0.124	0.410	0.716
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
DHE	Pearson Correlation	.636**	.462**	-0.129	-.486**	.979**	0.077	1	.524**	-.361*	-.449**	.611**	.385*	-0.325	.419*	.517**	-.335*	-0.242	-.628**
	Sig. (2-tailed)	0.000	0.005	0.454	0.003	0.000	0.655		0.001	0.033	0.006	0.000	0.020	0.053	0.011	0.001	0.046	0.155	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36

DHE%	Pearson Correlation	.566**	0.294	-0.154	-0.296	.448**	0.038	.524**	1	-0.061	-.378*	.343*	0.077	-.594**	0.280	.344*	-0.271	-0.265	-.476**
	Sig. (2-tailed)	0.000	0.081	0.369	0.079	0.006	0.826	0.001		0.729	0.023	0.041	0.654	0.000	0.098	0.040	0.110	0.118	0.003
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
EPR	Pearson Correlation	-.402*	-.387*	-0.001	.348*	-.495**	0.052	-.361*	-0.061	1	0.113	-0.134	-.493**	-0.070	-.548**	-0.309	0.108	0.202	.441**
	Sig. (2-tailed)	0.017	0.022	0.995	0.040	0.002	0.768	0.033	0.729		0.518	0.442	0.003	0.691	0.001	0.071	0.537	0.243	0.008
	N	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
IMR	Pearson Correlation	-.704**	-.827**	-0.137	.621**	-.465**	-0.092	-.449**	-.378*	0.113	1	-.640**	-.575**	0.295	-.666**	-.719**	.587**	0.092	.764**
	Sig. (2-tailed)	0.000	0.000	0.425	0.000	0.004	0.592	0.006	0.023	0.518		0.000	0.000	0.080	0.000	0.000	0.000	0.592	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
LEB	Pearson Correlation	.544**	.505**	-0.189	-.372*	.649**	0.011	.611**	.343*	-0.134	-.640**	1	.363*	-0.154	.505**	.406*	-0.254	-.369*	-.697**
	Sig. (2-tailed)	0.001	0.002	0.271	0.025	0.000	0.947	0.000	0.041	0.442	0.000		0.029	0.371	0.002	0.014	0.135	0.027	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36

OPE	Pearson Correlation	.652**	.779**	0.173	-.568**	.512**	-0.014	.385*	0.077	-.493**	-.575**	.363*	1	0.145	.680**	.553**	-.405*	-0.068	-.501**
	Sig. (2-tailed)	0.000	0.000	0.312	0.000	0.001	0.934	0.020	0.654	0.003	0.000	0.029		0.399	0.000	0.000	0.014	0.693	0.002
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
OPE%	Pearson Correlation	-.405*	-0.151	0.011	0.105	-0.247	-0.290	-0.325	-.594**	-0.070	0.295	-0.154	0.145	1	-0.073	-0.308	0.248	-0.068	0.276
	Sig. (2-tailed)	0.014	0.378	0.951	0.541	0.146	0.086	0.053	0.000	0.691	0.080	0.371	0.399		0.673	0.067	0.144	0.692	0.103
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
BDW	Pearson Correlation	.656**	.778**	-0.131	-.675**	.481**	-0.045	.419*	0.280	-.548**	-.666**	.505**	.680**	-0.073	1	.712**	-.534**	-.361*	-.811**
	Sig. (2-tailed)	0.000	0.000	0.448	0.000	0.003	0.796	0.011	0.098	0.001	0.000	0.002	0.000	0.673		0.000	0.001	0.031	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
BSS	Pearson Correlation	.736**	.816**	0.067	-.649**	.527**	0.223	.517**	.344*	-0.309	-.719**	.406*	.553**	-0.308	.712**	1	-.588**	-0.131	-.680**
	Sig. (2-tailed)	0.000	0.000	0.696	0.000	0.001	0.191	0.001	0.040	0.071	0.000	0.014	0.000	0.067	0.000		0.000	0.446	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36

PGA	Pearson Correlation	-.540**	-.587**	-0.037	.603**	-.340*	-0.261	-.335*	-0.271	0.108	.587**	-0.254	-.405*	0.248	-.534**	-.588**	1	-0.101	.609**
	Sig. (2-tailed)	0.001	0.000	0.832	0.000	0.042	0.124	0.046	0.110	0.537	0.000	0.135	0.014	0.144	0.001	0.000		0.559	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
REO	Pearson Correlation	-0.142	-0.182	.359*	0.097	-0.236	0.142	-0.242	-0.265	0.202	0.092	-.369*	-0.068	-0.068	-.361*	-0.131	-0.101	1	.370*
	Sig. (2-tailed)	0.410	0.288	0.031	0.574	0.165	0.410	0.155	0.118	0.243	0.592	0.027	0.693	0.692	0.031	0.446	0.559		0.026
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
REC	Pearson Correlation	-.764**	-.781**	0.112	.692**	-.642**	-0.063	-.628**	-.476**	.441**	.764**	-.697**	-.501**	0.276	-.811**	-.680**	.609**	.370*	1
	Sig. (2-tailed)	0.000	0.000	0.517	0.000	0.000	0.716	0.000	0.003	0.008	0.000	0.000	0.002	0.103	0.000	0.000	0.000	0.026	
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36

Appendix D.2.

Pearson Correlations 2008 (Social Policy Variables /Human Development Indicators) – Sub-Saharan Africa

		ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
ATCCT	Pearson Correlation	1	.845**	0.171	-.761**	.794**	0.308	.752**	.670**	-.451**	-.663**	.489**	.544**	-.342*	.674**	.800**	-.525**	-0.146	-.702**
	Sig. (2-tailed)		0.000	0.320	0.000	0.000	0.067	0.000	0.000	0.007	0.000	0.002	0.001	0.041	0.000	0.000	0.001	0.394	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
ATE	Pearson Correlation	.845**	1	0.209	-.784**	.612**	0.169	.507**	.362*	-.435**	-.738**	.476**	.670**	-0.032	.813**	.776**	-.583**	-0.210	-.742**
	Sig. (2-tailed)	0.000		0.222	0.000	0.000	0.325	0.002	0.030	0.009	0.000	0.003	0.000	0.855	0.000	0.000	0.000	0.219	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
ASEE	Pearson Correlation	0.171	0.209	1	-0.059	0.121	-0.040	0.027	0.056	0.060	-0.149	-0.044	0.236	-0.037	-0.117	0.085	-0.042	.347*	0.024
	Sig. (2-tailed)	0.320	0.222		0.733	0.483	0.817	0.875	0.746	0.734	0.387	0.798	0.166	0.829	0.496	0.621	0.807	0.038	0.891
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36

ADR	Pearson Correlation	-.761**	-.784**	-0.059	1	-.497**	-0.195	-.537**	-.514**	.439**	.629**	-.395*	-.583**	0.204	-.780**	-.757**	.730**	0.098	.710**
	Sig. (2-tailed)	0.000	0.000	0.733		0.002	0.255	0.001	0.001	0.008	0.000	0.017	0.000	0.233	0.000	0.000	0.000	0.570	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
CHE	Pearson Correlation	.794**	.612**	0.121	-.497**	1	0.223	.910**	.684**	-.507**	-.375*	.489**	0.214	-0.270	.510**	.479**	-0.104	-0.156	-.477**
	Sig. (2-tailed)	0.000	0.000	0.483	0.002		0.191	0.000	0.000	0.002	0.024	0.003	0.211	0.112	0.002	0.003	0.548	0.362	0.003
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
CHE%	Pearson Correlation	0.308	0.169	-0.040	-0.195	0.223	1	.350*	0.318	0.063	-0.220	.392*	-0.155	-0.212	0.156	0.202	-0.106	-0.111	-0.276
	Sig. (2-tailed)	0.067	0.325	0.817	0.255	0.191		0.036	0.059	0.718	0.198	0.018	0.365	0.214	0.364	0.238	0.539	0.520	0.103
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
DHE	Pearson Correlation	.752**	.507**	0.027	-.537**	.910**	.350*	1	.839**	-.430**	-.390*	.566**	0.050	-.450**	.429**	.513**	-0.117	-0.199	-.575**
	Sig. (2-tailed)	0.000	0.002	0.875	0.001	0.000	0.036		0.000	0.010	0.019	0.000	0.774	0.006	0.009	0.001	0.498	0.244	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36

DHE%	Pearson Correlation	.670**	.362*	0.056	-.514**	.684**	0.318	.839**	1	-0.264	-.372*	.507**	0.028	-.638**	.343*	.429**	-0.216	-0.165	-.608**
	Sig. (2-tailed)	0.000	0.030	0.746	0.001	0.000	0.059	0.000		0.125	0.026	0.002	0.870	0.000	0.041	0.009	0.205	0.336	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
EPR	Pearson Correlation	-.451**	-.435**	0.060	.439**	-.507**	0.063	-.430**	-0.264	1	0.114	-0.208	-.392*	-0.040	-.630**	-.346*	0.272	0.271	.519**
	Sig. (2-tailed)	0.007	0.009	0.734	0.008	0.002	0.718	0.010	0.125		0.514	0.230	0.020	0.818	0.000	0.042	0.114	0.116	0.001
	N	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
IMR	Pearson Correlation	-.663**	-.738**	-0.149	.629**	-.375*	-0.220	-.390*	-.372*	0.114	1	-.684**	-.457**	.389*	-.579**	-.698**	.407*	0.198	.611**
	Sig. (2-tailed)	0.000	0.000	0.387	0.000	0.024	0.198	0.019	0.026	0.514		0.000	0.005	0.019	0.000	0.000	0.014	0.248	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
LEB	Pearson Correlation	.489**	.476**	-0.044	-.395*	.489**	.392*	.566**	.507**	-0.208	-.684**	1	0.077	-.376*	.366*	.353*	-0.052	-.441**	-.600**
	Sig. (2-tailed)	0.002	0.003	0.798	0.017	0.003	0.018	0.000	0.002	0.230	0.000		0.657	0.024	0.028	0.034	0.765	0.007	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36

OPE	Pearson Correlation	.544**	.670**	0.236	-.583**	0.214	-0.155	0.050	0.028	-.392*	-.457**	0.077	1	0.171	.512**	.590**	-.613**	-0.054	-.373*
	Sig. (2-tailed)	0.001	0.000	0.166	0.000	0.211	0.365	0.774	0.870	0.020	0.005	0.657		0.318	0.001	0.000	0.000	0.756	0.025
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
OPE%	Pearson Correlation	-.342*	-0.032	-0.037	0.204	-0.270	-0.212	-.450**	-.638**	-0.040	.389*	-.376*	0.171	1	-0.084	-0.326	0.091	-0.056	0.320
	Sig. (2-tailed)	0.041	0.855	0.829	0.233	0.112	0.214	0.006	0.000	0.818	0.019	0.024	0.318		0.627	0.052	0.598	0.744	0.057
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
BDW	Pearson Correlation	.674**	.813**	-0.117	-.780**	.510**	0.156	.429**	.343*	-.630**	-.579**	.366*	.512**	-0.084	1	.736**	-.554**	-.356*	-.725**
	Sig. (2-tailed)	0.000	0.000	0.496	0.000	0.002	0.364	0.009	0.041	0.000	0.000	0.028	0.001	0.627		0.000	0.000	0.033	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
BSS	Pearson Correlation	.800**	.776**	0.085	-.757**	.479**	0.202	.513**	.429**	-.346*	-.698**	.353*	.590**	-0.326	.736**	1	-.580**	-0.120	-.677**
	Sig. (2-tailed)	0.000	0.000	0.621	0.000	0.003	0.238	0.001	0.009	0.042	0.000	0.034	0.000	0.052	0.000		0.000	0.485	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36

PGA	Pearson Correlation	-.525**	-.583**	-0.042	.730**	-0.104	-0.106	-0.117	-0.216	0.272	.407*	-0.052	-.613**	0.091	-.554**	-.580**	1	-0.013	.573**
	Sig. (2-tailed)	0.001	0.000	0.807	0.000	0.548	0.539	0.498	0.205	0.114	0.014	0.765	0.000	0.598	0.000	0.000		0.940	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
REO	Pearson Correlation	-0.146	-0.210	.347*	0.098	-0.156	-0.111	-0.199	-0.165	0.271	0.198	-.441**	-0.054	-0.056	-.356*	-0.120	-0.013	1	.410*
	Sig. (2-tailed)	0.394	0.219	0.038	0.570	0.362	0.520	0.244	0.336	0.116	0.248	0.007	0.756	0.744	0.033	0.485	0.940		0.013
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
REC	Pearson Correlation	-.702**	-.742**	0.024	.710**	-.477**	-0.276	-.575**	-.608**	.519**	.611**	-.600**	-.373*	0.320	-.725**	-.677**	.573**	.410*	1
	Sig. (2-tailed)	0.000	0.000	0.891	0.000	0.003	0.103	0.000	0.000	0.001	0.000	0.000	0.025	0.057	0.000	0.000	0.000	0.013	
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36

Appendix D.3.

Pearson Correlations 2015 (Social Policy Variables /Human Development Indicators) – Sub-Saharan Africa

		ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
ATCCT	Pearson Correlation	1	.832**	0.227	-.791**	.684**	0.327	.628**	.589**	-.452**	-.637**	.426**	.557**	-0.266	.659**	.816**	-.501**	-0.100	-.670**
	Sig. (2-tailed)		0.000	0.183	0.000	0.000	0.051	0.000	0.000	0.006	0.000	0.010	0.000	0.117	0.000	0.000	0.002	0.561	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
ATE	Pearson Correlation	.832**	1	0.249	-.764**	.519**	0.226	.442**	.352*	-.480**	-.666**	.440**	.584**	-0.005	.809**	.700**	-.506**	-0.198	-.757**
	Sig. (2-tailed)	0.000		0.143	0.000	0.001	0.185	0.007	0.035	0.004	0.000	0.007	0.000	0.975	0.000	0.000	0.002	0.248	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
ASEE	Pearson Correlation	0.227	0.249	1	-0.106	-0.026	0.127	-0.098	-0.063	0.136	-0.199	-0.056	0.274	0.021	-0.042	0.166	-0.034	0.319	-0.021
	Sig. (2-tailed)	0.183	0.143		0.538	0.882	0.461	0.571	0.715	0.436	0.244	0.746	0.106	0.901	0.810	0.334	0.843	0.058	0.903
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36

ADR	Pearson Correlation	-.791**	-.764**	-0.106	1	-.539**	-0.250	-.515**	-.433**	.461**	.606**	-.364*	-.529**	0.267	-.757**	-.734**	.743**	0.040	.649**
	Sig. (2-tailed)	0.000	0.000	0.538		0.001	0.142	0.001	0.008	0.005	0.000	0.029	0.001	0.116	0.000	0.000	0.000	0.816	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
CHE	Pearson Correlation	.684**	.519**	-0.026	-.539**	1	0.253	.960**	.712**	-.516**	-.347*	.476**	-0.006	-.376*	.470**	.527**	-0.070	-0.224	-.561**
	Sig. (2-tailed)	0.000	0.001	0.882	0.001		0.136	0.000	0.000	0.001	0.038	0.003	0.973	0.024	0.004	0.001	0.684	0.189	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
CHE%	Pearson Correlation	0.327	0.226	0.127	-0.250	0.253	1	0.277	0.195	0.018	-0.194	0.256	0.223	-0.116	0.184	.330*	-0.217	-0.090	-.356*
	Sig. (2-tailed)	0.051	0.185	0.461	0.142	0.136		0.102	0.254	0.916	0.256	0.131	0.192	0.500	0.282	0.049	0.205	0.603	0.033
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
DHE	Pearson Correlation	.628**	.442**	-0.098	-.515**	.960**	0.277	1	.769**	-.418*	-.364*	.519**	-0.066	-.424**	.398*	.514**	-0.064	-0.219	-.552**
	Sig. (2-tailed)	0.000	0.007	0.571	0.001	0.000	0.102		0.000	0.012	0.029	0.001	0.701	0.010	0.016	0.001	0.710	0.199	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36

DHE%	Pearson Correlation	.589**	.352*	-0.063	-.433**	.712**	0.195	.769**	1	-0.128	-.436**	.605**	-0.078	-.556**	0.296	.394*	-0.019	-0.152	-.483**
	Sig. (2-tailed)	0.000	0.035	0.715	0.008	0.000	0.254	0.000		0.465	0.008	0.000	0.650	0.000	0.079	0.018	0.911	0.376	0.003
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
EPR	Pearson Correlation	-.452**	-.480**	0.136	.461**	-.516**	0.018	-.418*	-0.128	1	0.055	-0.134	-.369*	0.012	-.589**	-.357*	.395*	0.255	.442**
	Sig. (2-tailed)	0.006	0.004	0.436	0.005	0.001	0.916	0.012	0.465		0.756	0.443	0.029	0.943	0.000	0.035	0.019	0.139	0.008
	N	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
IMR	Pearson Correlation	-.637**	-.666**	-0.199	.606**	-.347*	-0.194	-.364*	-.436**	0.055	1	-.703**	-.446**	.344*	-.521**	-.657**	0.299	0.112	.519**
	Sig. (2-tailed)	0.000	0.000	0.244	0.000	0.038	0.256	0.029	0.008	0.756		0.000	0.006	0.040	0.001	0.000	0.076	0.516	0.001
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
LEB	Pearson Correlation	.426**	.440**	-0.056	-.364*	.476**	0.256	.519**	.605**	-0.134	-.703**	1	0.037	-.345*	0.282	0.284	-0.010	-0.282	-.494**
	Sig. (2-tailed)	0.010	0.007	0.746	0.029	0.003	0.131	0.001	0.000	0.443	0.000		0.832	0.039	0.095	0.093	0.955	0.095	0.002
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36

OPE	Pearson Correlation	.557**	.584**	0.274	-.529**	-0.006	0.223	-0.066	-0.078	-.369*	-.446**	0.037	1	0.189	.463**	.567**	-.663**	-0.009	-.371*
	Sig. (2-tailed)	0.000	0.000	0.106	0.001	0.973	0.192	0.701	0.650	0.029	0.006	0.832		0.270	0.004	0.000	0.000	0.958	0.026
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
OPE%	Pearson Correlation	-0.266	-0.005	0.021	0.267	-.376*	-0.116	-.424**	-.556**	0.012	.344*	-.345*	0.189	1	-0.188	-0.317	0.071	-0.025	0.181
	Sig. (2-tailed)	0.117	0.975	0.901	0.116	0.024	0.500	0.010	0.000	0.943	0.040	0.039	0.270		0.271	0.060	0.680	0.885	0.291
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
BDW	Pearson Correlation	.659**	.809**	-0.042	-.757**	.470**	0.184	.398*	0.296	-.589**	-.521**	0.282	.463**	-0.188	1	.714**	-.556**	-0.297	-.691**
	Sig. (2-tailed)	0.000	0.000	0.810	0.000	0.004	0.282	0.016	0.079	0.000	0.001	0.095	0.004	0.271		0.000	0.000	0.079	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
BSS	Pearson Correlation	.816**	.700**	0.166	-.734**	.527**	.330*	.514**	.394*	-.357*	-.657**	0.284	.567**	-0.317	.714**	1	-.571**	-0.047	-.642**
	Sig. (2-tailed)	0.000	0.000	0.334	0.000	0.001	0.049	0.001	0.018	0.035	0.000	0.093	0.000	0.060	0.000		0.000	0.786	0.000
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36

PGA	Pearson Correlation	-.501**	-.506**	-0.034	.743**	-0.070	-0.217	-0.064	-0.019	.395*	0.299	-0.010	-.663**	0.071	-.556**	-.571**	1	-0.106	.502**
	Sig. (2-tailed)	0.002	0.002	0.843	0.000	0.684	0.205	0.710	0.911	0.019	0.076	0.955	0.000	0.680	0.000	0.000		0.539	0.002
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
REO	Pearson Correlation	-0.100	-0.198	0.319	0.040	-0.224	-0.090	-0.219	-0.152	0.255	0.112	-0.282	-0.009	-0.025	-0.297	-0.047	-0.106	1	.416*
	Sig. (2-tailed)	0.561	0.248	0.058	0.816	0.189	0.603	0.199	0.376	0.139	0.516	0.095	0.958	0.885	0.079	0.786	0.539		0.012
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36
REC	Pearson Correlation	-.670**	-.757**	-0.021	.649**	-.561**	-.356*	-.552**	-.483**	.442**	.519**	-.494**	-.371*	0.181	-.691**	-.642**	.502**	.416*	1
	Sig. (2-tailed)	0.000	0.000	0.903	0.000	0.000	0.033	0.000	0.003	0.008	0.001	0.002	0.026	0.291	0.000	0.000	0.002	0.012	
	N	36	36	36	36	36	36	36	36	35	36	36	36	36	36	36	36	36	36

Appendix D.4.

Pearson Correlations 2000 (Macroeconomic Variables) – Sub-Saharan Africa

		FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTTI	NM	ODA	ODAA	RP%
FPI	Pearson Correlation	1	-0.266	-0.066	0.030	.521**	0.080	-0.186	0.043	0.276	0.276	0.014	-.390*	0.023	-0.273	.589**	-.344*	-0.233
	Sig. (2-tailed)		0.123	0.707	0.866	0.001	0.649	0.284	0.807	0.109	0.108	0.936	0.020	0.898	0.113	0.000	0.043	0.179
	N	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
FDI	Pearson Correlation	-0.266	1	.395*	-.363*	0.083	-0.062	.818**	0.104	0.282	0.222	0.252	-0.220	0.013	-0.095	-0.195	0.218	-0.247
	Sig. (2-tailed)	0.123		0.017	0.030	0.631	0.718	0.000	0.544	0.095	0.193	0.139	0.198	0.942	0.582	0.255	0.202	0.147
	N	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
FDI%	Pearson Correlation	-0.066	.395*	1	-.344*	0.196	0.075	0.002	0.068	.339*	0.323	0.108	0.117	0.009	.404*	0.239	0.013	-0.172
	Sig. (2-tailed)	0.707	0.017		0.040	0.253	0.662	0.989	0.693	0.043	0.054	0.530	0.496	0.960	0.015	0.161	0.940	0.317
	N	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GDPDI	Pearson Correlation	0.030	-.363*	-.344*	1	0.206	0.182	-0.232	0.140	0.089	-0.037	-0.283	0.099	-0.138	0.114	0.054	-.392*	-0.268

	Sig. (2-tailed)	0.866	0.030	0.040		0.228	0.287	0.173	0.416	0.605	0.832	0.095	0.566	0.423	0.506	0.753	0.018	0.114
	N	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GDPPCC	Pearson Correlation	.521**	0.083	0.196	0.206	1	-0.060	0.007	0.008	.408*	.464**	-0.087	-0.107	-0.027	0.060	.425**	-0.265	-.542**
	Sig. (2-tailed)	0.001	0.631	0.253	0.228		0.727	0.968	0.964	0.014	0.004	0.613	0.534	0.875	0.728	0.010	0.119	0.001
	N	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GDPPC %	Pearson Correlation	0.080	-0.062	0.075	0.182	-0.060	1	-0.016	-0.096	0.083	0.192	-0.308	0.102	0.041	0.097	0.201	-0.105	-0.186
	Sig. (2-tailed)	0.649	0.718	0.662	0.287	0.727		0.927	0.579	0.628	0.261	0.067	0.552	0.810	0.572	0.241	0.541	0.276
	N	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GDP	Pearson Correlation	-0.186	.818**	0.002	-0.232	0.007	-0.016	1	0.074	0.088	0.028	0.029	-0.164	-0.004	-0.210	-0.207	0.113	-0.173
	Sig. (2-tailed)	0.284	0.000	0.989	0.173	0.968	0.927		0.669	0.609	0.871	0.865	0.339	0.983	0.220	0.225	0.511	0.313
	N	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GGNLB	Pearson Correlation	0.043	0.104	0.068	0.140	0.008	-0.096	0.074	1	.578**	-.332*	0.023	0.008	0.162	-0.031	0.206	-0.103	-0.193
	Sig. (2-tailed)	0.807	0.544	0.693	0.416	0.964	0.579	0.669		0.000	0.048	0.892	0.963	0.344	0.859	0.229	0.550	0.260
	N	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GGR	Pearson Correlation	0.276	0.282	.339*	0.089	.408*	0.083	0.088	.578**	1	.578**	-0.015	-0.265	0.114	0.178	.561**	-0.224	-.331*

	Sig. (2-tailed)	0.109	0.095	0.043	0.605	0.014	0.628	0.609	0.000		0.000	0.932	0.119	0.507	0.298	0.000	0.189	0.048
	N	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GGE	Pearson Correlation	0.276	0.222	0.323	-0.037	.464**	0.192	0.028	-.332*	.578**	1	-0.040	-0.314	-0.030	0.237	.443**	-0.156	-0.190
	Sig. (2-tailed)	0.108	0.193	0.054	0.832	0.004	0.261	0.871	0.048	0.000		0.815	0.062	0.862	0.164	0.007	0.365	0.267
	N	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
IACP%	Pearson Correlation	0.014	0.252	0.108	-0.283	-0.087	-0.308	0.029	0.023	-0.015	-0.040	1	-0.113	0.090	-0.085	-0.128	-0.032	-0.044
	Sig. (2-tailed)	0.936	0.139	0.530	0.095	0.613	0.067	0.865	0.892	0.932	0.815		0.512	0.602	0.624	0.456	0.852	0.798
	N	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
IACPI	Pearson Correlation	-.390*	-0.220	0.117	0.099	-0.107	0.102	-0.164	0.008	-0.265	-0.314	-0.113	1	0.064	.378*	-0.047	-0.135	0.014
	Sig. (2-tailed)	0.020	0.198	0.496	0.566	0.534	0.552	0.339	0.963	0.119	0.062	0.512		0.711	0.023	0.783	0.433	0.937
	N	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
NBTTI	Pearson Correlation	0.023	0.013	0.009	-0.138	-0.027	0.041	-0.004	0.162	0.114	-0.030	0.090	0.064	1	-0.173	0.141	0.239	-0.102
	Sig. (2-tailed)	0.898	0.942	0.960	0.423	0.875	0.810	0.983	0.344	0.507	0.862	0.602	0.711		0.313	0.413	0.161	0.555
	N	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
NM	Pearson Correlation	-0.273	-0.095	.404*	0.114	0.060	0.097	-0.210	-0.031	0.178	0.237	-0.085	.378*	-0.173	1	0.078	-0.166	-0.047

	Sig. (2-tailed)	0.113	0.582	0.015	0.506	0.728	0.572	0.220	0.859	0.298	0.164	0.624	0.023	0.313		0.651	0.332	0.783
	N	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
ODA	Pearson Correlation	.589**	-0.195	0.239	0.054	.425**	0.201	-0.207	0.206	.561**	.443**	-0.128	-0.047	0.141	0.078	1	-0.165	-0.225
	Sig. (2-tailed)	0.000	0.255	0.161	0.753	0.010	0.241	0.225	0.229	0.000	0.007	0.456	0.783	0.413	0.651		0.336	0.187
	N	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
ODAA	Pearson Correlation	-.344*	0.218	0.013	-.392*	-0.265	-0.105	0.113	-0.103	-0.224	-0.156	-0.032	-0.135	0.239	-0.166	-0.165	1	0.222
	Sig. (2-tailed)	0.043	0.202	0.940	0.018	0.119	0.541	0.511	0.550	0.189	0.365	0.852	0.433	0.161	0.332	0.336		0.193
	N	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
RP%	Pearson Correlation	-0.233	-0.247	-0.172	-0.268	-.542**	-0.186	-0.173	-0.193	-.331*	-0.190	-0.044	0.014	-0.102	-0.047	-0.225	0.222	1
	Sig. (2-tailed)	0.179	0.147	0.317	0.114	0.001	0.276	0.313	0.260	0.048	0.267	0.798	0.937	0.555	0.783	0.187	0.193	
	N	35	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36

Appendix D.5.

