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Transformational Leadership and Fiscal Sustainability in the Eastern Caribbean Currency Union

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Abstract

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MSc in Finance, University of Leicester, 2010

BSc in Business Administration, St. George's University, 2006

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Fiscal sustainability is an existing problem for countries in the Eastern Caribbean Currency Union (ECCU), particularly during a time of crisis. The concept of fiscal sustainability is a function of the policy posture of the government, which is largely influenced by leadership. Theoretically, the characteristics associated with transformational leadership align with what is required to design and implement fiscal policies that promote fiscal sustainability. Grounded in the transformational leadership theory and Kingdon's multiple streams framework, this quantitative correlational study involved examining the relationship between transformational leadership and fiscal sustainability in the ECCU. Data were collected from 85 participants working within the fiscal policy space in the region to assess qualities of leaders while published macro-economic data were obtained from the Eastern Caribbean Central Bank and International Monetary Fund to calculate fiscal sustainability. Results of the multiple regression analysis indicated that transformational leadership did not significantly predict fiscal sustainability, with F (4, 80) =.764 and *p* > 05. The results do not diminish the role of transformational leadership in terms of enhancing organizational performance. However, a key positive social change implication is the need to strengthen or build resilience infrastructures to withstand the lingering effects of an exogenous shock.

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Dedication

I dedicate this doctoral study in memory of my late father, Lennox Joseph Wells, who instilled in me that the quest for knowledge is a never-ending journey. Although you are no longer of this world, the lessons that you have imparted continue to regulate my life.

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The path to attaining a doctorate was arduous but yet rewarding. This would not have been possible without the support and dedication of my doctoral committee and those who believed in the research topic. Permit me to express profound gratitude to my Chair, Dr. Raj Singh, who offered his knowledge, expertise, and guidance with a level of flexibility that helped me to navigate the dissertation process. In addition, I wish to thank Dr. Dana-Mari Thomas, who offered feedback during the process of writing that challenged me to improve my work. Special commendations to the Heads of Government in the Eastern Caribbean Currency Union, in particular, Dr. Keith Mitchell, Prime Minister of Grenada who believed in and supported the efforts of the research.

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Chapter 1: Introduction to the Study

Introduction

Fiscal sustainability has been a public finance concern for governments as they consider fiscal and other policies to meet the expenditures required to provide goods and services promised to the citizenry without defaulting on the same or other liabilities (Gondor, 2019). This is one of the key pillars of macro-economic stability in a country and is often a core area of focus in public finance management (Mahmah & Kandil, 2019). However, for most countries, fiscal sustainability has been a major challenge involving factors including inadequate policy design and implementation brought on by weak institutional frameworks or infrastructure that supports policy development and implementation and poor management of financial risk, and lack of support from legislatures (Tofan et al., 2020). While these factors play a role in countries achieving long-run fiscal sustainability, most of the research in this area has focused on the sustainability of fiscal policies as a means of testing fiscal sustainability as an outcome. Little evidence has been found on research conducted in other areas beyond policy appropriateness that is necessary to support fiscal sustainability. Moreover, most empirical studies have concentrated on the economy of the United States (US) and other industrially-advanced economies, with little attention being placed on small island developing states in the Caribbean, although economies in that region have struggled with fiscal imbalances and growing debt levels which are known impediments of fiscal sustainability (Mahmah & Kandil, 2019).

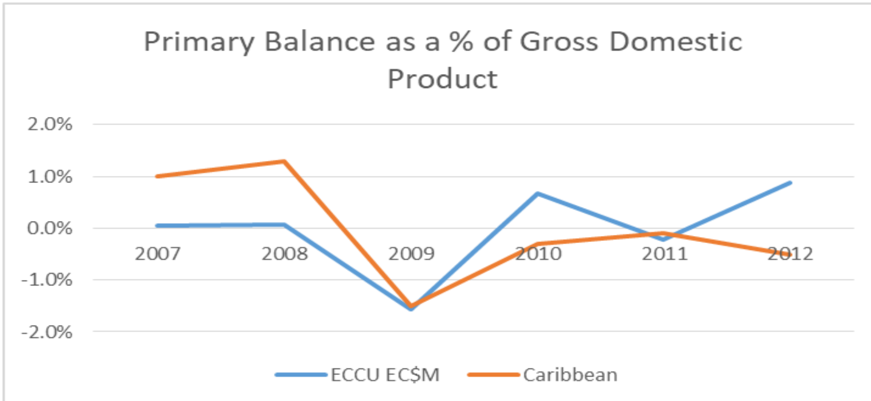
Background of the Problem

The economic structure of most of the countries in the Caribbean region is dominated by the export of goods and services, which was particularly dynamic during the period between 1990 and 2008 (Cevik & Nenda, 2020). For this period, exports represented an average of 42% of the Gross Domestic Product (GDP) of the region, with major linkages to the United States (US) and Europe (Kouame & Reyes, 2011). Export travel services from the tourism sector, in particular, played a major role in the contribution to the GDP, with some countries averaging 30% contributions (Kouame & Reyes, 2011).

Given the Caribbean's close relationship with the US and Europe, the global financial crisis of 2008 saw a reduction in exports, remittances, and foreign direct investment, thus resulting in an economic contraction of 0.2% across the region in 2009 (Kouame & Reyes, 2011). This contraction has affected the primary balance of countries (see Figure 1). The difference between government earnings and expenditures that did not include debt payments relative to GDP took a significant hit in 2009 (International Monetary Fund [IMF], n.d.). This suggests that no funds were available to meet debt obligations, thus placing countries at risk of debt default, while there was a struggle to meet mandatory expenditures necessary for the functioning of government.

Figure 1

Eastern Caribbean Primary Balance to Gross Domestic Product

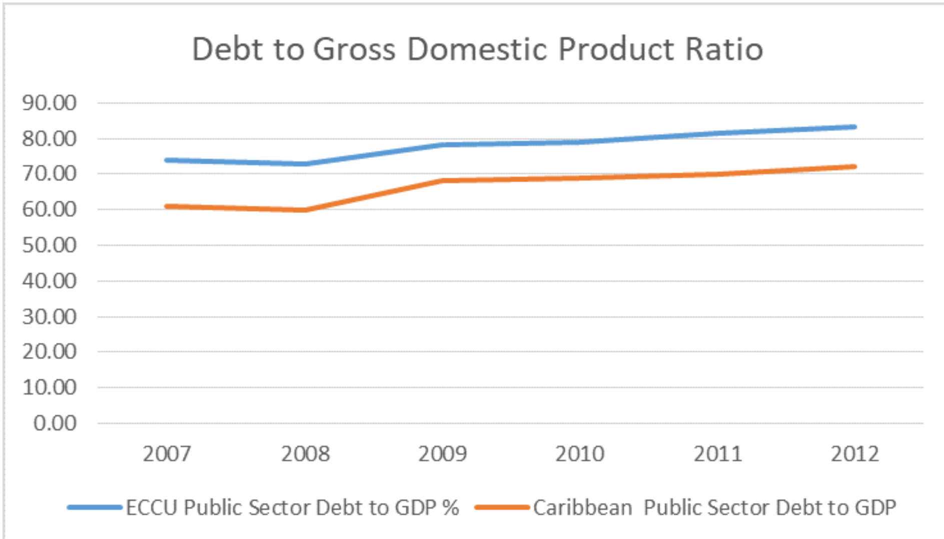


While all countries in the region grappled with the economic fallout of the financial crisis, some were more vulnerable than others. The Eastern Caribbean Currency Union (ECCU) is made up of eight member countries, namely Grenada, Antigua and Barbuda, Dominica, St. Kitts and Nevis, Anguilla, St. Vincent and the Grenadines, St. Lucia, and Montserrat was devastated compared to the wider Caribbean.

As a means of financing the deficit and spurring economic activity during the period between 2008 and 2012, countries in the Caribbean region incurred increased debt relative to the GDP (see Figure 2).

Figure 2

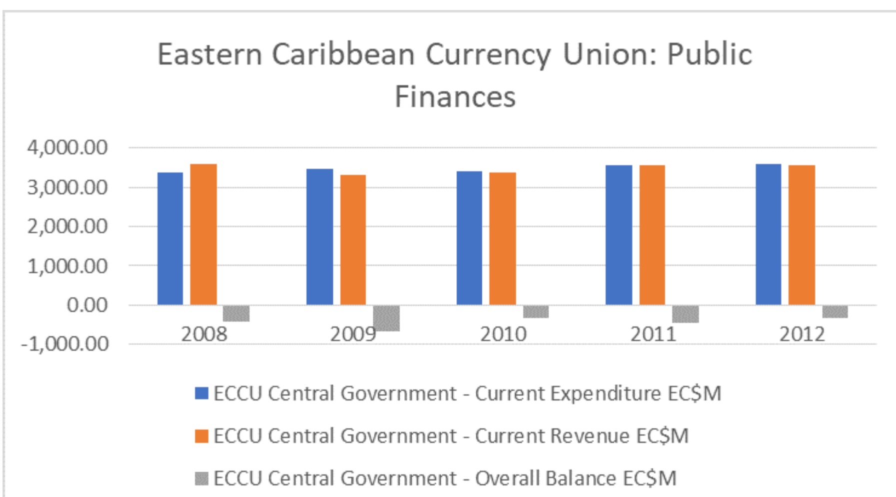
Eastern Caribbean Debt to Gross Domestic Product (2007-2012)



Although the ECCU performed better on average after the 2009 period compared to the Caribbean as a whole, the debt burden in the sub-region was greater. This created an overall deficit for the ECCU (see Figure 3).

Figure 3

Public Finances of the Eastern Caribbean (2008-2013)



These macroeconomic indicators suggested that the ECCU was facing a serious fiscal sustainability challenge compared to the wider Caribbean (Khadan, 2019). Accordingly, in the wake of the global financial crisis of 2008, increased focus has been placed on fiscal sustainability in the countries of the Caribbean with particular attention on the ECCU.

During the years following the financial crisis of 2008, international and regional partners including but not limited to the IMF, World Bank, Caribbean Development Bank, and Eastern Caribbean Central Bank (ECCB) aggressively engaged the governments of the ECCU regarding various public policy reform initiatives which saw improvements in terms of debt and fiscal positions (See figures 4 & 5) (Khadan, 2019).

Figure 4

Eastern Caribbean Debt to Gross Domestic Product (2008-2019)

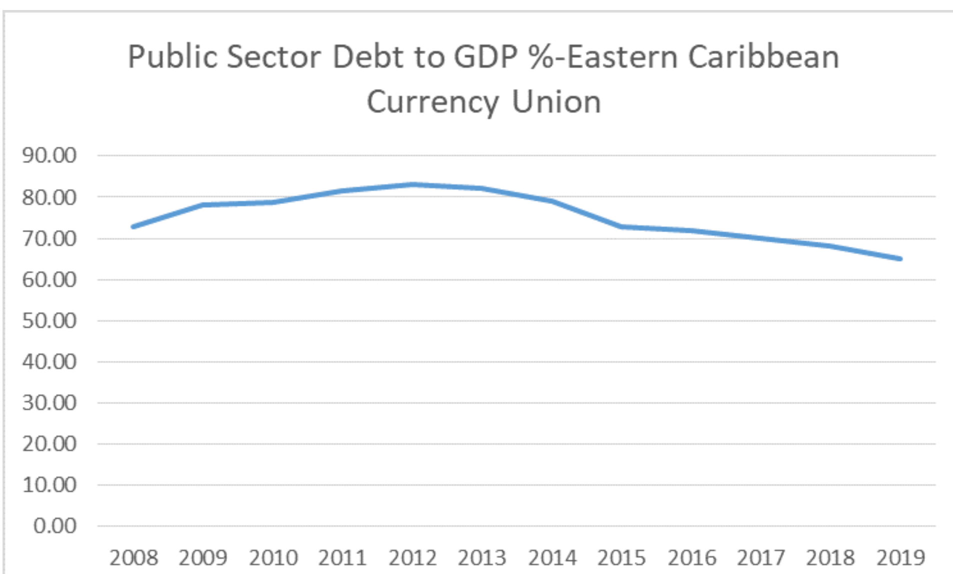
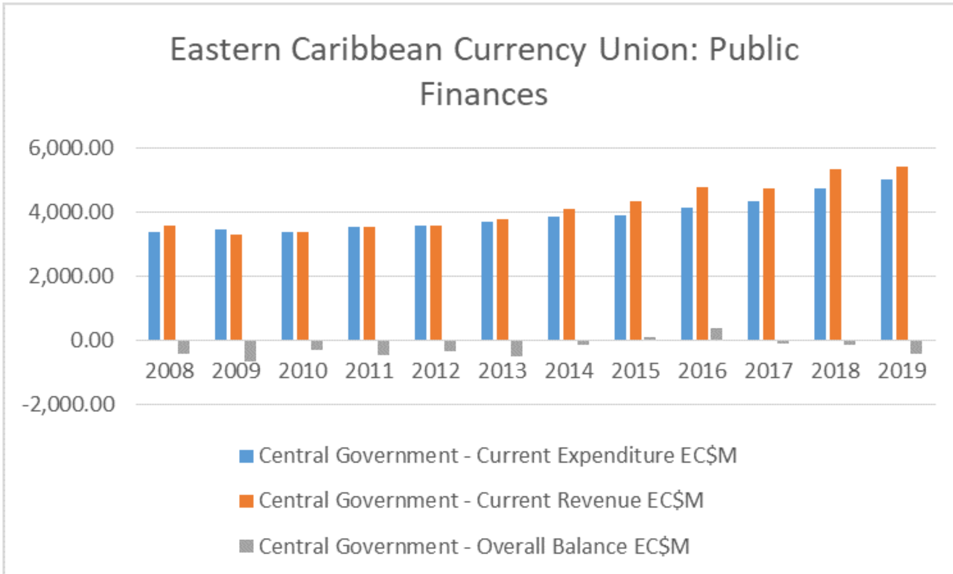


Figure 5

Public Finances of the Eastern Caribbean Currency Union (2008-2019)



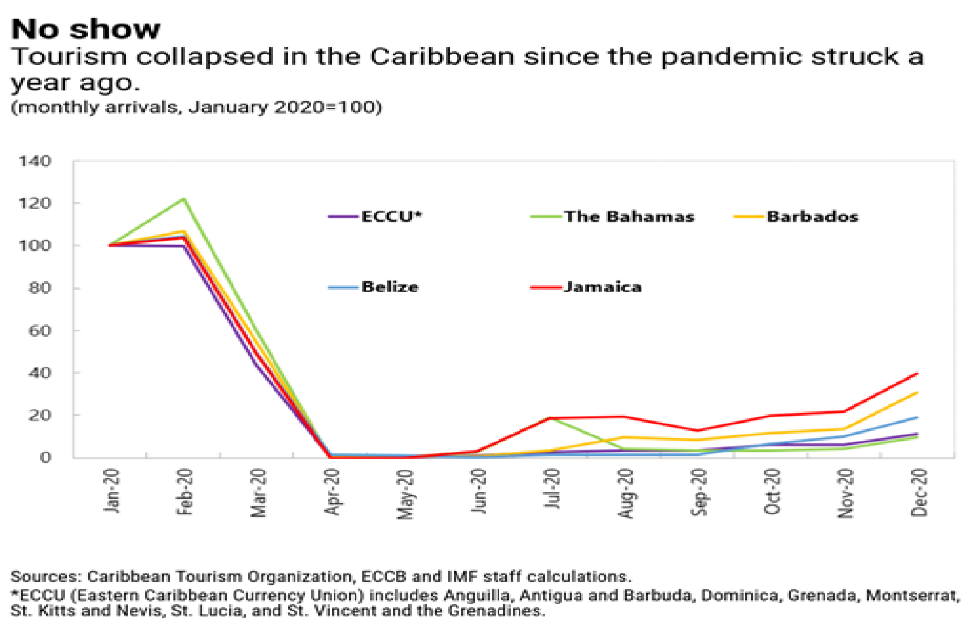
While the economies of the ECCU were trending on an improved path towards fiscal sustainability with clear signs after 2013, these economies have since been faced with a global pandemic that has exacerbated challenges. This has called for renewed vigor in the fight for fiscal sustainability in the subregion. The urgency of the work in this area has heightened with the economic fallout of the global pandemic brought on by COVID-19 in 2020 to the time of writing. The sector most directly impacted as a result of COVID-19 is the tourism sector, as countries worldwide periodically closed their borders, restricting travel and imposing national lockdowns as a means of controlling the spread of the virus. Countries in the Caribbean were not spared from these drastic measures with every island imposing such restrictions at some point in time during the pandemic (ECCB, n.d).

The Caribbean region is highly tourism-dependent, with the sector contributing 11.8% directly to the GDP and 28.5% overall by the close of 2019 (Alleyne et al., 2020). This ranges in average from 1.1% and 2.6% of direct and overall contributions to the GDP respectively in countries like Suriname to 30.4% and 73.6% of GDP contributions of the same in Aruba (Alleyne et al., 2020). Therefore, any restrictions on world travel would negatively affect the economies of countries in the Caribbean.

