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# TRADE POLICY IN THE ECCU AND IMPLICATIONS FOR COMPETITIVENESS: ASSESSING THE VIABILITY OF THE CANADA-CARICOM FTA

By

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## EXPLORING OPPORTUNITIES FOR ECCU TOURISM: LOOKING TOWARD THE EMERGING ECONOMIES

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#### Abstract

Free trade policies are considered avenues for increased competition and innovation. This paper assesses the viability of the Canada-CARICOM Free Trade Agreement (FTA) for ECCU territories using trade intensity and trade complementarity indices as proxies to predict potential export gains from the agreement. Trade data for the major exports of the respective territories was used to formulate trade indices which serve as indicators of increased potential gains under the proposed agreement. These inferences are then considered in the formulation of recommended strategies to ensure that ECCU territories exploit the available and new opportunities that may arise as a result of the Canada-CARICOM FTA. St Kitts and Nevis displayed the highest gaining potential while Grenada showed signs of increasing competitiveness under the FTA. However, due to the low trade intensity and complementarity results that were obtained, much of the efforts of ECCU policy makers under the FTA should be driven towards the advancement of trade in services and strengthening relationships with Canadian institutions while the engagement of the ECCU's diaspora in Canada can present positive externalities for competitiveness.

**Keywords**: Trade intensity, complementarity, bilateral, comparative advantage, liberalization.

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#### 1.0 INTRODUCTION

Many proponents of the Canada-CARICOM Free Trade Agreement (FTA) firmly assert that it should potentially enhance the trading relationship between both parties by a variety of avenues. However, the overall impact of the FTA on the territories of the ECCU could vary considering the nature of the existing trading relationship between these respective territories and Canada. An assessment of these existing trading relationships¹ can potentially provide vital insights as to the anticipated benefits that can be derived from this proposed FTA. Due to data limitations, most studies do not attempt to measure the welfare effects of trade agreements, but instead attempt to estimate the impacts of the agreements on trade flows. Enhanced competitiveness can be the result of increased trade flows and combinations of policy initiatives aimed at fostering advancements in key productive sectors.

This policy brief aims to assess the viability of the Canada-CARICOM FTA for the ECCU territories by assessing its potential gains based on the levels of trade intensity and complementarity of major export commodities. Also the identification of the policy implications required to allow the ECCU to become more competitive under the FTA will be addressed.

Free trade areas eliminate barriers to trade between members, which is proven to provide a significant incentive to increase trade between members and to reduce trade between members and non-members. In a free trade environment, countries will trade with their partners, attempting to exploit their own comparative cost advantage through specialization. They should export goods they produce most efficiently, and import goods from low-cost countries who have exploited their own comparative cost advantage to produce cheap exports. The creation of a FTA, with common external tariffs, will further alter the existing pattern of trade flows. The reasoning is that before the FTA, members imposed differential tariffs on different countries to protect their own industries however, once a FTA is created, members agree to

<sup>&</sup>lt;sup>1</sup> The current trading relationship that exists between ECCU territories and Canada involve large persistent trade deficits for ECCU countries while a very marginal size of their exports go to Canada.

eliminate tariffs between themselves. The effect of this is that consumers' increase their demand due to lower priced zero-tariff imports from members and new trade will be created by the process called trade creation<sup>2</sup>. On the other hand, the flow of trade after the establishment of a FTA can also be affected through trade diversion. Certain territories within a FTA may have comparative advantages hence trade will be diverted from the other countries to the countries where comparative advantages exist. While the economic analysis of trade creation and diversion is beyond the scope of this paper it discusses the potential for the ECCU's exports to Canada under the proposed FTA. Substantial economic gains are possible through trade creation under a FTA while transaction and opportunity costs, reductions in tariff revenue and displacement may be welfare reducing. As a country remove barriers to trade with respect to a partner country there is likely to be a process of adjustment occurring in the country's production structure which involves beginning to specialize in those sectors in which it has a comparative advantage relative to the trading partner. As a result, an important ingredient for the success of the Canada-CARICOM FTA depends on the prospective members maintaining and exploiting strong comparative advantages (if any) in different products<sup>3</sup>.

This brief proceeds with 9 sections: section 2 below gives a background on the Canada-CARICOM trading relationship and the motives behind the establishment of the Canada-CARICOM FTA. The review of relevant literature is discussed section 3 followed by section 4 which discuss the method utilized to generate empirical results. The presentation of the results is shown in section 5 while the analysis of these results is done in section 6. The penultimate section gives an assessment of the policy implications. Finally, section 8 and 9 provides recommendations for ECCU territories and a conclusion respectively.

<sup>&</sup>lt;sup>2</sup> Shujiro Urata and Misa Okabe (2010) discussed the trade creation and diversion effects of trade agreements in their paper 'Trade Creation and Diversion Effects of Regional Trade Agreements on commodity Trade.

<sup>&</sup>lt;sup>3</sup> Comparative advantages brought about due to the implementation of a FTA can potentially increase the willingness of FTA partners to trade with other FTA partners. The result should be that all parties to the pact will increase their income.