Pearson Correlations 2008 (Macroeconomic Variables) – Sub-Saharan Africa

		FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTTI	NM	ODA	ODAA	RP%
FPI	Pearson Correlation	1	0.198	0.155	0.276	-0.179	0.205	0.258	0.033	0.102	0.104	-0.008	-0.101	0.276	0.072	0.036	-0.052	0.122
	Sig. (2-tailed)		0.248	0.368	0.103	0.295	0.230	0.129	0.847	0.554	0.546	0.962	0.559	0.103	0.678	0.834	0.761	0.477
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
FDI	Pearson Correlation	0.198	1	0.014	0.119	0.115	0.148	.920**	0.170	-0.012	-0.135	-0.064	-0.021	.461**	-0.224	-0.195	0.226	-0.289
	Sig. (2-tailed)	0.248		0.934	0.488	0.505	0.390	0.000	0.322	0.946	0.433	0.710	0.904	0.005	0.188	0.254	0.186	0.087
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
FDI%	Pearson Correlation	0.155	0.014	1	.427**	0.197	0.068	-0.119	0.283	0.243	0.104	.356*	0.106	-0.036	0.324	.662**	-0.130	-0.236
	Sig. (2-tailed)	0.368	0.934		0.009	0.249	0.693	0.490	0.094	0.153	0.547	0.033	0.538	0.834	0.054	0.000	0.451	0.166
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GDPDI	Pearson Correlation	0.276	0.119	.427**	1	0.242	0.172	-0.032	.379*	.613**	.498**	0.001	-0.013	.591**	.439**	0.127	-0.293	-0.326

	Sig. (2-tailed)	0.103	0.488	0.009		0.155	0.315	0.852	0.022	0.000	0.002	0.995	0.940	0.000	0.007	0.459	0.083	0.052
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GDPPCC	Pearson Correlation	-0.179	0.115	0.197	0.242	1	-.457**	0.066	.443**	.350*	0.124	0.179	-0.207	0.236	0.160	0.057	-0.317	-.539**
	Sig. (2-tailed)	0.295	0.505	0.249	0.155		0.005	0.700	0.007	0.037	0.472	0.296	0.225	0.166	0.351	0.741	0.059	0.001
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GDPPC%	Pearson Correlation	0.205	0.148	0.068	0.172	-.457**	1	0.114	-0.207	0.150	.333*	0.194	0.025	0.271	0.067	0.169	.347*	0.144
	Sig. (2-tailed)	0.230	0.390	0.693	0.315	0.005		0.508	0.227	0.384	0.047	0.256	0.885	0.110	0.699	0.325	0.038	0.402
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GDP	Pearson Correlation	0.258	.920**	-0.119	-0.032	0.066	0.114	1	0.071	-0.064	-0.130	-0.005	-0.094	.402*	-.397*	-0.235	0.246	-0.175
	Sig. (2-tailed)	0.129	0.000	0.490	0.852	0.700	0.508		0.681	0.713	0.451	0.979	0.584	0.015	0.017	0.168	0.147	0.307
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GGNLB	Pearson Correlation	0.033	0.170	0.283	.379*	.443**	-0.207	0.071	1	.601**	0.044	0.019	-0.074	0.210	0.046	0.021	-.339*	-.329*
	Sig. (2-tailed)	0.847	0.322	0.094	0.022	0.007	0.227	0.681		0.000	0.800	0.910	0.667	0.218	0.790	0.904	0.043	0.050
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GGR	Pearson Correlation	0.102	-0.012	0.243	.613**	.350*	0.150	-0.064	.601**	1	.825**	0.080	-0.319	.351*	.366*	0.207	-.401*	-0.183

		C1	C2	C3	C4	C5	C6	C7	C8	C9	C10	C11	C12	C13	C14	C15	C16	C17
	Sig. (2-tailed)	0.554	0.946	0.153	0.000	0.037	0.384	0.713	0.000		0.000	0.642	0.058	0.036	0.028	0.226	0.015	0.284
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GGE	Pearson Correlation	0.104	-0.135	0.104	.498**	0.124	.333*	-0.130	0.044	.825**	1	0.086	-.347*	0.290	.425**	0.244	-0.261	0.004
	Sig. (2-tailed)	0.546	0.433	0.547	0.002	0.472	0.047	0.451	0.800	0.000		0.616	0.038	0.086	0.010	0.152	0.124	0.983
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
IACP%	Pearson Correlation	-0.008	-0.064	.356*	0.001	0.179	0.194	-0.005	0.019	0.080	0.086	1	0.171	-0.075	0.103	0.097	0.327	0.228
	Sig. (2-tailed)	0.962	0.710	0.033	0.995	0.296	0.256	0.979	0.910	0.642	0.616		0.320	0.663	0.550	0.573	0.051	0.180
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
IACPI	Pearson Correlation	-0.101	-0.021	0.106	-0.013	-0.207	0.025	-0.094	-0.074	-0.319	-.347*	0.171	1	-0.140	-0.010	-0.057	0.115	0.067
	Sig. (2-tailed)	0.559	0.904	0.538	0.940	0.225	0.885	0.584	0.667	0.058	0.038	0.320		0.416	0.952	0.742	0.506	0.699
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
NBTTI	Pearson Correlation	0.276	.461**	-0.036	.591**	0.236	0.271	.402*	0.210	.351*	0.290	-0.075	-0.140	1	0.157	-0.186	-0.020	-.400*
	Sig. (2-tailed)	0.103	0.005	0.834	0.000	0.166	0.110	0.015	0.218	0.036	0.086	0.663	0.416		0.361	0.276	0.908	0.016
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
NM	Pearson Correlation	0.072	-0.224	0.324	.439**	0.160	0.067	-.397*	0.046	.366*	.425**	0.103	-0.010	0.157	1	0.285	-0.255	-0.148

	Sig. (2-tailed)	0.678	0.188	0.054	0.007	0.351	0.699	0.017	0.790	0.028	0.010	0.550	0.952	0.361		0.092	0.133	0.390
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
ODA	Pearson Correlation	0.036	-0.195	.662**	0.127	0.057	0.169	-0.235	0.021	0.207	0.244	0.097	-0.057	-0.186	0.285	1	-0.160	-0.237
	Sig. (2-tailed)	0.834	0.254	0.000	0.459	0.741	0.325	0.168	0.904	0.226	0.152	0.573	0.742	0.276	0.092		0.351	0.164
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
ODAA	Pearson Correlation	-0.052	0.226	-0.130	-0.293	-0.317	.347*	0.246	-.339*	-.401*	-0.261	0.327	0.115	-0.020	-0.255	-0.160	1	0.261
	Sig. (2-tailed)	0.761	0.186	0.451	0.083	0.059	0.038	0.147	0.043	0.015	0.124	0.051	0.506	0.908	0.133	0.351		0.123
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
RP%	Pearson Correlation	0.122	-0.289	-0.236	-0.326	-.539**	0.144	-0.175	-.329*	-0.183	0.004	0.228	0.067	-.400*	-0.148	-0.237	0.261	1
	Sig. (2-tailed)	0.477	0.087	0.166	0.052	0.001	0.402	0.307	0.050	0.284	0.983	0.180	0.699	0.016	0.390	0.164	0.123	
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36

Appendix D.6.

Pearson Correlations 2015 (Macroeconomic Variables) – Sub-Saharan Africa

		FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTTI	NM	ODA	ODAA	RP%
FPI	Pearson Correlation	.394*	1	.395*	.560**	0.109	0.056	.356*	-0.249	0.001	0.141	0.294	-0.049	0.260	0.141	-0.279	0.249	-0.300
	Sig. (2-tailed)	0.018		0.017	0.000	0.525	0.745	0.033	0.143	0.998	0.411	0.081	0.775	0.125	0.411	0.100	0.142	0.075
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
FDI	Pearson Correlation	0.033	.395*	1	0.215	0.095	-0.094	-0.122	-.644**	.332*	.648**	0.055	-0.053	0.022	0.188	0.197	-0.068	-0.268
	Sig. (2-tailed)	0.848	0.017		0.208	0.582	0.585	0.478	0.000	0.048	0.000	0.752	0.757	0.898	0.272	0.250	0.692	0.115
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
FDI%	Pearson Correlation	0.261	.560**	0.215	1	0.090	-0.190	-0.013	-0.069	0.141	0.160	.339*	0.200	0.145	0.255	0.137	-0.118	-0.127
	Sig. (2-tailed)	0.125	0.000	0.208		0.600	0.267	0.939	0.688	0.413	0.353	0.043	0.243	0.400	0.133	0.425	0.493	0.460
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GDPDI	Pearson Correlation	-0.123	0.109	0.095	0.090	1	0.065	0.077	0.120	0.251	0.147	-0.105	-0.202	-0.069	0.227	-0.009	-0.255	-.498**

	Sig. (2-tailed)	0.473	0.525	0.582	0.600		0.708	0.654	0.487	0.139	0.391	0.543	0.238	0.690	0.183	0.957	0.133	0.002
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GDPPCC	Pearson Correlation	-0.156	0.056	-0.094	-0.190	0.065	1	0.043	0.089	0.016	-0.036	-0.205	-.392*	.342*	-0.132	-0.214	0.211	-0.108
	Sig. (2-tailed)	0.362	0.745	0.585	0.267	0.708		0.802	0.606	0.924	0.834	0.231	0.018	0.041	0.443	0.210	0.217	0.530
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GDPPC%	Pearson Correlation	.375*	.356*	-0.122	-0.013	0.077	0.043	1	0.048	-.392*	-.362*	0.214	-0.061	0.262	-.348*	-0.242	.457**	-0.154
	Sig. (2-tailed)	0.024	0.033	0.478	0.939	0.654	0.802		0.782	0.018	0.030	0.209	0.725	0.123	0.038	0.155	0.005	0.370
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GDP	Pearson Correlation	-0.174	-0.249	-.644**	-0.069	0.120	0.089	0.048	1	0.053	-.520**	-0.078	0.088	-0.145	-0.041	0.107	0.107	0.112
	Sig. (2-tailed)	0.310	0.143	0.000	0.688	0.487	0.606	0.782		0.761	0.001	0.650	0.609	0.400	0.810	0.533	0.536	0.517
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GGNLB	Pearson Correlation	-.398*	0.001	.332*	0.141	0.251	0.016	-.392*	0.053	1	.826**	-0.135	-0.219	-0.112	.373*	0.306	-.448**	-0.105
	Sig. (2-tailed)	0.016	0.998	0.048	0.413	0.139	0.924	0.018	0.761		0.000	0.433	0.199	0.514	0.025	0.070	0.006	0.543
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GGR	Pearson Correlation	-0.242	0.141	.648**	0.160	0.147	-0.036	-.362*	-.520**	.826**	1	-0.071	-0.237	-0.014	.342*	0.201	-.444**	-0.153

	Sig. (2-tailed)	0.155	0.411	0.000	0.353	0.391	0.834	0.030	0.001	0.000		0.680	0.163	0.934	0.041	0.240	0.007	0.374
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
GGE	Pearson Correlation	.380*	0.294	0.055	.339*	-0.105	-0.205	0.214	-0.078	-0.135	-0.071	1	0.164	0.025	-0.026	-0.058	0.271	0.249
	Sig. (2-tailed)	0.022	0.081	0.752	0.043	0.543	0.231	0.209	0.650	0.433	0.680		0.340	0.886	0.878	0.739	0.110	0.142
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
IACP%	Pearson Correlation	0.073	-0.049	-0.053	0.200	-0.202	-.392*	-0.061	0.088	-0.219	-0.237	0.164	1	-.348*	0.044	0.088	0.295	0.110
	Sig. (2-tailed)	0.672	0.775	0.757	0.243	0.238	0.018	0.725	0.609	0.199	0.163	0.340		0.038	0.800	0.611	0.081	0.524
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
IACPI	Pearson Correlation	.398*	0.260	0.022	0.145	-0.069	.342*	0.262	-0.145	-0.112	-0.014	0.025	-.348*	1	0.020	-0.111	0.154	-0.077
	Sig. (2-tailed)	0.016	0.125	0.898	0.400	0.690	0.041	0.123	0.400	0.514	0.934	0.886	0.038		0.907	0.521	0.371	0.656
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
NBTTI	Pearson Correlation	-0.099	0.141	0.188	0.255	0.227	-0.132	-.348*	-0.041	.373*	.342*	-0.026	0.044	0.020	1	0.042	-0.289	-0.146
	Sig. (2-tailed)	0.566	0.411	0.272	0.133	0.183	0.443	0.038	0.810	0.025	0.041	0.878	0.800	0.907		0.808	0.087	0.396
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
NM	Pearson Correlation	-0.146	-0.279	0.197	0.137	-0.009	-0.214	-0.242	0.107	0.306	0.201	-0.058	0.088	-0.111	0.042	1	-0.201	-0.181

	Sig. (2-tailed)	0.397	0.100	0.250	0.425	0.957	0.210	0.155	0.533	0.070	0.240	0.739	0.611	0.521	0.808		0.239	0.291
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
ODA	Pearson Correlation	0.308	0.249	-0.068	-0.118	-0.255	0.211	.457**	0.107	-.448**	-.444**	0.271	0.295	0.154	-0.289	-0.201	1	0.232
	Sig. (2-tailed)	0.068	0.142	0.692	0.493	0.133	0.217	0.005	0.536	0.006	0.007	0.110	0.081	0.371	0.087	0.239		0.174
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
ODAA	Pearson Correlation	0.092	-0.300	-0.268	-0.127	-.498**	-0.108	-0.154	0.112	-0.105	-0.153	0.249	0.110	-0.077	-0.146	-0.181	0.232	1
	Sig. (2-tailed)	0.595	0.075	0.115	0.460	0.002	0.530	0.370	0.517	0.543	0.374	0.142	0.524	0.656	0.396	0.291	0.174	
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
RP%	Pearson Correlation	1	.394*	0.033	0.261	-0.123	-0.156	.375*	-0.174	-.398*	-0.242	.380*	0.073	.398*	-0.099	-0.146	0.308	0.092
	Sig. (2-tailed)		0.018	0.848	0.125	0.473	0.362	0.024	0.310	0.016	0.155	0.022	0.672	0.016	0.566	0.397	0.068	0.595
	N	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36

Appendix E.1.

Marco-Economic Policy Variables Threshold Conversion for the Year 2000 – Latin America & The Caribbean

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTT	NM	ODA	ODAA	RP%
Antigua and Barbuda	98.50	43115925.93	5.19	92.68	16570.84	4.45	0.00	-4.89	18.01	22.89	-0.16	98.47	92.98	-282.00	118.20	9880000.00	67.87
Argentina	85.91	10418314339.00	3.67	64.28	11897.89	-1.89	0.88	-3.33	22.68	26.01	-0.94	26.15	96.91	-90000.00	1.63	60370000.00	10.86
Bolivia	83.05	736350000.00	8.77	232.28	3497.28	0.58	0.06	-3.73	25.59	29.31	4.60	75.64	110.34	-89995.00	58.28	486030000.00	38.21
Brazil	76.96	32994718700.00	5.03	149.67	9108.01	2.61	3.16	-3.32	31.16	34.48	7.04	10780490489263.20	99.94	0.00	1.38	241070000.00	18.81
Colombia	87.38	2436459923.00	2.44	73.23	6602.97	2.91	0.53	-2.94	23.49	26.43	9.22	60.69	96.90	-159003.00	4.62	186650000.00	26.04
Costa Rica	87.34	723426415.30	4.84	32.84	8066.65	1.71	0.06	-3.70	13.24	16.94	10.96	30.60	82.76	41792.00	3.36	13200000.00	40.95
Dominica	118.87	17596296.30	5.24	95.81	6378.15	0.70	0.00	-8.66	29.86	38.52	0.85	80.28	111.53	Missing	219.30	15280000.00	34.74
Dominican Republic	84.46	989000000.00	4.07	37.49	6623.43	3.03	0.11	-1.40	13.14	14.54	7.22	31.00	100.94	-152553.00	6.56	56190000.00	38.25
Ecuador	84.52	-23439367.91	-0.13	48.56	5901.13	-0.75	0.15	-0.31	22.91	23.22	96.10	38.83	91.23	-120002.00	11.66	147210000.00	39.70
El Salvador	95.00	173400000.00	1.47	174.40	5042.08	0.39	0.06	-4.18	14.97	19.16	2.27	72.16	110.37	-312786.00	30.67	179940000.00	41.09
Grenada	132.50	37407407.41	7.19	89.21	7650.12	4.71	0.00	-2.51	23.54	26.04	2.14	77.26	89.45	-4132.00	166.01	16870000.00	64.30

Guatemala	74.41	-788600000.00	-4.09	92.96	4808.64	1.27	0.11	-1.98	12.34	14.32	5.98	50.89	88.93	-281050.00	22.69	264350000.00	54.67
Haiti	95.76	13250000.00	0.34	590.50	1378.72	-0.84	0.02	-1.05	8.43	9.48	11.46	41.35	94.23	-139999.00	24.33	208010000.00	64.40
Honduras	71.67	349978000.00	4.93	100.00	2757.10	3.04	0.03	1.51	23.61	22.10	11.05	105.96	94.83	-41999.00	68.94	449770000.00	54.54
Jamaica	97.62	419600000.00	4.67	54.59	6511.59	0.04	0.03	-0.84	26.66	27.50	4.59	100.00	98.47	-84638.00	3.27	8700000.00	48.19
Mexico	88.41	18382284821.00	2.60	51.76	12532.13	3.48	2.53	-2.90	17.29	20.19	9.49	61.85	97.05	-2911437.00	-0.45	-45340000.00	25.28
Nicaragua	81.81	266500000.00	5.22	66.12	2739.39	2.50	0.03	-2.63	22.72	25.35	11.55	62.76	88.41	-173998.00	111.79	561970000.00	65.16
Paraguay	86.39	107800000.00	1.32	174.77	4839.60	-4.26	0.05	-0.95	20.26	21.20	8.98	34.41	107.28	-46919.00	15.74	83440000.00	26.96
Peru	92.39	809696760.00	1.56	80.07	5244.75	1.29	0.27	-2.09	19.39	21.48	3.76	80.37	98.51	-634999.00	15.49	401550000.00	38.28
St. Kitts and Nevis	141.02	96214814.81	22.88	88.23	16768.09	9.35	0.00	-11.96	22.80	34.76	2.11	73.38	102.16	Missing	87.94	3990000.00	67.22
Suriname	96.32	-148000000.00	-16.59	30.04	7782.85	-1.21	0.01	-8.31	17.78	26.09	29.56	13.87	97.03	-9124.00	77.56	36640000.00	33.56
Uruguay	82.77	262825000.00	1.15	66.68	9951.93	-2.28	0.07	-3.34	25.78	29.12	4.76	42.30	103.73	-104000.00	5.60	18590000.00	7.97
Mean	92.87	3105359047.04	3.26	113.01	7393.33	1.40	0.37	-3.34	20.71	24.05	11.03	490022295023.70	97.91	-265756.20	47.94	154743636.36	41.23
median	87.36	264662500.00	3.87	84.15	6557.28	1.28	0.06	-2.92	22.70	24.28	6.51	62.31	97.04	-97000.00	19.21	71905000.00	38.99
STDV	17.35	7966366291.18	6.68	118.19	4094.57	2.89	0.83	3.00	5.84	6.99	20.03	2298408294962.99	7.61	640592.12	60.26	178259910.39	17.97
Threshold conversion																	

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTT	NM	ODA	ODAA	RP%
Antigua and Barbuda	1	0	1	1	1	1	0	0	0	0	0	1	0	1	1	0	1
Argentina	0	1	0	0	1	0	1	0	0	1	0	0	0	1	0	0	0
Bolivia	0	1	1	1	0	0	0	0	1	1	0	1	1	1	1	1	0
Brazil	0	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	0
Colombia	1	1	0	0	1	1	1	0	1	1	1	0	0	0	0	1	0
Costa Rica	0	1	1	0	1	1	1	0	0	0	1	0	0	1	0	0	1
Dominica	1	0	1	1	0	0	0	0	1	1	0	1	1	Missing	1	0	0
Dominican Republic	0	1	1	0	1	1	1	1	0	0	1	0	1	0	0	0	0
Ecuador	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	1	1
El Salvador	1	0	0	1	0	0	1	0	0	0	0	1	1	0	1	1	1
Grenada	1	0	1	1	1	1	0	1	1	1	0	1	0	1	1	0	1
Guatemala	0	0	0	1	0	0	1	1	0	0	0	0	0	0	1	1	1
Haiti	1	0	0	1	0	0	0	1	0	0	1	0	0	0	1	1	1
Honduras	0	1	1	1	0	1	0	1	1	0	1	1	0	1	1	1	1
Jamaica	1	1	1	0	0	0	0	1	1	1	0	1	1	1	0	0	1
Mexico	1	1	0	0	1	1	1	1	0	0	1	0	1	0	0	0	0
Nicaragua	0	1	1	0	0	1	0	1	1	1	1	1	0	0	1	1	1
Paraguay	0	0	0	1	0	0	0	1	0	0	1	0	1	1	0	1	0
Peru	1	1	0	0	0	1	1	1	0	0	0	1	1	0	0	1	0

St. Kitts and Nevis	1	0	1	1	1	1	0	0	1	1	0	1	1	Missing	1	0	1
Suriname	1	0	0	0	1	0	0	0	0	1	1	0	0	1	1	0	0
Uruguay	0	0	0	0	1	0	1	0	1	1	0	0	1	0	0	0	0

Appendix F.1.

Macro-Economic Policy Variables Truth Table and Cluster Pairings for the Year 2000 (Prime Implicants in Bold and Underlined) - Latin America & The Caribbean

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTT	NM	ODA	ODAA	RP%	Cluster	Revised Cluster
Argentina	_0_	1	_0_	_0_	_1_	_0_	_1_	_0_	0	1	_0_	_0_	0	1	_0_	_0_	_0_	1	1
Uruguay	_0_	0	_0_	_0_	_1_	_0_	_1_	_0_	1	1	_0_	_0_	1	0	_0_	_0_	_0_	1	1
Colombia	_1_	_1_	0	_0_	1	1	1	0	1	1	1	0	0	0	_0_	1	0	2	2
Jamaica	_1_	_1_	1	_0_	0	0	0	1	1	1	0	1	1	1	_0_	0	1	2	2
Peru	_1_	_1_	0	_0_	0	1	1	1	0	0	0	1	1	0	_0_	1	0	2	2
Bolivia	0	1	1	_1_	_0_	_0_	0	0	1	1	0	1	_1_	1	1	_1_	0	3	3
El Salvador	1	0	0	_1_	_0_	_0_	1	0	0	0	0	1	_1_	0	1	_1_	1	3	3
Paraguay	0	0	0	_1_	_0_	_0_	0	1	0	0	1	0	_1_	1	0	_1_	0	3	3
Suriname	1	0	0	0	1	0	0	0	0	1	1	0	0	1	1	0	0	4	4

Honduras	0	1	1	1	0	1	0	1	1	0	1	1	0	1	1	1	1	5	5
Nicaragua	0	1	1	0	0	1	0	1	1	1	1	1	0	0	1	1	1	5	5
Costa Rica	0	1	1	0	1	1	1	0	0	0	1	0	0	1	0	0	1	6	5
Dominican Republic	0	1	1	0	1	1	1	1	0	0	1	0	1	0	0	0	0	6	5
Guatemala	0	0	0	1	0	0	1	1	0	0	0	0	0	0	1	1	1	6	5
Ecuador	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	1	1	7	5
Haiti	1	0	0	1	0	0	0	1	0	0	1	0	0	0	1	1	1	8	6
Antigua and Barbuda	1	0	1	1	1	1	0	0	0	0	0	1	0	1	1	0	1	9	7
Grenada	1	0	1	1	1	1	0	1	1	1	0	1	0	1	1	0	1	9	7
Brazil	0	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	0	10	8
Mexico	1	1	0	0	1	1	1	1	0	0	1	0	1	0	0	0	0	10	8
Dominica	1	0	1	1	0	0	0	0	1	1	0	1	1	…	1	0	0	Missing	Missing
St. Kitts and Nevis	1	0	1	1	1	1	0	0	1	1	0	1	1	…	1	0	1	Missing	Missing

Appendix E.2.

Macro-Economic Policy Variables Threshold Conversion for the Year 2008 – Latin America & The Caribbean

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTT	NM	ODA	ODAA	RP%
Antigua and Barbuda	98.90	158783774.40	11.60	108.28	25851.61	-1.22	0.00	-5.37	21.05	26.42	5.33	118.75	84.78	-92.00	65.64	6070000.00	72.60
Argentina	115.12	9725560000.00	2.69	177.64	17995.19	3.00	0.86	0.23	31.00	30.76	8.59	55.43	139.48	-84998.00	2.97	120000000.00	9.47
Bolivia	112.97	512335605.20	3.07	398.62	4986.85	4.40	0.06	3.57	38.90	35.33	14.01	111.88	173.34	-84003.00	65.45	628320000.00	34.47
Brazil	116.63	50716402711.00	2.99	290.30	13360.29	4.03	3.06	-1.53	35.90	37.44	5.68	18627144404695.50	109.78	0.00	2.34	452370000.00	16.25
Colombia	110.25	10564151395.00	4.33	119.50	10234.96	2.33	0.54	-0.25	26.39	26.64	7.00	97.82	148.86	-143000.00	21.75	976420000.00	22.80
Costa Rica	106.65	2436112218.00	7.96	78.31	12401.08	3.23	0.07	-0.28	15.46	15.74	13.42	71.89	74.99	30339.00	15.67	69410000.00	30.61
Dominica	102.63	56548262.96	12.34	103.06	9922.47	6.93	0.00	0.70	35.44	34.74	6.36	97.18	103.55	...	300.81	21380000.00	32.50
Dominican Republic	104.86	2728400000.00	5.65	110.39	10424.13	1.79	0.12	-3.25	15.04	18.29	10.64	90.25	93.63	-153773.00	16.30	157070000.00	28.70
Ecuador	111.87	1057036020.00	1.71	113.85	8904.89	4.57	0.15	0.56	35.80	35.23	8.40	78.03	146.06	-44999.00	15.86	229160000.00	37.70
El Salvador	114.43	903050000.00	5.02	231.85	7205.82	1.68	0.05	-2.68	16.56	19.24	7.26	99.38	63.08	-285671.00	38.38	234490000.00	36.32
Grenada	93.02	134832583.30	16.32	110.35	11640.94	0.61	0.00	-4.15	24.18	28.33	8.03	100.44	87.13	-4274.00	305.98	31800000.00	64.12
Guatemala	115.05	751109109.80	1.92	153.39	6515.04	1.02	0.11	-1.62	12.03	13.64	11.36	92.76	105.83	-114231.00	38.21	535190000.00	52.19
Haiti	109.46	29800000.00	0.46	1839.60	1526.17	-0.70	0.02	-2.97	15.07	18.04	14.38	142.34	55.10	-138004.00	95.55	927310000.00	54.45
Honduras	110.15	1200798087.00	8.71	166.17	4255.02	2.05	0.04	-0.27	26.14	26.41	11.40	199.38	76.65	-24000.00	71.94	566340000.00	49.43
Jamaica	95.93	1376602630.00	10.06	131.08	8385.31	-1.33	0.03	-7.51	27.29	34.80	22.01	246.23	95.09	-87395.00	30.78	85880000.00	46.63

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTT	NM	ODA	ODAA	RP%
Mexico	105.51	32187776903.00	2.90	82.28	15984.23	-0.48	2.13	-0.81	24.83	25.64	5.13	89.10	115.59	-246002.00	1.30	147810000.00	22.78
Nicaragua	105.45	627300000.00	7.38	127.44	3931.05	2.10	0.03	-0.20	21.47	21.68	19.83	127.18	83.38	-155000.00	132.01	738510000.00	58.30
Paraguay	121.47	337856000.00	1.83	382.27	6594.32	4.94	0.05	2.96	20.02	17.06	10.19	67.79	92.70	-117299.00	22.29	134820000.00	23.95
Peru	102.00	6923651285.00	5.74	101.93	8779.83	7.80	0.30	2.68	22.25	19.57	5.79	97.15	148.07	-489999.00	16.36	468610000.00	38.88
St. Kitts and Nevis	36.74	177906026.70	24.08	126.43	22237.66	5.13	0.00	-3.08	28.73	31.81	5.30	98.71	74.32	...	930.22	46820000.00	68.40
Suriname	108.97	-231400000.00	-6.55	115.52	12822.93	3.04	0.01	1.61	24.51	22.90	14.67	44.73	119.02	-6485.00	197.30	101640000.00	33.52
Uruguay	106.78	2141969341.00	7.05	125.92	14652.04	6.82	0.06	-1.59	27.13	28.72	7.88	85.18	85.42	-50000.00	9.87	33070000.00	6.00
Mean	104.77	5659844634.20	6.24	236.10	10845.99	2.81	0.35	-1.06	24.78	25.84	10.12	846688382132.14	103.45	-109944.30	108.95	305113181.82	38.18
median	107.88	980043010.00	5.34	126.17	10078.72	2.66	0.06	-0.55	24.67	26.41	8.49	97.50	94.36	-86196.50	34.50	152440000.00	35.39
STDV	16.68	12310062343.77	6.24	369.00	5929.12	2.61	0.77	2.71	7.53	7.25	4.68	3971320530718.03	31.21	121923.77	203.95	304781483.91	18.35
Threshold conversion																	
Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTT	NM	ODA	ODAA	RP%
Antigua and Barbuda	0	0	1	0	1	0	0	0	0	1	0	1	0	1	1	0	1
Argentina	1	1	0	1	1	1	1	1	1	1	1	0	1	1	0	0	0
Bolivia	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	0
Brazil	1	1	0	1	1	1	1	0	1	1	0	1	1	1	0	1	0
Colombia	1	1	0	0	1	0	1	1	1	1	0	1	1	0	0	1	0
Costa Rica	0	1	1	0	1	1	1	1	0	0	1	0	0	1	0	0	0
Dominica	0	0	1	0	0	1	0	1	1	1	0	0	1	...	1	0	0

Dominican Republic	0	1	1	0	1	0	1	0	0	0	1	0	0	0	0	1	0
Ecuador	1	1	0	0	0	1	1	1	1	1	0	0	1	1	0	1	1
El Salvador	1	0	0	1	0	0	0	0	0	0	0	1	0	0	1	1	1
Grenada	0	0	1	0	1	0	0	0	0	1	0	1	0	1	1	0	1
Guatemala	1	0	0	1	0	0	1	0	0	0	1	0	1	0	1	1	1
Haiti	1	0	0	1	0	0	0	0	0	0	1	1	0	0	1	1	1
Honduras	1	1	1	1	0	0	0	1	1	0	1	1	0	1	1	1	1
Jamaica	0	1	1	1	0	0	0	0	1	1	1	1	1	0	0	0	1
Mexico	0	1	0	0	1	0	1	0	1	0	0	0	1	0	0	0	0
Nicaragua	0	0	1	1	0	0	0	1	0	0	1	1	0	0	1	1	1
Paraguay	1	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0
Peru	0	1	1	0	0	1	1	1	0	0	0	0	1	0	0	1	1
St. Kitts and Nevis	0	0	1	1	1	1	0	0	1	1	0	1	0	…	1	0	1
Suriname	1	0	0	0	1	1	0	1	0	0	1	0	1	1	1	0	0
Uruguay	0	1	1	0	1	1	1	0	1	1	0	0	0	1	0	0	0

Appendix F.2.