Srinivasan et al. (2021) said tourism in the Caribbean region saw a contraction of 70% of hotel stays, with a complete halt in cruise ship arrivals as a result of the pandemic (see Figure 6). This has resulted in an average reduction of 8% in the GDP and a 50.9% loss in service exports in 2020 (Alleyne et al., 2020).

Figure 6

Impact of the COVID-19 Pandemic on the Tourism Sector in the Caribbean (2020)



Source: Srinivasan et al. (2021)

Srinivasan et al. (2021) advised that this can lead to long-term economic issues with the loss of jobs mostly affecting women and the youth that are less educated thus increasing poverty and unemployment in the countries. Alleyne et al. (2020) supported this observation highlight that one in every six workers in the Caribbean region is employed in the tourism sector, and any negative impact on the sector would affect lives and livelihoods in the region. Another impact is the complete closure of hotels and ancillary services that supports the industry.

While all countries in the Caribbean are significantly affected, the tourism sector in the ECCU bloc of countries was most hard hit. Although public finances and debt to GDP of member countries in the sub-region saw some improvements after the financial crisis, it has worsened with the onset of the pandemic in 2020 (see Figures 7 & 8).

Figure 7

Public Finances in the Eastern Caribbean (2008-2020)

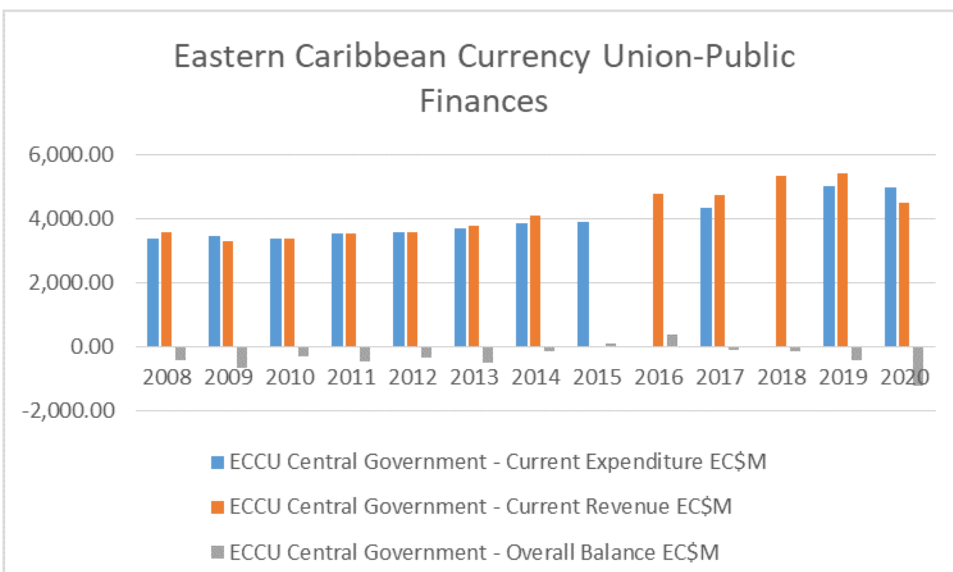
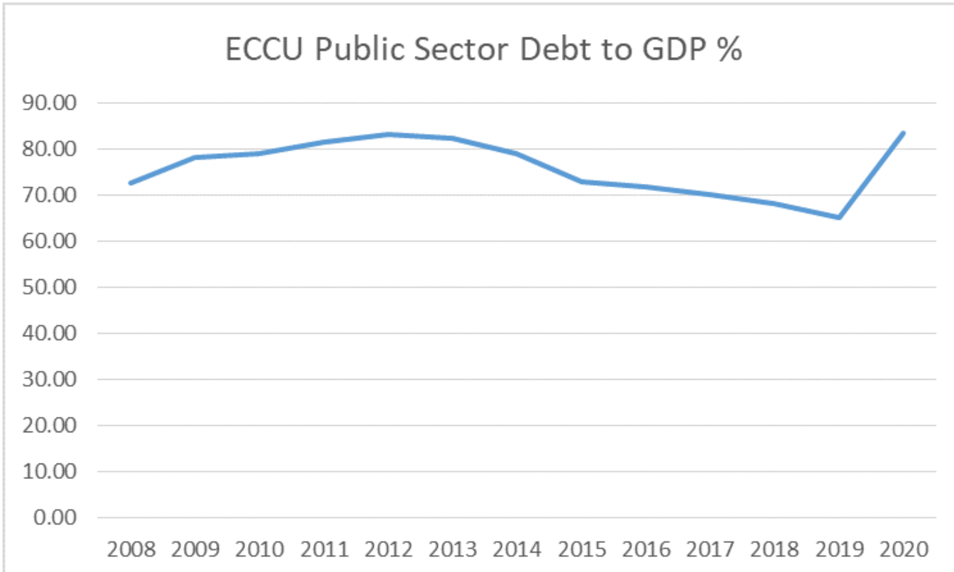


Figure 8

Eastern Caribbean Debt to Gross Domestic Product (2008-2020)



Similar to the 2008 financial crisis, the countries in the sub-region were disproportionately affected by the economic fallout from the pandemic and struggled to meet recurrent expenditure obligations. Debt burdens increased again to address this financing gap (see Figures 7 & 8).

The absence of fiscal buffers to manage the deficit has forced countries in the ECCU to rely on debt financing to fund regular obligations that are necessary for the government's survival, with little or no financing available to invest in capital projects as a means of stimulating economic activities. This has resulted in a vicious cycle of economic peril for countries in the ECCU, and by extension, the Caribbean. Cevik and Nenda (2020) said while the fiscal policy posture of the ECCU after the financial crisis of 2008 should remain prudent, countries need to build sufficient fiscal buffers to address crisis events. This is evident having regard for the most recent economic fallout of the pandemic which has reversed the gains made from the post-financial crisis era. It is therefore critical for the region to place greater emphasis on the issue of fiscal sustainability, particularly during a crisis.

Existing empirical studies on fiscal sustainability in the ECCU and by extension the Caribbean have involved the appropriateness of the government's policies, but there is little to no existing research regarding relationships between leadership and fiscal policy formulation and fiscal sustainability in the ECCU during a financial and economic crisis.

This research involves describing the nature of fiscal policies employed to manage the financial and economic crisis in the ECCU between 2008 and 2013, which marked the turning point for economic recovery in the region.

While there is evidence that the countries in the Caribbean region should maintain some elements of the fiscal policy posture adopted during the period of the financial crisis of 2008 leading up to 2013 where the economic turnaround was evident, to achieve long-term fiscal sustainability more is required (Cevik & Nenda, 2020). Khadan (2019) agreed with Cevik and Nenda (2020) that more work is required to address the long-term challenges of fiscal sustainability in the ECCU, and cited the strengthening of the policy infrastructure as a necessary action. Khadan (2019) added that leadership that possesses the requisite skills to institute change in the policy process is a key pillar required to improve the policy process.

Current research provides no evidence regarding the extent to which transformational leadership characteristics that are specifically noted for affecting organizational change are necessary to promote long-term fiscal sustainability in the region. Although every island has its unique characteristics and approaches to governance, the issue of fiscal sustainability remains important to all. This study can contribute to the body of knowledge regarding the issue of fiscal sustainability, particularly in small and developing island states, by providing information regarding characteristics of leadership that are required to position countries in the ECCU to achieve fiscal sustainability.

Problem Statement

The problem in this study is the challenge of fiscal sustainability confronting governments in the ECCU, which is exacerbated during a time of crisis. The concept of fiscal sustainability involves the ability of the government to achieve "a balance between its revenues and expenditures intertemporally" (Mahdavi, 2014, p. 1029). Cevik and Nenda (2020) said this is currently an issue for governments of Caribbean countries given their low revenues, primary deficits, high debt in terms of GDP, and disaster-prone geographic locations. When compounded by a crisis, the already low revenues of these countries are likely to contract, forcing the government to employ policies that can respond (Cevik & Nenda, 2020). The fiscal policy stance of governments in the Caribbean region determines the extent to which the issue of long-run solvency is resolved.

Cevik and Nenda (2020) found that a countercyclical fiscal policy stance adopted by countries in the region that promotes prudent fiscal policies should be maintained; however, there is a need to deploy growth-enhancing structural reforms that allow countries to build fiscal buffers to address expenditure burdens brought on by high levels of debt. Without these policy measures, fiscal sustainability would continue to elude the governments of the Caribbean (Cevik & Nenda, 2020).

Policy formulation and implementation is a function of the leadership of government institutions. Stolzenberk and Getimis (2016) underscored the importance of leadership, particularly in fiscal policy consolidation to achieve fiscal sustainability as an outcome. The qualities and characteristics that are required for leadership from a public sector standpoint to achieve this include the ability to motivate and inspire employees' performance in terms of a shared vision (Stolzenberk & Getimis. 2016). These qualities are key pillars of transformational leadership (Northouse, 2019).

Existing research on the topic of fiscal sustainability in the Caribbean region is limited to the appropriateness of fiscal policies used by countries. To date, there is little or no research regarding the relationship between transformational leadership and fiscal policy formulation and implementation as a function of fiscal sustainability in the ECCU during an economic crisis. In order to understand the relationship between transformational leadership and fiscal sustainability in the ECCU during the economic crisis between 2008 and 2013, a quantitative correlational study was conducted. Understanding the role of transformational leadership skills can provide public administrators in the ECCU with a leadership competency framework that is conducive to the development and implementation of strategies that promote fiscal sustainability over time.

Purpose of the Study

The purpose of this quantitative study is to describe the relationship between transformational leadership and fiscal sustainability in the ECCU for the period between 2008 and 2013. The independent variable is transformational leadership and is characterized by four constructs: idealized influence, individualized consideration, inspirational motivation, and intellectual stimulation. The dependent variable is fiscal sustainability, which is the ability of the government to balance its revenue and expenditure.

Participants in this research are administrative and political leadership of ministries of finance in the eight islands in the ECCU.

This research is unique as it addresses an under-researched area on the role of leadership in fiscal policy formulation and implementation as a direct function of fiscal sustainability.

Nature of the Study

Qualitative, quantitative, and mixed methods were all considered for this research. The research problem, purpose, and objective dictated the selection of method and design. The quantitative method is used to confirm a theory and establish the generalizability of a particular subject (House, 2018). This research involves testing the appropriateness of the transformational leadership theory during the policy process, and therefore the quantitative method was most appropriate for this research study.

The specific research design that was used in this study is a quantitative correlational design. This type of design involves understanding relationships between variables that cannot be manipulated (Burkholder et al., 2016).

This research design is nonexperimental in nature and is consistent with the research problem, objective, and purpose involving the relationship between fiscal sustainability and transformational leadership (two variables that cannot be manipulated because they were being assessed in a historical context) in the ECCU during the economic crisis between 2008 and 2013.

The transformational leadership variable was assessed from the results of administering Bass's multifactor questionnaire to 85 participants selected from Ministries of Finance in the ECCU, while fiscal sustainability was assessed using macroeconomic variables to calculate the fiscal sustainability index developed by Croce and Ramon (2003). Moreover, the data collected were analyzed using multiple regression.

Research Question

The central research question in this study is:

RQ: Is there a statistically significant predictive relationship between idealized influence, individualized consideration, inspirational motivation, intellectual stimulation, and fiscal sustainability in the ECCU for the period between 2008 to 2013?

Null & Alternative Hypothesis

H_01: There is no statistically significant predictive relationship between idealized influence, individualized consideration, inspirational motivation, or intellectual stimulation and fiscal sustainability in the ECCU for the period between 2008 to 2013.

H_a1: There is a statistically significant predictive relationship between idealized influence, individualized consideration, inspirational motivation, or intellectual stimulation and fiscal sustainability in the ECCU for the period 2008 to 2013.

Theoretical Framework

I chose the transformational leadership theory to support organizational transformation that may be necessary to support goal attainment and improved organizational performance (Northouse, 2019). Transformational leadership characteristics were specifically selected to demonstrate that some of its leadership qualities are necessary to transform policy formulation and implementation approaches within the public sector in the ECCU to support fiscal sustainability as the desired outcome.

Sun and Henderson (2017) said transformational leadership involves identifying problems, creating a vision, and inspiring and empowering followers to develop new and innovative solutions to accomplish the vision. This is required in the public sector in the ECCU to ensure appropriate policies are designed, adopted, and implemented to achieve fiscal sustainability. As such, while there is numerous research supporting the assertion purported by Sun and Henderson (2017), organizational setting and context are important considerations when assessing leadership styles.

Zeb et al. (2015) have assessed the effects of transformational leadership and goal attainment particularly in an environment of uncertainty in the public sector. It was revealed that both transformational and transactional leadership characteristics increase goal attainment and enhance performance in the public sector generally (Zeb et al., 2015).

However, in the context of a financial crunch and situations of uncertainty, transformational leadership is most suitable (Zeb et al., 2015). As such, transformational leadership is an appropriate lens for my study as it can provide strategies for improving fiscal sustainability in the ECCU.

I also used Kingdon's multiple streams frameworks in conjunction with the transformational leadership theory as it establishes the cycle of policy adoption and implementation. The leadership interaction within the policy process is critical to ensure the appropriate policy design, adoption, and implementation necessary to achieve fiscal sustainability.

Definitions

As a means of clarification, the following terms are defined.

Crisis: Liu et al. (2016) defined a crisis as a high-uncertainty event that creates a perceived threat.

Eastern Caribbean Central Bank (ECCB): The monetary authority that was established on July 5, 1983, for eight participating countries: Grenada, Antigua and Barbuda, Dominica, St. Kitts and Nevis, Anguilla, St. Vincent and the Grenadines, St. Lucia, and Montserrat. Their authority includes banking sector oversight and currency stability (ECCB, n.d.).

Eastern Caribbean Currency Union (ECCU): The ECCU is a group of eight countries under the umbrella of the Organization of Eastern Caribbean States in furtherance of the economic union envisioned under the revised treaty of Basseterre (Organization of Eastern Caribbean States, n.d.)

Financial Crisis: This is a situation where asset prices see a sharp reduction in value, institutions are unable to meet their obligations, and banks and other financial institutions are starved of liquidity, thus reducing the money supply and leading to contracting of aggregate economic activity (Bordo & Haubrich, 2017).

Financial Secretary/Permanent Secretary within the Ministry of Finance: Nomenclature used for the administrative manager who is responsible for macro-economic planning, financial management, and fiscal policies of islands in the ECCU (ECCB, n.d.).

Fiscal Balance: The difference between government revenue and expenditure (IMF, n.d.).

Fiscal Policy: A macro-economic stabilizer to ensure the broad balance between government expenditure and revenue in a way that creates economic development in a fair and equitable manner (Voda et al., 2020).

Gross Domestic Product (GDP): This is the measure of the monetary value of goods and services produced in a country during a specified time period (Callen, 2020).

Ministry of Finance: The arm of government in the ECCU that is responsible for macro-economic planning as well as financial management and fiscal policies.

Monetary Council: This is the highest body that governs the ECCB and is made up of all Ministers of Finance in the ECCU (ECCB, n.d.).

Overall Balance: The difference between government revenue and grants and expenditure and net lending (IMF, n.d.).

Primary Balance/Primary Fiscal Balance: This is the difference between government revenue and noninterest expenditures (IMF, n.d.).

Primary Surplus: A positive net effect between government revenue and noninterest expenditures (IMF, n.d.).

Public Debt: The total amount that the government owes to creditors at a particular point in time (IMF, n.d.).

Real Growth Rate: The GDP from one period to another that is adjusted for inflation (IMF, n.d.).

Real Interest Rate: Interest rate adjusted for inflation (IMF, n.d.).

Assumptions

Assumptions are elements of research that the researcher cannot necessarily prove but are assumed to be true (Leedy & Ormarod, 2016). It is important to establish assumptions in research as they constitute a critical component of understanding the context of the research. The first assumption in this research was that participants had a working knowledge of the organization and policy processes. Secondly, I assumed participants understood and appreciated the leadership styles of Financial or Permanent Secretaries within Ministries of Finance, and those individuals understood the leadership styles of their respective Ministers of Finance. Moreover, I assumed the responses provided by participants were truthful.

The above assumptions are necessary as without them the study would be meaningless. It was important that all participants involved in the research had an understanding of the organization and policy processes, as policy determines fiscal sustainability as the desired outcome. This working understanding was necessary as it allowed participants to explain how leadership engages during the same. The engagement in turn would enable participants to have an appreciation of leadership characteristics used during the process, which informs leadership style. This knowledge and understanding would enable the participants to adequately respond to the research instrument that facilitates the description associated with transformational leadership.

Limitations

Savela (2018) advised that a limitation in research is a weakness that is not within the control of the researcher. Limitations can manifest themselves during various stages of the research process, from the research design to data collection.

One limitation of the correlational design is known as the bi-directionality problem, as it will not provide information regarding the causal direction of the two variables (Burkholder et al., 2016). This suggests that the results would not indicate that transformational leadership causes fiscal sustainability, or attaining fiscal sustainability results in transformational leadership. Further, this type of research design is not used to address whether a third variable explains relationships between the two variables of interest, which is known as the third variable problem (Burkholder et al., 2016). Burkholder et al. (2016) said these two limitations affect the ability of a researcher to make causal inferences when using this design. The issue of cause and effect addresses an aspect of the validity of the study which is a weakness in correlational studies. Another issue that Burkholder et al. (2016) established with the correlational design study is that the results would not offer an in-depth understanding of the human experience in the research.