Macro-Economic Variable Truth Table and Cluster Pairings for the Year 2008 (Prime Implicants in Bold and Underlined) - Latin America & The Caribbean

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTT	NM	ODA	ODAA	RP%	Cluster	Revised Cluster
Costa Rica	0	1	1	0	1	1	1	1	_0_	_0_	1	0	0	1	0	0	0	1	1
Dominican Republic	0	1	1	0	1	0	1	0	_0_	_0_	1	0	0	0	0	1	0	1	1
El Salvador	1	0	0	1	0	0	0	0	_0_	_0_	0	1	0	0	1	1	1	2	1
Guatemala	1	0	0	1	0	0	1	0	_0_	_0_	1	0	1	0	1	1	1	2	1
Paraguay	1	0	0	1	0	1	0	1	_0_	_0_	1	0	0	0	0	0	0	2	1
Honduras	1	1	_1_	_1_	_0_	_0_	_0_	_1_	1	_0_	_1_	_1_	_0_	1	_1_	_1_	_1_	3	2
Nicaragua	0	0	_1_	_1_	_0_	_0_	_0_	_1_	0	_0_	_1_	_1_	_0_	0	_1_	_1_	_1_	3	2
Haiti	1	0	0	1	0	0	0	0	0	0	1	1	0	0	1	1	1	4	3
Antigua and Barbuda	_0_	0	_1_	0	1	_0_	_0_	_0_	0	_1_	0	_1_	0	1	1	_0_	_1_	5	4

Grenada	_0_	0	_1_	0	1	_0_	_0_	_0_	0	_1_	0	_1_	0	1	1	_0_	_1_	5	4
Jamaica	_0_	1	_1_	1	0	_0_	_0_	_0_	1	_1_	1	_1_	1	0	0	_0_	_1_	5	4
Argentina	1	1	0	1	_1_	1	_1_	1	_1_	1	1	_0_	1	1	_0_	_0_	_0_	6	5
Mexico	0	1	0	0	_1_	0	_1_	0	_1_	0	0	_0_	1	0	_0_	_0_	_0_	6	5
Uruguay	0	1	1	0	_1_	1	_1_	0	_1_	1	0	_0_	0	1	_0_	_0_	_0_	6	5
Bolivia	1	0	0	1	0	1	1	_1_	1	1	1	1	_1_	1	1	1	0	7	6
Colombia	1	1	0	0	1	0	1	_1_	1	1	0	1	_1_	0	0	1	0	7	6
Ecuador	1	1	0	0	0	1	1	_1_	1	1	0	0	_1_	1	0	1	1	7	6
Peru	0	1	1	0	0	1	1	_1_	0	0	0	0	_1_	0	0	1	1	9	6
Suriname	1	0	0	0	1	1	0	_1_	0	0	1	0	_1_	1	1	0	0	8	6
Brazil	1	1	0	1	1	1	1	0	1	1	0	1	1	1	0	1	0	10	7
Dominica	0	0	1	0	0	1	0	1	1	1	0	0	1	…	1	0	0	Missing	Missing
St. Kitts and Nevis	0	0	1	1	1	1	0	0	1	1	0	1	0	…	1	0	1	Missing	Missing

Appendix E.3.

Macro-Economic Policy Variables Threshold Conversion for the Year 2015 – Latin America & The Caribbean

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTT	NM	ODA	ODAA	RP%
Antigua and Barbuda	70.54	96267801.07	7.05	119.58	24013.16	2.97	0.00	-2.55	23.61	26.15	0.97	134.68	57.99	-56.00	14.91	1490000.00	75.00
Argentina	129.02	11758994011.00	1.98	825.31	20491.79	1.70	0.77	-5.79	35.38	41.17	10.62	168.27	146.93	30000.00	-0.43	-18870000.00	8.50
Bolivia	147.55	554643532.30	1.68	535.79	6955.18	3.27	0.07	-6.90	37.69	44.59	4.06	158.40	94.85	-61794.00	73.78	791310000.00	31.61
Brazil	140.58	74718044774.00	4.15	492.52	15769.50	-4.37	2.80	-10.33	28.09	38.42	9.03	28400440595910.10	108.38	15924.00	4.87	1003150000.00	14.23
Colombia	120.30	11735725715.00	4.03	150.46	13835.04	2.12	0.58	-3.41	26.38	29.79	5.00	122.61	110.35	-144998.00	28.11	1355860000.00	20.24
Costa Rica	126.09	2955521681.00	5.40	114.20	15545.57	2.55	0.07	-5.65	13.65	19.30	0.80	99.53	61.89	19658.00	23.15	111300000.00	23.14
Dominica	109.46	10935384.62	2.04	121.16	10948.58	-3.06	0.00	-0.87	31.54	32.40	-0.79	102.30	109.38	Missing	160.06	11710000.00	30.42
Dominican Republic	145.22	2227300000.00	3.24	145.79	15020.90	5.79	0.13	-0.20	17.54	17.73	0.84	119.21	102.80	-153010.00	26.59	279960000.00	21.43
Ecuador	121.92	1322477337.00	1.33	141.49	11351.80	-1.40	0.16	-5.26	33.83	39.09	3.97	103.22	118.97	-38001.00	19.71	318160000.00	36.60
El Salvador	110.49	494541718.10	2.13	260.84	8357.28	1.87	0.05	-3.16	18.03	21.19	-0.73	109.37	60.09	-240415.00	14.21	89700000.00	30.30
Grenada	136.49	86280526.00	8.65	123.09	13598.44	5.98	0.00	-1.19	24.46	25.66	-0.58	107.53	98.41	-4274.00	225.61	24100000.00	64.00
Guatemala	159.75	1175523400.00	1.84	202.81	7765.74	2.03	0.11	-1.44	10.83	12.27	2.39	119.52	102.81	-50131.00	25.31	411290000.00	50.03
Haiti	162.00	105680000.00	1.21	2711.15	1758.34	-0.10	0.02	-2.47	19.38	21.85	7.52	209.79	64.21	-150000.00	97.64	1045860000.00	47.57
Honduras	118.79	1316679827.00	6.28	242.20	5104.19	2.08	0.04	-0.78	25.24	26.02	3.16	284.75	73.43	-15001.00	60.32	540520000.00	44.84
Jamaica	101.63	924977863.70	6.52	223.26	8766.54	0.55	0.02	-0.29	27.01	27.30	3.68	428.74	85.70	-93096.00	20.57	59070000.00	45.17

Country																	
Mexico	119.88	36518544762.00	3.12	107.22	18765.49	1.90	1.97	-4.00	23.55	27.55	2.72	116.69	103.64	-300000.00	2.55	321070000.00	20.72
Nicaragua	125.77	949900000.00	7.53	204.11	5282.70	3.60	0.03	-1.38	23.91	25.29	4.00	190.34	105.38	-135000.00	75.29	457920000.00	52.16
Paraguay	149.46	529859000.00	1.94	488.59	9040.83	1.62	0.05	-2.41	24.74	27.15	3.13	90.84	108.57	-86700.00	9.06	60180000.00	22.64
Peru	109.99	8271633514.00	4.36	126.90	12389.73	1.92	0.34	-2.20	20.05	22.25	3.55	119.57	159.10	-240000.00	10.67	334830000.00	39.72
St. Kitts and Nevis	37.77	132141921.00	15.05	134.89	25184.88	2.92	0.00	6.56	38.79	32.23	-2.30	107.35	71.40	Missing	Missing	Missing	69.17
Suriname	154.32	183665852.70	3.81	165.96	15334.28	-3.53	0.01	-9.36	22.36	31.72	6.90	66.39	128.05	-5000.00	28.89	15980000.00	33.94
Uruguay	126.80	2435422215.00	4.57	217.20	20901.55	0.02	0.06	-3.58	28.77	32.35	8.67	146.06	106.12	-30000.00	6.75	23180000.00	4.96
Mean	123.81	7204761856.16	4.45	357.02	13008.25	1.38	0.33	-3.03	25.22	28.25	3.48	1290929118137.06	99.02	-84094.70	44.17	344655714.29	35.74
median	125.93	1062711700.00	3.92	184.38	12994.09	1.91	0.06	-2.51	24.60	27.23	3.35	119.54	103.22	-55962.50	23.15	279960000.00	32.78
STDV	28.63	17107481144.04	3.21	556.20	6252.48	2.65	0.70	3.50	7.27	7.93	3.44	6054994279831.47	26.82	96187.93	56.94	397828369.51	18.89
Threshold conversion																	

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTT	NM	ODA	ODAA	RP%
Antigua and Barbuda	0	0	1	0	1	1	0	0	0	0	0	1	0	1	0	0	1
Argentina	1	1	0	1	1	0	1	0	1	1	1	1	1	1	0	0	0
Bolivia	1	0	0	1	0	1	1	0	1	1	1	1	0	0	1	1	0
Brazil	1	1	1	1	1	0	1	0	1	1	1	1	1	1	0	1	0
Colombia	0	1	1	0	1	1	1	0	1	1	1	1	1	0	1	1	0
Costa Rica	1	1	1	0	1	1	1	0	0	0	0	0	0	1	0	0	0
Dominica	0	0	0	0	0	0	0	1	1	1	0	0	1	Missing	1	0	0

Dominican Republic	1	1	0	0	1	1	1	1	0	0	0	0	0	0	1	0	0
Ecuador	0	1	0	0	0	0	1	0	1	1	1	0	1	1	0	1	1
El Salvador	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Grenada	1	0	1	0	1	1	0	1	0	0	0	0	0	1	1	0	1
Guatemala	1	1	0	1	0	1	1	1	0	0	0	0	0	1	1	1	1
Haiti	1	0	0	1	0	0	0	1	0	0	1	1	0	0	1	1	1
Honduras	0	1	1	1	0	1	0	1	1	0	0	1	0	1	1	1	1
Jamaica	0	0	1	1	0	0	0	1	1	1	1	1	0	0	0	0	1
Mexico	0	1	0	0	1	0	1	0	0	1	0	0	1	0	0	1	0
Nicaragua	0	0	1	1	0	1	0	1	0	0	1	1	1	0	1	1	1
Paraguay	1	0	0	1	0	0	0	1	1	0	0	0	1	0	0	0	0
Peru	0	1	1	0	0	1	1	1	0	0	1	1	1	0	0	1	1
St. Kitts and Nevis	0	0	1	0	1	1	0	1	1	1	0	0	0	Missing	Missing	Missing	1
Suriname	1	0	0	0	1	0	0	0	0	1	1	0	1	1	1	0	1
Uruguay	1	1	1	1	1	0	1	0	1	1	1	1	1	1	0	0	0

Appendix F.3.

Macro-Economic Variable Truth Table and Cluster Pairings for the Year 2015 (Prime Implicants in Bold and Underlined) - Latin America & The Caribbean

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTT	NM	ODA	ODAA	RP%	Cluster	Revised Cluster
Antigua and Barbuda	0	0	_**1**_	0	1	1	_**0**_	0	0	0	0	1	0	1	0	0	_**1**_	3	1
Grenada	1	0	_**1**_	0	1	1	_**0**_	1	0	0	0	0	0	1	1	0	_**1**_	2	1
Honduras	0	1	_**1**_	1	0	1	_**0**_	1	1	0	0	1	0	1	1	1	_**1**_	1	1
Jamaica	0	0	_**1**_	1	0	0	_**0**_	1	1	1	1	1	0	0	0	0	_**1**_	1	1
Nicaragua	0	0	_**1**_	1	0	1	_**0**_	1	0	0	1	1	1	0	1	1	_**1**_	1	1
Costa Rica	1	1	1	0	1	1	1	0	0	_**0**_	_**0**_	_**0**_	0	1	0	0	0	5	2
Dominican Republic	1	1	0	0	1	1	1	1	0	_**0**_	_**0**_	_**0**_	0	0	1	0	0	4	2

El Salvador	0	0	0	1	0	0	0	0	0	*0*	*0*	*0*	0	0	0	0	0	5	2
Guatemala	1	1	0	1	0	1	1	1	0	*0*	*0*	*0*	0	1	1	1	1	4	2
Paraguay	1	0	0	1	0	0	0	1	1	*0*	*0*	*0*	1	0	0	0	0	4	2
Colombia	*0*	*1*	1	*0*	1	1	*1*	0	1	1	1	1	*1*	*0*	1	*1*	0	6	3
Mexico	*0*	*1*	0	*0*	1	0	*1*	0	0	1	0	0	*1*	*0*	0	*1*	0	6	3
Peru	*0*	*1*	1	*0*	0	1	*1*	1	0	0	1	1	*1*	*0*	0	*1*	1	6	3
Haiti	1	0	0	1	0	0	0	1	0	0	1	1	0	0	1	1	1	7	4
Argentina	1	1	0	1	1	0	1	*0*	1	*1*	*1*	1	1	1	0	0	0	9	5
Bolivia	1	0	0	1	0	1	1	*0*	1	*1*	*1*	1	0	0	1	1	0	8	5
Ecuador	0	1	0	0	0	0	1	*0*	1	*1*	*1*	0	1	1	0	1	1	8	5
Suriname	1	0	0	0	1	0	0	*0*	0	*1*	*1*	0	1	1	1	0	1	9	5
Uruguay	1	1	1	1	1	0	1	*0*	1	*1*	*1*	1	1	1	0	0	0	9	5
Brazil	1	1	1	1	1	0	1	0	1	1	1	1	1	1	0	1	0	10	6
Dominica	0	0	0	0	0	0	0	1	1	1	0	0	1	…	1	0	0	Missing	Missing

St. Kitts and Nevis	0	0	1	0	1	1	0	1	1	1	0	0	0	…	…	…	1	Missing	Missing

Appendix E.4.

Social Policy Variables (Human Development Indicators) Threshold Conversion for the Year 2000 – Latin America & The Caribbean

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
Antigua and Barbuda	96.66	90.07	26947447.88	56.48	381.08	2.50	257.00	67.44	Missing	13.00	73.54	154.59	26.74	98.25	82.41	2.12	0.00	0.00
Argentina	94.80	95.10	12726176000.00	61.02	418.40	4.06	99.17	23.70	30.37	17.70	73.83	315.89	49.05	99.01	94.78	1.11	33.16	11.08
Bolivia	65.29	69.96	393094507.60	76.62	43.54	4.27	24.52	56.32	47.96	58.40	60.69	49.50	32.74	78.82	38.25	1.90	51.52	27.39
Brazil	86.91	94.47	24323293200.00	54.29	313.07	7.12	129.76	41.45	48.83	30.40	70.06	274.87	36.43	93.71	73.26	1.45	89.49	42.80
Colombia	79.58	95.20	3590695546.00	56.92	135.33	6.17	105.98	78.31	29.17	21.20	71.02	47.54	13.19	90.04	75.79	1.46	75.52	28.03
Costa Rica	87.80	98.69	676263552.50	57.33	249.13	1.69	164.99	66.23	45.07	11.10	77.45	163.00	31.82	93.87	94.17	1.97	99.15	32.95
Dominica	78.36	80.83	14826364.82	Missing	225.43	7.66	156.81	69.56	Missing	13.40	76.60	85.75	28.30	93.48	64.03	-0.33	41.56	11.03
Dominican Republic	80.23	88.76	472913204.30	67.17	115.40	4.68	25.13	21.78	47.31	33.20	70.57	172.75	65.52	91.09	79.34	1.57	9.15	18.42
Ecuador	87.18	93.42	199614218.90	65.93	48.09	4.18	13.94	28.99	42.20	24.30	72.93	124.04	63.89	83.10	70.81	1.84	71.70	20.03
El Salvador	56.51	84.52	327179940.00	72.77	178.79	3.32	76.06	42.54	41.14	27.20	68.83	208.91	51.85	80.24	81.91	0.73	58.07	50.86
Grenada	92.93	85.95	23050440.93	74.82	261.03	5.10	91.12	34.91	Missing	13.20	70.34	243.09	62.30	93.31	94.23	0.17	0.00	10.47
Guatemala	39.34	73.32	357699736.30	91.26	85.81	5.10	27.88	32.50	54.82	40.80	67.85	143.96	57.72	85.47	59.21	2.29	51.72	62.74
Haiti	3.22	33.70	57980265.19	79.88	29.61	6.29	4.41	14.89	26.88	74.50	57.72	42.08	44.18	56.42	16.74	1.71	51.74	76.04

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
Honduras	29.93	67.62	269649562.70	85.50	68.95	6.91	33.30	48.29	54.07	30.60	70.54	75.99	46.02	82.21	61.91	2.59	61.91	55.13
Jamaica	73.16	84.57	480412925.00	66.68	195.53	6.78	108.03	55.25	27.78	19.00	72.33	105.81	28.99	90.77	83.75	0.83	4.84	11.90
Mexico	80.68	98.01	27480734100.00	64.74	309.63	5.10	Missing	Missing	50.27	22.50	74.36	250.92	52.22	89.31	76.33	1.40	19.80	12.17
Nicaragua	0.84	42.74	135836141.40	86.62	53.01	3.71	25.70	48.49	32.90	111.60	69.74	63.50	72.93	46.08	36.46	2.50	38.22	86.19
Paraguay	35.28	72.50	344338788.60	64.58	88.95	2.64	37.85	42.55	47.74	29.60	70.07	90.09	38.33	80.52	62.62	1.37	81.99	32.16
Peru	100.00	100.00	1591981087.00	46.16	90.22	5.76	47.16	52.27	23.20	8.10	70.51	175.49	31.12	Missing	87.01	-1.04	1.63	6.93
St. Kitts and Nevis	100.00	93.03	15380875.97	Missing	439.66	9.89	185.90	42.28	Missing	18.70	71.34	401.39	55.66	98.21	85.35	1.22	0.00	26.64
Suriname	79.89	97.44	30664877.05	60.87	168.82	4.75	81.48	48.27	18.94	30.20	67.84	106.69	15.36	88.84	80.93	1.15	88.40	26.47
Uruguay	96.05	98.01	523412022.90	60.38	623.96	7.95	285.68	45.78	39.18	14.80	74.81	162.47	17.53	96.75	94.13	0.36	93.38	38.80
Mean	70.21	83.54	3366461127.50	67.50	205.61	5.26	94.38	45.80	39.32	30.16	70.59	157.20	41.90	86.17	72.43	1.29	46.50	31.28
median	80.06	89.42	351019262.45	65.33	173.81	5.10	81.48	45.78	41.67	23.40	70.55	149.27	41.25	90.04	77.83	1.43	51.62	27.01
STDV	30.01	17.71	7797129843.00	11.91	156.47	1.98	79.04	16.46	11.14	23.97	4.51	94.23	17.17	13.24	20.45	0.90	34.07	22.97
Threshold conversion																		
Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
Antigua and Barbuda	1	1	0	0	1	0	1	1	Missing	0	1	1	0	1	1	1	0	0
Argentina	1	1	1	0	1	0	1	0	0	0	1	1	1	1	1	0	0	0
Bolivia	0	0	1	1	0	0	0	1	1	1	0	0	0	0	0	1	0	1
Brazil	1	1	1	0	1	1	1	0	1	1	0	1	0	1	0	1	1	1
Colombia	0	1	1	0	0	1	1	1	0	0	1	0	0	0	0	1	1	1
Costa Rica	1	1	1	0	1	0	1	1	1	0	1	1	0	1	1	1	1	1
Dominica	0	0	0	Missing	1	1	1	1	Missing	0	1	0	0	1	0	0	0	0
Dominican Republic	1	0	1	1	0	0	0	0	1	1	1	1	1	1	1	1	0	0

Ecuador	1	1	0	1	0	0	0	0	1	1	1	0	1	0	0	1	1	0
El Salvador	0	0	0	1	1	0	0	0	0	1	0	1	1	0	1	0	1	1
Grenada	1	0	0	1	1	1	1	0	Missing	0	0	1	1	1	1	0	0	0
Guatemala	0	0	1	1	0	0	0	0	1	1	0	0	1	0	0	1	1	1
Haiti	0	0	0	1	0	1	0	0	0	1	0	0	1	0	0	1	1	1
Honduras	0	0	0	1	0	1	0	1	1	1	0	0	1	0	0	1	1	1
Jamaica	0	0	1	1	1	1	1	1	0	0	1	0	0	1	1	0	0	0
Mexico	1	1	1	0	1	1	Missing	Missing	1	0	1	1	1	0	0	0	0	0
Nicaragua	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	1	0	1
Paraguay	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1
Peru	1	1	1	0	0	1	0	1	0	0	0	1	0	Missing	1	0	0	0
St. Kitts and Nevis	1	1	0	Missing	1	1	1	0	Missing	0	1	1	1	1	1	0	0	0
Suriname	0	1	0	0	0	0	0	1	0	1	0	0	0	0	1	0	1	0
Uruguay	1	1	1	0	1	1	1	0	0	0	1	1	0	1	1	0	1	1

Appendix F.4.

Social Policy Variables (Human Development Indicators) Truth Table and Cluster Pairings for the Year 2000 (Prime Implicants in Bold and Underlined) - Latin America & The Caribbean

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC	Cluster	Revised Cluster
Bolivia	0	0	1	1	0	0	**_0_**	1	1	**_1_**	0	0	0	0	0	1	0	1	1	1
Dominican Republic	1	0	1	1	0	0	**_0_**	0	1	**_1_**	1	1	1	1	1	1	0	0	2	1
Ecuador	1	1	0	1	0	0	**_0_**	0	1	**_1_**	1	0	1	0	0	1	1	0	2	1
El Salvador	0	0	0	1	1	0	**_0_**	0	0	**_1_**	0	1	1	0	1	0	1	1	3	1
Guatemala	0	0	1	1	0	0	**_0_**	0	1	**_1_**	0	0	1	0	0	1	1	1	1	1
Honduras	0	0	0	1	0	1	**_0_**	1	1	**_1_**	0	0	1	0	0	1	1	1	1	1
Paraguay	0	0	0	0	0	0	**_0_**	0	1	**_1_**	0	0	0	0	0	0	1	1	3	1
Haiti	**_0_**	**_0_**	**_0_**	1	**_0_**	1	**_0_**	0	**_0_**	1	**_0_**	**_0_**	1	**_0_**	**_0_**	1	1	**_1_**	4	2
Nicaragua	**_0_**	**_0_**	**_0_**	1	**_0_**	0	**_0_**	1	**_0_**	1	**_0_**	**_0_**	1	**_0_**	**_0_**	1	0	**_1_**	4	2
Colombia	0	1	1	0	0	1	1	**_1_**	0	0	1	0	**_0_**	0	0	1	1	1	5	3
Costa Rica	1	1	1	0	1	0	1	**_1_**	1	0	1	1	**_0_**	1	1	1	1	1	5	3

Jamaica	0	0	1	1	1	1	1	_**1**_	0	0	1	0	_**0**_	1	1	0	0	0	5	3
Suriname	0	1	0	0	0	0	0	_**1**_	0	1	0	0	_**0**_	0	1	0	1	0	5	3
Argentina	_**1**_	_**1**_	_**1**_	_**0**_	_**1**_	0	_**1**_	_**0**_	0	0	1	_**1**_	1	_**1**_	1	0	0	0	6	4
Brazil	_**1**_	_**1**_	_**1**_	_**0**_	_**1**_	1	_**1**_	_**0**_	1	1	0	_**1**_	0	_**1**_	0	1	1	1	6	4
Uruguay	_**1**_	_**1**_	_**1**_	_**0**_	_**1**_	1	_**1**_	_**0**_	0	0	1	_**1**_	0	_**1**_	1	0	1	1	6	4
Antigua and Barbuda	1	1	0	0	1	0	1	1	…	0	1	1	0	1	1	1	0	0	MIssing	Missing
Dominica	0	0	0	…	1	1	1	1	…	0	1	0	0	1	0	0	0	0	Missing	Missing
Grenada	1	0	0	1	1	1	1	0	…	0	0	1	1	1	1	0	0	0	Missing	Missing
Mexico	1	1	1	0	1	1	…	…	1	0	1	1	1	0	0	0	0	0	Missing	Missing
Peru	1	1	1	0	0	1	0	1	0	0	0	1	0	…	1	0	0	0	Missing	Missing
St. Kitts and Nevis	1	1	0	…	1	1	1	0	…	0	1	1	1	1	1	0	0	0	Missing	Missing

Appendix E.5.

Social Policy Variables (Human Development Indicators) Threshold Conversion for the Year 2008 – Latin America & The Caribbean

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
Antigua and Barbuda	98.10	93.30	31731179.33	51.85	676.57	3.50	479.79	70.92	Missing	8.70	75.08	237.30	22.40	97.32	85.54	1.19	0.00	0.00
Argentina	97.34	97.93	14985797500.00	57.59	567.33	4.64	281.70	49.65	34.80	13.70	75.27	348.16	31.37	99.37	94.89	1.03	26.34	7.61
Bolivia	74.69	84.67	1026373545.00	70.17	78.70	3.70	48.05	61.06	49.56	39.60	65.27	66.02	29.22	86.73	45.89	1.66	41.38	20.51
Brazil	92.73	98.53	83301492000.00	47.68	704.91	9.74	307.98	43.69	51.45	18.50	73.13	328.16	30.84	95.79	80.35	1.02	84.27	47.26
Colombia	87.24	96.81	8298822000.00	49.11	327.64	4.07	224.40	68.49	40.94	16.90	72.95	143.50	23.49	93.73	80.62	1.18	84.01	28.96
Costa Rica	91.20	99.26	1500935908.00	48.50	518.63	2.19	356.08	68.66	43.51	9.00	78.48	273.43	29.55	97.65	95.94	1.36	92.85	43.13
Dominica	85.97	90.90	21992705.56	Missing	299.67	7.70	193.75	64.65	Missing	16.50	Missing	153.59	33.39	95.68	74.11	0.17	15.94	7.46
Dominican Republic	86.20	97.58	846294745.70	61.38	233.68	4.54	104.89	44.89	45.23	29.00	72.29	206.80	43.60	93.09	81.33	1.38	11.61	17.94
Ecuador	92.57	97.21	2015140840.00	59.64	259.85	4.74	97.70	37.60	42.90	17.20	74.68	295.53	54.50	88.21	79.19	1.69	61.14	15.09
El Salvador	74.16	91.00	717528790.00	65.98	217.94	6.08	121.64	55.81	42.00	18.20	71.29	160.36	35.82	87.29	86.50	0.44	62.52	36.93
Grenada	95.56	90.00	29372481.95	55.45	455.81	6.41	197.69	43.37	Missing	12.30	72.14	349.25	52.31	95.17	85.09	0.33	0.00	10.66
Guatemala	42.80	81.77	1098349655.00	81.34	182.30	5.74	57.84	31.73	55.05	31.10	70.76	240.63	56.61	89.93	63.65	2.21	55.41	60.78

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
Haiti	3.75	35.11	95797849.76	69.87	50.56	6.85	4.68	9.26	21.56	62.40	60.45	35.42	30.31	61.14	24.86	1.54	37.24	75.77
Honduras	42.90	76.40	716797090.40	72.35	143.12	7.66	52.09	36.39	48.36	21.80	72.09	173.56	54.50	87.76	71.86	2.11	37.99	51.16
Jamaica	83.97	92.00	798420113.50	57.74	269.91	7.14	144.60	53.58	32.85	16.60	74.33	146.56	32.42	92.01	84.71	0.53	6.14	10.76
Mexico	83.15	98.91	52952840000.00	57.45	556.53	4.81	255.52	45.91	45.57	15.80	75.80	402.98	48.60	94.28	83.49	1.62	17.54	9.77
Nicaragua	1.96	50.30	308872604.30	87.65	100.27	4.62	47.94	47.81	27.44	86.80	73.03	193.18	72.54	57.89	34.16	2.65	27.10	86.35
Paraguay	62.34	84.68	625024834.40	56.77	168.04	3.71	65.85	39.19	62.17	17.50	71.89	176.98	44.12	85.81	70.63	1.23	60.13	25.72
Peru	100.00	100.00	2884696500.00	40.51	188.61	5.49	91.29	48.40	27.89	5.80	73.26	285.18	24.43	97.91	92.89	0.01	4.27	8.01
St. Kitts and Nevis	100.00	96.70	23329017.30	Missing	809.17	9.13	304.05	37.58	Missing	12.40	Missing	687.85	56.27	98.88	90.91	1.10	0.00	0.01
Suriname	85.67	91.89	122405678.30	55.45	394.61	5.54	165.27	41.88	20.51	23.30	69.75	93.70	12.58	92.77	79.87	1.06	77.95	28.46
Uruguay	97.37	98.78	998052642.10	58.27	719.76	7.65	450.47	62.59	42.73	10.20	76.28	142.77	12.22	97.96	94.81	0.33	60.91	43.28
Mean	76.35	88.35	7881821258.21	60.24	360.16	5.71	184.24	48.32	40.81	22.88	72.41	233.68	37.78	90.29	76.42	1.17	39.31	28.89
median	86.09	92.65	822357429.60	57.67	284.79	5.52	154.94	46.86	42.81	17.05	72.99	199.99	32.91	93.41	80.98	1.19	37.62	23.11
STDV	28.74	16.24	20343086478.98	11.54	230.29	1.91	134.34	14.49	11.36	18.84	3.94	139.80	15.60	10.82	19.02	0.68	30.58	24.16
								Threshold conversion										
Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
Antigua and Barbuda	1	1	0	0	1	0	1	1	Missing	0	1	1	0	1	1	1	0	0

Argentina	1	1	1	0	1	0	1	1	0	0	1	1	0	1	1	0	0	0
Bolivia	0	0	1	1	0	0	0	1	1	1	0	0	0	0	0	1	1	0
Brazil	1	1	1	0	1	1	1	0	1	1	1	1	0	1	0	0	1	1
Colombia	1	1	1	0	1	0	1	1	0	0	0	0	0	1	0	0	1	1
Costa Rica	1	1	1	0	1	0	1	1	1	0	1	1	0	1	1	1	1	1
Dominica	0	0	0	Missing	1	1	1	1	Missing	0	Missing	0	1	1	0	0	0	0
Dominican Republic	1	1	1	1	0	0	0	0	1	1	0	1	1	0	1	1	0	0
Ecuador	1	1	1	1	0	0	0	0	1	1	1	1	1	0	0	1	1	0
El Salvador	0	0	0	1	0	1	0	1	0	1	0	0	1	0	1	0	1	1
Grenada	1	0	0	0	1	1	1	0	Missing	0	0	1	1	1	1	0	0	0
Guatemala	0	0	1	1	0	1	0	0	1	1	0	1	1	0	0	1	1	1
Haiti	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	1	0	1
Honduras	0	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1	1	1
Jamaica	0	0	0	1	0	1	0	1	0	0	1	0	0	0	1	0	0	0
Mexico	0	1	1	0	1	0	1	0	1	0	1	1	1	1	1	1	0	0
Nicaragua	0	0	0	1	0	0	0	1	0	1	1	0	1	0	0	1	0	1
Paraguay	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1	1	1

Peru	1	1	1	0	0	0	0	1	0	0	1	1	0	1	1	0	0	0
St. Kitts and Nevis	1	1	0	Missing	1	1	1	0	Missing	0	Missing	1	1	1	1	0	0	0
Suriname	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	1	1
Uruguay	1	1	1	1	1	1	1	1	0	0	1	0	0	1	1	0	1	1

Appendix F.5.

Social Policy Variables (Human Development Indicators) Truth Table and Cluster Pairings for the Year 2008 (Prime Implicants in Bold and Underlined) - Latin America & The Caribbean

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC	Cluster	Revised Cluster
Bolivia	0	0	1	1	**_0_**	0	**_0_**	1	**_1_**	**_1_**	0	0	0	**_0_**	0	**_1_**	1	0	2	1
Dominican Republic	1	1	1	1	**_0_**	0	**_0_**	0	**_1_**	**_1_**	0	1	1	**_0_**	1	**_1_**	0	0	2	1
Ecuador	1	1	1	1	**_0_**	0	**_0_**	0	**_1_**	**_1_**	1	1	1	**_0_**	0	**_1_**	1	0	2	1
Guatemala	0	0	1	1	**_0_**	1	**_0_**	0	**_1_**	**_1_**	0	1	1	**_0_**	0	**_1_**	1	1	1	1
Honduras	0	0	0	1	**_0_**	1	**_0_**	0	**_1_**	**_1_**	0	0	1	**_0_**	0	**_1_**	1	1	1	1
Paraguay	0	0	0	0	**_0_**	0	**_0_**	0	**_1_**	**_1_**	0	0	1	**_0_**	0	**_1_**	1	1	2	1
Argentina	1	**_1_**	**_1_**	**_0_**	**_1_**	0	**_1_**	1	0	0	**_1_**	**_1_**	0	**_1_**	1	0	0	0	3	2
Brazil	1	**_1_**	**_1_**	**_0_**	**_1_**	1	**_1_**	0	1	1	**_1_**	**_1_**	0	**_1_**	0	0	1	1	3	2
Mexico	0	**_1_**	**_1_**	**_0_**	**_1_**	0	**_1_**	0	1	0	**_1_**	**_1_**	1	**_1_**	1	1	0	0	3	2
Colombia	**_1_**	1	**_1_**	0	1	0	**_1_**	**_1_**	0	**_0_**	0	0	**_0_**	**_1_**	0	0	**_1_**	**_1_**	4	3
Costa Rica	**_1_**	**_1_**	**_1_**	0	1	0	**_1_**	**_1_**	1	**_0_**	1	1	**_0_**	**_1_**	1	1	**_1_**	**_1_**	4	3

Uruguay	**_1_**	**_1_**	**_1_**	1	1	1	**_1_**	**_1_**	0	**_0_**	1	0	**_0_**	**_1_**	1	0	**_1_**	**_1_**	4	3
El Salvador	0	0	0	1	0	1	0	1	**_0_**	1	0	0	1	0	1	**_0_**	1	1	6	4
Jamaica	0	0	0	1	0	1	0	1	**_0_**	0	1	0	0	0	1	**_0_**	0	0	5	4
Peru	1	1	1	0	0	0	0	1	**_0_**	0	1	1	0	1	1	**_0_**	0	0	5	4
Suriname	0	0	0	0	1	1	1	0	**_0_**	1	0	0	0	0	0	**_0_**	1	1	6	4
Nicaragua	**_0_**	**_0_**	**_0_**	**_1_**	**_0_**	0	**_0_**	1	**_0_**	**_1_**	1	**_0_**	1	**_0_**	**_0_**	**_1_**	**_0_**	**_1_**	7	5
Haiti	**_0_**	**_0_**	**_0_**	**_1_**	**_0_**	1	**_0_**	0	**_0_**	**_1_**	0	**_0_**	0	**_0_**	**_0_**	**_1_**	**_0_**	**_1_**	7	5
Antigua and Barbuda	1	1	0	0	1	0	1	1	…	0	1	1	0	1	1	1	0	0	Missing	Missing
Dominica	0	0	0	…	1	1	1	1	…	0	…	0	1	1	0	0	0	0	Missing	Missing
Grenada	1	0	0	0	1	1	1	0	…	0	0	1	1	1	1	0	0	0	Missing	Missing
St. Kitts and Nevis	1	1	0	…	1	1	1	0	…	0	…	1	1	1	1	0	0	0	Missing	Missing

Appendix E.6.

Social Policy Variables (Human Development Indicators) Threshold Conversion for the Year 2015 – Latin America & The Caribbean

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
Antigua and Barbuda	98.67	96.83	30006135.83	45.23	657.17	2.95	437.37	66.55	Missing	5.90	76.21	268.02	24.25	96.74	87.50	1.05	0.00	0.00
Argentina	98.29	100.00	29005465304.00	56.55	997.93	4.84	712.69	71.42	30.66	10.20	76.42	245.00	17.63	99.63	94.84	1.01	28.14	10.04
Bolivia	62.55	91.52	1937884512.00	63.69	197.26	3.99	134.17	68.01	41.89	30.00	68.76	115.57	25.92	92.88	52.61	1.53	31.40	17.54
Brazil	95.38	99.71	100389000000.00	43.82	780.40	9.38	333.65	42.75	43.90	14.00	75.28	393.66	28.29	97.50	86.15	0.85	73.97	43.79
Colombia	91.29	98.19	9790364957.00	45.62	374.24	4.58	249.90	66.78	44.70	13.50	74.20	156.02	18.29	96.52	84.44	0.91	68.24	23.56
Costa Rica	93.20	99.41	3707507938.00	45.37	929.11	3.43	705.85	75.97	35.39	8.20	79.63	276.41	21.49	99.70	97.15	1.05	99.00	38.73
Dominica	90.06	99.90	25883286.76	Missing	383.65	7.40	260.71	67.96	Missing	28.80	Missing	166.41	28.41	96.50	77.89	0.53	16.18	7.83
Dominican Republic	89.93	98.56	1639416452.00	57.76	396.69	5.43	160.04	40.34	43.71	26.20	73.67	381.37	43.68	94.48	82.70	1.17	11.63	16.48
Ecuador	95.24	98.83	3834079799.00	55.58	530.11	6.22	263.28	49.67	40.15	13.00	76.10	428.48	43.71	92.61	86.14	1.51	52.80	13.82
El Salvador	84.71	95.40	866088925.40	56.84	283.16	8.54	181.80	64.20	41.76	13.40	73.27	161.17	27.86	93.01	91.13	0.50	57.82	24.40
Grenada	96.50	91.87	36121781.94	50.69	460.28	5.91	178.35	38.75	Missing	14.80	73.53	386.43	57.04	95.63	78.30	0.43	0.00	10.92
Guatemala	45.06	90.51	1813517963.00	68.75	224.38	5.00	71.88	32.03	49.64	24.70	73.15	247.55	55.77	93.60	67.36	2.04	60.39	63.65
Haiti	4.27	38.22	128038319.90	62.26	53.57	6.88	5.72	10.68	22.69	56.10	63.06	43.58	36.27	64.17	30.54	1.30	8.00	76.07
Honduras	51.87	89.98	1231465083.00	59.76	176.61	6.87	68.52	38.80	53.04	16.70	73.38	173.59	49.13	92.18	79.78	1.71	42.28	51.54
Jamaica	89.89	97.28	756786079.00	48.71	294.26	7.24	172.40	58.59	29.89	13.90	75.84	121.22	23.70	92.92	85.37	0.34	10.26	16.77
Mexico	85.15	99.00	58629382340.00	51.41	534.81	5.80	279.00	52.17	41.51	12.70	76.93	417.29	41.37	98.31	89.22	1.33	15.39	9.22

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
Nicaragua	4.39	52.50	522138299.60	88.15	162.93	5.35	92.10	56.53	21.65	68.70	75.15	155.47	72.24	67.34	32.60	2.64	18.20	86.64
Paraguay	73.87	93.85	1258220081.00	53.19	321.34	3.56	172.03	53.53	56.33	12.60	73.02	207.45	30.92	89.87	76.82	1.29	52.73	25.50
Peru	100.00	100.00	5858755959.00	43.88	322.96	7.82	199.26	61.70	26.29	4.20	74.75	396.16	23.25	97.89	98.13	-0.07	13.80	11.91
St. Kitts and Nevis	100.00	99.93	28235985.29	Missing	907.00	18.32	340.58	37.55	Missing	11.70	Missing	817.20	56.64	Missing	Missing	1.02	4.57	1.64
Suriname	89.26	87.74	165404019.40	50.65	577.50	5.62	291.55	50.49	22.46	18.70	71.28	103.19	10.15	94.68	79.22	0.96	60.05	24.91
Uruguay	97.91	99.71	2227308467.00	55.88	1281.29	7.30	894.56	69.82	40.37	7.60	77.34	282.99	16.19	99.25	95.67	0.35	88.56	58.02
Mean	78.98	91.77	10176412349.46	55.19	493.03	6.47	282.06	53.38	38.11	19.35	74.05	270.19	34.19	92.64	78.74	1.07	36.97	28.77
median	90.00	97.73	1448818266.50	54.38	390.17	5.85	224.58	55.03	40.94	13.70	74.47	246.27	28.35	94.68	84.44	1.03	29.77	20.55
STDV	28.50	15.65	24158626680.77	10.44	316.07	3.13	225.00	15.99	10.48	15.68	3.49	167.86	16.19	9.35	18.80	0.61	29.90	24.45

Threshold conversion

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
Antigua and Barbuda	1	0	0	0	1	0	1	1	Missing	0	1	1	0	1	1	1	0	0
Argentina	1	1	1	1	1	0	1	1	0	0	1	0	0	1	1	0	0	0
Bolivia	0	0	1	1	0	0	0	1	1	1	0	0	0	0	0	1	1	0
Brazil	1	1	1	0	1	1	1	0	1	1	1	1	0	1	1	0	1	1
Colombia	1	1	1	0	0	0	1	1	1	0	0	0	0	1	0	0	1	1
Costa Rica	1	1	1	0	1	0	1	1	0	0	1	1	0	1	1	1	1	1
Dominica	1	1	0	Missing	0	1	1	1	Missing	1	Missing	0	1	1	0	0	0	0
Dominican Republic	0	1	1	1	1	0	0	0	1	1	0	1	1	0	0	1	0	0
Ecuador	1	1	1	1	1	1	1	0	0	0	1	1	1	0	1	1	1	0

El Salvador	0	0	0	1	0	1	0	1	1	0	0	0	0	0	1	0	1	1
Grenada	1	0	0	0	1	1	0	0	Missing	1	0	1	1	1	0	0	0	0
Guatemala	0	0	1	1	0	0	0	0	1	1	0	1	1	0	0	1	1	1
Haiti	0	0	0	1	0	1	0	0	0	1	0	0	1	0	0	1	0	1
Honduras	0	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1	1	1
Jamaica	0	0	0	0	0	1	0	1	0	1	1	0	0	0	1	0	0	0
Mexico	0	1	1	0	1	0	1	0	1	0	1	1	1	1	1	1	0	0
Nicaragua	0	0	0	1	0	0	0	1	0	1	1	0	1	0	0	1	0	1
Paraguay	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1	1
Peru	1	1	1	0	0	1	0	1	0	0	1	1	0	1	1	0	0	0
St. Kitts and Nevis	1	1	0	Missing	1	1	1	0	Missing	0	Missing	1	1	Missing	Missing	0	0	0
Suriname	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	1
Uruguay	1	1	1	1	1	1	1	1	0	0	1	1	0	1	1	0	1	1

Social Policy Variables (Human Development Indicators) Truth Table and Cluster Pairings for the Year 2015 (Prime Implicants in Bold and Underlined) - Latin America & The Caribbean

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC	Cluster	Revised Cluster
Bolivia	0	0	1	1	0	0	0	1	1	1	_0_	0	0	0	_0_	1	_1_	0	2	1
Colombia	1	1	1	0	0	0	1	1	1	0	_0_	0	0	1	_0_	0	_1_	1	2	1
Guatemala	0	0	1	1	0	0	0	0	1	1	_0_	1	1	0	_0_	1	_1_	1	1	1
Honduras	0	0	0	1	0	1	0	0	1	1	_0_	0	1	0	_0_	1	_1_	1	1	1
Paraguay	0	0	0	0	0	0	0	0	1	0	_0_	0	1	0	_0_	1	_1_	1	2	1
Suriname	0	0	0	0	1	0	1	0	0	1	_0_	0	0	0	_0_	0	_1_	1	2	1
Brazil	1	1	1	0	1	1	1	0	1	1	1	1	0	1	1	0	1	1	5	2
Dominican Republic	0	_1_	_1_	1	_1_	0	0	_0_	1	1	0	_1_	_1_	0	0	_1_	0	_0_	3	3
Ecuador	1	_1_	_1_	1	_1_	1	1	_0_	0	0	1	_1_	_1_	0	1	_1_	1	_0_	3	3
Mexico	0	_1_	_1_	0	_1_	0	1	_0_	1	0	1	_1_	_1_	1	1	_1_	0	_0_	3	3
El Salvador	0	0	0	1	_0_	_1_	_0_	_1_	1	0	0	0	_0_	0	_1_	_0_	1	1	4	4

Jamaica	0	0	0	0	_0_	_1_	_0_	_1_	0	1	1	0	_0_	0	_1_	_0_	0	0	4	4
Peru	1	1	1	0	_0_	_1_	_0_	_1_	0	0	1	1	_0_	1	_1_	_0_	0	0	4	4
Argentina	_1_	_1_	_1_	1	_1_	0	_1_	_1_	_0_	_0_	_1_	0	_0_	_1_	_1_	0	0	0	6	5
Costa Rica	_1_	_1_	_1_	0	_1_	0	_1_	_1_	_0_	_0_	_1_	1	_0_	_1_	_1_	1	1	1	6	5
Uruguay	_1_	_1_	_1_	1	_1_	1	_1_	_1_	_0_	_0_	_1_	1	_0_	_1_	_1_	0	1	1	6	5
Haiti	_0_	_0_	_0_	_1_	_0_	1	_0_	0	_0_	_1_	0	_0_	_1_	_0_	_0_	_1_	_0_	_1_	7	6
Nicaragua	_0_	_0_	_0_	_1_	_0_	0	_0_	1	_0_	_1_	1	_0_	_1_	_0_	_0_	_1_	_0_	_1_	7	6
Antigua and Barbuda	1	0	0	0	1	0	1	1	…	0	1	1	0	1	1	1	0	0	Missing	Missing
Dominica	1	1	0	…	0	1	1	1	…	1	…	0	1	1	0	0	0	0	Missing	Missing
Grenada	1	0	0	0	1	1	0	0	1	1	0	1	1	1	0	0	0	0	Missing	Missing
St. Kitts and Nevis	1	1	0	…	1	1	1	0	…	0	…	1	1	…	…	0	0	0	Missing	Missing

Appendix G.1.

Overall Social Policy Variables (Human Development Indicators) Longitudinal Truth Table Threshold (2000 To 2015) – Latin America & The Caribbean

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
2000																		
Antigua and Barbuda	1	1	0	0	1	0	1	1	…	0	1	1	0	1	1	1	0	0
Argentina	1	1	1	0	1	0	1	0	0	0	1	1	1	1	1	0	0	0
Bolivia	0	0	1	1	0	0	0	1	1	1	0	0	0	0	0	1	0	1
Brazil	1	1	1	0	1	1	1	0	1	1	0	1	0	1	0	1	1	1
Colombia	0	1	1	0	0	1	1	1	0	0	1	0	0	0	0	1	1	1
Costa Rica	1	1	1	0	1	0	1	1	1	0	1	1	0	1	1	1	1	1
Dominica	0	0	0	…	1	1	1	1	…	0	1	0	0	1	0	0	0	0
Dominican Republic	1	0	1	1	0	0	0	0	1	1	1	1	1	1	1	1	0	0
Ecuador	1	1	0	1	0	0	0	0	1	1	1	0	1	0	0	1	1	0
El Salvador	0	0	0	1	1	0	0	0	0	1	0	1	1	0	1	0	1	1
Grenada	1	0	0	1	1	1	1	0	…	0	0	1	1	1	1	0	0	0
Guatemala	0	0	1	1	0	0	0	0	1	1	0	0	1	0	0	1	1	1
Haiti	0	0	0	1	0	1	0	0	0	1	0	0	1	0	0	1	1	1
Honduras	0	0	0	1	0	1	0	1	1	1	0	0	1	0	0	1	1	1
Jamaica	0	0	1	1	1	1	1	1	0	0	1	0	0	1	1	0	0	0

Mexico	1	1	1	0	1	1	…	…	1	0	1	1	1	0	0	0	0	0
Nicaragua	0	0	0	1	0	0	0	1	0	1	0	0	1	0	0	1	0	1
Paraguay	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	1
Peru	1	1	1	0	0	1	0	1	0	0	0	1	0	…	1	0	0	0
St. Kitts and Nevis	1	1	0	…	1	1	1	0	…	0	1	1	1	1	1	0	0	0
Suriname	0	1	0	0	0	0	0	1	0	1	0	0	0	0	1	0	1	0
Uruguay	1	1	1	0	1	1	1	0	0	0	1	1	0	1	1	0	1	1

2008

Antigua and Barbuda	1	1	0	0	1	0	1	1	…	0	1	1	0	1	1	1	0	0
Argentina	1	1	1	0	1	0	1	1	0	0	1	1	0	1	1	0	0	0
Bolivia	0	0	1	1	0	0	0	1	1	1	0	0	0	0	0	1	1	0
Brazil	1	1	1	0	1	1	1	0	1	1	1	1	0	1	0	0	1	1
Colombia	1	1	1	0	1	0	1	1	0	0	0	0	0	1	0	0	1	1
Costa Rica	1	1	1	0	1	0	1	1	1	0	1	1	0	1	1	1	1	1
Dominica	0	0	0	…	1	1	1	1	…	0	…	0	1	1	0	0	0	0
Dominican Republic	1	1	1	1	0	0	0	0	1	1	0	1	1	0	1	1	0	0
Ecuador	1	1	1	1	0	0	0	0	1	1	1	1	1	0	0	1	1	0
El Salvador	0	0	0	1	0	1	0	1	0	1	0	0	1	0	1	0	1	1
Grenada	1	0	0	0	1	1	1	0	…	0	0	1	1	1	1	0	0	0
Guatemala	0	0	1	1	0	1	0	0	1	1	0	1	1	0	0	1	1	1

Haiti	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	1	0	1
Honduras	0	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1	1	1
Jamaica	0	0	0	1	0	1	0	1	0	0	1	0	0	0	1	0	0	0
Mexico	0	1	1	0	1	0	1	0	1	0	1	1	1	1	1	1	0	0
Nicaragua	0	0	0	1	0	0	0	1	0	1	1	0	1	0	0	1	0	1
Paraguay	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	1	1	1
Peru	1	1	1	0	0	0	0	1	0	0	1	1	0	1	1	0	0	0
St. Kitts and Nevis	1	1	0	...	1	1	1	0	...	0	...	1	1	1	1	0	0	0
Suriname	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	1	1
Uruguay	1	1	1	1	1	1	1	1	0	0	1	0	0	1	1	0	1	1

2015

Antigua and Barbuda	1	0	0	0	1	0	1	1	...	0	1	1	0	1	1	1	0	0
Argentina	1	1	1	1	1	0	1	1	0	0	1	0	0	1	1	0	0	0
Bolivia	0	0	1	1	0	0	0	1	1	1	0	0	0	0	0	1	1	0
Brazil	1	1	1	0	1	1	1	0	1	1	1	1	0	1	1	0	1	1
Colombia	1	1	1	0	0	0	1	1	1	0	0	0	0	1	0	0	1	1
Costa Rica	1	1	1	0	1	0	1	1	0	0	1	1	0	1	1	1	1	1
Dominica	1	1	0	...	0	1	1	1	...	1	...	0	1	1	0	0	0	0
Dominican Republic	0	1	1	1	1	0	0	0	1	1	0	1	1	0	0	1	0	0
Ecuador	1	1	1	1	1	1	1	0	0	0	1	1	1	0	1	1	1	0

El Salvador	0	0	0	1	0	1	0	1	1	0	0	0	0	0	1	0	1	1
Grenada	1	0	0	0	1	1	0	0	…	1	0	1	1	1	0	0	0	0
Guatemala	0	0	1	1	0	0	0	0	1	1	0	1	1	0	0	1	1	1
Haiti	0	0	0	1	0	1	0	0	0	1	0	0	1	0	0	1	0	1
Honduras	0	0	0	1	0	1	0	0	1	1	0	0	1	0	0	1	1	1
Jamaica	0	0	0	0	0	1	0	1	0	1	1	0	0	0	1	0	0	0
Mexico	0	1	1	0	1	0	1	0	1	0	1	1	1	1	1	1	0	0
Nicaragua	0	0	0	1	0	0	0	1	0	1	1	0	1	0	0	1	0	1
Paraguay	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1	1
Peru	1	1	1	0	0	1	0	1	0	0	1	1	0	1	1	0	0	0
St. Kitts and Nevis	1	1	0	…	1	1	1	0	…	0	…	1	1	…	…	0	0	0
Suriname	0	0	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	1
Uruguay	1	1	1	1	1	1	1	1	0	0	1	1	0	1	1	0	1	1