Delimitations

Leedy and Ormarod (2016) defined delimitations in research as restrictions imposed by the researcher to narrow the focus of the research undertaking to make it manageable. There are several delimitations established in this research. The concentration on the Eastern Currency Union limits the number of countries under evaluation. A second delimitation is the imposition of a restricted timeframe of 2008-2013 to capture the global financial crisis and the cusp of recovery which fits within the context of the research problem in a specific and appropriate period. Further, considering fiscal sustainability limits the focus to the area of government that is responsible for fiscal policy development and implementation as key pillars of fiscal sustainability. This provides a focus on the Ministries of Finance within the ECCU as opposed to the entire government system. To this end, the quality of the leadership focus in the public sector in the ECCU is limited to that Ministry in particular.

In light of the foregoing, the findings of the research cannot necessarily be generalized to the broader Caribbean or all of the policy formulation and implementation processes within the government system.

Significance of the Study

Fiscal sustainability requires appropriate policy designs and implementation strategies guided by sound leadership (Stolzenberg & Getimis, 2016). This has eluded many countries in the Caribbean region (Cevik & Nanda, 2020). Results of this study can aid countries in the ECCU to establish a leadership competency framework that is conducive to the development and implementation of strategies that promote fiscal sustainability over time.

Governments' core function is to adequately meet the needs of their people in terms of quality healthcare services, education, social protection initiatives, and infrastructure development. However, the ECCU is faced with low growth, a small tax base, and high debt burdens which create resource constraints that limit required investments (IMF, 2019). Consequently, the region is faced with poor healthcare systems, poor infrastructure, insufficient educational opportunities, increased unemployment in terms of private sector growth, and a highly uneducated population, which worsened during the time of crisis (IMF, 2019). To improve the lives and livelihoods of the people of the ECCU, fiscal sustainability must be confronted in terms of leadership as a requisite function of policy design and formulation.

Summary and Transition

Chapter 1 includes the context in which the issue of fiscal sustainability and its importance to countries in the Caribbean and the ECCU in particular. Detailed background information regarding the effects of crisis events on key indicators that affect fiscal sustainability in the Caribbean was addressed highlighting the disproportionate impact on the ECCU. This contextual information justified the need for this study.

The research problem and purpose were extrapolated from the context and background evidence of the challenge with fiscal sustainability. The general problem established was that fiscal sustainability as a function of policy in the ECCU is a concern that is further exacerbated during a time of crisis. Accepting that leadership has a major role in the policy process, the specific problem is the role of transformational leadership in terms of supporting the appropriate policy design, adoption, and implementation to facilitate fiscal sustainability for the period between 2008 and 2013. Accordingly, the purpose of the study is to describe the relationship between transformational leadership and fiscal sustainability in the ECCU during a specific period.

This chapter also establishes the importance of the study, highlighting that it can aid in terms of creating a leadership competency framework that supports the hiring of appropriate financial management leaders in the public sector in countries in the ECCU. The leadership competency framework would be limited to leaders of Ministries of Finance, and would not reflect the wider public sector. Accordingly, the applicability of results across public services must be approached with caution. Notwithstanding, the research would aid in understanding the qualities that are necessary for managers of public finance, particularly during a time of crisis.

I addressed this topic because of a lack of peer-reviewed literature involving assessing leadership characteristics that support policy processes that are necessary for fiscal sustainability.

The theory used to anchor the research was the transformational leadership theory cast in the context of Kingdon's multiple streams framework. Further, the research was approached with several assumptions which included the level of understanding of the policy process of the participants, their appreciation for the operations of the Ministries of Finance that is charged with the responsibility for fiscal policy, the participants understand the leadership styles of their leadership and they would be honest in their response. Only under these conditions would the information gathered be interpreted with a level of confidence.

Chapter 2 includes existing research regarding the topic and key findings that are relevant while chapter 3 establishes the methodology that was used in this research.

Chapter 2: Literature Review

Introduction

Countries in the ECCU and by extension the wider Caribbean continue to be affected by fiscal imbalances and rising debt levels that are further exacerbated by exogenous shocks and natural disasters (Khadan, 2019). Fiscal deficits in the Caribbean region continue to increase, averaging from 1.8% of GDP in 2008 to 2.4% in 2019 while the debt to GDP ratio increased from 66.4% in 2008 to 67.7% in 2019 (Alleyne et al., 2020).

The deterioration of average fiscal deficit and debt levels relative to GDP was partly due to the effects of the financial crisis in 2008 and the impact of hurricanes experienced during that period (Cevik & Nendad, 2020). Further deterioration of these indicators is anticipated in 2021 due to the economic fallout of COVID-19 which brought contracting pressures on revenues of governments in the Caribbean region while increasing their expenditures (Alleyne et al., 2020). Moreover, the lack of fiscal buffers has forced countries to increase their debt burden and fiscal imbalance, thus creating downward pressure on economic growth (Khadan, 2019).

These issues affect the ability of governments to meet their obligations and pose major fiscal sustainability concerns. Cevik and Nenda (2020) said countries in the Caribbean have weak fiscal sustainability and require prudent fiscal policy postures that support economic growth and the building of fiscal buffers given the region's vulnerabilities to natural disasters. Khadan (2019) supported the observations advanced by Cevik and Nenda (2020) adding that to achieve this, there is a need to strengthen the fiscal policy apparatus as countries struggle from “relatively weak fiscal institutions” (p. 17). This would support the development, advancement, adoption, and implementation of appropriate fiscal policies that are necessary for fiscal sustainability (Khadan, 2019).

A key factor in terms of strengthening fiscal policy frameworks is leadership. Stolzenberg and Getimis (2016) said when seeking to address fiscal issues, a leader with a vision that can communicate the same, develop, motivate and inspire their employees to achieve that vision would be more effective. Northouse (2019) considered these leadership characteristics as key pillars of transformational leadership.

In this chapter, I reviewed key literature related to the study topic and theoretical frameworks. Key topics in the literature review include fiscal policy development, adoption and implementation as a leadership issue, and types of leadership characteristics that support strategic outcomes for governments. I chose the transformational leadership theory and Kingdon’s multiple streams framework to adequately explore leadership characteristics involved with policy processes related to fiscal sustainability.

Literature Research Strategy

Literature was obtained from the Walden University Library, ScienceDirect, SAGE Journals, Ulrich’s Periodical Directory, ProQuest, Google Scholar, and Thoreau. Keywords and phrases searched in the research databases were *fiscal sustainability*, *leadership*, , *financial and economic crisis*, *transformational leadership*, *fiscal sustainability in the Caribbean*, *public sector leadership*, *factors that promote fiscal sustainability*, *government*, *drivers of fiscally sustainable policies in government*, *factors of fiscal sustainability in government*, *leadership theory*, *policy formulation process in* *government*, and *fiscal sustainability in the ECCU*. Peer-reviewed articles were also obtained from primary search results. Information from official websites of governments, the Bretton Woods Institutions, ECCB, and Caribbean Development Bank was used.

Review Related to Key Variables in the Study

Fiscal Sustainability

Fiscal sustainability is predicated on the design and implementation of fiscal policies. Most research involving this issue has focused on the extent to which fiscal policies of a country support the notion of fiscal sustainability by definition.

The earlier approaches to the concept of fiscal sustainability viewed it from an accounting framework to the intertemporal budget constraint where the former approach considered the long-run primary balance levels and its ability to stabilize the debt to GDP ratio, and the latter approach looked at the present value of future primary surpluses and its ability to meet the debt and interest accumulated as a result of the current deficit (Serju-Thomas, 2020).

While there are several definitions for fiscal sustainability, Serju-Thomas (2020) said the widely accepted definition in the economic literature is the definition that is based on the intertemporal budget constraint. The intertemporal budget constraint method is a forward-looking concept that requires the projection of future tax revenues and expenditures as well as GDP growth and interest rates to determine if budgetary constraints are met, which is really a solvency question (Serju-Thomas, 2020). Although solvency in and of itself is a necessary condition for fiscal sustainability, sustainability mandates that solvency occurs in terms of an unchanged fiscal policy stance.

Accordingly, the intertemporal budget constraints definition implies that fiscal sustainability is only achieved if the unchanged fiscal policies of the government facilitate the present value of the future surplus to compensate for current debt and interest accumulation. It is however important to note that a major critique of this definition is that it sets aside the interaction between budgetary variables and the economy and is therefore based on a partial equilibrium approach (Serju-Thomas, 2020).

Notwithstanding the limitation, it is evident that the evolution of the debt ratio is a function of budgetary policies of a government relative to revenue earned from tax structures and primary expenditures over time. There are several indicators and tests that provide information regarding the sustainability of fiscal policies based on the intertemporal budgetary constraints definition.

Khadan (2019) advised that early signs of fiscal sustainability concerns are consistent fiscal deficit and growing debt to GDP ratio like what is apparent in the Caribbean. Due to low credit ratings and pressured economic growth to support the potential for future surpluses, countries in the Caribbean are trapped in a vicious unsustainable cycle of increasing debt and interest rates (Khadan, 2019). While these signs are evidence of fiscal sustainability challenges in the region, the extent of the same must be determined. This cycle makes heavily-indebted countries more vulnerable to increased fiscal sustainability challenges caused by exogenous shocks (Gondor, 2019; Khadan, 2019). Gondor (2019) recorded the experiences of growing public indebtedness that has impacted the economic growth levels of many of the European Union member countries since the financial crisis of 2008 thus triggering fiscal reforms of varying degrees across the member states due to the threat posed to fiscal sustainability. The experiences of Mexico, Indonesia, South Korea, and Turkey were no different as documented by Ogbeifun and Shobande (2020). While high debt levels and fiscal imbalances are signs of fiscal sustainability challenges in a country (Gondon, 2019; Khadan, 2019; Obeilfun & Sholbade, 2020), the extent of the same must be assessed and the necessary reforms must be analyzed.

Fiscal sustainability can be assessed in two ways a fiscal indicator or test. Fiscal sustainability tests generally assess whether the solvency conditions have held for past budgetary policies as a means of informing future policy positions of the government (Serju-Thomas, 2020). Empirical research has shown testing techniques to involve unit root test (Hamilton & Flavin, 1986; Wilcox, 1989), cointegration analysis of fiscal data (Trehan & Walsh, 1988, 1991), or the adoption of a model-based sustainability approach (Bohn, 1998, 2005). One major limitation of the testing approach is that it does not guarantee future sustainability as the results are often inconsistent even when applied to the same country and period repeatedly (Serju-Thomas, 2020).

The early approaches with the fiscal sustainability test gave rise to an alternative means of gauging fiscal sustainability by using synthetic indicators that use simple measures from current information or a model-based projection of future paths of fiscal policy (Serju-Thomas, 2020). One of the limitations of the use of traditional indicators that Croce and Ramon (2003) have identified is the estimation of future GDP and interest rates that may be challenging in an ever-changing environment. Accordingly, the authors proposed a recursive algorithm that uses the law of the motion of the debt to GDP ratio, subject to the government reaction function to establish a fiscal sustainability index (Croce & Ramon, 2003). This is intended to anchor the debt to GDP ratio to the desired amount that supports sustainability. To this end, when the debt to GDP ratio exceeds the desired target this triggers a policy reaction from the government that supports the generation of primary surpluses that is consistent with the convergence of the debt ratio to the desired target (Croce & Ramon, 2003). The key features of this approach are that it uses past, and current data and a target value for the relevant variables. The use of a debt to GDP ratio anchor ensures policy consistency that supports a rule-based strategy that allows the government to react to unforeseen shocks (Croce & Ramon, 2003).

The mathematical expression to calculate the fiscal sustainability index (FSI) as proposed by Croce and Ramon (2003) is as follows: $FSI_t = (\beta_t - \lambda_t)$, where β_t measures the ratio between the real interest rate and the rate of growth of real output at a particular point in time (Croce & Ramon, 2003). Therefore an increase in this ratio suggests that there is an increase in debt burden relative to the growth parameters. The λ_t symbol, on the other hand, represents the measure of the deviation of the observed and target value of the primary surplus and debt ratios at a particular point in time (Croce & Ramon, 2003). This, therefore, reflects the intensity of the policy response to generate a surplus in response to the debt gap observed in the previous period.

Fiscal sustainability of the policy response is then determined if FSI_t is < 1 which would suggest that the policy stance is responsive as the growth factor outweighs the interest and or the target value of the primary surplus is exceeding the debt ratios (Croce & Ramon, 2003). Conversely, unstainable policies are identified if FSI_t >1. This would suggest that the interest factor outweighs the growth parameters and or the debt ratios are much larger than the primary surplus consideration.

This approach to measuring fiscal sustainability at a point in time is ideal for use in the context of the ECCU given that the block of islands has a common debt to GDP anchor of 60% relative to fiscal sustainability as agreed to and established by the ECCB. This eliminates the need to project future revenues, GDP growth rates, and interest rates for the region to assess fiscal sustainability using another method.

While research literature has highlighted that the fiscal sustainability index as an indicator can be used to guide future policy position relative to fiscal sustainability the results of this research would be considered not as a comparative to support the rationale for the use of a particular fiscal sustainability test or indicator but rather to highlight the importance of assessing fiscal sustainability from a perspective that is appropriate given the countries unique context or circumstances (Croce & Ramon, 2003).

Cevik and Nenda (2020) utilized Bohn's test of fiscal sustainability model in the Caribbean and validated the evidence provided by the signs of fiscal sustainability concerns stating there is a clear challenge with the fiscal policy poster of the region noting specifically the compounded risk of natural disasters. Scott-Joseph (2010) narrowed his observation to the ECCU a subset of the broader Caribbean expressing the same concerns that Cevik and Nenda (2020) highlighted 10 years later relative to the wider Caribbean. However, while Khadan (2019) agreed with the observations made by other researchers of fiscal sustainability in the Caribbean by assessing the policies that affect the same, the author went further advancing the concern of the weakness of the policy apparatus and the need to strengthen the same.

The ECCU was of particular concern to Khadan (2019) given that the countries function within a currency union which requires the leaders in the policy apparatus to have the necessary characteristics and competencies to understand and navigate the interaction between fiscal and monetary policies to ensure that the overall policy mix of the countries facilitates the fiscal sustainability agenda from a holistic standpoint while juggling individual country considerations. Chortareas and Mavrodimitrakis (2021), agreed with Khadan's (2019) concerns relative to economic policies in the case of a currency union. The source highlighted that the Economic and Monetary Union in Europe for the past 20 years has suffered from a lack of leaders with the appropriate qualities to coordinate fiscal and monetary policies thus weakening the policy apparatus (Chortareas & Mavrodimitrakis, 2021). Chortareas and Mavrodimitrakis (2021) noted that monetary policies for the European Union are conducted centrally and independently by the European Central Bank, while fiscal policies are the only tool for economic stabilization at the national level. Accordingly, the overall policy mix suffers due to a lack of the appropriate leadership competencies to coordinate fiscal and monetary policies to ensure the overall policy mix supports the development agendas of the countries (Chortareas & Mavrodimitrakis, 2021).

While the construct of the ECCU mimics what obtains in the European Union with the ECCB acting centrally on monetary policies and fiscal policies residing at the national level, the coordination is interlinked with the Ministers of Finance and the

Permanent or Financial Secretaries within the Ministries of Finance who are largely responsible for championing fiscal policies are directly involved in the governing of the bank (ECCB, n.d.). The challenge for these leaders in the ECCU, however, is fostering a marriage of the regional monetary policies at the centralized level with the fiscal policies at the domestic level to ensure a balanced policy mix that supports long-term fiscal sustainability. This requires leadership with specific qualities which is a part of the weakness of the policy apparatus in the ECCU as highlighted by Khadan (2019). The observation made about the issues of leadership in the policy apparatus was a critical one as while fiscal policies are often the focus in literature when assessing fiscal policies no research was found on the sufficiency of the policy apparatus that supports the same. This offers a window to explore leadership as the main driver of the workings of the policy apparatus.

The policy apparatus considers institutions and groups that make up the policy system within the government. Lesch and McCambridge (2021) said that committed and well-position leaders that aggressively engage stakeholders are necessary for a proper functioning policy apparatus within the government system. Mols et al. (2020) added that a strong policy apparatus requires more than the intense engagement of the stakeholder as this does not increase mutual understanding and trust among parties. Mols et al. (2020) said what is critical is leadership that ensures commitment to a shared vision, goals, and a sense of direction. While commitment to a shared vision and mutual respect and understanding is necessary for the policy system, the capacity to design and implement the necessary policies that are required are equally critical. Aryeetey and Covic (2020) supported this observation and cited that a vision and commitment to the same means nothing in the absence of the capacity to design and implement the policies required. To this end, the leader must have the requisite characteristics that support the capacity building and self-development of their followers in this regard.

Gatchair (2018) has identified the concerns for the self-development of followers, and the ability to help them self-actualize is a key feature of transformational leadership. Further, the said form of leadership supports innovation and creativity in developing solutions towards goal attainment (Gatchair, 2018). This characteristic aids in the capacity within the policy process.

The recognition of the role of leadership with specific characteristics within the policy apparatus is a key consideration for any policy outcome (Mols et al., 2020).