OVERALL Threshold Stability

Antigua and Barbuda	**ABOVE**		BELOW	BELOW	**ABOVE**	BELOW	**ABOVE**	**ABOVE**		BELOW	**ABOVE**	**ABOVE**	BELOW	**ABOVE**	**ABOVE**	**ABOVE**	BELOW	BELOW
Argentina	**ABOVE**	**ABOVE**	**ABOVE**		**ABOVE**	BELOW	**ABOVE**		BELOW	BELOW	**ABOVE**			**ABOVE**	**ABOVE**	BELOW	BELOW	BELOW
Bolivia	BELOW	BELOW	**ABOVE**	**ABOVE**	BELOW	BELOW	BELOW	**ABOVE**	**ABOVE**	**ABOVE**	BELOW	BELOW	BELOW	BELOW	BELOW	**ABOVE**		
Brazil	**ABOVE**	**ABOVE**	**ABOVE**	BELOW	**ABOVE**	**ABOVE**	**ABOVE**	BELOW	**ABOVE**	**ABOVE**		**ABOVE**	BELOW	**ABOVE**			**ABOVE**	**ABOVE**
Colombia		**ABOVE**	**ABOVE**	BELOW			**ABOVE**	**ABOVE**		BELOW		BELOW	BELOW		BELOW		**ABOVE**	**ABOVE**
Costa Rica	**ABOVE**	**ABOVE**	**ABOVE**	BELOW	**ABOVE**	BELOW	**ABOVE**	**ABOVE**		BELOW	**ABOVE**	**ABOVE**	BELOW	**ABOVE**	**ABOVE**	**ABOVE**	**ABOVE**	**ABOVE**
Dominica			BELOW			**ABOVE**	**ABOVE**	**ABOVE**				BELOW		**ABOVE**	BELOW	BELOW	BELOW	BELOW

Country	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Dominican Republic			**ABOVE**	**ABOVE**		BELOW	BELOW	BELOW	**ABOVE**	**ABOVE**		**ABOVE**	**ABOVE**			**ABOVE**	BELOW	BELOW
Ecuador	**ABOVE**	**ABOVE**		**ABOVE**				BELOW			**ABOVE**		**ABOVE**	BELOW		**ABOVE**	**ABOVE**	BELOW
El Salvador	BELOW	BELOW	BELOW	**ABOVE**			BELOW				BELOW			BELOW	**ABOVE**	BELOW	**ABOVE**	**ABOVE**
Grenada	**ABOVE**	BELOW	BELOW		**ABOVE**	**ABOVE**		BELOW			BELOW	**ABOVE**	**ABOVE**	**ABOVE**		BELOW	BELOW	BELOW
Guatemala	BELOW	BELOW	**ABOVE**	**ABOVE**	BELOW		BELOW	BELOW	**ABOVE**	**ABOVE**	BELOW		**ABOVE**	BELOW	BELOW	**ABOVE**	**ABOVE**	**ABOVE**
Haiti	BELOW	BELOW	BELOW	**ABOVE**	BELOW	**ABOVE**	BELOW	BELOW	BELOW	**ABOVE**	BELOW	BELOW		BELOW	BELOW	**ABOVE**		**ABOVE**
Honduras	BELOW	BELOW	BELOW	**ABOVE**	BELOW	**ABOVE**	BELOW		**ABOVE**	**ABOVE**	BELOW	BELOW	**ABOVE**	BELOW	BELOW	**ABOVE**	**ABOVE**	**ABOVE**
Jamaica	BELOW	BELOW				**ABOVE**		**ABOVE**	BELOW		**ABOVE**	BELOW	BELOW		ABOVE	BELOW	BELOW	BELOW
Mexico		**ABOVE**	**ABOVE**	BELOW	**ABOVE**				**ABOVE**	BELOW	**ABOVE**	**ABOVE**	**ABOVE**				BELOW	BELOW
Nicaragua	BELOW	BELOW	BELOW	**ABOVE**	BELOW	BELOW	BELOW	**ABOVE**	BELOW	ABOVE		BELOW	**ABOVE**	BELOW	BELOW	**ABOVE**	BELOW	**ABOVE**
Paraguay	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	BELOW	**ABOVE**		BELOW	BELOW		BELOW	BELOW		**ABOVE**	**ABOVE**
Peru	**ABOVE**	**ABOVE**	**ABOVE**	BELOW	BELOW		BELOW	**ABOVE**	BELOW	BELOW		**ABOVE**	BELOW		**ABOVE**	BELOW	BELOW	BELOW
St. Kitts and Nevis	**ABOVE**	**ABOVE**	BELOW		**ABOVE**	**ABOVE**	**ABOVE**	BELOW		BELOW		**ABOVE**	**ABOVE**			BELOW	BELOW	BELOW
Suriname	BELOW		BELOW	BELOW					BELOW	**ABOVE**	BELOW	BELOW	BELOW	BELOW		BELOW		**ABOVE**
Uruguay	**ABOVE**	**ABOVE**	**ABOVE**		**ABOVE**	**ABOVE**	**ABOVE**		BELOW	BELOW	**ABOVE**		BELOW	**ABOVE**	**ABOVE**	BELOW	**ABOVE**	**ABOVE**

Appendix G.2.

Overall Macro-Economic Policy Variables Longitudinal Truth Table Threshold (2000 To 2015) – Latin America & The Caribbean

Country	FPI	FDI	FDI%	GDPDI	GDPPCC	GDPPC%	GDP	GGNLB	GGR	GGE	IACP%	IACPI	NBTT	NM	ODA	ODAA	RP%
2000																	
Antigua and Barbuda	1	0	1	1	1	1	0	0	0	0	0	1	0	1	1	0	1
Argentina	0	1	0	0	1	0	1	0	0	1	0	0	0	1	0	0	0
Bolivia	0	1	1	1	0	0	0	0	1	1	0	1	1	1	1	1	0
Brazil	0	1	1	1	1	1	1	0	1	1	1	1	1	1	0	1	0
Colombia	1	1	0	0	1	1	1	0	1	1	1	0	0	0	0	1	0
Costa Rica	0	1	1	0	1	1	1	0	0	0	1	0	0	1	0	0	1
Dominica	1	0	1	1	0	0	0	0	1	1	0	1	1	…	1	0	0
Dominican Republic	0	1	1	0	1	1	1	1	0	0	1	0	1	0	0	0	0
Ecuador	0	0	0	0	0	0	1	1	1	0	1	0	0	0	0	1	1

El Salvador	1	0	0	1	0	0	1	0	0	0	0	1	1	0	1	1	1
Grenada	1	0	1	1	1	1	0	1	1	1	0	1	0	1	1	0	1
Guatemala	0	0	0	1	0	0	1	1	0	0	0	0	0	0	1	1	1
Haiti	1	0	0	1	0	0	0	1	0	0	1	0	0	0	1	1	1
Honduras	0	1	1	1	0	1	0	1	1	0	1	1	0	1	1	1	1
Jamaica	1	1	1	0	0	0	0	1	1	1	0	1	1	1	0	0	1
Mexico	1	1	0	0	1	1	1	1	0	0	1	0	1	0	0	0	0
Nicaragua	0	1	1	0	0	1	0	1	1	1	1	1	0	0	1	1	1
Paraguay	0	0	0	1	0	0	0	1	0	0	1	0	1	1	0	1	0
Peru	1	1	0	0	0	1	1	1	0	0	0	1	1	0	0	1	0
St. Kitts and Nevis	1	0	1	1	1	1	0	0	1	1	0	1	1	…	1	0	1
Suriname	1	0	0	0	1	0	0	0	0	1	1	0	0	1	1	0	0
Uruguay	0	0	0	0	1	0	1	0	1	1	0	0	1	0	0	0	0
2008																	
Antigua and Barbuda	0	0	1	0	1	0	0	0	0	1	0	1	0	1	1	0	1

Argentina	1	1	0	1	1	1	1	1	1	1	1	0	1	1	0	0	0
Bolivia	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	0
Brazil	1	1	0	1	1	1	1	0	1	1	0	1	1	1	0	1	0
Colombia	1	1	0	0	1	0	1	1	1	1	0	1	1	0	0	1	0
Costa Rica	0	1	1	0	1	1	1	1	0	0	1	0	0	1	0	0	0
Dominica	0	0	1	0	0	1	0	1	1	1	0	0	1	…	1	0	0
Dominican Republic	0	1	1	0	1	0	1	0	0	0	1	0	0	0	0	1	0
Ecuador	1	1	0	0	0	1	1	1	1	1	0	0	1	1	0	1	1
El Salvador	1	0	0	1	0	0	0	0	0	0	0	1	0	0	1	1	1
Grenada	0	0	1	0	1	0	0	0	0	1	0	1	0	1	1	0	1
Guatemala	1	0	0	1	0	0	1	0	0	0	1	0	1	0	1	1	1
Haiti	1	0	0	1	0	0	0	0	0	0	1	1	0	0	1	1	1
Honduras	1	1	1	1	0	0	0	1	1	0	1	1	0	1	1	1	1
Jamaica	0	1	1	1	0	0	0	0	1	1	1	1	1	0	0	0	1
Mexico	0	1	0	0	1	0	1	0	1	0	0	0	1	0	0	0	0

Nicaragua	0	0	1	1	0	0	0	1	0	0	1	1	0	0	1	1	1
Paraguay	1	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0
Peru	0	1	1	0	0	1	1	1	0	0	0	0	1	0	0	1	1
St. Kitts and Nevis	0	0	1	1	1	1	0	0	1	1	0	1	0	…	1	0	1
Suriname	1	0	0	0	1	1	0	1	0	0	1	0	1	1	1	0	0
Uruguay	0	1	1	0	1	1	1	0	1	1	0	0	0	1	0	0	0

2015

Antigua and Barbuda	1	0	1	1	1	1	0	0	1	1	0	1	1	1	1	0	1
Argentina	1	0	0	0	1	0	0	0	0	1	1	0	0	1	1	0	0
Bolivia	0	0	0	0	1	0	1	0	1	1	0	0	1	0	0	0	0
Brazil	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Colombia	0	0	1	0	1	0	0	0	0	1	0	1	0	1	1	0	1
Costa Rica	1	1	0	1	1	1	1	1	1	1	1	0	1	1	0	0	0
Dominica	1	0	0	1	0	1	1	1	1	1	1	1	1	…	1	1	0

Dominican Republic	1	1	0	1	1	1	1	0	1	1	0	1	1	1	0	1	0
Ecuador	1	1	0	0	1	0	1	1	1	1	0	1	1	0	0	1	0
El Salvador	0	1	1	0	1	1	1	1	0	0	1	0	0	1	0	0	0
Grenada	0	0	1	0	0	1	0	1	1	1	0	0	1	1	1	0	0
Guatemala	0	1	1	0	1	0	1	0	0	0	1	0	0	0	0	1	0
Haiti	1	1	0	0	0	1	1	1	1	1	0	0	1	1	0	1	1
Honduras	1	0	0	1	0	0	0	0	0	0	0	1	0	0	1	1	1
Jamaica	0	0	1	0	1	0	0	0	0	1	0	1	0	1	1	0	1
Mexico	1	0	0	1	0	0	1	0	0	0	1	0	1	0	1	1	1
Nicaragua	1	0	0	1	0	0	0	0	0	0	1	1	0	0	1	1	1
Paraguay	1	1	1	1	0	0	0	1	1	0	1	1	0	1	1	1	1
Peru	0	1	1	1	0	0	0	0	1	1	1	1	1	0	0	0	1
St. Kitts and Nevis	0	1	0	0	1	0	1	0	1	0	0	0	1	…	…	…	0
Suriname	0	0	1	1	0	0	0	1	0	0	1	1	0	0	1	1	1
Uruguay	1	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0

OVERALL Threshold Stability

Antigua and Barbuda	BELOW	**ABOVE**		**ABOVE**		BELOW	BELOW		BELOW	**ABOVE**		**ABOVE**	**ABOVE**	BELOW	**ABOVE**
Argentina		BELOW		**ABOVE**				**ABOVE**		BELOW		**ABOVE**		BELOW	BELOW
Bolivia								**ABOVE**	**ABOVE**		**ABOVE**				BELOW
Brazil							BELOW							BELOW	BELOW
Colombia			BELOW	**ABOVE**				**ABOVE**							
Costa Rica	**ABOVE**			**ABOVE**	**ABOVE**	**ABOVE**				**ABOVE**	BELOW		**ABOVE**	BELOW	BELOW
Dominica	BELOW			BELOW				**ABOVE**	**ABOVE**		**ABOVE**		**ABOVE**		BELOW
Dominican Republic	**ABOVE**			**ABOVE**		**ABOVE**								BELOW	BELOW
Ecuador		BELOW	BELOW			**ABOVE**	**ABOVE**	**ABOVE**						BELOW	**ABOVE**
El Salvador							BELOW	BELOW							
Grenada	BELOW	**ABOVE**				BELOW		**ABOVE**	BELOW			**ABOVE**	**ABOVE**	BELOW	
Guatemala					BELOW	**ABOVE**		BELOW	BELOW		BELOW		BELOW		**ABOVE**
Haiti	**ABOVE**		BELOW	BELOW										**ABOVE**	**ABOVE**
Honduras			**ABOVE**	BELOW		BELOW			BELOW	**ABOVE**	BELOW		**ABOVE**	**ABOVE**	**ABOVE**

Country	ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
Jamaica	**ABOVE**				BELOW	BELOW				**ABOVE**		**ABOVE**					BELOW	**ABOVE**
Mexico	BELOW						**ABOVE**			BELOW		BELOW	**ABOVE**	BELOW				
Nicaragua			BELOW				BELOW				**ABOVE**	**ABOVE**	BELOW	BELOW	**ABOVE**	**ABOVE**	**ABOVE**	
Paraguay		**ABOVE**	BELOW				BELOW	**ABOVE**		BELOW	**ABOVE**							
Peru	**ABOVE**				BELOW								**ABOVE**	BELOW	BELOW			
St. Kitts and Nevis			**ABOVE**					BELOW	**ABOVE**		BELOW							
Suriname	BELOW						BELOW		BELOW		**ABOVE**					**ABOVE**		
Uruguay												BELOW				BELOW	BELOW	BELOW

Appendix H.1.

Pearson Correlations 2000 (Social Policy Variables /Human Development Indicators) – Latin America & The Caribbean

		ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
ATCCT	Pearson Correlation	1	.920**	0.218	-.772**	.624**	0.149	.594**	0.246	-0.116	-.816**	.564**	.576**	-0.319	.898**	.829**	-.499*	-0.194	-.835**
	Sig. (2-tailed)		0.000	0.330	0.000	0.002	0.509	0.005	0.283	0.646	0.000	0.006	0.005	0.147	0.000	0.000	0.018	0.386	0.000
	N	22	22	22	20	22	22	21	21	18	22	22	22	22	21	22	22	22	22
ATE	Pearson Correlation	.920**	1	0.302	-.758**	.548**	0.048	.516*	0.286	-0.023	-.845**	.653**	.531*	-0.345	.886**	.892**	-0.413	0.007	-.738**
	Sig. (2-tailed)	0.000		0.171	0.000	0.008	0.834	0.017	0.209	0.928	0.000	0.001	0.011	0.116	0.000	0.000	0.056	0.977	0.000

	N	22	22	22	20	22	22	21	21	18	22	22	22	22	21	22	22	22	22
ASEE	Pearson Correlation	0.218	0.302	1	-0.295	0.301	0.085	0.098	-0.136	0.232	-0.110	0.183	.453*	0.043	0.212	0.135	0.018	0.040	-0.142
	Sig. (2-tailed)	0.330	0.171		0.206	0.174	0.707	0.674	0.556	0.354	0.627	0.415	0.034	0.851	0.357	0.548	0.936	0.859	0.528
	N	22	22	22	20	22	22	21	21	18	22	22	22	22	21	22	22	22	22
ADR	Pearson Correlation	-.772**	-.758**	-0.295	1	-.456*	0.030	-.517*	-0.363	0.370	.654**	-.477*	-0.366	.586**	-.655**	-.629**	.547*	-0.054	.677**
	Sig. (2-tailed)	0.000	0.000	0.206		0.043	0.901	0.024	0.126	0.130	0.002	0.033	0.112	0.007	0.002	0.003	0.013	0.822	0.001
	N	20	20	20	20	20	20	19	19	18	20	20	20	20	19	20	20	20	20
CHE	Pearson Correlation	.624**	.548**	0.301	-.456*	1	0.308	.893**	0.100	-0.014	-.504*	.542**	.651**	-0.255	.662**	.642**	-0.279	-0.063	-0.356
	Sig. (2-tailed)	0.002	0.008	0.174	0.043		0.163	0.000	0.668	0.955	0.017	0.009	0.001	0.252	0.001	0.001	0.209	0.781	0.104
	N	22	22	22	20	22	22	21	21	18	22	22	22	22	21	22	22	22	22
CHE%	Pearson Correlation	0.149	0.048	0.085	0.030	0.308	1	0.239	-0.028	-0.132	-0.133	-0.021	0.234	-0.137	0.197	0.010	-0.328	-0.153	0.020
	Sig. (2-tailed)	0.509	0.834	0.707	0.901	0.163		0.297	0.903	0.600	0.554	0.925	0.294	0.544	0.391	0.965	0.136	0.498	0.930
	N	22	22	22	20	22	22	21	21	18	22	22	22	22	21	22	22	22	22
DHE	Pearson Correlation	.594**	.516*	0.098	-.517*	.893**	0.239	1	.458*	-0.083	-.525*	.592**	0.376	-.497*	.630**	.570**	-0.242	0.006	-0.373
	Sig. (2-tailed)	0.005	0.017	0.674	0.024	0.000	0.297		0.037	0.752	0.015	0.005	0.093	0.022	0.003	0.007	0.291	0.980	0.096
	N	21	21	21	19	21	21	21	21	17	21	21	21	21	20	21	21	21	21
DHE%	Pearson Correlation	0.246	0.286	-0.136	-0.363	0.100	-0.028	.458*	1	-0.113	-0.267	0.399	-0.294	-.644**	0.239	0.187	-0.108	0.110	-0.282
	Sig. (2-tailed)	0.283	0.209	0.556	0.126	0.668	0.903	0.037		0.667	0.241	0.073	0.195	0.002	0.311	0.417	0.641	0.634	0.215

	N	21	21	21	19	21	21	21	21	17	21	21	21	21	20	21	21	21	21
EPR	Pearson Correlation	-0.116	-0.023	0.232	0.370	-0.014	-0.132	-0.083	-0.113	1	-0.035	0.129	0.161	0.405	0.166	-0.085	.515*	0.172	0.148
	Sig. (2-tailed)	0.646	0.928	0.354	0.130	0.955	0.600	0.752	0.667		0.892	0.610	0.524	0.095	0.525	0.738	0.029	0.495	0.558
	N	18	18	18	18	18	18	17	17	18	18	18	18	18	17	18	18	18	18
IMR	Pearson Correlation	-.816**	-.845**	-0.110	.654**	-.504*	-0.133	-.525*	-0.267	-0.035	1	-.617**	-.433*	0.402	-.929**	-.834**	.519*	0.088	.777**
	Sig. (2-tailed)	0.000	0.000	0.627	0.002	0.017	0.554	0.015	0.241	0.892		0.002	0.044	0.064	0.000	0.000	0.013	0.698	0.000
	N	22	22	22	20	22	22	21	21	18	22	22	22	22	21	22	22	22	22
LEB	Pearson Correlation	.564**	.653**	0.183	-.477*	.542**	-0.021	.592**	0.399	0.129	-.617**	1	0.350	-0.100	.600**	.730**	-0.230	-0.023	-.490*
	Sig. (2-tailed)	0.006	0.001	0.415	0.033	0.009	0.925	0.005	0.073	0.610	0.002		0.110	0.659	0.004	0.000	0.303	0.919	0.021
	N	22	22	22	20	22	22	21	21	18	22	22	22	22	21	22	22	22	22
OPE	Pearson Correlation	.576**	.531*	.453*	-0.366	.651**	0.234	0.376	-0.294	0.161	-.433*	0.350	1	0.295	.551**	.606**	-0.238	-0.337	-0.329
	Sig. (2-tailed)	0.005	0.011	0.034	0.112	0.001	0.294	0.093	0.195	0.524	0.044	0.110		0.183	0.010	0.003	0.286	0.125	0.135
	N	22	22	22	20	22	22	21	21	18	22	22	22	22	21	22	22	22	22
OPE%	Pearson Correlation	-0.319	-0.345	0.043	.586**	-0.255	-0.137	-.497*	-.644**	0.405	0.402	-0.100	0.295	1	-0.375	-0.206	0.300	-0.367	0.298
	Sig. (2-tailed)	0.147	0.116	0.851	0.007	0.252	0.544	0.022	0.002	0.095	0.064	0.659	0.183		0.094	0.358	0.175	0.093	0.178
	N	22	22	22	20	22	22	21	21	18	22	22	22	22	21	22	22	22	22
BDW	Pearson Correlation	.898**	.886**	0.212	-.655**	.662**	0.197	.630**	0.239	0.166	-.929**	.600**	.551**	-0.375	1	.840**	-.434*	-0.107	-.786**
	Sig. (2-tailed)	0.000	0.000	0.357	0.002	0.001	0.391	0.003	0.311	0.525	0.000	0.004	0.010	0.094		0.000	0.050	0.645	0.000

		ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
	N	21	21	21	19	21	21	20	20	17	21	21	21	21	21	21	21	21	21
BSS	Pearson Correlation	.829**	.892**	0.135	-.629**	.642**	0.010	.570**	0.187	-0.085	-.834**	.730**	.606**	-0.206	.840**	1	-.444*	-0.126	-.658**
	Sig. (2-tailed)	0.000	0.000	0.548	0.003	0.001	0.965	0.007	0.417	0.738	0.000	0.000	0.003	0.358	0.000		0.039	0.575	0.001
	N	22	22	22	20	22	22	21	21	18	22	22	22	22	21	22	22	22	22
PGA	Pearson Correlation	-.499*	-0.413	0.018	.547*	-0.279	-0.328	-0.242	-0.108	.515*	.519*	-0.230	-0.238	0.300	-.434*	-.444*	1	0.258	.502*
	Sig. (2-tailed)	0.018	0.056	0.936	0.013	0.209	0.136	0.291	0.641	0.029	0.013	0.303	0.286	0.175	0.050	0.039		0.247	0.017
	N	22	22	22	20	22	22	21	21	18	22	22	22	22	21	22	22	22	22
REO	Pearson Correlation	-0.194	0.007	0.040	-0.054	-0.063	-0.153	0.006	0.110	0.172	0.088	-0.023	-0.337	-0.367	-0.107	-0.126	0.258	1	0.414
	Sig. (2-tailed)	0.386	0.977	0.859	0.822	0.781	0.498	0.980	0.634	0.495	0.698	0.919	0.125	0.093	0.645	0.575	0.247		0.055
	N	22	22	22	20	22	22	21	21	18	22	22	22	22	21	22	22	22	22
REC	Pearson Correlation	-.835**	-.738**	-0.142	.677**	-0.356	0.020	-0.373	-0.282	0.148	.777**	-.490*	-0.329	0.298	-.786**	-.658**	.502*	0.414	1
	Sig. (2-tailed)	0.000	0.000	0.528	0.001	0.104	0.930	0.096	0.215	0.558	0.000	0.021	0.135	0.178	0.000	0.001	0.017	0.055	
	N	22	22	22	20	22	22	21	21	18	22	22	22	22	21	22	22	22	22

Appendix H.2.

Pearson Correlations 2008 (Social Policy Variables /Human Development Indicators) – Latin America & The Caribbean

ATCCT	Pearson Correlation	1	.940**	0.178	-.809**	.654**	0.012	.638**	.543**	0.176	-.876**	.578**	0.420	-.448*	.923**	.877**	-.653**	-0.062	-.826**
	Sig. (2-tailed)		0.000	0.427	0.000	0.001	0.957	0.001	0.009	0.484	0.000	0.008	0.051	0.037	0.000	0.000	0.001	0.785	0.000
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	22	22	22	22	22
ATE	Pearson Correlation	.940**	1	0.241	-.693**	.577**	-0.047	.558**	.560**	0.349	-.868**	.689**	0.416	-0.322	.936**	.904**	-.500*	0.062	-.729**
	Sig. (2-tailed)	0.000		0.279	0.001	0.005	0.835	0.007	0.007	0.156	0.000	0.001	0.054	0.144	0.000	0.000	0.018	0.782	0.000
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	22	22	22	22	22
ASEE	Pearson Correlation	0.178	0.241	1	-0.291	0.414	0.307	0.267	-0.052	0.246	-0.122	0.187	0.295	-0.034	0.184	0.131	0.025	0.215	0.018
	Sig. (2-tailed)	0.427	0.279		0.214	0.055	0.165	0.230	0.820	0.325	0.590	0.431	0.183	0.880	0.411	0.562	0.914	0.336	0.936
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	22	22	22	22	22
ADR	Pearson Correlation	-.809**	-.693**	-0.291	1	-.562**	0.053	-.547*	-0.395	0.029	.776**	-0.411	-0.342	.634**	-.711**	-.720*	.718**	-0.079	.651**
	Sig. (2-tailed)	0.000	0.001	0.214		0.010	0.826	0.013	0.085	0.908	0.000	0.072	0.140	0.003	0.000	0.000	0.000	0.740	0.002
	N	20	20	20	20	20	20	20	20	18	20	20	20	20	20	20	20	20	20
CHE	Pearson Correlation	.654**	.577**	0.414	-.562**	1	0.272	.918**	0.320	0.109	-.559**	.627**	.637**	-0.255	.639**	.659*	-0.324	-0.028	-0.403

	Sig. (2-tailed)	0.001	0.005	0.055	0.010		0.221	0.000	0.146	0.667	0.007	0.003	0.001	0.251	0.001	0.001	0.142	0.903	0.063
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	22	22	22	22	22
CHE%	Pearson Correlation	0.012	-0.047	0.307	0.053	0.272	1	0.051	-0.346	-0.073	-0.067	-0.173	0.247	0.059	0.073	0.046	-0.297	-0.154	0.069
	Sig. (2-tailed)	0.957	0.835	0.165	0.826	0.221		0.821	0.115	0.772	0.768	0.465	0.268	0.793	0.747	0.839	0.179	0.493	0.760
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	22	22	22	22	22
DHE	Pearson Correlation	.638**	.558**	0.267	-.547*	.918**	0.051	1	.580**	0.087	-.561**	.639**	0.382	-.434*	.619**	.645**	-0.358	0.029	-0.364
	Sig. (2-tailed)	0.001	0.007	0.230	0.013	0.000	0.821		0.005	0.731	0.007	0.002	0.079	0.044	0.002	0.001	0.102	0.897	0.096
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	22	22	22	22	22
DHE%	Pearson Correlation	.543**	.560**	-0.052	-0.395	0.320	-0.346	.580**	1	0.154	-0.399	.597**	-0.085	-0.421	.488*	.470*	-0.344	0.081	-0.375
	Sig. (2-tailed)	0.009	0.007	0.820	0.085	0.146	0.115	0.005		0.542	0.066	0.005	0.708	0.051	0.021	0.027	0.117	0.720	0.086
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	22	22	22	22	22
EPR	Pearson Correlation	0.176	0.349	0.246	0.029	0.109	-0.073	0.087	0.154	1	-0.332	0.231	0.267	0.281	0.335	0.175	0.185	0.261	-0.119
	Sig. (2-tailed)	0.484	0.156	0.325	0.908	0.667	0.772	0.731	0.542		0.178	0.356	0.285	0.259	0.174	0.487	0.464	0.295	0.639
	N	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18

IMR	Pearson Correlation	-.876**	-.868**	-0.122	.776**	-.559**	-0.067	-.561**	-0.399	-0.332	1	-.562**	-0.369	0.409	-.932**	-.905*	.637**	-0.005	.732**
	Sig. (2-tailed)	0.000	0.000	0.590	0.000	0.007	0.768	0.007	0.066	0.178		0.010	0.091	0.059	0.000	0.000	0.001	0.983	0.000
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	22	22	22	22	22
LEB	Pearson Correlation	.578**	.689**	0.187	-0.411	.627**	-0.173	.639**	.597**	0.231	-.562**	1	.646**	0.024	.597**	.775*	-0.193	0.025	-0.367
	Sig. (2-tailed)	0.008	0.001	0.431	0.072	0.003	0.465	0.002	0.005	0.356	0.010		0.002	0.918	0.005	0.000	0.416	0.918	0.111
	N	20	20	20	20	20	20	20	20	18	20	20	20	20	20	20	20	20	20
OPE	Pearson Correlation	0.420	0.416	0.295	-0.342	.637**	0.247	0.382	-0.085	0.267	-0.369	.646**	1	0.408	.428*	.479*	-0.049	-0.332	-.423*
	Sig. (2-tailed)	0.051	0.054	0.183	0.140	0.001	0.268	0.079	0.708	0.285	0.091	0.002		0.059	0.047	0.024	0.827	0.131	0.050
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	22	22	22	22	22
OPE%	Pearson Correlation	-.448*	-0.322	-0.034	.634**	-0.255	0.059	-.434*	-0.421	0.281	0.409	0.024	0.408	1	-0.396	-0.316	.580**	-0.286	0.228
	Sig. (2-tailed)	0.037	0.144	0.880	0.003	0.251	0.793	0.044	0.051	0.259	0.059	0.918	0.059		0.068	0.152	0.005	0.196	0.308
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	22	22	22	22	22
BDW	Pearson Correlation	.923**	.936**	0.184	-.711**	.639**	0.073	.619**	.488*	0.335	-.932**	.597**	.428*	-0.396	1	.899*	-.561**	-0.035	-.743**
	Correlation																		

	Sig. (2-tailed)	0.000	0.000	0.411	0.000	0.001	0.747	0.002	0.021	0.174	0.000	0.005	0.047	0.068		0.000	0.007	0.877	0.000
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	22	22	22	22	22
BSS	Pearson Correlation	.877**	.904**	0.131	-.720**	.659**	0.046	.645**	.470*	0.175	-.905**	.775**	.479*	-0.316	.899**	1	-.591**	-0.010	-.652**
	Sig. (2-tailed)	0.000	0.000	0.562	0.000	0.001	0.839	0.001	0.027	0.487	0.000	0.000	0.024	0.152	0.000		0.004	0.965	0.001
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	22	22	22	22	22
PGA	Pearson Correlation	-.653**	-.500*	0.025	.718**	-0.324	-0.297	-0.358	-0.344	0.185	.637**	-0.193	-0.049	.580**	-.561**	-.591**	1	0.185	.556**
	Sig. (2-tailed)	0.001	0.018	0.914	0.000	0.142	0.179	0.102	0.117	0.464	0.001	0.416	0.827	0.005	0.007	0.004		0.410	0.007
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	22	22	22	22	22
REO	Pearson Correlation	-0.062	0.062	0.215	-0.079	-0.028	-0.154	0.029	0.081	0.261	-0.005	0.025	-0.332	-0.286	-0.035	-0.010	0.185	1	.463*
	Sig. (2-tailed)	0.785	0.782	0.336	0.740	0.903	0.493	0.897	0.720	0.295	0.983	0.918	0.131	0.196	0.877	0.965	0.410		0.030
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	22	22	22	22	22
REC	Pearson Correlation	-.826**	-.729**	0.018	.651**	-0.403	0.069	-0.364	-0.375	-0.119	.732**	-0.367	-.423*	0.228	-.743**	-.652**	.556**	.463*	1

Sig. (2-tailed)	0.000	0.000	0.936	0.002	0.063	0.760	0.096	0.086	0.639	0.000	0.111	0.050	0.308	0.000	0.001	0.007	0.030	
N	22	22	22	20	22	22	22	22	18	22	20	22	22	22	22	22	22	22

Appendix H.3.