Transformational Leadership

Dornea and Oanea (2015) concluded that fiscal sustainability is an important factor for the macro-economic stability of any country. The source further adds that the quality of a government’s fiscal policy design and implementation determines the extent to which fiscal sustainability is an achieved outcome particularly during a time of crisis (Dornea & Oanea, 2015). Harb et al. (2020) supported the observation made by Dornea and Oanea (2015) highlighting that policy formulation, adoption, and implementation that supports sustainable economic recovery is largely driven by leaders with the appropriate leadership characteristics.

Stolzenberg and Getimis (2016), advanced that leadership in the public sector plays a critical role in policy formulation, implementation, and management, but noted a specific form of leadership characteristics that is more suitable for fiscal policy consolidation to achieve fiscal sustainability. It was concluded that leadership that can create a clear vision, communicate and achieve buy-in for the same, inspire and motive the active participation of all stakeholders, promotes legitimacy in the formulation and implementation of the fiscal policies, and is often more effective and efficient (Stolzenberg & Getimis, 2016). While commitment, motivation, a shared vision, and inspiration are all necessary for goal attainment, in an environment of uncertainty, innovation, and creativity are necessary ingredients to ensure the appropriate policy design. Khaili (2017) has specifically linked the transformational leadership style as one that fosters an environment that supports innovation and creativity through the intellectual stimulation characteristic.

Upon achieving the appropriate policy the implementation of the same is a critical factor that hinges on the performance of the public sector officials to execute the same.

Zeb et al. (2015) have identified two types of leadership styles that positively affect performance in the public sector namely transformational leadership and transactional leadership. While both leadership styles positively impact performance in the public sector it noted that transformational leadership style is most appropriate in situations of fiscal challenges as rewards and incentives that motivate the transaction type of leadership are not available under such circumstances (Zeb et al., 2015). Scheuerlein et al. (2018) supported this notion adding that transformational leadership during a financial crisis calls for the leader to connect with the employees on a deeper level that propels actions for the greater good rather than self-interest. Harb et al. (2020) added that this level of connection that transformational leadership characteristics can make drives the commitment necessary for sustainable economic recovery.

Ng (2017) informed that in the context of the public sector there are five mediating factors or mechanisms that allow transformational leadership to enhance performance in the public sector beyond any other form of leadership style. The mediating mechanisms grounded in social and psychological theories were identified as, affective, motivational, identification, social exchange, and justice enhancement, as these illustrate the type of changes transformational leaders bring out in followers (Ng, 2017). Affective mechanisms focused on the positive emotional experience of an employee that is led by a transformational leader, the motivational mechanism addresses the employee's confidence and excitement in getting the job done, while the identification mechanism supports how the transformational leader affects the values and beliefs of the worker and the social aspect touches on the quality of the engagement between the leader and the workers (Ng, 2017). Justice enhancement as a mechanism, on the other hand, evaluates how trust in the leader is established through their actions relative to resource allocation. All the mechanisms were tested with a special focus on self-reporting of performance which includes task performance, citizen behavior, and innovative behavior (Ng, 2017). The three performance outcomes were determined as they capture the role of an effective worker in an organization (Ng, 2017).

The aforementioned provides a good basis to consider a transformational leadership theoretical lens and its relationship with fiscal sustainability which is a direct function of policy formulation and implementation process.

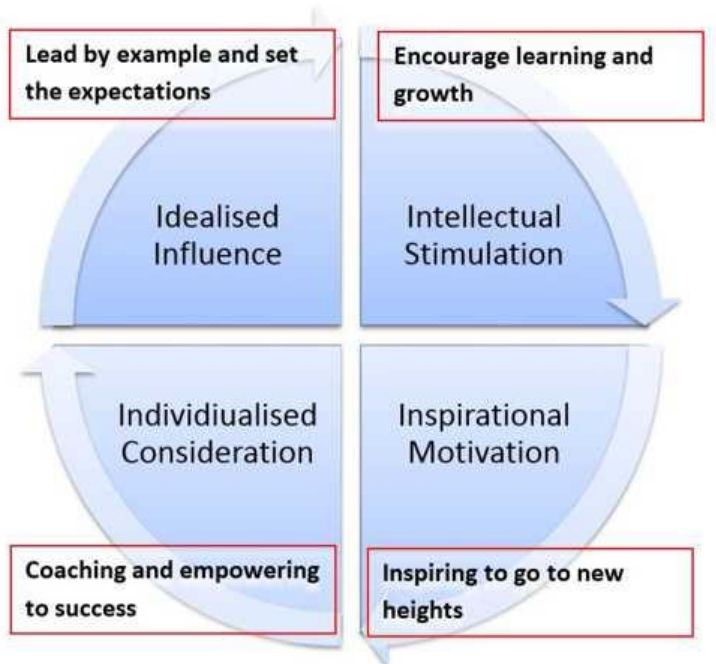
Theoretical Foundation

Transformational Leadership Theory

Northouse (2019) advised that transformational leadership is one of the most popular approaches to leadership due to its emphasis on inspiring and empowering followers to succeed in times of uncertainty. This form of leadership was a construct initially proposed by James MacGregor Burns (Siangchokyoo et al., 2020). Burns advanced that transformational leadership changes or transforms followers to accomplish more than what is expected of them and therefore there is a greater emphasis or focus on the relationship between the leaders and the followers (Northouse, 2019). Bass (1985) expanded on the work of Burns by dissecting how leaders drive followers to do more than what is expected which include educating or raising the followers' level of consciousness about the importance of a specific objective, influencing followers to look beyond self-interest, and seeing the greater good which happens in part through increasing the level of consciousness and driving followers to address higher-level needs (Northouse, 2019). An elaboration of the thought process of Bass (1985) was highlighted in his work with Avolio (1993) where 4 factors of transformational leadership that supports the outcome it derives were identified namely, idealized influence, inspirational motivation, intellectual stimulation, and individualized construct (see Figure 9).

Figure 9

Factors of Transformational Leadership



Idealized Influence

Savovic (2017) advised that idealized influence behavior is characterized by a leader who displays values, beliefs, and moral standing that followers wish to emulate. Norhtouse (2019) endorsed this sentiment and adds that such leaders are deeply respected and trusted by their followers. Accordingly, when a vision and mission are provided to the followers by leaders that display idealized influence behavior a collective identity is easily fostered (Weng et al., 2015).

Inspiration and Motivation

This characteristic speaks to a leader's ability to create and communicate a vision, clarify expectations of the followers and inspire them through motivation to become committed to the same (Savovic, 2017). To achieve this end, leaders generally use symbols and emotional appeal that drives the achievement of objectives beyond the followers' self-interest (Northouse, 2019). This element of transformational leadership uses the trust, respect, and spirit of collective identity as a platform to deploy tactics that connect with followers in a way that drives their actions towards the achievement of the shared vision (Weng et al., 2015).

Intellectual Stimulation

Bass (1985) considered intellectual stimulation as a leader's ability to influence creativity and innovation in followers that add value to the problem-solving capacity within an entity. Northouse (2019) added that leaders that are intellectually stimulating challenge followers to question their beliefs, values, and those of the leaders themselves and that of the organization. Such leaders encourage and embrace followers to think outside the box to develop new ways of addressing organizational issues (Northouse, 2019). This characteristic is often welcomed in a world of constant change.

Individualized Consideration

Steinmann et al. (2018) informed that individualized consideration is a characteristic that cultivates a supportive culture in an organization as the leaders listen to the needs of the followers. Northouse (2019) supported this notion and adds that a leader with this quality acts as a coach and mentor to the followers helping them to self-actualize.

While the foundational work of Burns was refined by Bass and colleagues, extensive research in the area of transformational leadership has linked its tenants to improved organizational performance, engagement, commitment, creativity, innovation, and goal attainment in an organization (Siangchokyoo et al., 2020). Northouse (2019) supported this observation advising that meta-analysis of 39 studies has found transformational leadership is associated with improved work outcomes both in the public and private sector setting. This has often been the case as transformational leadership unlike transactional leadership which was also advanced by Burns, creates a deeper inner connection with followers that drives higher performance which goes beyond trading performance for benefits as is the case with transactional leadership. Moreover, transformational leaders are regarded as change agents due to their ability to identify employees' weaknesses and strengths, train and develop them in a way that they self-actualize for the benefit of the organization (Alqatawenah, 2018). The change agent factor complements the other qualities of the transformational leader in a way that facilitates project implementation that is geared at altering the norms of the organization (Masood & Afsar, 2017).

In the case of the Eastern Caribbean where sustainability challenges have been the norm implies that change is required. Efforts to effect the required change were made during the period 2008-2013 which was noted in the efforts made towards economic recovery. However, the onset of COVID-19 and its impact on the world economy has reinforced the observation of Cevik and Nenda (2020) that more has to be done. Further, it supports the call by Khadan (2019) for the strengthening of the policy apparatus which mandates leadership with the skillset to effect the necessary changes. Accordingly, the transformational leadership theory was used to demonstrate the likely relationship between the 4 factors of transformational leadership and fiscal sustainability as a public sector outcome in a period of a financial crisis.

Kingdon's Multiple Streams Framework

Kingdon's multiple streams framework was originally used to explain policy agenda-setting for health, transport, and fiscal policy (Kingdon, 1984). The framework explains the process of policy agenda-setting and provides a reference for policy-making and implementation in a complex environment (Kingdon, 1984). Weible and Sabatier (2018) concurred with Kingdon (1984) and advised that the multiple streams framework is a major tool that can be used to analyze the policy process given the rise in global challenges and uncertainty. This makes the framework most appropriate for the research undertaking given that fiscal sustainability is a function of fiscal policy and is being considered in the context of a crisis which is an uncertain environment. Additionally, the multiple streams framework was originally designed with fiscal policy in mind.

The wide use of the framework in the public policy space is not surprising as John Kingdon the originator of the multiple streams framework advanced the same as a reference for policymaking, and implementation in a complex environment on 6 assumptions namely ambiguity, time constraints, problematic preference, unclear technology, fluid participation, and stream independence which are all conditions relevant to the public sector (Weible & Sabatier, 2018).

Ambiguity

Weible and Sabatier (2018) defined the issue of ambiguity as "a state of having ways of thinking about the circumstances or phenomena" which results in a multitude of solutions to a given problem in the policy space (p.18).

Time Constraints

This assumption suggests that policymakers are often under tremendous pressure to make decisions due to limited time brought on by the occurrence of parallel events (Weible & Sabatier, 2018).

Problematic Preference

Due to the assumptions of ambiguity and time constraints, a problem arises with policymakers having a clear policy preference to advance (Weible & Sabatier, 2018). Accordingly, the policy that is often selected for advancement is not fixed but is predicated on a multiplicity of factors (Weible & Sabatier, 2018).

Unclear Technology

Technology in the context of the organizational theory refers to the work process and therefore unclear technology suggests the employee's lack of clarity on how their job contributes to the overall mission and vision of the organization (Weible & Sabatier, 2018).

Fluid Participation

This assumption addresses the issue of changes in the composition of the decision-making body that affects the decision-making process (Weible & Sabatier, 2018). Unclear technology is a factor that further complicates the decision-making process coupled with the time participants are willing to commit to the process (Weible & Sabatier, 2018).

Stream Independence

Weible and Sabatier (2018) considered this to be the independence of process through the political system where the problem, policy solutions, and politics are developed and addressed independently of each other. This notion is one of the foundational elements of the multiple streams framework where the streams work independently but meet at some point in the policy process which determines how policies are advanced.

While the Multiple Streams Framework rests on the above assumptions it has 5 structural elements namely the problem stream, policy stream, political stream, the agenda window, and the policy entrepreneur (Weible & Sabatier, 2018). It is important to describe each element independently.

Problem Stream

Policy is often driven by a problem or an issue that needs a resolution. Weible and Sabatier (2018) defined problems as a “condition that deviates from policymakers or citizens’ ideal state” that requires the government’s intervention to resolve (p.21). It is important to note that not all issues that are concerning to policymakers and the citizenry alike receive attention but rather indicators, focusing events, and feedback are the elements that drive the issue to the center stage (Weible & Sabatier, 2018). Indicators like that of rising unemployment, growing fiscal deficits and the like may warrant certain matters to be considered. This is evident with the issue of fiscal sustainability in the

ECCU. Further, focusing events are defined by Weible and Sabatier (2018) as rare harmful events that are known to the public and policymakers. The current global pandemic, a world financial crisis, and hurricanes or other natural disasters can be described as focus events. The final trigger that can bring an issue to the forefront is negative feedback on a particular program (Weible & Sabatier, 2018).

While the above factors may bring into focus a concern, actors within the policy space must be able to clearly define and articulate that concern as a problem. For instance, relative to this research undertaking the indicators of constant fiscal deficits, low revenues, and growing debt levels that place downward pressure on economic growth in the ECCU brought into sharp focus the ability of the governments in those countries to meet their obligations to the citizenry in a sustainable manner. This concern is married with the disaster-prone location of the region that places it at more risk for focusing events which adds to the likelihood of the fiscal situation of the countries being an area of focus. To this end, the leadership or actors that play leadership roles in the policy space must be able to recognize the problem is one of fiscal sustainability and be able to articulate and advance the same. The ability to achieve this end is largely dependent on the qualities of the leadership.

Policy Stream

Having identified the problem the policy stream which is made of a community of persons in the civil service, other interest groups, and advisors or consultants would engage in developing policy alternatives to address the problem (Weible & Sabatier, 2018). Policy alternatives are generated from debating various ideas within the community and the process of engagement is generally influenced by the structure of the policy community. Moreover, the emergence of a policy for advancement is dependent on its technical feasibility, acceptability, financial viability, and public support would be evident (Weible & Sabatier, 2018). While there is no weight ascribed to the various criteria if the idea is not supported by the majority in the political stream it will not move forward. Support in the political stream can be influenced by external and internal considerations like the level of public support, lobby groups, re-election prospects, and other factors.

Political Stream

This stream is dominated by powering and bargaining tactics to sell a particular policy proposal based on 3 core elements as identified by Kingdon, namely national mood, interest groups, and government (Weible & Sabatier, 2018).

The national mood is the general perception of how the citizenry feels about an issue at any given point in time that is not necessarily based on opinion polls but is rather subjective (Weible & Sabatier, 2018). Government official takes a cue from what is perceived to be the national mood to advance certain policy agenda items that are likely to obtain public support based on the same (Weible & Sabatier, 2018). It is important to note that national mood can be influenced by a number of factors which include the influence of powerful interest groups and their ability to network and mobilize in a way that gets the public involved in a particular cause.

In this regard, the effects of a powerful interest group must be given due consideration in the political stream. While interest groups are a part of the policy community and have a voice that can shape policy from that perspective, it does not take away from the campaign or advocacy that may be launched for or against a particular proposal (Weible & Sabatier, 2018). The activities of these groups can influence the public mood on a particular issue, thereby pressuring the policymakers to take a certain policy path (Sharif & Swank, 2019).

The government and legislature is the body that ultimately adopts a policy and therefore this body plays a critical role in the political stream. This is largely the case as policy adoption by the legislature is likely to be generally associated with the ideology of the political party to which they are associated (Weible & Sabatier, 2018). Therefore the composition of the legislature relative to the party that controls the majority and its ideology, the individual views of the representative, the needs of varying constituents, and the ability of the policy entrepreneurs to adequately sell a policy proposal can all influence how the body votes on a particular policy issue.

Notwithstanding the fact that national mood or special interest groups can affect the decision of legislature on a particular policy issue, this body is ultimately responsible for policy adoption (Weible & Sabatier, 2018).

Policy (agenda) window

Weible and Sabatier (2018) considered the policy window as an opportunity that is evident in one of the streams to push a particular issue to be considered on the policy agenda or to drive a particular policy proposal. These opportunities can occur in any stream for instance if there is a focusing event like that of a hurricane in the problem stream a window is created to advance climate-smart policies on the policy agenda.

Concerning policy adoption, there may be a window of opportunity if policy solution in the policy stream aligns with the national mood. The idea here is that an opportunity that presents itself makes policy adoption or agenda ideal for advancing.

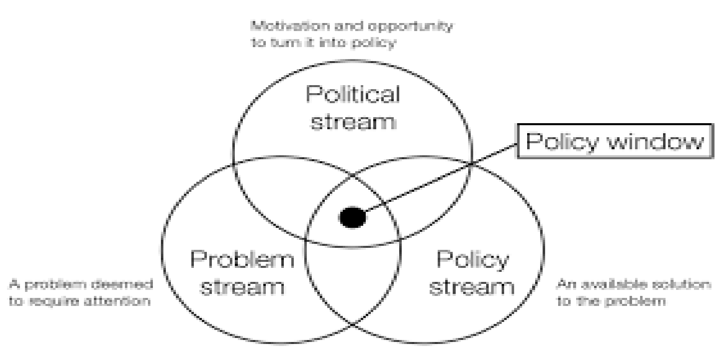
Policy Entrepreneurs

In the policy space, some persons or entities are willing to invest their resources to advance or sell a particular policy (Weible & Sabatier, 2018). These policy advocates can be actors from any one of the streams and must have an appreciation of the dynamics of the activities surrounding the policy they wish to advance to identify a policy window and use it to push the policy forward (Weible & Sabatier, 2018). This requires negotiation skills, persistence, good communication skills, the ability to influence and motivate people to take a particular course of action among other attributes.

The multiple stream framework can be summarized in figure 10 where the three streams can be influenced by a policy entrepreneur who pushes the same when an opportunity arise which sets the tone for policy adoption.

Figure 10

Multiple Streams Framework



The role that leadership plays at all levels of this process is an important factor to ensure appropriate policy adoption and implementation. To this end, it is critical that the leadership characteristics that drive fiscal policy adoption and implementation be evaluated as fiscal sustainability is a function of fiscal policy.

Conceptual Framework

Ravitch and Carl (2015) defined a conceptual framework as the researcher's approach to exploring a problem which includes a set of related concepts presented logically to offer the reader a clear sense of the approach taken to a study. I have designed a conceptual model portraying the interaction between transformational leadership theory and the multiple streams framework in the policy process that can facilitate appropriate policy adoption and implementation in the ECCU. It is therefore essential to understand the actors in the policy space within the currency union to put the framework in context.

The actors in the fiscal policy space in the ECCU are not different from the categories previously stated. However, the main policy entrepreneur is identified given the prescribed role as the chief fiscal policy advisor to the political directorate more popularly referred to as the Permanent Secretary within the Ministry of Finance or the Financial Secretary in these countries (Organization of Eastern Caribbean States, n.d.). These administrative leaders are charged with the responsibility of championing policies to the political doctorate within the Ministry of Finance often referred to as the Minister for Finance who then champions the policy in the political space for adoption. While fiscal policy agitation and advocacy may come from varying actors, the design and implementation of the same must pass through the chief fiscal policy advisor to the Minister of Finance by way of organizational structure (Organization of Eastern Caribbean States, n.d.).

Accordingly, the concern of governments in the ECCU not being able to meet their financial obligations highlighted by macro-economic indicators such as growing fiscal deficits, increase debt to GDP ratio, slow economic growth married with a focusing event like that of the world financial crisis of 2008 brings into sharp focus a concern in the problem stream. This concern needs to be clearly defined and articulated from the administrative leadership i.e the Permanent Secretaries within the Ministries of Finance or Financial Secretaries, to all concerned to receive policy consideration.

The inspiration and motivational characteristic of transformational leadership if possessed would allow the leader to create a vision where the financial challenges of government do not exist. To create this vision, the problem must be ventilated with all stakeholders and the desired stage articulated. For instance, the issue of deficits and the like poses fiscal sustainability challenges, and the vision can be to achieve fiscal sustainability. This vision must be clearly communicated at all levels of the organization, expectations clarified, and people must be motivated and committed to resolving the problem to achieve the desired state or vision.

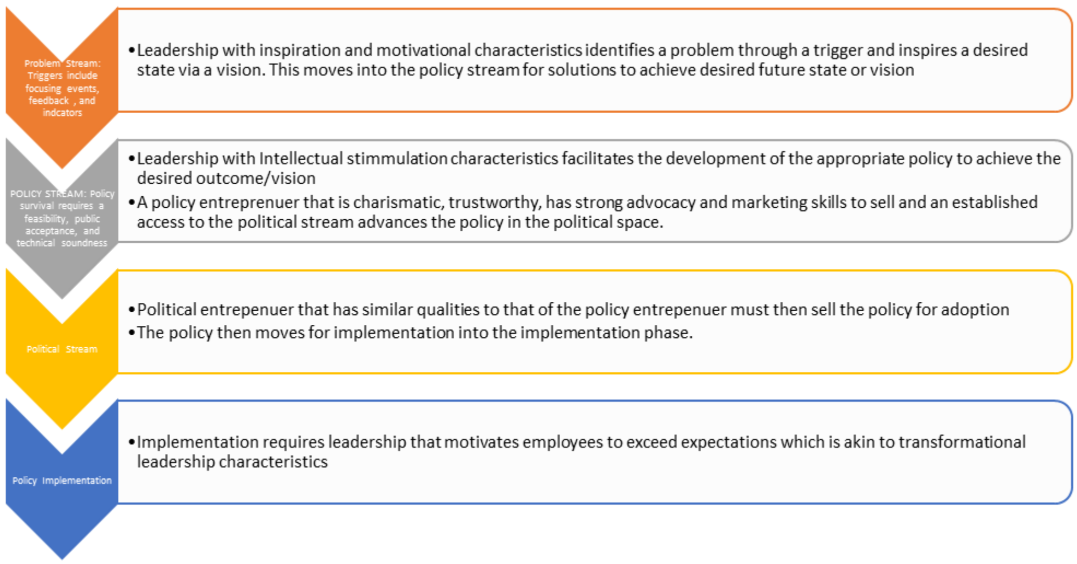
Given the trust that is established with leaders with the individualized influence characteristics of transformational leadership, the employees would have a collective identity in which they take into the policy stream to engage with the policy community.

A well-defined problem allows the policy and planning areas within the governments to develop appropriate policies in conjunction with all the relevant stakeholders. The leadership characteristics of intellectual stimulation play a critical role in the policy stream where it facilitates a space for creativity and innovation in developing a solution to fiscal sustainability that is feasible, technical soundness, financial viability, value acceptability, and public support. Coming out from the policy stream the surviving policy needs to be sold in the political space to allow the policy to be adopted. This requires a policy entrepreneur with strong advocacy skills, charisma, good negotiation skills, and a sense of trust, mutual respect, and access to the political community, to convince the political entrepreneur to advance the policy in the political space. The political entrepreneur then uses some of the same qualities espoused by the policy entrepreneur to sell the policy for adoption. Both entrepreneurs have to be mindful of the opportune time to advocate the policy or appreciate when a policy window is available to advance the same. Upon adoption, administrative leadership is required for policy implementation.

Figure 11 depicts the interplay that demonstrates leadership is required at every level of the policy process and transformational leadership specifically adapts to what is required in the policy process.

Figure 11

Policy Process & Transformational Leadership



Administrative and political leadership within the Ministries of Finance in the ECCU requires some key attributes to allow for appropriate policy formulation, adoption, and implementation. Analyzing the successes of transformational leadership characteristics in the context of fiscal sustainability and the measure for the same in this regard is a key consideration.

Summary and Conclusions

Chapter 2 involved addressing literature regarding the subject of fiscal sustainability as a function of fiscal policy and the role of leadership in that regard. The uniqueness of the fiscal sustainability challenges in the small island developing states of the Caribbean was a key focus. Research identifying the weaknesses in the policy posture and some of the attributing factors were evident. One of the factors that affect fiscal sustainability outside of the actual policies themselves was the policy infrastructure within the governments in these islands.

A critical component of the policy apparatus is leadership. As such, empirical evidence to support the use of the transformational leadership lens was articulated. The leadership lens was then cast within the context of the policy process by using Kingdon's multiple streams framework. The multiple streams framework was considered as it was originally designed with fiscal policy formulation, adoption, and implementation processes in mind. The interplay of transformational leadership qualities within the context of the multiple stream framework was conceptualized.

Literature around the most appropriate measure of fiscal sustainability was elaborated with consideration being given to sustainability tests and indicators. The justification of the measure that would fit within the Eastern Caribbean context was highlighted. Having justified the need for the research, chapter 3 will describe the research method required to examine the relationship between transformational leadership and fiscal sustainability in the ECCU

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Chapter 3: Research Method

Introduction

The purpose of this study is to describe the relationship between transformational leadership and fiscal sustainability in the ECCU for the period between 2008 and 2013. The study involved examining the four constructs of transformational leadership and their potential impact on the ability of policy leaders in the ECCU to develop and implement policies that support fiscal sustainability.

This chapter includes an overview of steps taken to address the research question by highlighting the rationale for the research method and design used in this study. Also included is a discussion of the study population and sampling protocol, data collection instruments, and data analysis procedures. Finally, I describe ethical considerations and the reliability and validity of the research.

Research Method and Design Rationale

Burkholder et al. (2016) said there are three approaches that a researcher can take: qualitative, quantitative, and mixed methods. These approaches are associated with unique research designs that structure the research to ensure that all the parts come together to address the research question(s) (Burkholder et al., 2016). Therefore, it is important to underscore that the approach selected by a researcher must have a logical connection between the research problem, purpose, and the research question(s) demonstrating internal coherence and consistency of ideas threading through each of those respective areas (Burkholder et al., 2016). Accordingly, I selected a quantitative approach with a correlational design.

The quantitative research method is associated with deductive reasoning that allows for the testing of a theory (Burkholder et al., 2016). This form of reasoning is associated with the central research question in this research undertaking as the transformational leadership theory is being tested in the context of fiscal sustainability. The appropriateness of the use of this method in this study is further solidified as consideration was given to the relationship between measurable variables (fiscal sustainability via the fiscal sustainability index and 4 constructs of transformational leadership) which is a necessary feature of the quantitative method (Burkholder et al., 2016).

The research design that is associated with this form of inquiry (Quantitative method) that was selected is a correlational design. Burkholder et al. (2016) said the correlational design is a nonexperimental design that is used when research involves the nature of a relationship between variables that cannot be manipulated. This design is most appropriate in this instance because the research is considering the nature of the relationship between the variables fiscal sustainability and transformational leadership in the ECCU and both variables cannot be controlled but is rather naturally occurring particularly given that it is being assessed in a historical context i.e between 2008-2013.

Having previously established the research problem, purpose, questions, and research design that was selected for the research undertaking, it is easy to demonstrate the interplay between all these components that address the issue of alignment. Alignment ensures a logical connection between the research problem, purpose, and the research question(s) that facilitates the answering of the research question in a logical, and coherent manner (Burkholder et al., 2016).

As is evident in the problem and purpose statements expressed in Chapter 1, and existing literature as established in Chapter 2, there is an apparent lack of understanding regarding the relationship between transformational leadership and fiscal sustainability in the ECCU. Consequently, the research question was designed to determine the relationship between the four constructs of transformational leadership and fiscal sustainability in the ECCU, thus addressing the specific research problem.

The extent of consistency, logical connectivity, and relationship that is evident between the research problem, questions, purpose, and design suggest that the foundational elements of the research are appropriately justified.

Role of Researcher

Ravitch and Carl (2016) said the role of the researcher can vary depending on the research method or approach. With the quantitative method, participants act independently of the researcher (Ravitch & Carl, 2016). However, Karagiozis (2018) said it is still necessary for the researcher in quantitative research to understand potential biases that may exist due to familiarity with participants who are engaged in the study and the subject being researched. This understanding is necessary to facilitate unbiased research. I would attempt to identify areas of concern and highlight how the same is mitigated from affecting the research process.

As the researcher, I have worked in the Ministry of Finance in Grenada for 13 years and participated in policy formulation during the period 2017 to 2019, where I served as the Permanent Secretary leading the Ministry. During my period of leadership, I was appointed to the Board of Directors of the ECCB where I am exposed to fiscal policy leaders in the ECCU. As such, I am very familiar with the policy process in the Grenada context and by extension the ECCU. In my position as director of the ECCB, I am also familiar with the macro-economic performance of all countries in the ECCU. While I am familiar with some of the participants of the study, and the policy process I am unfamiliar with the respective leadership styles that direct the same. Moreover, my knowledge of the macro-economic performance of the countries only provides a sign that fiscal sustainability is a challenge. The information does not provide a definitive assessment of the fiscal posture of the countries relative to fiscal sustainability as this is measured using a combination of the macroeconomic performance variables. Familiarity in this instance merely affords me access and in no would affect the research results.

Therefore, my role as a researcher is limited to collecting, analyzing, and interpreting data and documenting results.

Methodology

Research Method

The pillars of this research undertaking are the research problem, purpose, and objective. These pillars dictated the method of inquiry, research design, sampling strategy, and statistical methods used.

A quantitative study with a correlational design was most appropriate to address the central question the research is seeking to address as extrapolated from a research problem and associated purpose.

Considering that the research question is seeking to test whether there is a relationship between the factors of transformational leadership as established in theory and fiscal sustainability in the context of the policy framework renders the approach deductive in nature. Accordingly, in this research undertaking, while the literature may suggest that transformational leadership characteristics as grounded in theory can support fiscal sustainability as an outcome, this must be tested through the null and alternate hypotheses as highlighted in Chapter 1. Burkholder et al. (2016) associated the deductive approach in the rationalization of a research problem primarily with a quantitative study. Moreover, the source asserts that the concepts of interest in quantitative research must be able to be operationalized through measurable variables (Burkholder et al., 2016). In the case of this research, the concepts of transformational leadership and fiscal sustainability are two concepts that can be measured using the Bass (1985) multifactor questionnaire and Croce and Ramon's (2003) fiscal sustainability index respectively.

While the research has met the criterion of having concepts that convert into measurable variables, Burkholder et al. (2016) said that there are three main types of measurable variables that are associated with quantitative research designs namely, dependent, independent, and confounding variables. An independent variable is a factor that has an effect or causes a change in a situation or phenomenon that is the subject of a study (Burkholder et al., 2016). Alternatively, the dependent variable is the outcome or the variable that is altered as a result of the independent variable (Burkholder et al., 2016). Confounding variables can be categorized as extraneous or intervening variables that can affect the dependent and independent variables and influence the results of a study (Burkholder et al., 2016). Considering the three types of variables in the context of the current research, it is evident from the research question that transformational leadership acts as the independent variable while fiscal sustainability is the dependent variable. This is supported by the fact that the research question is assessing the relationship between transformational leadership characteristics from an effect standpoint on fiscal sustainability as an outcome.

In light of the foregoing, the research undertaking is well supported by a quantitative research method of an inquiry having met the criteria advanced by Burkholder et al. (2016) of being deductive by testing a theory through hypotheses, having measurable variables, and having those variables be defined by the types associated quantitative research method. It is important to ensure that the research design selected is equally aligned with the method of inquiry that supports the research question as derived from the research problem and purpose.

Research Design

Burkholder et al. (2016) highlighted that a research design is a plan for answering the research question. The decision to propose a correlational or nonexperimental design in this study was based on the alignment of the same with the research problem, purpose, question, and design. Burkholder et al. (2016) suggested that the use of a correlational research design is most appropriate for research that is seeking to understand if a relationship or association exists between two naturally occurring variables. Moreover, this design is associated with a quantitative approach to inquiry. The central objective of a correlational design mirrors the central objective or goal of the research undertaking as it seeks to understand the relationship between transformational leadership and fiscal sustainability in the ECCU for the period 2008-2013. However, a closer examination of the nature of the variables (the factors of transformational leadership and fiscal sustainability) and the extent to which they can be classified as natural occurring was necessary.

The independent variable of transformational leadership characteristics cannot be manipulated from a historical perspective given that the assessment of these characteristics is for the period 2008-2013. While it can be argued that the characteristics can be developed and therefore be manipulated, this does not hold true when the assessment is being considered from a historical perspective. Moreover, the macro-economic variables that were used to assess fiscal sustainability are based on factors that cannot be controlled in an experimental setting. Therefore, both variables are deemed natural occurring. Accordingly, the correlational design is most suited to address the central question in this research.

Having established the research method and design that is most appropriate to address the research question, consideration must be given to the research population, the sampling strategy, and size and the statistical method that aligns with the same.

Research Population, Sampling Strategy, and Sample Size

The Ministries of Finance across the region have the sole responsibility for fiscal policy development and implementation. The staffing complement of those Ministries is on average 250 persons per island with a total population size of 2000. While the Ministries of Finance as a whole have the overall responsibility for fiscal policy development and implementation, the participants in this research undertaking were taken from the employees that report to the administrative and political leadership that has a direct role in the process.

The administrative leaders of the Ministries of Finance in the Eastern Caribbean often referred to as Financial or Permanent Secretaries in the Ministry of Finance has the overall responsibility for the macro-economic and financial management of the country which includes fiscal policy development and implementation which renders their participation critical to the study (Organization of Eastern Caribbean States, n.d.). Further, key personnel that is responsible for supporting the policy implementation and formation process and reports to the Financial or Permanent Secretaries with the Ministries of Finance are also important as they can speak to the leadership style of the Financial Secretaries during the policy process. The Ministers of Finance from the political standpoint is a necessary facilitator of the policy adoption and is also of paramount importance to the process. Accordingly, this particular group of persons is considered critical to this research given their role in the efforts towards fiscal sustainability. Each of these participants has the direct knowledge and experience needed within the context of the research and has a vested interest in the findings.

In this regard, sampling was not done from the entire staff population within the Ministries of Finance but rather from a subset of the staff with the requisite skills and expertise that are required for the study objective. Consequently, a stratified random sampling method that supports the selection of participants within the Ministries of

Finance in the countries that is responsible for policy development and implementation was deployed.

Burkholder et al. (2016) advised that stratified random sampling is a form of probability sampling that is associated with quantitative research as it supports generalization give that the sample is more likely to be representative of the population. The method requires the breaking of the population into a subgroup that has key characteristics that may be related to the dependent variable from which random sampling is done (Burkholder et al.,2016). This form of sampling aligns with the research method, design, and purpose as only the actors in the Ministries of Finance that have a direct role in the policy space can influence fiscal sustainability as a function of fiscal policy and therefore add value to the research undertaking.