Pearson Correlations 2015 (Social Policy Variables /Human Development Indicators) – Latin America & The Caribbean

		ATCCT	ATE	ASEE	ADR	CHE	CHE%	DHE	DHE%	EPR	IMR	LEB	OPE	OPE%	BDW	BSS	PGA	REO	REC
ATCCT	Pearson Correlation	1	.902**	0.195	-.808**	.628**	0.167	.551**	.490*	0.205	-.882**	.601**	.477*	-.498*	.902**	.910**	-.707**	0.137	-.797**
	Sig. (2-tailed)		0.000	0.384	0.000	0.002	0.457	0.008	0.021	0.415	0.000	0.005	0.025	0.018	0.000	0.000	0.000	0.543	0.000
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	21	21	22	22	22
ATE	Pearson Correlation	.902**	1	0.206	-.646**	.501*	0.095	.446*	.522*	.494*	-.879**	.664**	.435*	-0.374	.968**	.892**	-.495*	0.244	-.713**
	Sig. (2-tailed)	0.000		0.359	0.002	0.018	0.675	0.038	0.013	0.037	0.000	0.001	0.043	0.086	0.000	0.000	0.019	0.275	0.000
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	21	21	22	22	22
ASEE	Pearson Correlation	0.195	0.206	1	-0.291	0.280	0.109	0.158	-0.045	0.133	-0.173	0.233	0.234	-0.105	0.243	0.221	-0.038	0.183	-0.018
	Sig. (2-tailed)	0.384	0.359		0.212	0.206	0.629	0.484	0.841	0.598	0.441	0.323	0.295	0.641	0.289	0.336	0.866	0.416	0.937
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	21	21	22	22	22
ADR	Pearson Correlation	-.808**	-.646**	-0.291	1	-0.411	-0.087	-0.351	-0.256	-0.145	.823**	-0.293	-0.350	.675**	-.689**	-.750**	.769**	-0.158	.660**
	Sig. (2-tailed)	0.000	0.002	0.212		0.072	0.716	0.129	0.276	0.566	0.000	0.209	0.130	0.001	0.001	0.000	0.000	0.505	0.002

	N	20	20	20	20	20	20	20	20	18	20	20	20	20	20	20	20	20	20
CHE	Pearson Correlation	.628**	.501*	0.280	-0.411	1	0.225	.937**	0.392	-0.015	-.549**	.632**	.477*	-0.357	.574**	.625**	-0.341	0.368	-0.229
	Sig. (2-tailed)	0.002	0.018	0.206	0.072		0.314	0.000	0.071	0.952	0.008	0.003	0.025	0.103	0.006	0.002	0.120	0.092	0.306
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	21	21	22	22	22
CHE%	Pearson Correlation	0.167	0.095	0.109	-0.087	0.225	1	-0.024	-0.313	-0.149	-0.088	-0.084	.657**	0.259	-0.031	0.115	-0.241	-0.194	-0.130
	Sig. (2-tailed)	0.457	0.675	0.629	0.716	0.314		0.917	0.156	0.555	0.697	0.724	0.001	0.244	0.894	0.620	0.280	0.387	0.563
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	21	21	22	22	22
DHE	Pearson Correlation	.551**	.446*	0.158	-0.351	.937**	-0.024	1	.591**	-0.070	-.505*	.620**	0.214	-.505*	.524*	.587**	-0.344	.439*	-0.156
	Sig. (2-tailed)	0.008	0.038	0.484	0.129	0.000	0.917		0.004	0.784	0.017	0.004	0.340	0.016	0.015	0.005	0.117	0.041	0.488
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	21	21	22	22	22
DHE%	Pearson Correlation	.490*	.522*	-0.045	-0.256	0.392	-0.313	.591**	1	-0.025	-0.397	.639**	-0.152	-.555**	.535*	.513*	-0.301	0.301	-0.357
	Sig. (2-tailed)	0.021	0.013	0.841	0.276	0.071	0.156	0.004		0.922	0.067	0.002	0.500	0.007	0.012	0.017	0.173	0.173	0.103
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	21	21	22	22	22
EPR	Pearson Correlation	0.205	.494*	0.133	-0.145	-0.015	-0.149	-0.070	-0.025	1	-0.408	0.161	0.254	0.129	0.416	0.285	0.131	0.362	-0.149

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
	Sig. (2-tailed)	0.415	0.037	0.598	0.566	0.952	0.555	0.784	0.922		0.093	0.524	0.308	0.609	0.086	0.252	0.604	0.140	0.556
	N	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
IMR	Pearson Correlation	-.882**	-.879**	-0.173	.823**	-.549**	-0.088	-.505*	-0.397	-0.408	1	-.564**	-0.403	.493*	-.896**	-.935**	.613**	-0.274	.653**
	Sig. (2-tailed)	0.000	0.000	0.441	0.000	0.008	0.697	0.017	0.067	0.093		0.010	0.063	0.020	0.000	0.000	0.002	0.217	0.001
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	21	21	22	22	22
LEB	Pearson Correlation	.601**	.664**	0.233	-0.293	.632**	-0.084	.620**	.639**	0.161	-.564**	1	.567**	-0.088	.619**	.714**	-0.170	0.305	-0.291
	Sig. (2-tailed)	0.005	0.001	0.323	0.209	0.003	0.724	0.004	0.002	0.524	0.010		0.009	0.713	0.004	0.000	0.473	0.191	0.214
	N	20	20	20	20	20	20	20	20	18	20	20	20	20	20	20	20	20	20
OPE	Pearson Correlation	.477*	.435*	0.234	-0.350	.477*	.657**	0.214	-0.152	0.254	-0.403	.567**	1	0.350	.491*	.539*	-0.139	-0.176	-0.412
	Sig. (2-tailed)	0.025	0.043	0.295	0.130	0.025	0.001	0.340	0.500	0.308	0.063	0.009		0.110	0.024	0.012	0.538	0.434	0.056
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	21	21	22	22	22
OPE%	Pearson Correlation	-.498*	-0.374	-0.105	.675**	-0.357	0.259	-.505*	-.555**	0.129	.493*	-0.088	0.350	1	-.496*	-.520*	.602**	-0.390	0.309
	Sig. (2-tailed)	0.018	0.086	0.641	0.001	0.103	0.244	0.016	0.007	0.609	0.020	0.713	0.110		0.022	0.016	0.003	0.073	0.162
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	21	21	22	22	22

BDW	Pearson Correlation	.902**	.968**	0.243	-.689**	.574**	-0.031	.524*	.535*	0.416	-.896**	.619**	.491*	-.496*	1	.895**	-.531*	0.307	-.679**
	Sig. (2-tailed)	0.000	0.000	0.289	0.001	0.006	0.894	0.015	0.012	0.086	0.000	0.004	0.024	0.022		0.000	0.013	0.176	0.001
	N	21	21	21	20	21	21	21	21	18	21	20	21	21	21	21	21	21	21
BSS	Pearson Correlation	.910**	.892**	0.221	-.750**	.625**	0.115	.587**	.513*	0.285	-.935**	.714**	.539*	-.520*	.895**	1	-.634**	0.321	-.615**
	Sig. (2-tailed)	0.000	0.000	0.336	0.000	0.002	0.620	0.005	0.017	0.252	0.000	0.000	0.012	0.016	0.000		0.002	0.156	0.003
	N	21	21	21	20	21	21	21	21	18	21	20	21	21	21	21	21	21	21
PGA	Pearson Correlation	-.707**	-.495*	-0.038	.769**	-0.341	-0.241	-0.344	-0.301	0.131	.613**	-0.170	-0.139	.602**	-.531*	-.634**	1	0.019	.523*
	Sig. (2-tailed)	0.000	0.019	0.866	0.000	0.120	0.280	0.117	0.173	0.604	0.002	0.473	0.538	0.003	0.013	0.002		0.935	0.012
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	21	21	22	22	22
REO	Pearson Correlation	0.137	0.244	0.183	-0.158	0.368	-0.194	.439*	0.301	0.362	-0.274	0.305	-0.176	-0.390	0.307	0.321	0.019	1	0.341
	Sig. (2-tailed)	0.543	0.275	0.416	0.505	0.092	0.387	0.041	0.173	0.140	0.217	0.191	0.434	0.073	0.176	0.156	0.935		0.120
	N	22	22	22	20	22	22	22	22	18	22	20	22	22	21	21	22	22	22
REC	Pearson Correlation	-.797**	-.713**	-0.018	.660**	-0.229	-0.130	-0.156	-0.357	-0.149	.653**	-0.291	-0.412	0.309	-.679**	-.615**	.523*	0.341	1
	Sig. (2-tailed)	0.000	0.000	0.937	0.002	0.306	0.563	0.488	0.103	0.556	0.001	0.214	0.056	0.162	0.001	0.003	0.012	0.120	

| N | 22 | 22 | 22 | 20 | 22 | 22 | 22 | 22 | 18 | 22 | 20 | 22 | 22 | 21 | 21 | 22 | 22 | 22 |

Appendix H.4.

Pearson Correlations 2000 (Macroeconomic Variables) – Latin America & The Caribbean

		FPI	FDI_A	FDI	GDPDI	GDPPCC	GDPPC	GDP	GGNLB	GGR	GGE	IACP	IACPI	NBTT	ODA	ODAA	RP
FPI	Pearson Correlation	1	0.108	-.712**	0.381	-.549**	-0.14	0.109	-.572**	-0.387	-0.103	.483*	0.131	0.291	0.125	0.309	-.447*
	Sig. (2-tailed)		0.634	0	0.08	0.008	0.534	0.63	0.005	0.075	0.648	0.023	0.562	0.188	0.589	0.173	0.037
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	22
FDI_A	Pearson Correlation	0.108	1	-0.093	0	0.225	-0.404	.982**	-.485*	0.076	0.284	0.393	.881**	0.202	-0.285	0.391	-0.4
	Sig. (2-tailed)	0.634		0.679	1	0.315	0.062	0	0.022	0.735	0.2	0.071	0	0.367	0.211	0.08	0.065
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	22
FDI	Pearson Correlation	-.712**	-0.093	1	-0.323	.434*	0.338	-0.143	.590**	0.225	-0.053	-0.412	-0.021	-0.308	0.278	-0.185	.593**
	Sig. (2-tailed)	0	0.679		0.143	0.044	0.124	0.525	0.004	0.313	0.814	0.057	0.927	0.163	0.223	0.422	0.004
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	22
GDPDI	Pearson Correlation	0.381	0	-0.323	1	-0.397	-0.157	-0.001	-0.096	-0.041	0.005	.438*	0.054	-0.183	0.129	0.408	-0.01

	Sig. (2-tailed)	0.08	1	0.143		0.068	0.486	0.997	0.67	0.855	0.984	0.041	0.81	0.416	0.577	0.066	0.963
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	22
GDPPCC	Pearson Correlation	-.549**	0.225	.434*	-0.397	1	0.033	0.254	0.043	0.291	0.248	-0.032	0.099	0.093	-0.332	-0.377	-0.061
	Sig. (2-tailed)	0.008	0.315	0.044	0.068		0.883	0.254	0.848	0.188	0.266	0.886	0.662	0.681	0.142	0.092	0.786
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	22
GDPPC	Pearson Correlation	-0.14	-0.404	0.338	-0.157	0.033	1	-0.354	.507*	-0.189	-0.397	-.463*	-.485*	-0.235	0.185	-0.087	0.332
	Sig. (2-tailed)	0.534	0.062	0.124	0.486	0.883		0.106	0.016	0.399	0.067	0.03	0.022	0.293	0.422	0.707	0.131
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	22
GDP	Pearson Correlation	0.109	.982**	-0.143	-0.001	0.254	-0.354	1	-.474*	0.093	0.295	0.395	.782**	0.247	-0.316	0.364	-.434*
	Sig. (2-tailed)	0.63	0	0.525	0.997	0.254	0.106		0.026	0.68	0.183	0.069	0	0.269	0.163	0.105	0.044
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	22
GGNLB	Pearson Correlation	-.572**	-.485*	.590**	-0.096	0.043	.507*	-.474*	1	0.045	-0.4	-.634**	-.466*	-0.313	0.331	-0.197	.553**

	Sig. (2-tailed)	0.005	0.022	0.004	0.67	0.848	0.016	0.026		0.842	0.065	0.002	0.029	0.156	0.143	0.393	0.008
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	22
GGR	Pearson Correlation	-0.387	0.076	0.225	-0.041	0.291	-0.189	0.093	0.045	1	.898**	0.165	0.088	0.2	0.111	0.051	-0.05
	Sig. (2-tailed)	0.075	0.735	0.313	0.855	0.188	0.399	0.68	0.842		0	0.464	0.696	0.372	0.632	0.826	0.827
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	22
GGE	Pearson Correlation	-0.103	0.284	-0.053	0.005	0.248	-0.397	0.295	-0.4	.898**	1	.431*	0.287	0.322	-0.023	0.112	-0.289
	Sig. (2-tailed)	0.648	0.2	0.814	0.984	0.266	0.067	0.183	0.065	0		0.045	0.196	0.144	0.922	0.629	0.192
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	22
IACP	Pearson Correlation	.483*	0.393	-0.412	.438*	-0.032	-.463*	0.395	-.634**	0.165	.431*	1	0.36	.460*	-0.389	0.32	-.542**
	Sig. (2-tailed)	0.023	0.071	0.057	0.041	0.886	0.03	0.069	0.002	0.464	0.045		0.099	0.031	0.081	0.157	0.009
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	22
IACPI	Pearson Correlation	0.131	.881**	-0.021	0.054	0.099	-.485*	.782**	-.466*	0.088	0.287	0.36	1	0.078	-0.158	0.379	-0.254

	Sig. (2-tailed)	0.562	0	0.927	0.81	0.662	0.022	0	0.029	0.696	0.196	0.099		0.73	0.494	0.09	0.253
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	22
NBTT	Pearson Correlation	0.291	0.202	-0.308	-0.183	0.093	-0.235	0.247	-0.313	0.2	0.322	.460*	0.078	1	-0.138	-0.061	-0.42
	Sig. (2-tailed)	0.188	0.367	0.163	0.416	0.681	0.293	0.269	0.156	0.372	0.144	0.031	0.73		0.55	0.794	0.052
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	22
ODA	Pearson Correlation	0.125	-0.285	0.278	0.129	-0.332	0.185	-0.316	0.331	0.111	-0.023	-0.389	-0.158	-0.138	1	-0.016	.451*
	Sig. (2-tailed)	0.589	0.211	0.223	0.577	0.142	0.422	0.163	0.143	0.632	0.922	0.081	0.494	0.55		0.947	0.04
	N	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
ODAA	Pearson Correlation	0.309	0.391	-0.185	0.408	-0.377	-0.087	0.364	-0.197	0.051	0.112	0.32	0.379	-0.061	-0.016	1	-0.089
	Sig. (2-tailed)	0.173	0.08	0.422	0.066	0.092	0.707	0.105	0.393	0.826	0.629	0.157	0.09	0.794	0.947		0.701
	N	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21	21
RP	Pearson Correlation	-.447*	-0.4	.593**	-0.01	-0.061	0.332	-.434*	.553**	-0.05	-0.289	-.542**	-0.254	-0.42	.451*	-0.089	1

	Sig. (2-tailed)	0.037	0.065	0.004	0.963	0.786	0.131	0.044	0.008	0.827	0.192	0.009	0.253	0.052	0.04	0.701	
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	21	21	22

Appendix H.5.

Pearson Correlations 2008 (Macroeconomic Variables) – Latin America & The Caribbean

		FPI	FDI_A	FDI	GDPDI	GDPPCC	GDPPC	GDP	GGNLB	GGR	GGE	IACP	IACPI	NBTT	ODA	ODAA	RP
FPI	Pearson Correlation	1	0.183	-.800**	0.144	-.489*	-0.068	0.198	0.376	-0.085	-0.229	0.163	0.159	0.262	-.902**	0.297	-.525*
	Sig. (2-tailed)		0.416	0	0.523	0.021	0.763	0.377	0.085	0.707	0.306	0.47	0.48	0.24	0	0.179	0.012
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
FDI_A	Pearson Correlation	0.183	1	-0.199	-0.065	0.214	-0.018	.994**	0.028	0.301	0.302	-0.363	.818**	0.209	-0.235	0.097	-.443*
	Sig. (2-tailed)	0.416		0.375	0.772	0.34	0.938	0	0.901	0.174	0.172	0.097	0	0.35	0.292	0.669	0.039
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
FDI	Pearson Correlation	-.800**	-0.199	1	-0.266	0.396	0.052	-0.227	-.464*	0.103	0.28	-0.224	-0.116	-0.369	.696**	-0.336	.515*
	Sig. (2-tailed)	0	0.375		0.232	0.068	0.82	0.311	0.03	0.65	0.207	0.316	0.606	0.091	0	0.126	0.014
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
GDPDI	Pearson Correlation	0.144	-0.065	-0.266	1	-0.417	-0.248	-0.057	-0.06	-0.217	-0.203	0.214	0.033	-0.287	-0.053	.493*	0.136

	Sig. (2-tailed)	0.523	0.772	0.232		0.054	0.265	0.803	0.791	0.331	0.364	0.338	0.885	0.195	0.814	0.02	0.547
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
GDPPCC	Pearson Correlation	-.489*	0.214	0.396	-0.417	1	-0.007	0.229	-0.301	0.163	0.283	-.542**	0.095	-0.003	0.347	-.616**	0.026
	Sig. (2-tailed)	0.021	0.34	0.068	0.054		0.974	0.306	0.173	0.467	0.203	0.009	0.675	0.991	0.114	0.002	0.909
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
GDPPC	Pearson Correlation	-0.068	-0.018	0.052	-0.248	-0.007	1	-0.041	.663**	.423*	0.191	-0.338	0.105	0.346	0.185	-0.119	-0.415
	Sig. (2-tailed)	0.763	0.938	0.82	0.265	0.974		0.856	0.001	0.05	0.393	0.123	0.643	0.115	0.41	0.598	0.055
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
GDP	Pearson Correlation	0.198	.994**	-0.227	-0.057	0.229	-0.041	1	0.044	0.314	0.31	-0.365	.788**	0.229	-0.237	0.074	-.454*
	Sig. (2-tailed)	0.377	0	0.311	0.803	0.306	0.856		0.846	0.154	0.16	0.095	0	0.305	0.288	0.742	0.034
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
GGNLB	Pearson Correlation	0.376	0.028	-.464*	-0.06	-0.301	.663**	0.044	1	0.281	-0.082	-0.116	-0.039	.569**	-0.162	0.241	-.440*

	Sig. (2-tailed)	0.085	0.901	0.03	0.791	0.173	0.001	0.846		0.205	0.716	0.608	0.863	0.006	0.471	0.28	0.04
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
GGR	Pearson Correlation	-0.085	0.301	0.103	-0.217	0.163	.423*	0.314	0.281	1	.933**	-0.181	0.33	.572**	0.16	-0.084	-0.272
	Sig. (2-tailed)	0.707	0.174	0.65	0.331	0.467	0.05	0.154	0.205		0	0.419	0.134	0.005	0.477	0.71	0.221
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
GGE	Pearson Correlation	-0.229	0.302	0.28	-0.203	0.283	0.191	0.31	-0.082	.933**	1	-0.145	0.358	0.381	0.227	-0.177	-0.117
	Sig. (2-tailed)	0.306	0.172	0.207	0.364	0.203	0.393	0.16	0.716	0		0.52	0.102	0.08	0.31	0.429	0.603
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
IACP	Pearson Correlation	0.163	-0.363	-0.224	0.214	-.542**	-0.338	-0.365	-0.116	-0.181	-0.145	1	-0.212	-0.137	-0.174	0.24	0.182
	Sig. (2-tailed)	0.47	0.097	0.316	0.338	0.009	0.123	0.095	0.608	0.419	0.52		0.344	0.542	0.44	0.281	0.418
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
IACPI	Pearson Correlation	0.159	.818**	-0.116	0.033	0.095	0.105	.788**	-0.039	0.33	0.358	-0.212	1	0.045	-0.117	0.108	-0.267

	Sig. (2-tailed)	0.48	0	0.606	0.885	0.675	0.643	0	0.863	0.134	0.102	0.344		0.841	0.605	0.633	0.23
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
NBTT	Pearson Correlation	0.262	0.209	-0.369	-0.287	-0.003	0.346	0.229	.569**	.572**	0.381	-0.137	0.045	1	-0.262	0.191	-0.394
	Sig. (2-tailed)	0.24	0.35	0.091	0.195	0.991	0.115	0.305	0.006	0.005	0.08	0.542	0.841		0.239	0.394	0.07
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
ODA	Pearson Correlation	-.902**	-0.235	.696**	-0.053	0.347	0.185	-0.237	-0.162	0.16	0.227	-0.174	-0.117	-0.262	1	-0.237	.506*
	Sig. (2-tailed)	0	0.292	0	0.814	0.114	0.41	0.288	0.471	0.477	0.31	0.44	0.605	0.239		0.287	0.016
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
ODAA	Pearson Correlation	0.297	0.097	-0.336	.493*	-.616**	-0.119	0.074	0.241	-0.084	-0.177	0.24	0.108	0.191	-0.237	1	0.069
	Sig. (2-tailed)	0.179	0.669	0.126	0.02	0.002	0.598	0.742	0.28	0.71	0.429	0.281	0.633	0.394	0.287		0.759
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
RP	Pearson Correlation	-.525*	-.443*	.515*	0.136	0.026	-0.415	-.454*	-.440*	-0.272	-0.117	0.182	-0.267	-0.394	.506*	0.069	1

	Sig. (2-tailed)	0.012	0.039	0.014	0.547	0.909	0.055	0.034	0.04	0.221	0.603	0.418	0.23	0.07	0.016	0.759	
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22

Appendix H.6.

Pearson Correlations 2015 (Macroeconomic Variables) – Latin America & The Caribbean

		FPI	FDI_A	FDI	GDPDI	GDPPCC	GDPPC	GDP	GGNLB	GGR	GGE	IACP	IACPI	NBTT	ODA	ODAA	RP
FPI	Pearson Correlation	1	-0.242	.467*	0.004	0.42	.489*	-0.255	-.660**	0.135	0.397	-0.189	-0.205	0.146	.616**	-.473*	0.404
	Sig. (2-tailed)		0.278	0.028	0.984	0.051	0.021	0.251	0.001	0.548	0.068	0.4	0.361	0.518	0.002	0.026	0.062
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
FDI_A	Pearson Correlation	-0.242	1	0.058	-0.03	0.279	0.101	.978**	0.028	0.318	0.254	-0.093	.838**	0.038	-0.306	-0.05	-.464*
	Sig. (2-tailed)	0.278		0.798	0.894	0.209	0.655	0	0.902	0.15	0.255	0.68	0	0.865	0.166	0.827	0.03
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
FDI	Pearson Correlation	.467*	0.058	1	0.017	0.357	.640**	0.018	-0.241	0.319	0.37	-0.314	0.059	0.149	0.209	0.006	0.303
	Sig. (2-tailed)	0.028	0.798		0.94	0.103	0.001	0.936	0.279	0.148	0.09	0.154	0.794	0.508	0.35	0.98	0.171
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
GDPDI	Pearson Correlation	0.004	-0.03	0.017	1	-0.402	-0.209	-0.059	0.162	-0.326	-0.342	-0.111	0.069	0.163	-0.044	0.235	0.248

	Sig. (2-tailed)	0.984	0.894	0.94		0.064	0.351	0.796	0.472	0.138	0.119	0.622	0.759	0.468	0.846	0.293	0.265
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
GDPPCC	Pearson Correlation	0.42	0.279	0.357	-0.402	1	.464*	0.281	-.566**	0.137	0.357	-0.173	0.094	-0.021	0.065	-.640**	-0.082
	Sig. (2-tailed)	0.051	0.209	0.103	0.064		0.03	0.206	0.006	0.545	0.103	0.441	0.679	0.927	0.774	0.001	0.717
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
GDPPC	Pearson Correlation	.489*	0.101	.640**	-0.209	.464*	1	0.121	-0.375	0.046	0.199	-0.228	0.093	-0.224	0.335	-0.024	.546**
	Sig. (2-tailed)	0.021	0.655	0.001	0.351	0.03		0.59	0.086	0.84	0.374	0.306	0.679	0.315	0.127	0.917	0.009
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
GDP	Pearson Correlation	-0.255	.978**	0.018	-0.059	0.281	0.121	1	0.054	0.252	0.187	-0.056	.748**	0.018	-0.343	-0.069	-.469*
	Sig. (2-tailed)	0.251	0	0.936	0.796	0.206	0.59		0.812	0.259	0.404	0.805	0	0.938	0.118	0.759	0.028
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
GGNLB	Pearson Correlation	-.660**	0.028	-0.241	0.162	-.566**	-0.375	0.054	1	-0.163	-.566**	0.215	0.002	-0.306	-.471*	0.366	-0.056

	Sig. (2-tailed)	0.001	0.902	0.279	0.472	0.006	0.086	0.812		0.468	0.006	0.336	0.994	0.166	0.027	0.094	0.803
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
GGR	Pearson Correlation	0.135	0.318	0.319	-0.326	0.137	0.046	0.252	-0.163	1	.906**	-0.005	0.4	0.353	0.292	0.08	-0.314
	Sig. (2-tailed)	0.548	0.15	0.148	0.138	0.545	0.84	0.259	0.468		0	0.983	0.065	0.107	0.187	0.723	0.155
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
GGE	Pearson Correlation	0.397	0.254	0.37	-0.342	0.357	0.199	0.187	-.566**	.906**	1	-0.097	0.333	.427*	.446*	-0.09	-0.238
	Sig. (2-tailed)	0.068	0.255	0.09	0.119	0.103	0.374	0.404	0.006	0		0.669	0.129	0.048	0.037	0.69	0.286
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
IACP	Pearson Correlation	-0.189	-0.093	-0.314	-0.111	-0.173	-0.228	-0.056	0.215	-0.005	-0.097	1	-0.044	-0.265	-0.171	0.022	-0.031
	Sig. (2-tailed)	0.4	0.68	0.154	0.622	0.441	0.306	0.805	0.336	0.983	0.669		0.844	0.234	0.447	0.921	0.891
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
IACPI	Pearson Correlation	-0.205	.838**	0.059	0.069	0.094	0.093	.748**	0.002	0.4	0.333	-0.044	1	0.06	-0.173	0.108	-0.279

	Sig. (2-tailed)	0.361	0	0.794	0.759	0.679	0.679	0	0.994	0.065	0.129	0.844		0.792	0.443	0.632	0.209
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
NBTT	Pearson Correlation	0.146	0.038	0.149	0.163	-0.021	-0.224	0.018	-0.306	0.353	.427*	-0.265	0.06	1	0.096	-0.041	-0.389
	Sig. (2-tailed)	0.518	0.865	0.508	0.468	0.927	0.315	0.938	0.166	0.107	0.048	0.234	0.792		0.671	0.856	0.074
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
ODA	Pearson Correlation	.616**	-0.306	0.209	-0.044	0.065	0.335	-0.343	-.471*	0.292	.446*	-0.171	-0.173	0.096	1	-0.013	.480*
	Sig. (2-tailed)	0.002	0.166	0.35	0.846	0.774	0.127	0.118	0.027	0.187	0.037	0.447	0.443	0.671		0.956	0.024
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
ODAA	Pearson Correlation	-.473*	-0.05	0.006	0.235	-.640**	-0.024	-0.069	0.366	0.08	-0.09	0.022	0.108	-0.041	-0.013	1	0.208
	Sig. (2-tailed)	0.026	0.827	0.98	0.293	0.001	0.917	0.759	0.094	0.723	0.69	0.921	0.632	0.856	0.956		0.352
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
RP	Pearson Correlation	0.404	-.464*	0.303	0.248	-0.082	.546**	-.469*	-0.056	-0.314	-0.238	-0.031	-0.279	-0.389	.480*	0.208	1

		0.062	0.03	0.171	0.265	0.717	0.009	0.028	0.803	0.155	0.286	0.891	0.209	0.074	0.024	0.352	
Sig. (2-tailed)																	
N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22

Appendix I.1.