The administrative and political actors in the policy space in the ECCU that would make up the strata comprises 200 persons with each island having an average of 25 persons directly engaged in the fiscal policy process from the Ministries standpoint. Random sampling based on the minimum sample size was deployed from the strata of 200 persons.

While the sampling method is an important consideration in the research the minimum sample size of the population that would yield reliable results from statistical analysis is critical. Accordingly, I used the G*power to estimate the minimum sample size using a fixed effect multiple regression model with 4 predictors. The G*power analysis allows users to estimate the minimum sample size by using key parameters (Lapresa et al., 2016). Lapresa et al. (2016) advised that there are numerous factors to consider when determining the sampling size. These factors inform the parameter used to calculate the G*power. The factors include the alpha level, desired statistical power, the number of predictors in the regression equation, and the anticipated effect size (Lapresa et al., 2016). The alpha level used was .5, the statistical power of 80% was utilized as this is considered generally reasonable when conducting research (Warner, 2013), 4 predictors representing the 4 constructs of transformational leadership was a parameter, and the medium effect size of .15 as established by Green (1991) for regression analysis was factored.

Utilizing G*Power 3.1.9.7 calculator with the above parameters, a priori power analysis for multiple linear regression established a sample size of at least 85 participants is required. This represents 43% of the strata and therefore I would randomly select an almost equal number of participants of at least 10 persons from each island.

Procedure for Recruiting Participants

Having previously worked in the Ministry of Finance in Grenada for over 13 years in various positions has provided me with a networking platform. Further, being a director of the ECCB from 2019 to the present offers access to all the administrative and political leaders in the Ministries of Finance in the ECCU who serve on the board of directors. Accordingly, these platforms were used to identify the participants necessary for the research undertaking.

As a first step, the official email addresses of all the persons involved in the fiscal policy space were obtained from the various government websites. Secondly, Emails were sent to 120 eligible participants (60 percent of the entire stratified population) inviting participation and implying consent if the link to the questionnaire embedded in the email was clicked. The email informed participants (a) of the study's purpose; (b) the study objectives and benefits; (c) that participation was strictly voluntary; (d) that consent could be withdrawn at any time; e) that risks involved by participating are minimal; f) that each participant's identity and information would remain anonymous and confidential and how this will be done; g) the duration of the study, h) what is expected of the participants and i) accessing the link in the email implies consent to participate in the study.

It is important to note that the Multifactor Questionnaire multi-rater tool used in this study allows for the leader to self-rate and for persons to rate their leaders referred to as raters. Given that the core of transformational leadership is how the leader impacts the follower rather than the leaders' view of themselves (Northouse, 2019). Accordingly, participants used in this study for the purpose of the analysis were the raters or persons rating the leadership at all levels in the fiscal policy space.

The research minimum sample size was 85 participants and therefore efforts were made to get at least 85 participants which included raters of the administrative and political leadership with the Ministries of Finance in the islands of the ECCU

Data Collection Method and Instruments

O' Sullivan et al. (2017) informed that the data collection method used in any research is largely dependent on the nature and objective of the study. In that regard, I must use collection methods that would identify transformational leadership qualities and a fiscal sustainability indicator to establish the extent of the relationship between the same. Accordingly, two types of data would be collected in this research namely primary and secondary data. Primary data would be collected by way of the Multifactor Leadership Questionnaire (MLQ 5X-Short) as developed by Bass (1985) directly from the participants which would address the leadership information needed for the research while economic data would be obtained from published content from the official websites of the Governments, the ECCB, Caribbean Development Bank, and the Bretton Woods Institutions on the fiscal sustainability component of the research undertaking.

MLQ 5X

The Multifactor Leaders Questionnaire (MLQ 5X-Short) is a psychological inventory consisting of 45 items, 36 of which are about leadership and 9 on leadership outcomes, and is a part of Bass's full-range leadership model (Rittschoof & Fortunato, 2016). Bass (1985) developed the instrument to allow leaders to self-assess their leadership characteristics, including that of peers, superiors, and subordinates. The instrument measures responses on a 5-point Likert scale ranging from 0 (not at all) to 4 (frequently, if not always) (Bass, 1985). Researchers have established the MLQ (5X-Short) as a valid and reliable instrument as the coefficient alpha estimates of reliability, in particular, have been reported to be .81 to .93 (Rittschoof & Fortunato, 2016). Moreover, the instrument has been used in over 200 research undertakings internationally where construct valid is demonstrated across varying job titles (Rittschoof & Fortunato, 2016). The MLQ (5X-Short) is a well-established instrument and participants would be asked to rate their leader from an administrative or political level as may be applicable.

Fiscal Sustainability Index

The fiscal sustainability index as developed by Croce and Ramon (2003) would be used to measure the extent of fiscal sustainability. The formula for the same as proposed by Croce and Ramon (2003) is as follows:

$$FSIt = (\beta t - \lambda t)$$

where βt measures the ratio between the real interest rate and the rate of growth of real output at a particular point in time (Croce and Ramon, 2003). The λt symbol, on the other hand, represents the measure of the deviation of the observed and target value of the primary surplus and debt ratios at a particular point in time (Croce and Ramon, 2003).

Fiscal sustainability is determined if FSIt is < 1 which would suggest that the policy stance is responsive (Croce and Ramon, 2003). Conversely, unstainable policies are identified if FSIt >1.

This index by definition requires the use of the respective government statistics on the real interest rate, public debt levels, real growth rate, and the primary surplus to calculate the same. These statistics on the governments in the ECCU are publicly available on the websites of the Bretton Woods Institutions, the ECCB, Caribbean Development Bank, and the official website of the governments in the region. Therefore there is no need for obtaining official consent for use in the analysis. However, citation of the relevant source is necessary.

While the instruments used must be able to gather pertinent information relative to the research variable, it is important to note that the data collection methods can have validity and reliability issues that can affect the quality of the research. The concept of validity addresses how accurately the phenomenon is reflected while reliability reflects how consistent the findings and the results are if multiple researchers were to use the same method of data collection and analysis (Burkholder et al., 2016).

In the case of this research, a validity concern that may arise is the leader's responses to the questionnaire relative to their leadership style may not accurately reflect their actions and therefore affect the information obtained. However, this would be minimized by engaging direct subordinates with the same questionnaire to obtain an alternative view of the leader's leadership style and triangulating the results. On the flip side, the subordinates may be fearful to provide accurate responses about their leaders due to fear of reprisals. This would be resolved with the embedded confidentiality and anonymity features in the data collection and analysis process. Accordingly, the accuracy of the responses in a general sense can be a major validity concern if not appropriately managed.

The use of secondary data from government statistics can be compromised with data collection errors from the point of the source and the lack of consistency in the definition. For instance, there may be an inconsistency across countries under review in the definition of public debt which is a macro-economic variable used to evaluate fiscal sustainability. This concern is mitigated as the definitions in the literature that is associated with calculating fiscal sustainability and other concepts in this research are expressly stated in the dissertation work.

Data Analysis Plan

It is well established that the research design, purpose, problem, must be aligned to ensure consistency, coherence, and logic in the research undertaking as it affects the quality of the same. This concept of alignment also extends to the statistical methodology used in analyzing and interpreting the research results. The fact that the essence of the research undertaking is to assess the relationship between variables a simple Pearson's Correlation analysis can be used or that of a Linear Regression Analysis. However, Frankfort-Nachmias and Guerrero, (2018) advised that the selection of one type of analysis over the other is based on how the variables that are used are measured (continuous, categorical, etc) as Pearson's Correlation only uses continuously measured variables as opposed to Linear Regression that uses both categorical and continuous measured variables, the interchangeability of the variables in the analysis, if the research intends to ascertain a mere relationship or how one variable affects the other the latter being the case for the Linear Regression Analysis and the former holding for the Pearson's Correlation, and the objective of assessing the relationship issues in the research undertaking.

Given that the objective of the research is to develop a leadership framework that supports fiscal sustainability in the ECCB, it was important to determine not just the strength of the relationship that exists but the impact of transformational leadership on fiscal sustainability as the desired outcome. Accordingly, a form of linear regression was deemed the most appropriate type of analysis to undertake as it would provide information on how improving leadership competencies can enhance the chances of fiscal sustainability. Further, understanding that the variables of transformational leadership and fiscal sustainability cannot be interchanged, for instance, transformational leadership can impact fiscal sustainability but fiscal sustainability has no bearing on transformational leadership, adds more credence to the selection of the linear regression form of analysis identified. Having established that a linear form of regression is warranted the specific type must be determined. Given that multiple independent or predictor variables are being considered in this research multiple linear regression that facilitates the same appears to be an appropriate fit.

Rensink (2016) advised that multiple linear regression is an extension of simple linear regression. It is a predictive analysis that is used to evaluate the relationship between a quantitative dependent variable and TWO or more independent variables (Rensink, 2016). The source highlights that the variable that is to be predicted is the dependent variable which in the case of the study is fiscal sustainability as measured by the fiscal sustainability index (Rensink, 2016). The variables that are being used to predict the dependent variable are referred to as the predictor variables and in the case of this study, those variables are the 4 constructs of transformational leadership (Rensink, 2016).

The data obtained from the questionnaire and the calculation of the fiscal sustainability index was captured in SPSS Statistics for analysis of the multiple linear regression and testing some of the assumptions associated with the same. There are eight main assumptions about the dataset that must be considered for multiple linear regression analysis namely, the dependent variable should be measured on a continuous scale, there should be two or more independent variables that are measured continuously or categorically, linearity should exist, independence of errors, homoscedasticity, multicollinearity, undue influence, and normal distribution of errors must exist.

In the case of this study, there are four independent variables involved and the dependent and independent variables are all continuous relative to measurement. The MLQ (5X-Short) questionnaire that addresses the four constructs of transformational leadership that makes up the independent variables is measured using a 5-point Likert scale while the index that assesses fiscal sustainability is continuous in nature.

The linearity assumptions consider whether there is a relationship between the independent variable and the dependent variables (Frankfort-Nachmias & Leon-Guerrero, 2018). The homoscedasticity assumption suggests that the residual and the variance for the same should be equivalent for all predicted scores (Ernst & Albers, 2017). Graphing a scatter plot in SPSS and evaluating the shape of the dispersion can aid in assessing the extent to which linearity and homoscedasticity assumptions were violated (Frankfort-Nachmias & Leon-Guerrero, 2018).

The test for independence of errors and multicollinearity assumptions would be assessed from the Durbin-Watson test and the Variance Inflation Factors (VIF) carried out in SPSS (Frankfort-Nachmias & Leon-Guerrero, 2018). A Durbin-Watson result of below 1.0 and above 3.0 is considered dangerous for independence of error while the multicollinearity assumption is considered met if the VIF of all the independent variables is less than 10 (Frankfort-Nachmias & Leon-Guerrero, 2018).

The assessment of the normal distribution assumption can be viewed from a histogram and the Shapiro-Wilk test performed in SPSS (Frankfort-Nachmias & Leon-Guerrero, 2018).

It must be noted that each test of the assumptions can result in a violation of the same which can nullify the validity of the confidence level in the significance test (Utley, 2019).

The SPSS program will generate multiple tables for interpretation which includes the various test of assumptions. Notwithstanding, three main tables would be of focus for the interpretation of the results providing there is no violation of any of the assumptions namely the Model Summary, Coefficient, and the ANOVA tables.

In the Model Summary table the correlation coefficient, and the coefficient of determination values as represented by R, and R^2, respectively would be evident along with the adjusted R^2 value. The correlation coefficient or R portrays the strength and direction of and association of variables with a scale of -1 to +1 with 0 representing a non-existent linear relationship (Schober et al., 2018). The coefficient of determination or R^2 assesses the proportion of variance in the dependent variable that can be explained by the independent variables (Schober et al., 2018). The adjusted R^2, on the other hand, regulates the proper fit of the variables to generalize the results of the model population and is usually less than or equal to R^2 (Amirat, et al., 2016).

Generally, the Model Summary table can be used to determine how well the model fits the data.

In the ANOVA table the F ratio test whether the independent variables statistically significantly predicts the dependent variable (Frankfort-Nachmias & Guerrero, 2018). Further, the coefficient table highlights how much the dependent variable varies with an independent variable when all other variables are held constant (Frankfort-Nachmias & Guerrero, 2018).

Evaluating these three tables will provide an idea of the extent to which transformational leadership characteristics can predict fiscal sustainability.

Threats to Validity

Burkholder et al. (2016) contend that establishing validity in research is an important quality consideration that addresses the evidence in the research and how it supports the interpretation and accuracy of the data used in drawing logical conclusions. In other words, valid findings in research can accurately reflect the phenomenon under review rendering the concept of validity as a process as well as an outcome (Burkholder et al.,2016).

In quantitative research designs like that of correlational design, there are 4 types of validity considerations namely, construct validity, internal validity, external validity, and conclusion validity. Construct validity assesses if what the researcher observed in the research was what was intended to be observed and whether the researcher is measuring what was intended to be measured (Burkholder et al., 2016). This form of validity is not expected to be an issue in a correlational design in this study. Internal validity, on the other hand, addresses the issue of causal inferences one of the limitations of the correlational design as causation cannot be determined (Burkholder et al., 2016). This weakness is known as the bi-directionality problem as it will not provide information on the causal direction of the two variables (Burkholder et al., 2016). For instance, the result would not indicate that transformational leadership causes fiscal sustainability or attaining fiscal sustainability results in transformational leadership. Further, this type of design would not offer information on whether a third variable explains the relationship between the two variables of interest which is known as the third variable problem (Burkholder et al., 2016). Burkholder et al. (2016) said that these two limitations affect the ability of a researcher to make causal inferences when using this design.

External validity considers the applicability of the conclusions in the study being generalizable while conclusion validity concerns the degree to which the conclusions drawn in the research are reasonable (Burkholder et al., 2016).

While internal validity is a weakness of correlational design, external validity can be seen as a strength of design given that there is no manipulation of variables the results of the study are likely to be applicable in a real-world setting and can be generalizable (Burkholder et al.,2016).

A necessary aspect of validity is reliability which evaluates the degree to which there is a consistency of the data collection and analysis across various researchers (Burkholder et al., 2016). Burkholder et al.(2016) informed that quantitative data is easily recorded and accessible, and once collected it is not subject to major interpretation which gives it a level of reliability. As such, the intended instruments to measure the various variables and the standard for interpretation renders reliability a strength in correlational design. Another strength of the correlational design is that it allows researchers to make predictions, for instance, knowing the score of transformational leadership can aid in predicting the score of fiscal sustainability (Burkholder et al., 2016).

Ethical Procedures and Participant Protection

Ethical consideration is at the pillar of quality research, particularly research involving humans (Burkholder et al., 2016). Research with human involvement "creates a special relationship between researcher and their subject" as the subject is an essential part of the investigation (O'Sullivan et al., 2017, p. 254).

Burkholder et al. (2016) advised that research ethics must be considered throughout every aspect of the research process as it has implications for areas such as but not limited to, participant recruitment, data storage, language used in the research instruments, analysis, and the like. Accordingly, it is important to evaluate the research undertaking and assess the likely ethical issues and develop mitigating strategies for the same.

On considering fiscal sustainability in the ECCU and its relationship with transformational leadership, leaders and their subordinates that are responsible for fiscal sustainability in that region must be engaged. The first ethical issue in that regard is how I proceed to engage in a manner that informs them of the research, voluntarily solicit their participation, while protecting their rights and civil liberties. Moreover, as part of obtaining an agreement to engage in the research, it is important for all concerned to understand the risk and benefit of the same.

Rudestam and Newton (2015) said that every effort should be made by the researcher to minimize risk while maximizing benefits to the participant. For instance, a risk in my research undertaking that brings with it an ethical challenge is the reader of the research being able to identify the leader and the associated country or vice versa which can pose a reputational risk to the career of the leader and the credibility of the fiscal management in the country. This can ultimately affect lives and livelihoods. Further, internal to the country is the discomfort of the subordinates to provide information on their perception of the competencies and skills of the leader for fear of reprisals. In this regard, it was important that as a researcher I considered strategies for protecting the identity of the participants and securing the data collected to avoid harming the participants in any way.

One of the unique features of this research venture is the engagement of participants across cultures which ran the risk of using culturally insensitive language that may offend participants. Accordingly, strategies were deployed to avoid this mishap and the potential harm it can bring.

Having considered the likely risks and ethical issues in the research it is important to weigh the same against the benefits of the research undertaking. Burkholder et al., (2016) informed that this process is subjective, and therefore consulting the ethical codes and regulations is necessary. The main benefit of this research is to add knowledge to the governments of the ECCU on what leadership competencies are likely to improve fiscal sustainability as a governmental outcome. This information can improve recruitment practices, approach to succession planning, and training needs and development in the respective countries. Adopting the necessary strategies to protect the identity of the participants, using the appropriate language in the research instruments, obtaining informed consent, addressing privacy issues, and ensuring respect for the participants would result in minimal risk of engagement.

Management of Ethical Issues

The approach taken upon identifying the participants through the networks established was to email participants inviting them to participate in the study with the implied consent of the same by clicking the link to access the questionnaire. The email informed participants (a) of the study's purpose; (b) the study objectives and benefits; (c) that participation was strictly voluntary; (d) that consent could be withdrawn at any time; e) that risks involved by participating are minimal; f) that each participant's identity and information would remain anonymous and confidential and how this will be done; g) the duration of the study, h) what participants are expected to do and contact details for any questions the participants may have and i) accessing the link in the email implies consent to participate in the study. This addressed the issue of permission to partake in the research.

On the issue of confidentiality and anonymity, to protect any reputational and other risks to the participants as previously identified, the participant's names were not required in the provided responses during the data collection process only email addresses were necessary to preserve the privacy of every participant and their country affiliation. Moreover, the data collection instrument used allowed for the automatic deleting of email addresses from the database once the questionnaire responses were submitted.

Furthermore, participants were asked not to provide any information that would make them feel uncomfortable or jeopardize their professional status. All data collected was stored in a safe and secure location for five years for the express purpose of protecting the rights and privacy of participants. A password-protected computer was used to store all electronic copies of collected data and analysis files. Finally, a locked filing cabinet was used to store hard copies of all the data and analytical materials. This addressed the issues of privacy.

All participants were debriefed on the findings of the research post-completion. This supports the commitment given for transparency, mutual respect, and partnership at the beginning of the research.

These issues were fully explained to potential participants where necessary.

Summary

The challenge of fiscal sustainability in the ECCU and the role of transformational leadership with respect to the same was worth exploring. However, it was critical to ensure that the research method, design, data collection instruments, and statistical approach to assessing the same were all in alignment. It was equally important to understand the ethical risk to research quality and design and explore the appropriate strategies to mitigate the same throughout the research process.

Having covered the research design, mode and instruments for data collection, the statistical approach to analysis, and strategies used to protect the participants, the ensuing chapters 4 and 5 of the research would consider an overview of the research question a detailed description of the data collection process, analysis and interpretation of the results of the study, the study limitations, implications for positive social change, suggestions for future research and conclusion.

Chapter 4: Results

Introduction

The purpose of this quantitative correlational study was to determine if a relationship exists between the transformational leadership characteristics of individualized influence, intellectual stimulation, individualized consideration, and inspirational motivation, and fiscal sustainability as a function of fiscal policy in the ECCU, particularly during a period of crisis.

Existing literature regarding fiscal sustainability in the region has involved the adequacy of fiscal policy as an end product to support fiscal sustainability as an outcome. I sought to fill a gap in the literature regarding the role of leadership during the fiscal policy process and the extent to which there is a relationship between leadership characteristics and fiscal policy design and implementation that facilitates fiscal sustainability. Transformational leadership characteristics were considered given empirical evidence as established in Chapter 2 that suggests that qualities associated with the same can facilitate appropriate fiscal policy design and implementation that enables fiscal sustainability over time.

I sought to address the following research question:

RQ: Is there a statistically significant predictive relationship between idealized influence, individualized consideration, inspirational motivation, intellectual stimulation, and fiscal sustainability in the ECCU for the period 2008 and 2013?

While the literature is suggesting that the transformational leadership theory can support fiscal sustainability as an outcome this must be tested by the null and alternative hypotheses. To this end, the null and alternative hypotheses established were as follows:

$H_0 1$: There is no statistically significant predictive relationship between idealized influence, individualized consideration, inspirational motivation, intellectual stimulation, and fiscal sustainability in the ECCU for the period between 2008 and 2013.

$H_a 1$: There is a statistically significant predictive relationship between idealized influence, individualized consideration, inspirational motivation, intellectual stimulation, and fiscal sustainability in the ECCU for the period between 2008 and 2013.

The statistical method used to test hypotheses and thereby answer the research question was multiple linear regression. This form of statistical method involved assessing the extent to which the dependent variable is impacted or affected by independent variables, thus highlighting the relationship and extent of predictability of movement.

In this chapter, data collection is explained, including response rates, the proportionality of the sample to the larger population, and demographic characteristics of the sample. Also included in this chapter is a test of assumptions of multiple linear regression analysis, results of the regression analysis, and a summary of findings.

Data Collection

I visited the official government websites of the eight-member countries of the ECCU. Ministries of Finance websites were searched and email addresses of fiscal policy personnel were collected. Some of the key areas email addresses were obtained from were that of the revenue (Inland Revenue and Customs) and macro-economic policy and planning units, debt management, accountant general offices, and budget divisions. In total, 120 random emails were issued to a stratified population of 200, and participants were allowed to assess leadership in terms of the fiscal policy process during any identified year between 2008 and 2013. I only secured responses from 85 potential participants resulting in a response rate of 71%. Based on the participant's online profiles, respondents were all Black; 60% were females and 40% were males.

Considering the entire population size of 200, participants in this study represent 43% of the same which is equivalent to the minimum sample size requirement of 85 according to the G*power analysis (Lapresa et al., 2016). To this end, the sample participants are representative of the population.

Fiscal sustainability was assessed by first obtaining published data from the IMF on the real interest rates, real GDP rates, debt amounts, primary surpluses, and GDP for all eight countries for the period 2008 to 2013. This information was placed in the equation (β_t - λ_t) where β_t measures the ratio between the real interest rate and rate of growth of real output and the λ_t symbol measured observed and target values of primary surplus and debt ratios at a particular point in time (Croce & Ramon, 2003). It is important to note that the primary surplus target and debt to Gross Domestic Product benchmark for the ECCU as a common policy is 3.5% and 60% respectively (ECCB, n.d). Moreover, in the instance where a primary deficit occurred in a period, zero was represented as the surplus amount used.

Findings

While multiple regression appears appropriate to address the research question from a theoretical standpoint, Effendi (2017) advised that the validity of the technique is dependent on the data satisfying the underlying assumptions associated with the same as it affects the interpretation of the results. As such, diagnostics involving independence of observation, multicollinearity, homoscedasticity and linearity, undue influence, and normal distribution of errors were considered before evaluating the results.

Tests of Assumptions

Independence of Errors and Multicollinearity

Independence of observation and multicollinearity assumptions were interpreted using the Durbin-Watson test (see Table 1)and VIFs (see Table 2).

Warner (2013) advises that with respect to the independence of observation, there should be no correlation between residual variables. Laerd (n.d) said as a general rule, a Durbin-Watson value of less than one and above three would suggest that there is a serial correlation between the variables, while a value of two suggests that no correlation exists. The Durbin-Watson value is two, thereby indicating that there is the independence of observations.

Multicollinearity, as measured by the VIF, is an important measure as the presence of the same can reduce the level of statistical significance in the independent variables. Tyzhnenko and Ryeznik (2021) said as a general rule, a VIF above 10 indicates that the independent variables have a high level of correlation with each other. It is evident that all the independent variables are below 10, and as such the assumption is considered met.

Table 1

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.192[a]	.037	-.011	1.696508021365411	2.059

a. Predictors: (Constant), Coaches & Develops People (IC), Acts with Integrity (IIB)-Individualize Influence, Encourages Others (IM)- Inspirational Motivation, Encourages Innovative Thinking (IS)

b. Dependent Variable: FISCAL SUSTAINABILITY INDEX

Note: Notwithstanding the Durbin-Watson measure, the Model Summary table also presents information on the proportion of variance explained by the independent variables (Laerd, n.d.).

Table 2

Coefficients

	Unstandardized Coefficients		Standardized Coefficients		Correlations			Collinearity Statistics	
Model	B	Std. Error	Beta	Sig.	Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	1.514	.486	3.112	.003				

	Acts with Integrity (IIB)-Individualize Influence	.157	.322	.094	.489	.626	.155	.055	.054	.325	3.072
	Encourages Others (IM)-Inspirational Motivation	-.028	.338	-.017	-.081	.935	.144	-.009	-.009	.263	3.803
	Encourages Innovative Thinking (IS)	-.212	.391	-.132	-.543	.589	.133	-.061	-.060	.203	4.928
	Coaches & Develops People (IC)	.358	.369	.239	.969	.335	.177	.108	.106	.198	5.061

a. Dependent Variable: FISCAL SUSTAINABILITY INDEX

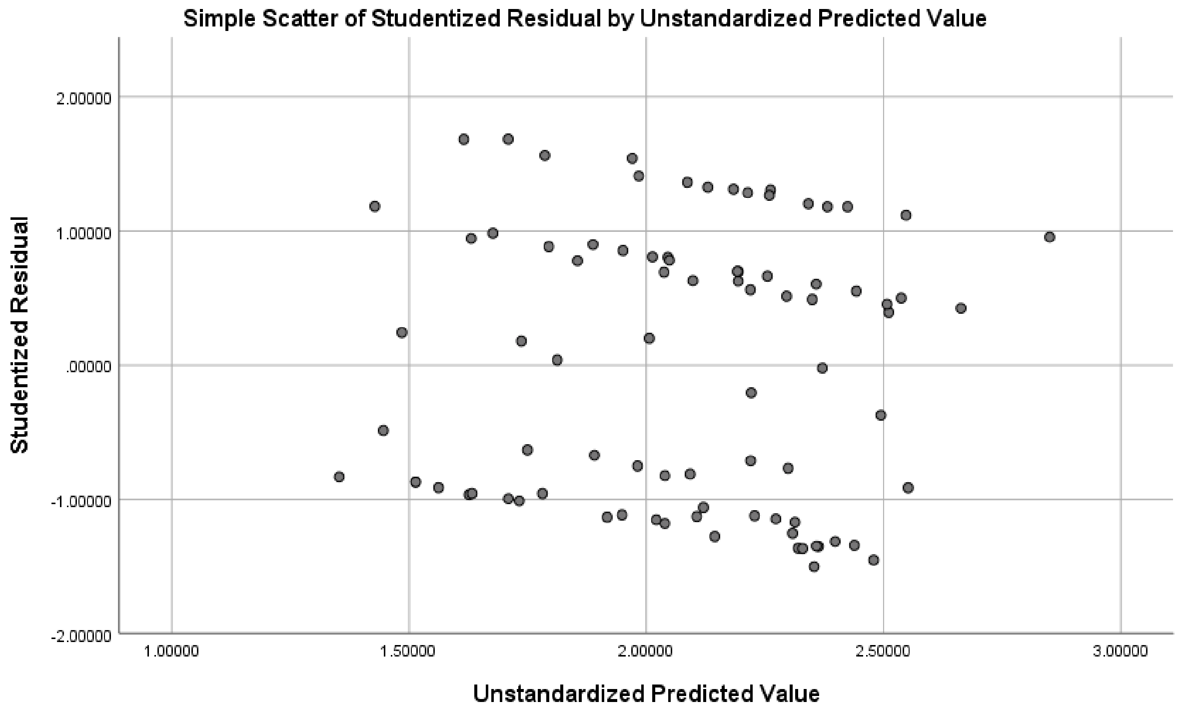
Note: Along with the VIF information, the Coefficients Table generally highlights the effect of a 1 unit change in an independent variable (with all the other independent variables being held constant) has on the dependent variable and its associated significance (Laerd, n.d.).

Homoscedasticity and Linearity

Homoscedasticity suggests that the residual and the variance for the same should be equivalent for all predicted scores (Warner, 2013). This reduces the chances of making type 1 and type 11 errors and thereby improves the accuracy of the research findings (Warner, 2013). The scatter plot (see figure 12) demonstrates a somewhat rectangular shape plot rather than a funnel shape distribution which suggests that homoscedasticity was achieved (Laerd, n.d).

Figure 12

Assessment of Homoscedasticity & Linearity



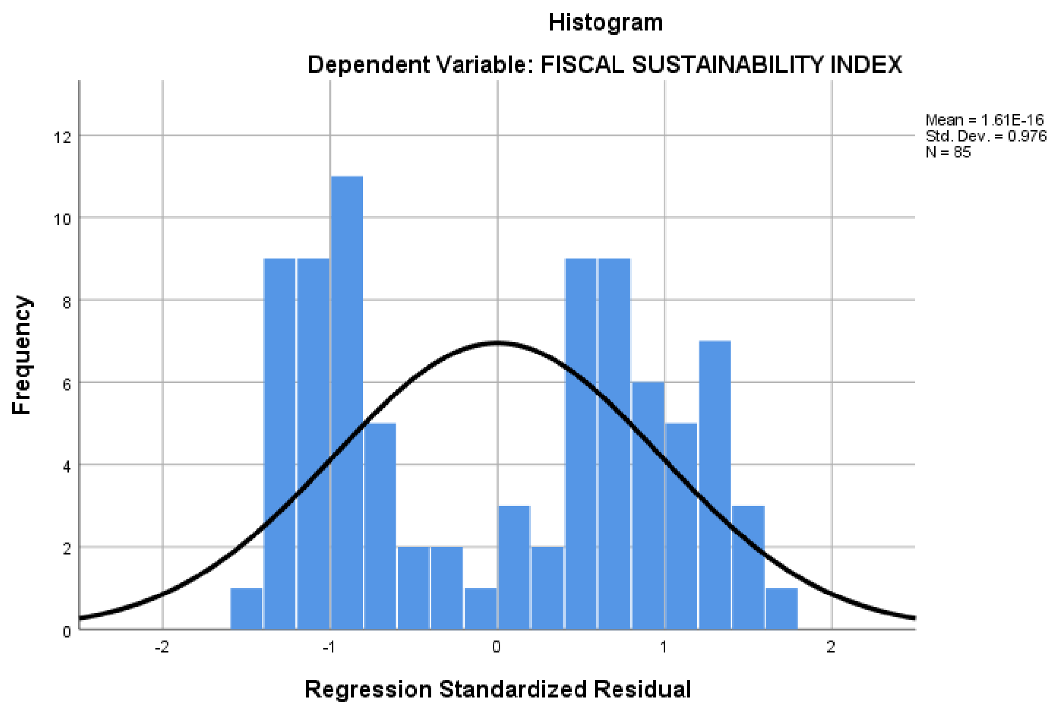
The scatter plot also gives an indication of linearity. Linearity considers whether there is a relationship between the dependent variables and the independent variables (Frankfort-Nachmias & Leon-Guerrero, 2018). The scatter plot (see figure 12) demonstrates a somewhat positive linear relationship between the independent variables and the dependent variable thus achieving the linearity assumption.

Normal Distribution of Errors

The shape of the histogram of the dependent variable displaying the frequency on the y-axis and the regression standardize residual on the x-axis provided an indication as to whether there is a normal distribution of errors. Based on the shape of the histogram in figure 13, it is evident that the distribution is fairly normal with no significant deviation from normality. This assumption would, therefore, be considered met.

Figure 13

Assessing Normality of the Distribution



Undue Influence

The test of undue influence was considered using Cook's distance which provides an overall measure for the influence of an individual case on the model (Padron-Hidalgo et al., 2020). The Residual Statistics table 3 depicts the results of Cook's distance. Warner (2013) informed that as a general rule if the measure of the Cook's distance is greater than 1 there is an issue with undue influence on the model. In this instance the

Cook's distance is way below 1 ranging from .000 to .123 and as such this assumption is considered met.

Table 3

Residuals Statistics

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.352596998214722	2.850038528442383	2.084809662775598	.323491417990544	85
Std. Predicted Value	-2.263	2.366	.000	1.000	85
Standard Error of Predicted Value	.202	.785	.392	.127	85
Adjusted Predicted Value	1.271535992622376	2.968183517456055	2.079757917345841	.347932192591219	85
Residual	-2.421109199523926	2.742717981338501	.000000000000000	1.655622301808277	85
Std. Residual	-1.427	1.617	.000	.976	85
Stud. Residual	-1.501	1.684	.001	1.008	85
Deleted Residual	-2.872904300689697	3.079294681549073	.005051745429758	1.767505264734696	85
Stud. Deleted Residual	-1.514	1.703	.002	1.011	85
Mahal. Distance	.203	16.975	3.953	3.409	85
Cook's Distance	.000	.123	.014	.020	85
Centered Leverage Value	.002	.202	.047	.041	85

a. Dependent Variable: FISCAL SUSTAINABILITY INDEX

Note: The Residuals Statics considers the difference between the observed value and the mean value the model predicts to assess the extent to which the model accounts for variations in the observed data (Laerd, n.d.).

Given that all the assumptions relative to the data were met, the null and alternative hypothesis emanating from the research question was tested.

Interpretation of the Results

The Multifactor Leadership Questionnaire rater form was issued to 120 potential participants with 85 of the same participating in the survey. The survey allowed participants to rate their leaders in the fiscal policy space for the period between 2008 and 2013. Table 4, Descriptive Statistics shows the study's variables and their associated mean and standard deviation relative to the participant engagement.

Table 4

Descriptive Statistics

	Mean	Std. Deviation	N
FISCAL SUSTAINABILITY INDEX	2.084809662775598	1.686929726976932	85
Acts with Integrity (IIB)-Individualize Influence	2.244	1.0088	85
Encourages Others (IM)- Inspirational Motivation	2.494	1.0684	85
Encourages Innovative Thinking (IS)	2.000	1.0510	85
Coaches & Develops People (IC)	1.989	1.1285	85

A statistical regression was performed to determine the relationship between fiscal sustainability from the predictor variables of idealized influences, individualize consideration, inspirational motivation, or intellectual stimulation (see Table 5).