IMF Purchases (Interventions) in Sub-Saharan Africa During the Year 2000 to 2007

Country	IMF Intervention (Yes/No)	Number of IMF Interventions (Based on Arrangement Number and Type)
Angola	No	N/A
Benin	Yes	2
Burkina Faso	Yes	2
Burundi	Yes	1
Cabo Verde	Yes	2
Cameroon	Yes	3
Central African Rep.	Yes	2
Chad	Yes	2
Comoros	No	N/A
Congo Dem Rep.	Yes	1
Congo Rep	Yes	1
Côte d'Ivoire	Yes	1
Ethiopia	Yes	1
Gabon	Yes	3
Gambia	Yes	2
Ghana	Yes	1
Guinea	Yes	2
Guinea-Bissau	Yes	1
Kenya	Yes	2

Lesotho	Yes	1
Liberia	No	N/A
Madagascar	Yes	2
Malawi	Yes	2
Mali	Yes	1
Mozambique	Yes	2
Niger	Yes	2
Nigeria	Yes	2
Rwanda	Yes	4
São Tomé and Príncipe	Yes	2
Senegal	Yes	3
Seychelles	No	N/A
Sierra Leone	Yes	2
Tanzania	Yes	3
Togo	No	N/A
Uganda	Yes	4
Zambia	Yes	3

Appendix I.2.

IMF Purchases (Interventions) in Sub-Saharan Africa During the Year 2008 to 2014

Country	IMF Intervention (Yes/No)	Number of IMF Interventions (Based on Arrangement Number and Type)
Angola	Yes	1
Benin	Yes	1
Burkina Faso	Yes	2
Burundi	Yes	2
Cabo Verde	Yes	1
Cameroon	No	0
Central African Rep.	Yes	1
Chad	Yes	1
Comoros	Yes	1
Congo Dem Rep.	Yes	1
Congo Rep	Yes	1
Côte d'Ivoire	Yes	2
Ethiopia	Yes	1
Gabon	No	0
Gambia	Yes	1
Ghana	Yes	1
Guinea	Yes	1
Guinea-Bissau	Yes	1
Kenya	Yes	1
Lesotho	Yes	1

Liberia	Yes	2
Madagascar	No	0
Malawi	Yes	3
Mali	Yes	3
Mozambique	Yes	2
Niger	Yes	2
Nigeria	No	0
Rwanda	Yes	2
São Tomé and Príncipe	Yes	2
Senegal	Yes	1
Seychelles	Yes	3
Sierra Leone	Yes	2
Tanzania	Yes	3
Togo	Yes	1
Uganda	Yes	2
Zambia	Yes	1

Appendix I.3.

IMF Purchases (Interventions) in Latin America During the Year 2000 to 2008

Country	IMF Intervention (Yes /No)	Number of IMF Interventions (Based on Arrangement Number and Type)
El Salvador	No	0
Mexico	No	0
Costa Rica	No	0
Jamaica	No	0
Suriname	No	0
St. Kitts and Nevis	No	0
Antigua and Barbuda	No	0
Haiti	No	1
Honduras	Yes	1
Grenada	Yes	1
Bolivia	Yes	2
Colombia	Yes	2
Brazil	Yes	2
Guatemala	Yes	2
Ecuador	Yes	2
Dominican Republic	Yes	2
Nicaragua	Yes	2
Paraguay	Yes	2
Dominica	Yes	2
Argentina	Yes	3
Peru	Yes	4
Uruguay	Yes	4

Appendix I.4.

IMF Purchases (Interventions) in Latin America During the Year 2008 to 2015

Country	IMF Intervention (Yes /No)	Number of IMF Interventions (Based on Arrangement Number and Type)
Dominica	No	0
Peru	No	0
Uruguay	No	0
Argentina	No	0
Brazil	No	0
Bolivia	No	0
Ecuador	No	0
Paraguay	No	0
Suriname	No	0
Nicaragua	No	0
Haiti	Yes	1
St. Kitts and Nevis	Yes	1
Dominican Republic	Yes	1
Guatemala	Yes	1
Costa Rica	Yes	1
Antigua and Barbuda	Yes	1
El Salvador	Yes	2
Jamaica	Yes	2
Grenada	Yes	2
Honduras	Yes	3
Colombia	Yes	4
Mexico	Yes	5

Appendix J.1.

Macro-Economic Policy Variable Description and Missing/Replacement Cases

Indicator Name	Units	Scale	Number of Missing Cases
Foreign direct investment, net inflows (BoP, current US$)	U.S. dollars		1 missing case in the first year (2000)
Foreign direct investment, net inflows (% of GDP)	Percent	Percentage	1 missing case in the first year (2000)
GDP growth (annual %)	Percent Growth	Percentage	1 missing case in the first year (2000)
GDP per capita growth (annual %)	Percent Growth	Percentage	No missing cases
Net migration			3 missing cases throughout the 3 years
Net barter terms of trade index (2000 = 100)	Index		3 missing cases in first year (2000); 2 missing cases in second and third years
Net ODA received per capita (current US$)	U.S. dollars		6 missing cases in the first and last years (2000 and 2015) 4 missing cases in the second year (2008)
Net official development assistance and official aid received (current US$)	U.S. dollars		2 missing case in the first year (2000); 5 missing cases in the second year (2008); 6 missing cases in the third year (2015)
Gross domestic product, constant prices	Percent change	Percentage	No missing cases
Gross domestic product, current prices	U.S. dollars	Billions	No missing cases
Gross domestic product, current prices	Purchasing power parity; international dollars	Billions	No missing cases
Gross domestic product, deflator	Index		No missing cases

Gross domestic product per capita, constant prices	Purchasing power parity; 2011 international dollar	Units	No missing cases
Gross domestic product per capita, current prices	U.S. dollars	Units	No missing cases
Gross domestic product per capita, current prices	Purchasing power parity; international dollars	Units	No missing cases
Gross domestic product based on purchasing-power-parity (PPP) share of world total	Percent	Percentage	No missing cases
Inflation, average consumer prices	Index		No missing cases
Inflation, average consumer prices	Percent change	Percentage	No missing cases
Inflation, end of period consumer prices	Index		No missing cases
Inflation, end of period consumer prices	Percent change	Percentage	No missing cases
General government revenue	Percent of GDP	Percentage	No missing cases
General government total expenditure	Percent of GDP	Percentage	No missing cases
General government net lending/borrowing	Percent of GDP	Percentage	No missing case
Food production index (2004-2006 = 100)	Index		3 missing cases in the first year (2000); 1 missing cases in the second year (2008) and third year (2015)
Rural population (% of total population)	Percent	Percentage	No missing cases

Appendix J.2.

Social Policy Variable (Human Development Indicators) Description and Missing/Replacement Cases

Indicator Name	Units	Scale	Number of Missing Cases
Population growth (annual %)	Percent	Percentage	No missing cases
Adjusted savings: education expenditure (current US$)	U.S. dollars		3 missing cases throughout the 3 years
Current health expenditure (% of GDP)	Percent	Percentage	No missing cases
Current health expenditure per capita (current US$)	U.S. dollars		1 missing case throughout all 3 years
Domestic general government health expenditure (% of current health expenditure)	Percent	Percentage	5 missing cases in the first year (2000); 2 missing cases in the second year (2008); 1 missing case in the third year (2015)
Domestic general government health expenditure per capita (current US$)	U.S. dollars		5 missing cases in the first year (2000); 2 missing cases in the second year (2008); 1 missing case in the third year (2015)
Life expectancy at birth, total (years)	Years	Years	2 missing cases in the second and third years
Access to clean fuels and technologies for cooking (% of population)	Percent	Percentage	2 missing cases throughout the 3 years
Access to electricity (% of population)	Percent	Percentage	No missing cases
Age dependency ratio (% of working-age population)	Percent	Percentage	3 missing cases throughout the 3 years
Employment to population ratio, ages 15-24, total (%) (modeled ILO estimate)	Percent		6 missing cases throughout the 3 years
Mortality rate, infant (per 1,000 live births)			1 missing case throughout all 3 years

Out-of-pocket expenditure (% of current health expenditure)	Percent	Percentage	1 missing case throughout all 3 years
Out-of-pocket expenditure per capita (current US$)	U.S. dollars		1 missing case throughout all 3 years
Out-of-pocket expenditure per capita, PPP (current international $)	U.S. dollars		3 missing cases throughout the 3 years
People using at least basic drinking water services (% of population)	Percent	Percentage	5 missing cases in the first year (2000); 3 missing cases in the second year (2008); 4 missing case in the third year (2015)
People using at least basic sanitation services (% of population)	Percent	Percentage	3 missing cases in the first year (2000); 1 missing cases in the second year (2008); 2 missing case in the third year (2015)
Renewable electricity output (% of total electricity output)	Percent	Percentage	No missing cases
Renewable energy consumption (% of total final energy consumption)	Percent		1 missing case in the first year (2000)

Appendix J.3.

Country, Variable, Missing Year and Replacement Year

Country	Variable	Missing Year	Replacement Year
All World Bank Database			
Sao Tome and Principe	Adjusted savings: education expenditure (current US$)	2000	2001
Montenegro	Foreign direct investment, net inflows (% of GDP)	2000	2002
Sao Tome and Principe	Foreign direct investment, net inflows (% of GDP)	2000	2001
Montenegro	Foreign direct investment, net inflows (BoP, current US$)	2000	2002
Kosovo	GDP growth (annual %)	2000	2001
Sao Tome and Principe	GDP growth (annual %)	2000	2002
Kosovo	GDP per capita growth (annual %)	2000	2001
Sao Tome and Principe	GDP per capita growth (annual %)	2000	2002
Dominica	Life expectancy at birth, total (years)	2000	2002
St. Kitts and Nevis	Life expectancy at birth, total (years)	2000	2002
Kosovo	Net official development assistance and official aid received (current US$)	2008	2009
Kosovo	Net ODA received per capita (current US$)	2008	2009
All IMF Database			

Sao Tome & Principe	Gross domestic product based on purchasing-power-parity (PPP) share of world total	2000	1999 (2001 unavailable)
Sao Tome & Principe	Gross domestic product based on purchasing-power-parity (PPP) share of world total	2008	2009
Argentina	Inflation, average consumer prices (Index)	2015	2016
Kosovo	Inflation, average consumer prices (Percent change)	2000	2001
Argentina	Inflation, average consumer prices (Percent change)	2015	2013 (2014 and 2016 unavailable)
Kosovo	Inflation, end of period consumer prices (Index)	2000	2002 (2001 and 1999 unavailable)
Argentina	Inflation, end of period consumer prices (Index)	2015	2016
Kosovo	Inflation, end of period consumer prices (% Change)	2000	2003 (no other suitable)
Argentina	Inflation, end of period consumer prices (% Change)	2015	2014 (2016 unavailable)
Montenegro	General government revenue (Percent of GDP)	2000	2002 (2001 missing)
Malawi	General government revenue (Percent of GDP)	2000	2002 (2001 missing)
Malawi	General government total expenditure (Percent of GDP)	2000	2002 (2001 missing)
Montenegro	General government total expenditure (Percent of GDP)	2000	2002 (2001 missing)
Malawi	General government net lending/borrowing (Percent of GDP)	2000	2002 (2001 missing)
Montenegro	General government net lending/borrowing (Percent of GDP)	2000	2002 (2001 missing)

Appendix J.4.

Indicator Name and Boolean Simplification – Marco Economic and Social Policy Variables

MACRO ECONOMIC POLICY VARIBALES	
Indicator Name	**Boolean Simplification**
Food production index (2004-2006 = 100)	FPI
Foreign direct investment, net inflows (% of GDP)	FDI%
Foreign direct investment, net inflows (BoP, current US$)	FDI
Gross domestic product, current prices	GDPCUR
Gross domestic product, deflator	GDPDI
Gross domestic product per capita, current prices	GDPPCC
GDP per capita growth (annual %)	GDPPC%
Gross domestic product based on purchasing-power-parity (PPP) share of world total	GDP
General government net lending/borrowing	GGNLB
General government revenue	GGR
General government total expenditure	GGE
Inflation, average consumer prices	IACP%

Inflation, average consumer prices	IACPI
Net barter terms of trade index (2000 = 100)	NBTT
Net migration	NM
Net ODA received per capita (current US$)	ODA
Net official development assistance and official aid received (current US$)	ODAA
Rural population (% of total population)	RP%

MACRO SOCIAL POLICY VARIABLES	
Indicator Name	**Boolean Simplification**
Access to clean fuels and technologies for cooking (% of population)	ATCCT
Access to electricity (% of population)	ATE
Adjusted savings: education expenditure (current US$)	ASEE
Age dependency ratio (% of working-age population)	ADR
Current health expenditure per capita (current US$)	CHE
Current health expenditure (% of GDP)	CHE%
Domestic general government health expenditure per capita (current US$)	DHE
Domestic general government health expenditure (% of current health expenditure)	DHE%
Employment to population ratio, ages 15-24, total (%) (modelled ILO estimate)	EPR
Mortality rate, infant (per 1,000 live births)	IMR
Life expectancy at birth, total (years)	LEB
Out-of-pocket expenditure per capita (current US$)	OPE
Out-of-pocket expenditure (% of current health expenditure)	OPE%

People using at least basic drinking water services (% of population)	BDW
People using at least basic sanitation services (% of population)	BSS
Population growth (annual %)	PGA
Renewable electricity output (% of total electricity output)	REO
Renewable energy consumption (% of total final energy consumption)	REC

Appendix J.5.

Indicator Name and Definition Provided by Database –Economic Policy Variables

Indicator Name	Definition
Food production index (2004-2006 = 100)	Food production index covers food crops that are considered edible and that contain nutrients. Coffee and tea are excluded because, although edible, they have no nutritive value.
Foreign direct investment, net inflows (% of GDP)	Foreign direct investment are the net inflows of investment to acquire a lasting management interest (10 percent or more of voting stock) in an enterprise operating in an economy other than that of the investor. It is the sum of equity capital, reinvestment of earnings, other long-term capital, and short-term capital as shown in the balance of payments. This series shows net inflows (new investment inflows less disinvestment) in the reporting economy from foreign investors and is divided by GDP.
Foreign direct investment, net inflows (BoP, current US$)	Foreign direct investment refers to direct investment equity flows in the reporting economy. It is the sum of equity capital, reinvestment of earnings, and other capital. Direct investment is a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy. Ownership of 10 percent or more of the ordinary shares of voting stock is the criterion for determining the existence of a direct investment relationship. Data are in current U.S. dollars.
Gross domestic product, current prices	Values are based upon GDP in national currency converted to U.S. dollars using market exchange rates (yearly average). Exchange rate projections are provided by country economists for the group of other emerging market and developing countries. Exchanges rates for advanced economies are established in the WEO assumptions for each WEO exercise. Expenditure-based GDP is total final expenditures at purchasers' prices (including the f.o.b. value of exports of goods and services), less the f.o.b. value of imports of goods and services

Gross domestic product, deflator	The GDP deflator is derived by dividing current price GDP by constant price GDP and is considered to be an alternate measure of inflation. Data are expressed in the base year of each country's national accounts.
Gross domestic product per capita, current prices	GDP is expressed in current U.S. dollars per person. Data are derived by first converting GDP in national currency to U.S. dollars and then dividing it by total population.
GDP per capita growth (annual %)	Annual percentage growth rate of GDP per capita based on constant local currency. Aggregates are based on constant 2010 U.S. dollars. GDP per capita is gross domestic product divided by midyear population. GDP at purchaser's prices is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.
Gross domestic product based on purchasing-power-parity (PPP) share of world total	These data form the basis for the country weights used to generate the World Economic Outlook country group composites for the domestic economy. The IMF is not a primary source for purchasing power parity (PPP) data. WEO weights have been created from primary sources and are used solely for purposes of generating country group composites. For primary source information, please refer to one of the following sources: The Organization for Economic Cooperation and Development, the World Bank, or the Penn World Tables. For further information see Box A2 in the April 2004 World Economic Outlook, Box 1.2 in the September 2003 World Economic Outlook for a discussion on the measurement of global growth and Box A.1 in the May 2000 World Economic Outlook for a summary of the revised PPP-based weights, and Annex IV of the May 1993 World Economic Outlook. See also Anne Marie Gulde and Marianne Schulze-Ghattas, Purchasing Power Parity Based Weights for the World Economic Outlook, in Staff Studies for the World Economic Outlook (Washington: IMF, December 1993), pp. 106-23.
General government net lending/borrowing	Net lending (+)/ borrowing (−) is calculated as revenue minus total expenditure. This is a core GFS balance that measures the extent to which general government is either putting financial resources at the disposal of other sectors in the economy and non-residents (net lending), or utilizing the financial resources generated by other sectors and non-residents (net borrowing). This balance may be viewed as an indicator of the financial impact of general

	government activity on the rest of the economy and non-residents (GFSM 2001, paragraph 4.17). Note: Net lending (+)/borrowing (–) is also equal to net acquisition of financial assets minus net incurrence of liabilities.
General government revenue	Revenue consists of taxes, social contributions, grants receivable, and other revenue. Revenue increases government's net worth, which is the difference between its assets and liabilities (GFSM 2001, paragraph 4.20). Note: Transactions that merely change the composition of the balance sheet do not change the net worth position, for example, proceeds from sales of nonfinancial and financial assets or incurrence of liabilities.
General government total expenditure	Total expenditure consists of total expense and the net acquisition of nonfinancial assets. Note: Apart from being on an accrual basis, total expenditure differs from the GFSM 1986 definition of total expenditure in the sense that it also takes the disposals of nonfinancial assets into account.
Inflation, average consumer prices	Annual percentages of average consumer prices are year-on-year changes.
Inflation, average consumer prices	Expressed in averages for the year, not end-of-period data. A consumer price index (CPI) measures changes in the prices of goods and services that households consume. Such changes affect the real purchasing power of consumers' incomes and their welfare. As the prices of different goods and services do not all change at the same rate, a price index can only reflect their average movement. A price index is typically assigned a value of unity, or 100, in some reference period and the values of the index for other periods of time are intended to indicate the average proportionate, or percentage, change in prices from this price reference period. Price indices can also be used to measure differences in price levels between different cities, regions or countries at the same point in time.
Net barter terms of trade index (2000 = 100)	Net barter terms of trade index are calculated as the percentage ratio of the export unit value indexes to the import unit value indexes, measured relative to the base year 2000. Unit value indexes are based on data reported by countries that demonstrate consistency under UNCTAD quality controls, supplemented by UNCTAD's estimates using the previous year's trade values at the Standard International Trade Classification three-digit level as weights. To improve data coverage, especially for the latest periods, UNCTAD constructs a set of average prices indexes at the three-digit product classification of the Standard International Trade Classification revision 3 using UNCTAD's Commodity Price Statistics, international and national sources, and UNCTAD secretariat estimates and calculates unit value indexes at the country level using the current year's trade values as weights.

Net migration	Net migration is the net total of migrants during the period, that is, the total number of immigrants less the annual number of emigrants, including both citizens and noncitizens. Data are five-year estimates.
Net ODA received per capita (current US$)	Net official development assistance (ODA) per capita consists of disbursements of loans made on concessional terms (net of repayments of principal) and grants by official agencies of the members of the Development Assistance Committee (DAC), by multilateral institutions, and by non-DAC countries to promote economic development and welfare in countries and territories in the DAC list of ODA recipients; and is calculated by dividing net ODA received by the midyear population estimate. It includes loans with a grant element of at least 25 percent (calculated at a rate of discount of 10 percent).
Net official development assistance and official aid received (current US$)	Net official development assistance (ODA) consists of disbursements of loans made on concessional terms (net of repayments of principal) and grants by official agencies of the members of the Development Assistance Committee (DAC), by multilateral institutions, and by non-DAC countries to promote economic development and welfare in countries and territories in the DAC list of ODA recipients. It includes loans with a grant element of at least 25 percent (calculated at a rate of discount of 10 percent). Net official aid refers to aid flows (net of repayments) from official donors to countries and territories in part II of the DAC list of recipients: more advanced countries of Central and Eastern Europe, the countries of the former Soviet Union, and certain advanced developing countries and territories. Official aid is provided under terms and conditions similar to those for ODA. Part II of the DAC List was abolished in 2005. The collection of data on official aid and other resource flows to Part II countries ended with 2004 data. Data are in current U.S. dollars.
Rural population (% of total population)	Rural population refers to people living in rural areas as defined by national statistical offices. It is calculated as the difference between total population and urban population.

Appendix J.6.

Indicator Name and Definition Provided by Database – Social Policy Variables (Human Development Indicators)

Indicator Name	Definition
Access to clean fuels and technologies for cooking (% of population)	Access to clean fuels and technologies for cooking is the proportion of total population primarily using clean cooking fuels and technologies for cooking. Under WHO guidelines, kerosene is excluded from clean cooking fuels.
Access to electricity (% of population)	Access to electricity is the percentage of population with access to electricity. Electrification data are collected from industry, national surveys and international sources.
Adjusted savings: education expenditure (current US$)	Education expenditure refers to the current operating expenditures in education, including wages and salaries and excluding capital investments in buildings and equipment.
Age dependency ratio (% of working-age population)	Age dependency ratio is the ratio of dependents--people younger than 15 or older than 64--to the working-age population--those ages 15-64. Data are shown as the proportion of dependents per 100 working-age population.
Current health expenditure per capita (current US$)	Current expenditures on health per capita in current US dollars. Estimates of current health expenditures include healthcare goods and services consumed during each year.
Current health expenditure (% of GDP)	Level of current health expenditure expressed as a percentage of GDP. Estimates of current health expenditures include healthcare goods and services consumed during each year. This indicator does not include capital health expenditures such as buildings, machinery, IT and stocks of vaccines for emergency or outbreaks.
Domestic general government health expenditure per capita (current US$)	Public expenditure on health from domestic sources per capita expressed in current US dollars.

Domestic general government health expenditure (% of current health expenditure)	Share of current health expenditures funded from domestic public sources for health. Domestic public sources include domestic revenue as internal transfers and grants, transfers, subsidies to voluntary health insurance beneficiaries, non-profit institutions serving households (NPISH) or enterprise financing schemes as well as compulsory prepayment and social health insurance contributions. They do not include external resources spent by governments on health.
Employment to population ratio, ages 15-24, total (%) (modeled ILO estimate)	Employment to population ratio is the proportion of a country's population that is employed. Employment is defined as persons of working age who, during a short reference period, were engaged in any activity to produce goods or provide services for pay or profit, whether at work during the reference period (i.e. who worked in a job for at least one hour) or not at work due to temporary absence from a job, or to working-time arrangements. Ages 15-24 are generally considered the youth population.
Mortality rate, infant (per 1,000 live births)	Infant mortality rate is the number of infants dying before reaching one year of age, per 1,000 live births in a given year.
Life expectancy at birth, total (years)	Life expectancy at birth indicates the number of years a new-born infant would live if prevailing patterns of mortality at the time of its birth were to stay the same throughout its life.
Out-of-pocket expenditure per capita (current US$)	Health expenditure through out-of-pocket payments per capita in USD. Out of pocket payments are spending on health directly out of pocket by households in each country.
Out-of-pocket expenditure (% of current health expenditure)	Share of out-of-pocket payments of total current health expenditures. Out-of-pocket payments are spending on health directly out-of-pocket by households.
People using at least basic drinking water services (% of population)	The percentage of people using at least basic water services. This indicator encompasses both people using basic water services as well as those using safely managed water services. Basic drinking water services is defined as drinking water from an improved source, provided collection time is not more than 30

minutes for a round trip. Improved water sources include piped water, boreholes or tube wells, protected dug wells, protected springs, and packaged or delivered water.

People using at least basic sanitation services (% of population)	The percentage of people using at least basic sanitation services, that is, improved sanitation facilities that are not shared with other households. This indicator encompasses both people using basic sanitation services as well as those using safely managed sanitation services. Improved sanitation facilities include flush/pour flush to piped sewer systems, septic tanks or pit latrines; ventilated improved pit latrines, compositing toilets or pit latrines with slabs.
Population growth (annual %)	Annual population growth rate for year t is the exponential rate of growth of midyear population from year t-1 to t, expressed as a percentage. Population is based on the de facto definition of population, which counts all residents regardless of legal status or citizenship.
Renewable electricity output (% of total electricity output)	Renewable electricity is the share of electricity generated by renewable power plants in total electricity generated by all types of plants.
Renewable energy consumption (% of total final energy consumption)	Renewable energy consumption is the share of renewable energy in total final energy consumption.

Appendix J.7.