Table 5

Variables Entered/Removed

Model	Variables Entered	Variables Removed	Method
1	Coaches & Develops People (IC), Acts with Integrity (IIB)-Individualize Influence, Encourages Others (IM)-Inspirational Motivation, Encourages Innovative Thinking (IS)[b]	.	Enter

a. Dependent Variable: FISCAL SUSTAINABILITY INDEX

b. All requested variables entered.

Preliminary data screening included examination of all the assumptions that are necessary to conduct a multiple regression analysis which showed no serious violations. There was linearity and homoscedasticity as assessed by visual inspection of the studentized residuals against the predicted values in figure 12. There was the independence of observation, as assessed by a Durbin-Watson statistic in the Model

Summary, Table 1. Moreover, there was no evidence of multicollinearity, as assessed by VIF values that were less than 10 in Coefficients, Table 2. Additionally, Cook's value representing undue influence was below 1. All 4 independent variables provided useful information on the predictability or the lack thereof of fiscal sustainability as an outcome. The Model Summary as displayed in Table 6, shows an $R^2 = .037$, indicating only 3.7% variability in fiscal sustainability is due to the 4 constructs of transformational leadership. This suggests that the change in the fiscal sustainability outlook for the ECCU during a time of a crisis is largely dependent on other factors with 96.3% of the variability being unaccounted for by transformational leadership. To this end, transformational leadership has a weak size effect on fiscal sustainability.

Table 6

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.192[a]	.037	-.011	1.696508021365411	2.059

a. Predictors: (Constant), Coaches & Develops People (IC), Acts with Integrity (IIB)-Individualize Influence, Encourages Others (IM)- Inspirational Motivation, Encourages Innovative Thinking (IS)

b. Dependent Variable: FISCAL SUSTAINABILITY INDEX

Note: Notwithstanding the Durbin-Watson measure, the Model Summary table also presents information on the proportion of variance explained by the independent variables (Laerd, n.d.).

In light of the foregoing, it is no surprise that the ANOVA, Table 7 informs that the overall model is not statistically significant, with a significance value of .552 greater than the conventional significance level of .01 or .05. In this regard, idealized influences, individualized consideration, inspirational motivation, or intellectual stimulation do not statistically predict fiscal sustainability, F (4, 80) =.764, $P>.05$. This suggests that the null hypothesis of whether there is a statistically significant relationship between idealized influence, individualized consideration, inspirational motivation, or intellectual stimulation and fiscal sustainability must be accepted.

Table 7

ANOVA

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	8.790	4	2.198	.764	.552[b]
	Residual	230.251	80	2.878		
	Total	239.041	84			

a. Dependent Variable: FISCAL SUSTAINABILITY INDEX

b. Predictors: (Constant), Coaches & Develops People (IC), Acts with Integrity (IIB)-Individualize Influence, Encourages Others (IM)- Inspirational Motivation, Encourages Innovative Thinking (IS)

Summary

The results of the analysis demonstrate that in the context of a crisis there is not a statistically significant relationship between the characteristics of transformational leadership and fiscal sustainability in the ECCU. This result sufficiently answers the research question advanced in this study.

Chapter 5 includes results identified in this chapter involving existing literature, limitations of the study, recommendations for future studies, and implications for social change.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The challenge of fiscal sustainability within the ECCU, which is largely exacerbated during a time of a crisis, gave rise to a need to evaluate this issue from a leadership standpoint rather than assessing the adequacy of fiscal policies in the region.

While existing literature suggests that transformational leadership characteristics support enhanced performance and goal attainment during times of uncertainty, it was unclear whether and to what extent these characteristics had any bearing on fiscal sustainability as an outcome of fiscal policy design and implementation. I sought to address the relationship between fiscal sustainability and transformational leadership.

The purpose of this quantitative study with a correlational design was to examine whether there is a relationship between the four constructs of transformational leadership (idealized influences, individualized consideration, inspirational motivation, and intellectual stimulation) and fiscal sustainability in the ECCU during the global financial crisis.

Results of the study were that the impact of transformational leadership characteristics on fiscal sustainability during a time of an exogenous shock is negligible and insignificant. Under those circumstances, 96.3% of the impact on fiscal sustainability as an outcome of fiscal policies involves factors outside of transformational leadership. These findings support some of the research in the ECCU regarding factors that have a larger impact on the fiscal sustainability outlook of the region. Moreover, the findings shed some insight on other areas of focus for future studies that can be contemplated.

In this chapter, I explore results in the context of literature as previously discussed in Chapter 2. Additionally, limitations of the study are explained and proposed recommendations for further research are advanced. I end with a discussion of implications for social change.

Interpretation of the Findings

I used the transformational leadership theory and Kingdon's multiple streams framework within a conceptual framework. The transformational leadership theory was considered to address leadership characteristics involving improving organizational performance and goal attainment. The multiple streams framework, provided a mold in which transformational leadership can function when designing and implementing fiscal policy to achieve the desired goal of fiscal sustainability for the period under review (global financial crisis of 2008-2013)

It was important to conceptualize transformational leadership in this study in the context of Kingdon's multiple streams framework which was originally designed with fiscal policy formulation in mind and therefore was built on key assumptions like that of ambiguity and time constraints (Weible & Sabadier, 2018). These are all real considerations confronting leaders when a focusing event like that of a global financial crisis occurs.

Dornea and Oanes (2015) highlighted the role of leadership in the fiscal policy process by advising that the quality of a government's fiscal policy design and implementation determines the extent to which fiscal sustainability is achieved, particularly during a time of crisis. While leadership is a critical component of the policy process as underscored by Mols et al. (2020), and elaborated by Aryeetey and Covi (2020) and Gatchair (2018), the type of leadership characteristics that can facilitate the desired performance outcomes in the context of the public sector was identified by Zeb et al. (2015) as transformational and transactional leadership qualities.

Zeb et al. (2015) however concluded that in a time of financial pressures like a financial crisis, transactional leadership characteristics are less likely to be effective in terms of goal attainment, as leaders are unable to proffer rewards and incentives for performance which are generally associated with the transactional leadership style. As such, transformational leaders are most appropriate in the public sector setting under conditions of fiscal pressure (Zeb et al., 2015). Northouse (2019) agreed with the conclusion advanced by Zeb et al. (2015) informing that transformational leadership is one of the most popular leadership approaches due to its emphasis on inspiring and empowering followers to succeed in a time of crisis. Even so, the result of this study does not support the assertion made by Zeb et al. (2015) as transformational leadership characteristics had no impact on fiscal sustainability as the desired performance outcome in the case of the ECCU for the six-year period that was reviewed. Interestingly, leaders displayed transformational leadership characteristics in countries that showed years of unsustainable fiscal positions, and the same held true for leaders in countries within the region who had sustainable fiscal positions during this period. This supports the study’s overall findings that there are other factors apart from transformational leadership qualities that impacted the fiscal outlook of the ECCU during a time of an exogenous shock.

Cevik and Nenda (2020) agreed with the assertion of the study's findings citing that with limited or no fiscal buffers, the devastating economic impact of natural disasters on the ECCU and by extension the Caribbean during the period between 1980 and 2018 has lingered with the impact of recovery policies advanced by the leadership being less visible because of the frequency of occurrence of shocks. Cevik and Nenda (2020) further stated that hurricanes have resulted in damages to the Caribbean, costing as much as 260% of their GDP on average which required more than five years for the policy responses facilitated by leaders to materialize. The IMF (2019) said six out of the eight countries in the ECCU rank in the top 10 most disaster-prone countries in the world, and since 1961, these countries have experienced 187 natural disasters that resulted in increased debt.

The research by Scott- Joseph (2010) reinforced the observations made by Cevik and Nenda (2020) and the International Monetary Fund (2019), documenting the impact of natural disasters expenditure on fiscal sustainability in the ECCU, highlighting that the cost to rebuild has become a major issue for the already heavily-indebted countries. Scott- Joseph (2010) found that natural disasters and other focusing events place additional pressures on the government to run procyclical fiscal policies for short- to medium-term economic survival. Moreover, Cevik and Nenda (2020) said even with a prudent fiscal policy posture adopted during and after a global financial crisis, the region would still have fiscal sustainability challenges if countries are unable to build fiscal buffers at a faster rate than the potential impact of a natural disaster event.

Gondon (2019) agreed with the conclusion drawn by empirical data that focusing events like that of natural disasters and global financial crises increase vulnerability to fiscal sustainability challenges brought on by exogenous shocks with slowed recovery. Gondon (2019) drew on the example of the experience of the European Union and its fiscal sustainability challenges in the wake of the global financial crisis that triggered sweeping reforms the results of which were only evident post-2013. Ogberifun and Shobande (2020) highlighted the experience of Mexico, Indonesia, South Korea, and Turkey who were all faced with fiscal sustainability challenges during the period between 1990 and 2017 that necessitated broad-based reforms the results of which were evident more than five years later.

Recognizing the vicious cycle that is facing the Eastern Caribbean region the IMF (2019) emphasized the need for the ECCU and by extension the Caribbean to build resilience in a way that they are able to cushion the short and medium-term effects of a shock.

IMF (2019) reinforced the observations made by the Khadan (2019) highlighting that exogenous shocks such as the global financial crisis and natural hazards have further weakened the fiscal situation in the ECCU where there are limited institutional arrangements to guide corrective measures. Both the IMF (2019) and Khadan (2019) underscored the sentiments made by Scott-Joseph (2010) relative to the leadership being forced to adopt pro-cyclical policies as oftentimes the countries require immediate liquidity support which is usually in the form of debt or increased taxation and restrictive expenditure measures. The former issue adds a greater burden on the further generation while the latter interventions decrease the spending powers of the citizenry during a financial crunch and deliver fewer goods and services to the people through expenditure contraction. This situation further inhibits economic growth and perpetuates the vicious cycle of the challenge (Gondon, 2019).

Cevik and Nenda (2020) like IMF (2019), Khadan (2019), and Scott-Joseph (2010), concluded that the limited fiscal options in the immediate, short to medium term and slowness of recovery renders the leadership efforts less visibility in terms of impact. The latter issue on the slowness of recovery supports the experience of the European Union as advanced by Gondor (2019) and Ogberifun and Shobande (2020) relative to Mexico, Indonesia, South Korea, and Turkey. Further, this was evident in the improvements in the fiscal sustainability outlook of the ECCU post-2013 following the reforms undertaken during the period of 2008-2013 with the support of the Britton Wood Institutions (IMF, 2019). Cevik and Nenda (2020) and Scott-Joseph (2010) have recorded similar results specific to the ECCU where evidence of policy interventions following an exogenous shock is evident through a gradual process as the impact of the shock takes time to subside.

In light of the foregoing, it is instructive that the results of the relationship between transformational leadership and fiscal sustainability were insignificant for the period under review that was associated with the global financial crisis. It emphasizes the point supported in the literature that during a period of shock the impact of transformational leadership on fiscal sustainability has little or no bearing as external pressures dominate the policy agenda. Further, efforts of the leadership relative to recovery policies would only be visible over time.

The findings in this research do not diminish the extensive work done on the appropriateness of transformational leadership qualities as an ingredient to enhance organizational performance and goal attainment. What it highlights, however, is the importance of contextualizing the environment in which this leadership style is forced to operate as it may limit the impact of the qualities considering the effects of other debilitating factors beyond the leader's control in that specific time period. Moreover, the timeframe of assessment is also critical as the short, medium and long-term effects of the policy response to the focusing event would not be immediately evident but would manifest over time.

Limitations of the Study

This study limitation includes the fiscal sustainability index used, the scope of leadership considered, the timeframe for the analysis, and the research design. The fiscal sustainability index as proffered by Croce and Ramon (2003) that was utilized in this study, gauges fiscal sustainability without an explicit reference to a timeframe established by the authorities to achieve the same. While a debt and primary balance target that anchors the fiscal sustainability index offered a unique alignment to what exists in the ECCU as an established common policy position, these targets were set with an associated timeframe of achievement being contemplated. For instance, the debt to GDP target for the ECCU of 60% was considered an immediate requirement in a 2008-2013 timeframe as opposed to a 2020 proposition which was the timeframe agreed to by the countries during that period (ECCB, n.d). Accordingly, the study did not take the projections of attainment of fiscal sustainability as a factor in the analysis.

The assessment of leadership for this study was only to the extent of leaders in the fiscal policy space and therefore the study cannot be used as a general position for the public sector in the ECCU.

The issue of the timeframe used in the study limits the visibility of the impact of leadership given the fact that the review period is at the height of the shock and therefore the impact of the policies for recovery as a function of leadership is not evident.

On the matter of research design, the correlational design is a non-experimental design associated with the quantitative methodology. Burkholder et al. (2016) advised that the third variable problem this design does not offer any causal inferences and therefore it cannot be said that transformational leadership does not cause fiscal sustainability given the outcome. What is clear, however, is that it has little or no significance in the context of a global financial crisis.

Recommendations

As I assessed the data for this study and reviewed the literature proffered in Chapter 2, it was evident that a longer-term study relative to the period is required for such an undertaking. The concept of fiscal sustainability is not a one-off outcome but rather is an ongoing process. Accordingly, it would be useful to evaluate fiscal sustainability as a function of fiscal policy of which leadership is a key pillar, during and post an exogenous shock or focusing event. This would allow the fiscal policy advanced by the country during the period of the shock to yield outcomes thereby providing a better assessment of the impact of transformational leadership style as an enabler of fiscal sustainability in any given period.

The role of leadership in navigating the fiscal sustainability challenges that are confronting the ECCU remains very relevant, particularly in a time of the current global pandemic. Therefore, the topic is worth further exploration.

Another possible area for future research can be what other factors impacted the fiscal policy position of the ECCU that accounts for the 96.3 percent that is recorded from this study for the period between 2008 to 2013. The literature seems to suggest that a focusing event in and of itself limits the options available to leaders in the ECCU forcing them to engage in pro-cyclical fiscal policies for short-term to medium-term due to a lack of fiscal buffers. The extent to which the lack of fiscal buffers in such a context drives the decision to increase debt and worsen the fiscal positions is yet to be tested.

An equally important evaluation on the issue of fiscal sustainability in the ECCU is the extent to which the common policy targets for fiscal sustainability are appropriate for all the countries given their individual context.

Implications

Although the research shows that transformational leadership has an insignificant impact on fiscal sustainability during a financial crisis, fiscal sustainability is still an issue for the ECCU. The study, therefore, offers an opportunity to provide the necessary supporting structures that can aid leadership in navigating the difficult period as it is evident that the leader alone has little or no impact with the onset of a shock. As such, a collective strengthening of the resilience infrastructure of the region would be necessary.

To this end, on a local level, a social partnership may be a necessary grouping that can support a more holistic national response to a focusing event. On an international or regional level, consideration should be given to building the resilience infrastructure of the region to place the countries in a better position to respond to shock from a liquidity perspective. In this regard, it may be useful for loan agreements to contemplate debt forgiveness, moratoriums, or haircut clauses should a focusing event occur as the policy instrument used for recovery would take some time to take effect in a circumstance where immediate liquidity is needed. Moreover, the Caribbean region should engage the Britton Woods Institutions as a block with a view to having them relook the criteria for financing where budgetary support is needed due to a focusing event.

This study has demonstrated that the region would require more than a leader with transformative characteristics in the short to medium term to address the issue of fiscal sustainability but rather there is a need to confront the challenge in a multifaceted way that would allow the countries to withstand an exogenous shock.

Conclusion

This study brought into sharp focus the challenge of fiscal sustainability affecting the ECCU particularly in a time of crisis. While existing literature focused on the appropriateness of the fiscal policies of the currency union to promote fiscal sustainability as an outcome, the role of leadership was absent from that conversation. Accordingly, the approach to this research was to consider the leadership characteristics that are most likely to support the attainment of fiscal sustainability and evaluate the extent to which a relationship exists between the same. This gave rise to the testing of the null hypotheses that there is no statistically significant relationship between the characteristics of transformational leadership and fiscal sustainability in the ECCU for the period 2008-2013.

The results of this study suggest that transformational leadership characteristics have no significant impact on fiscal sustainability as an outcome during the height of the global financial crisis. It further highlighted that 96.3 percent of the impact on fiscal sustainability during that period was emanating from other factors.

This result in no way diminishes the role of leadership and more specifically transformational leadership. As the most noteworthy limitation of the study was the timeframe allowed to recognize the policy effect during and post an exogenous shock like that of the global financial crisis. Moreover, the limited options available to leaders in the ECCU in the absence of fiscal buffers dictates the short to medium-term policy response, particularly where immediate liquidity support is required.

To this end, more must be done to build or strengthen the resilience architecture in the ECCU to economically withstand the impact of a shock.

The urgency to address this issue is even more relevant as the world is engulfed in a global pandemic that has forced the closure of boards and resulted in the imposition of restrictions that continues to affect the economies of the world. The average debt levels in the ECCU have since sky-rocketed beyond the levels that existed during the global financial crisis. This was as a result of the immediate liquidity needs imposed by the shock which forced burrowing to finance deficits. As a consequence, the fiscal sustainability challenges would persist with the results of the recovery policy intervention would be evident over time.

Researchers who are interested in conducting research in the area of fiscal sustainability in the Eastern Caribbean or by extension the Caribbean region should observe with keen interest the impact of the pandemic on the same and the policy posture of the government in the short, medium, and long term.

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