Indicator Name and Source Provided by Database – Marco-Economic Policy Variables

Indicator Name	Source
Food production index (2004-2006 = 100)	Food and Agriculture Organization, electronic files and web site.
Foreign direct investment, net inflows (% of GDP)	International Monetary Fund, International Financial Statistics and Balance of Payments databases, World Bank, International Debt Statistics, and World Bank and OECD GDP estimates.
Foreign direct investment, net inflows (BoP, current US$)	International Monetary Fund, Balance of Payments database, supplemented by data from the United Nations Conference on Trade and Development and official national sources.
Gross domestic product, current prices	IMF World Economic and Financial Surveys - World Economic Outlook Database. https://www.imf.org/external/pubs/ft/weo/2018/02/weodata/index.aspx
Gross domestic product, deflator	IMF World Economic and Financial Surveys - World Economic Outlook Database. https://www.imf.org/external/pubs/ft/weo/2018/02/weodata/index.aspx
Gross domestic product per capita, current prices	IMF World Economic and Financial Surveys - World Economic Outlook Database. https://www.imf.org/external/pubs/ft/weo/2018/02/weodata/index.aspx
GDP per capita growth (annual %)	World Bank national accounts data, and OECD National Accounts data files.

Gross domestic product based on purchasing-power-parity (PPP) share of world total	IMF World Economic and Financial Surveys - World Economic Outlook Database. https://www.imf.org/external/pubs/ft/weo/2018/02/weodata/index.aspx
General government net lending/borrowing	IMF World Economic and Financial Surveys - World Economic Outlook Database. https://www.imf.org/external/pubs/ft/weo/2018/02/weodata/index.aspx
General government revenue	IMF World Economic and Financial Surveys - World Economic Outlook Database. https://www.imf.org/external/pubs/ft/weo/2018/02/weodata/index.aspx
General government total expenditure	IMF World Economic and Financial Surveys - World Economic Outlook Database. https://www.imf.org/external/pubs/ft/weo/2018/02/weodata/index.aspx
Inflation, average consumer prices	IMF World Economic and Financial Surveys - World Economic Outlook Database. https://www.imf.org/external/pubs/ft/weo/2018/02/weodata/index.aspx
Inflation, average consumer prices	Source: National Statistics Office Latest actual data: 2017 Notes: CPI basket was expanded on December 2001, 2007, and again in 2015 Harmonized prices: No Frequency of source data: Monthly Base year: 2015 Primary domestic currency: Albanian lek Data last updated: 03/2018
Net barter terms of trade index (2000 = 100)	United Nations Conference on Trade and Development, Handbook of Statistics and data files, and International Monetary Fund, International Financial Statistics.
Net migration	United Nations Population Division. World Population Prospects: 2017 Revision.
Net ODA received per capita (current US$)	Development Assistance Committee of the Organisation for Economic Co-operation and Development, Geographical Distribution of Financial Flows to Developing Countries, Development Co-operation Report, and International Development Statistics database. Data are available online at: www.oecd.org/dac/stats/idsonline. World Bank population estimates are used for the denominator.

| Net official development assistance and official aid received (current US$) | Development Assistance Committee of the Organisation for Economic Co-operation and Development, Geographical Distribution of Financial Flows to Developing Countries, Development Co-operation Report, and International Development Statistics database. Data are available online at: www.oecd.org/dac/stats/idsonline. |
| Rural population (% of total population) | World Bank staff estimates based on the United Nations Population Division's World Urbanization Prospects: 2018 Revision. |

Appendix J.8.

Indicator Name and Source Provided by Database – Social Policy Variables (Human Development Indicators)

Indicator Name	Source
Access to clean fuels and technologies for cooking (% of population)	World Bank, Sustainable Energy for All (SE4ALL) database from WHO Global Household Energy database.
Access to electricity (% of population)	World Bank, Sustainable Energy for All (SE4ALL) database from the SE4ALL Global Tracking Framework led jointly by the World Bank, International Energy Agency, and the Energy Sector Management Assistance Program.
Adjusted savings: education expenditure (current US$)	UNESCO; data are extrapolated to the most recent year available
Age dependency ratio (% of working-age population)	World Bank staff estimates based on age distributions of United Nations Population Division's World Population Prospects: 2017 Revision.
Current health expenditure per capita (current US$)	World Health Organization Global Health Expenditure database (http://apps.who.int/nha/database).
Current health expenditure (% of GDP)	World Health Organization Global Health Expenditure database (http://apps.who.int/nha/database).

Domestic general government health expenditure per capita (current US$)	World Health Organization Global Health Expenditure database (http://apps.who.int/nha/database).
Domestic general government health expenditure (% of current health expenditure)	World Health Organization Global Health Expenditure database (http://apps.who.int/nha/database).
Employment to population ratio, ages 15-24, total (%) (modelled ILO estimate)	International Labour Organization, ILOSTAT database. Data retrieved in September 2018.
Mortality rate, infant (per 1,000 live births)	Estimates developed by the UN Inter-agency Group for Child Mortality Estimation (UNICEF, WHO, World Bank, UN DESA Population Division) at www.childmortality.org.
Life expectancy at birth, total (years)	(1) United Nations Population Division. World Population Prospects: 2017 Revision or derived from male and female life expectancy at birth from sources such as: (2) Census reports and other statistical publications from national statistical offices, (3) Eurostat: Demographic Statistics, (4) United Nations Statistical Division. Population and Vital Statistics Report (various years), (5) U.S. Census Bureau: International Database, and (6) Secretariat of the Pacific Community: Statistics and Demography Programme.
Out-of-pocket expenditure per capita (current US$)	World Health Organization Global Health Expenditure database (http://apps.who.int/nha/database).

Out-of-pocket expenditure (% of current health expenditure)	World Health Organization Global Health Expenditure database (http://apps.who.int/nha/database).
People using at least basic drinking water services (% of population)	WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply, Sanitation and Hygiene (washdata.org).
People using at least basic sanitation services (% of population)	WHO/UNICEF Joint Monitoring Programme (JMP) for Water Supply, Sanitation and Hygiene (washdata.org).
Population growth (annual %)	Derived from total population. Population source: (1) United Nations Population Division. World Population Prospects: 2017 Revision, (2) Census reports and other statistical publications from national statistical offices, (3) Eurostat: Demographic Statistics, (4) United Nations Statistical Division. Population and Vital Statistics Report (various years), (5) U.S. Census Bureau: International Database, and (6) Secretariat of the Pacific Community: Statistics and Demography Programme.
Renewable electricity output (% of total electricity output)	IEA Statistics © OECD/IEA 2018 (http://www.iea.org/stats/index.asp), subject to https://www.iea.org/t&c/termsandconditions/
Renewable energy consumption (% of total final energy consumption)	World Bank, Sustainable Energy for All (SE4ALL) database from the SE4ALL Global Tracking Framework led jointly by the World Bank, International Energy Agency, and the Energy Sector Management Assistance Program.

Appendix K.1.

Term Frequency (Extract from RStudio Document Matrix)

Gabon

Docs	Budget	Central	Debt	External	Government	Oil	Percent	Performance	Program	Revenue
1	53	40	51	36	99	57	25	37	32	35
2	25	38	24	35	74	39	46	34	48	31
3	57	53	79	40	134	49	46	43	32	36
4	24	43	40	35	75	32	21	40	28	17
5	37	49	49	44	106	35	67	47	55	26
6	35	17	44	42	113	42	32	11	57	35
7	27	6	6	5	53	14	31	10	29	12
Total	258	246	293	237	654	268	268	222	281	192

Cape Verde

Doc	Arrears	Cape	Central	Debt	Domestic	External	Financial	Government	Program	Verde
10	22	26	22	68	31	57	21	51	33	23
11	22	28	20	61	30	66	21	48	45	27
12	22	26	25	58	30	56	34	52	32	23
13	31	25	24	37	29	48	36	58	37	22
15	29	22	39	32	38	52	20	132	74	22
3	25	34	43	35	32	49	27	75	46	29

4	33	45	29	47	32	58	45	92	46	39
6	21	26	32	60	25	54	33	60	28	22
7	32	39	59	53	41	79	32	106	51	37
9	32	29	51	37	46	54	14	130	65	32
Total	269	300	344	488	334	573	283	804	457	276

Appendix L1

LAC Economic Cluster Pairing and Boolean Simplification

Proposed LAC Cluster Membership and Boolean Simplification for Economic Variables 2000

Cluster	Cluster Members	Boolean Simplification
Cluster 1	Argentina, Uruguay	fpi * fdi% * gdpdi * GDPPCC * gdppc% * GDP * ggnlb * iacp% * iacpi * oda * odaa * rp%
Cluster 2	Colombia, Jamaica, Peru	FPI * FDI * gdpdi * oda
Cluster 3	Bolivia, El Salvador, Paraguay	GDPDI * gdppcc * gdppc% * NBTT * ODAA
Cluster 4	Suriname	
Cluster 5	Honduras, Nicaragua, Costa Rica, Dominican Republic, Guatemala, Ecuador	fpi
Cluster 6	Haiti	
Cluster 7	Antigua and Barbuda, Grenada	FPI * fdi * FDI% * GDPDI * GDPPCC * GDPPC% * gdp * iacp% * IACPI * nbtt * NM * ODA *odaa * RP%
Cluster 8	Brazil, Mexico	FDI * GDPPCC * GDPPC% * GDP * IACP% * NBTT * oda * rp%

Proposed LAC Cluster Membership and Boolean Simplification for Economic Variables 2008

Cluster	Cluster Members	Boolean Simplification
Cluster 1	Costa Rica, Dominican Republic, El Salvador, Guatemala, Paraguay	ggr * gge
Cluster 2	Honduras, Nicaragua	FDI% * GDPDI% * gdppcc * gdppc% * gdp * GGNLB * gge * IACP% * IACPI *nbtt * ODA * ODAA * RP%
Cluster 3	Haiti	
Cluster 4	Antigua and Barbuda, Grenada, Jamaica	fpi * FDI% * gdppc% * gdp * ggnlb * GGE * IACPI * odaa * RP%
Cluster 5	Argentina, Mexico, Uruguay	FDI * GDPPCC * GDP * GGR * iacpi * oda * odaa * rp%

| Cluster 6 | Bolivia, Colombia, Ecuador, Peru, Suriname | GGNLB * NBTT |
| Cluster 7 | Brazil | |

Proposed LAC Cluster Membership and Boolean Simplification for Economic Variables 2015

Cluster	*Cluster Members*	*Boolean Simplification*
Cluster 1	Antigua and Barbuda, Grenada, Honduras, Jamaica, Nicaragua	FDI% * gdp * RP%
Cluster 2	Costa Rica, Dominican Republic, El Salvador, Guatemala, Paraguay	gge * iacp% * iacpi
Cluster 3	Colombia, Mexico, Peru	fpi * FDI * gdpdi * GDP * NBTT * nm * ODAA
Cluster 4	Haiti	
Cluster 5	Argentina, Bolivia, Ecuador, Suriname, Uruguay	ggnlb * GGE * IACP%
Cluster 6	Brazil	

Longitudinal Analysis of Convergence for Economic Variable

	Boolean Simplification			Patterns of Economic Convergence Over Time Interval		
Converging Cases 2000 to 2015	2000	2008	2015	2000/08	2008/15	2000 to 2015
Argentina, Uruguay	fpi * fdi% * gdpdi * GDPPCC * gdppc% * GDP * ggnlb * iacp% * iacpi * oda * odaa * rp%	FDI * GDPPCC * GDP * GGR * iacpi * oda * odaa * rp%	ggnlb*GGE*IACP%	GDPPCC * GDP * iacpi * oda * odaa * rp%		
Colombia, Peru	FPI * FDI * gdpdi * oda	GGNLB * NBTT	fpi * FDI * gdpdi * GDP * NBTT * nm * ODAA		NBTT	
El Salvador, Paraguay	GDPDI * gdppcc * gdppc% * NBTT * ODAA	ggr * gge	gge * iacp% * iacpi		gge	
Costa Rica, Dominican Republic	fpi	ggr * gge	gge * iacp% * iacpi		gge	

Antigua and Barbuda, Grenada	FPI * fdi * FDI% * GDPDI * GDPPCC * GDPPC% * gdp * iacp% * IACPI * nbtt * NM * ODA *odaa * RP%	fpi * FDI% * gdppc% * gdp * ggnlb * GGE * IACPI * odaa * RP%	FDI% * gdp * RP%	fpi * FDI% * gdp * IACPI * odaa * RP%	FDI%*gdp*RP%	FDI%*gdp*RP%
Honduras, Nicaragua	fpi	FDI% * GDPDI% * gdppcc * gdppc% * gdp * GGNLB * gge * IACP% * IACPI *nbtt * ODA * ODAA * RP%	FDI% * gdp * RP%		FDI% * gdp * RP%	

Appendix L2

LAC Social Policy Cluster Pairing and Boolean Simplification

Proposed LAC Cluster Membership and Boolean Simplification for Social Policy Variables 2000

Cluster	Cluster Members	Boolean Simplification
Cluster 1	Bolivia, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Paraguay	dhe * IMR
Cluster 2	Haiti, Nicaragua	atcct * ate * asee * ADR * che * dhe * epr * IMR * leb * ope * OPE% * bdw * bss * PGA * REC
Cluster 3	Colombia, Costa Rica, Jamaica, Suriname	DHE% * ope%
Cluster 4	Argentina, Brazil, Uruguay	ATCCT * ATE * ASEE * adr * CHE * DHE * dhe% * OPE * BDW

Proposed LAC Cluster Membership and Boolean Simplification for Social Policy Variables 2008

Cluster	Cluster Members	Boolean Simplification
Cluster 1	Bolivia, Dominican Republic, Ecuador, Guatemala, Honduras, Paraguay	che * dhe * EPR * IMR * bdw * PGA
Cluster 2	Argentina, Brazil, Mexico	ATE * ASEE * adr * CHE * DHE * LEB * OPE * BDW
Cluster 3	Colombia, Costa Rica, Uruguay	ATCCT * ATE * ASEE * CHE * DHE * DHE% * imr * ope% * BDW * REO * REC
Cluster 4	El Salvador, Jamaica, Peru, Suriname	epr * pga
Cluster 5	Nicaragua, Haiti	atcct * ate * asee * ADR * che * dhe * epr * IMR * ope * bdw * bss * PGA * reo * REC

Proposed LAC Cluster Membership and Boolean Simplification for Social Policy Variables 2015

Cluster	Cluster Members	Boolean Simplification
Cluster 1	Bolivia, Colombia, Guatemala, Honduras, Paraguay, Suriname	leb * bss * REO
Cluster 2	Brazil	
Cluster 3	Dominican Republic, Ecuador, Mexico	ATE * ASEE * CHE * dhe% * OPE * OPE% * PGA * rec
Cluster 4	El Salvador, Jamaica, Peru	che * CHE% * dhe * DHE% * ope% * BSS * pga
Cluster 5	Argentina, Costa Rica, Uruguay	ATCCT * ATE * ASEE * CHE * DHE * DHE% * epr * imr * LEB * ope% * BDW * BSS
Cluster 6	Haiti, Nicaragua	atcct * ate * asee * ADR * che * dhe * epr * IMR * ope * OPE% * bdw * bss * PGA * reo * REC

Longitudinal Analysis of Convergence for Social Policy Variable

	Boolean Simplification			Patterns of Social Policy Convergence Over Time Interval		
Converging Cases 2000 to 2015	**2000**	**2008**	**2015**	**2000/08**	**2008/15**	**2000 to 2015**
Dominican Republic, Ecuador	dhe * IMR	che * dhe * EPR * IMR * bdw * PGA	ATE * ASEE * CHE * dhe% * OPE * OPE% * PGA * rec	dhe * IMR		
Bolivia, Guatemala, Honduras, Paraguay,	dhe * IMR	che * dhe * EPR * IMR * bdw * PGA	leb * bss * REO	dhe * IMR		
Haiti, Nicaragua	atcct * ate * asee * ADR * che * dhe * epr * IMR * leb * ope * OPE% * bdw * bss * PGA * REC	atcct * ate * asee * ADR * che * dhe * epr * IMR * ope * bdw * bss * PGA * reo * REC	atcct * ate * asee * ADR * che * dhe * epr * IMR * ope * OPE% * bdw * bss * PGA * reo * REC	atcct * ate * asee * ADR * che * dhe * epr * IMR * ope * bdw * bss * PGA * REC	atcct * ate * asee * ADR * che * dhe * epr * IMR * ope * bdw * bss * PGA * reo * REC	atcct* ate* asee* ADR* che* dhe* epr* IMR * ope *bdw* bss* PGA * REC

Appendix L3

SSA Economic Cluster Pairing and Boolean Simplification

Proposed SSA Cluster Membership and Boolean Simplification for Economic Policy Variables 2000

Cluster	Cluster Members	Boolean Simplification
Cluster 1	Cameroon, Central African Republic, Madagascar, Mali	fdi% * GDPDI * IACPI
Cluster 2	Benin, Gambia, Guinea-Bissau, Rwanda	FPI * GDPPC% * gdp * ODA * rp%
Cluster 3	Cote d'Ivoire, Guinea	GDP * ggr * gge * IACPI * NBTT * nm * oda
Cluster 4	Burkina Faso, Burundi, Chad, Lesotho, Niger	iacpi * oda * RP%
Cluster 5	Comoros, Togo	GDPDI * gdp * ggnlb * ggr * gge * nbtt * NM * odaa * RP%
Cluster 6	Ethiopia, Ghana, Kenya, Malawi, Mozambique, Tanzania, Uganda, Zambia	gdpdi * ODA
Cluster 7	Congo, Dem. Rep., Sierra Leone	gdpdi * gpdpcc * ggr * gge * IACPI * RP%
Cluster 8	Angola, Nigeria	fpi * FDI * FDI% * gdpdi * GDPPCC * GDP * GGNLB * GGR* GGE *IACP% * iacpi * nbtt * oda * rp%
Cluster 9	Cabo Verde, Congo, Rep., Gabon, Liberia, Sao Tome and Principe, Seychelles.	GDPDI * odaa * rp%

Proposed SSA Cluster Membership and Boolean Simplification for Economic Policy Variables 2008

Cluster	Cluster Members	Boolean Simplification
Cluster 1	Benin, Burkina Faso, Cameroon, Guinea-Bissau, Mali, Togo	FPI * fdi
Cluster 2	Chad, Madagascar	FDI * FDI% * GDPDI * gge * iacp% * NM * oda * RP%
Cluster 3	Central African Republic, Comoros, Cote d'Ivoire, The Gambia, Senegal	fpi * gdppc% * iacp%
Cluster 4	Malawi, Niger	FPI * gdpcc * GDPC%
Cluster 5	Guinea, Kenya, Tanzania, Uganda	gge * nm * oda * RP%
Cluster 6	Ghana, Mozambique, Rwanda, Zambia	GDPPC% * ODAA
Cluster 7	Burundi, Lesotho	fpi * fdi% * fdi * gdp *GGR * GGE * iacpi * IACP% * ODA * odaa * RP%
Cluster 8	Congo, Dem. Rep., Ethiopia, Sierra Leone	gdppcc * gdppc% * ggr * gge * IACP% * IACPI
Cluster 9	Nigeria	
Cluster 10	Angola, Cabo Verde, Congo, Rep., Gabon, Liberia, Sao Tome and Principe, Seychelles	NM * rp%

Proposed SSA Cluster Membership and Boolean Simplification for Economic Policy Variables 2015

Cluster	Cluster Members	Boolean Simplification
Cluster 1	Benin, Gambia, Guinea-Bissau, Senegal, Togo	fdi * nbtt *
Cluster 2	Cameroon, Cote d'Ivoire, Rwanda	fdi% * gdpdi * GDPPC% * iacp% * NBTT * rp%
Cluster 3	Niger, Zambia	FPI * FDI% * FDI * gdppc% * ggnlb * GGE *NBTT * oda * ODAA * RP%
Cluster 4	Burundi, Comoros	fpi * fdi * fdi% * GDPDI * gdppcc * gdppc% * gdp * GGR * GGE * NBTT * odaa * RP%
Cluster 5	Burkina Faso, Chad, Kenya, Madagascar, Uganda	GDPPPP * RP%
Cluster 6	Central African Republic, Guinea, Mali	fdi * fdi% * gdppc * GDPPC% * ggr * gge * nm * RP%
Cluster 7	Congo, Dem. Rep., Ethiopia, Ghana, Malawi, Tanzania	FDI * IACP% * ODAA
Cluster 8	Sierra Leone, Nigeria	FPI * gdppc% * ggr * gge * IACP% * IACPI * ODAA
Cluster 9	Angola, Congo, Rep.	FPI * FDI% * FDI * GDPDI * GDPPCC * gdppc% * GGR * GGE * iacpi * NBTT * oda * odaa * rp%
Cluster 10	Cabo Verde, Gabon, Lesotho, Liberia, Mozambique, Sao Tome and Principe, Seychelles	FDI% * GGR * NM

Longitudinal Analysis of Convergence for Economic Variable

Converging Cases 2000 to 2015	Boolean Simplification			Patterns of Economic Convergence Over Time Interval		
	2000	2008	2015	2000/08	2008/15	2000 to 2015
Benin and Guinea-Bissau	FPI * GDPPC% * gdp * ODA * rp%	FPI * fdi	fdi * nbtt *	FPI	fdi	
Kenya and Uganda	gdpdi * ODA	gge * nm * oda * RP%	GDPPPP * RP%		RP%	
Cabo Verde, Gabon, Liberia, Sao Tome and Principe, and Seychelles	GDPDI * odaa * rp%	NM* rp%	FDI%*GGR*NM	rp%	NM	

Appendix L4

SSA Social Policy Cluster Pairing and Boolean Simplification

Proposed SSA Social Policy Cluster Grouping and Boolean Simplification for the year 2000

Cluster	Cluster Members	Boolean Simplification
Cluster 1	Benin, Burkina Faso, Chad, Guinea-Bissau, Liberia, Madagascar, Niger	ope * bss
Cluster 2	Central African Republic, Guinea, Mali, Sierra Leone, Togo	atcct * che% * dhe * OPE% * bss
Cluster 3	Congo, Dem. Rep., Ethiopia, Tanzania	ate * ASEE * CHE% * dhe * ope * bdw * REO * REC
Cluster 4	Angola, Burundi, Malawi, Uganda, Zambia	ADR * IMR * ope% * bdw * REO
Cluster 5	Cameroon, Cote d'Ivoire, Ghana, Kenya	ASEE * CHE * OPE * OPE%
Cluster 6	Comoros, Congo, Rep., Gambia, Lesotho, Rwanda, Sao Tome and Principe	epr * imr * BDW * rec
Cluster 7	Mozambique, Nigeria, Senegal	ATCCT * ATE * ASEE * adr * CHE% * imr * OPE * ope% * BDW * BSS * pga * rec
Cluster 8	Cabo Verde, Gabon	ATCCT * ATE * CHE * DHE * DHE% * imr * LEB * OPE * BDW * BSS * pga * rec

Proposed SSA Social Policy Cluster Grouping and Boolean Simplification for the year 2008

Cluster	Cluster Members	Boolean Simplification
Cluster 1	Burundi, Congo, Dem. Rep., Ethiopia, Madagascar, Malawi, Tanzania, Zambia	ate * ADR * ope * bdw * REC
Cluster 2	Burkina Faso, Chad, Niger, Uganda	ate * ADR * EPR * leb * bdw * bss * PGA * REC
Cluster 3	Benin, Guinea-Bissau, Liberia, Mali	IMR * BDW * bss * reo
Cluster 4	Cameroon, Central African Republic, Cote d'Ivoire, Guinea, Sierra Leone, Togo	IMR * pga
Cluster 5	Angola, Lesotho	ATCCT * ASEE * CHE * DHE * DHE% * epr * IMR * ope% * BSS * REO * rec
Cluster 6	Comoros, Congo, Rep., Gambia, Ghana, Kenya, Rwanda, Sao Tome and Principe	ATE * LEB
Cluster 7	Cabo Verde, Gabon	ATCCT * ATE * adr * CHE * DHE * DHE% *epr * imr * LEB * OPE * BDW * BSS * reo
Cluster 8	Mozambique, Nigeria, Senegal	ATCCT * ATE * ASEE * adr * imr * OPE * BDW * BSS * pga * rec

Proposed SSA Social Policy Cluster Grouping and Boolean Simplification for the year 2015

Cluster	Cluster Members	Boolean Simplification
Cluster 1	Cameroon, Chad, Guinea, Guinea-Bissau, Niger, Togo	IMR * leb * OPE%
Cluster 2	Benin, Burkina Faso, Cote d'Ivoire, Liberia, Mali	CHE% * IMR
Cluster 3	Central African Republic, Sierra Leone	atcct * ate * asee * che% * dhe * dhe% * IMR * leb * OPE% * bdw * bss * pga * REO * REC
Cluster 4	Burundi, Congo, Dem. Rep., Ethiopia, Madagascar, Malawi, Tanzania, Uganda, Zambia	ate * bdw
Cluster 5	Mozambique, Nigeria, Senegal	ATCCT * ATE * ASEE * adr * imr * ope * BDW * BSS * pga * rec
Cluster 6	Cabo Verde, Gabon	ATCCT * ATE * adr * CHE * DHE * DHE% * epr * imr * LEB * OPE * ope% * BDW * BSS * reo
Cluster 7	Comoros, Gambia, Rwanda, Sao Tome and Principe	ATE * asee * epr * LEB * BDW * BSS * reo * rec
Cluster 8	Angola, Congo, Rep., Ghana, Kenya, Lesotho	ATCCT * CHE * DHE * DHE% * REO

Longitudinal Analysis of Convergence for Social Policy Indicators

Converging Cases 2000 to 2015	Boolean Simplification			Patterns of Social Policy Convergence Over Time Interval		
	2000	2008	2015	2000/08	2008/15	2000 to 2015
Ghana, Kenya	ASEE * CHE * OPE * OPE%	ATE * LEB	ATCCT * CHE * DHE * DHE% * REO			
Cabo Verde, Gabon	ATCCT * ATE * CHE * DHE * DHE% * imr * LEB * OPE * BDW * BSS * pga * rec	ATCCT * ATE * adr * CHE * DHE * DHE% *epr * imr * LEB * OPE * BDW * BSS * reo	ATCCT * ATE * adr * CHE * DHE * DHE% * epr * imr * LEB * OPE * ope% * BDW * BSS * reo	ATCCT * ATE * CHE * DHE * DHE% * imr * LEB * OPE * BDW * BSS	ATCCT * ATE * adr * CHE * DHE * DHE% *epr * imr * LEB * OPE * BDW * BSS * reo	ATCCT* ATE *CHE * DHE * DHE% * imr * LEB * OPE * BDW * BSS
Chad, Niger	ope * bss	ate * ADR * EPR * leb * bdw * bss * PGA * REC	IMR * leb * OPE%	bss	leb	
Benin, Liberia	ope * bss	IMR * BDW * bss * reo	CHE% * IMR	bss	IMR	
Congo, Dem. Rep., Ethiopia, Tanzania	ate * ASEE * CHE% * dhe * ope * bdw * REO * REC	ate * ADR * ope * bdw * REC	ate * bdw	ate *ope *bdw * REC	ate *bdw	ate *bdw
Burundi, Malawi, Zambia	ADR * IMR * ope% * bdw * REO	ate * ADR * ope * bdw * REC	ate * bdw	ADR * bdw	ate * bdw	bdw

Mozambique, Nigeria, Senegal	ATCCT * ATE * ASEE * adr * CHE% * imr * OPE * ope% * BDW * BSS * pga * rec	ATCCT * ATE * ASEE * adr * imr * OPE * BDW * BSS * pga * rec	ATCCT * ATE * ASEE * adr * imr * ope * BDW * BSS * pga * rec	ATCCT * ATE * ASEE * adr * imr * OPE * BDW * BSS * pga * rec	ATCCT * ATE * ASEE * adr * imr * BDW * BSS * pga * rec	ATCCT * ATE * ASEE * adr * imr * BDW * BSS * pga * rec
Guinea, Togo	atcct * che% * dhe * OPE% * bss	IMR * pga	IMR * leb * OPE%		IMR	
Central African Republic, Sierra Leone	atcct * che% * dhe * OPE% * bss	IMR * pga	atcct * ate * asee * che% * dhe * dhe% * IMR * leb * OPE% * bdw * bss * pga * REO * REC		IMR * pga	
Comoros, Gambia, Rwanda, Sao Tome and Principe	epr * imr * BDW * rec	ATE * LEB	ATE * asee * epr * LEB * BDW * BSS * reo * rec		ATE * LEB	