#### 2.0 BACKGROUND AND MOTIVATION

Trade policy is immensely critical to the overall advancement of small open economies such as those of the ECCU since these islands are highly dependent on foreign trade to achieve economic growth. The trading environment between CARICOM and Canada was initially governed by the Caribbean-Canada Trade Agreement (CARIBCAN) of 1986. The CARIBCAN agreement was essentially a non-reciprocal preferential trade agreement which allowed unilateral duty free access to the Canadian market for almost all commodity exports originating from the Commonwealth Caribbean countries (Khadan 2011). CARIBCAN was actually of marginal significance to CARICOM in terms of exports since less than 12 per cent of Canadian imports from the English-speaking Caribbean entered Canada under CARIBCAN. From a CARICOM viewpoint, Canada should remain an important, international partner for a variety of reasons. Canada is the third largest market for exports of goods from CARICOM after the United States (over 50 per cent) and the European Union (12 per cent) regardless of the fact that Canada represents only 4 per cent of CARICOM's market for the export of goods. Additionally, Canada is home to a significant number of CARICOM's diaspora, it is a major source of tourists to the region and Canadian private sector investment in the region in a variety of industries, including banking, tourism and mining, is very significant (direct investment is in excess of US\$75 billion, and trade in services is roughly US\$3 billion annually). Additionally, Canada is a significant aid contributor to CARICOM countries.

Table1: CARICOM Countries' Share in Bloc's Total Trade with Canada,

2013 as Percentages<sup>4</sup>

Impor	rts	Exports			
Country	Share (%)	Country	Share (%)		
Trinidad & Tobago	36.0	Guyana	44.6		
Bahamas	20.0	Jamaica	18.4		
Barbados	15.9	Trinidad & Tobago	16.9		
Jamaica	13.0	Surinam	11.0		
Haiti	4.0	Bahamas	3.9		
Guyana	2.0	Haiti	2.9		
Surinam	1.7	Barbados	1.6		
Antigua and	1.6	St Kitts & Nevis	0.8		
Barbuda					
Saint Lucia	1.2	Belize	0.2		
St Vincent and the	1.0	Grenada	0.2		
Grenadines					
Belize	0.9	Dominica	0.0		
St Kitts & Nevis	0.8	Montserrat	0.0		
Dominica	0.5	Saint Lucia	0.0		
Grenada	0.5	St Vincent & the	0.0		
		Grenadines			
Montserrat	0.0	Dominica	0.0		
Total	100.0		100.0		

Note: CARICOM's exports (imports) are Canada's imports (exports).

Source: Industry Canada

The CARIBCAN trading relationship between CARICOM and Canada was not compatible with the World Trade Organization (WTO) rules hence it was ended in 2011. Thus, in order for CARICOM countries to obtain preferential treatment in the Canadian market the Canada—

<sup>&</sup>lt;sup>4</sup> Antigua and Barbuda and Saint Lucia import the largest volumes while St Kitts and Nevis exports the largest share.

CARICOM FTA which is compatible with WTO rules has been under negotiation<sup>5</sup>. For both parties the contentious areas of the negotiations for the new agreement are tariff liberalization, services and investment. Furthermore, discussions took place in the areas of market access for goods, cross border trade in services, temporary entry, financial services, investment, intellectual property, rules of origin, ICT, customs procedures, dispute settlement, institutional issues, trade related cooperation, environment and labour.

Although the costs involved in the establishment of this new preferential FTA are rather significant, mitigating these costs can present various potential opportunities for the ECCU. Furthermore, countries in the region may find favour with the termination of CARIBCAN due to the fact that Canada is currently engaging in bilateral agreements with other trading blocs which operate under more liberated modalities of trade.

#### 2.1 Canada-CARICOM

Based on trade data from the UN Comtrade, CARICOM historically enjoyed a positive trade balance with Canada up to 2012 where CARICOM imports grew by 66 per cent. The Canadian market accounts for around 3.3 per cent of total CARICOM exports. However, an examination of trade data from Canadian sources depicts that the value of trade differs significantly. Arguably, this is because Canadian data on CARICOM exports into the Canadian market would in some cases include re-exports (which may not be covered under the CARIBCAN agreement as they would not qualify under the rules of origin) as well as transportation and customs revaluation factors. In addition these figures also include trade with Other Countries and Territories (OCTs) that are not full members of CARICOM. It is also important to note that Suriname and Haiti were not beneficiaries of CARIBCAN.

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<sup>&</sup>lt;sup>5</sup> The major challenge faced by policy activists in their quest to transition away from CARIBCAN was that the different rates of economic development within the region means that each country wants to ensure their interests are met considering their fiscal space and their financial capacity to exploit new opportunities.

Table 2: CARICOM's Trade Balance with Canada 2006-2012 (US\$)

Year	Imports	Exports	Trade Balance
2006	593,044,355	1,020,718,066	427,673,711
2007	676,836,821	1,373,699,535	696,862,714
2008	854,591,370	1,531,254,005	676,662,635
2009	656,991,881	1,226,232,704	569,240,823
2010	782,439,904	1,570,510,848	788,070,944
2011	778,208,959	1,400,716,158	622,507,199
2012	1,175,770,653	1,124,505,880	-51,264,773
Totals	5,517,883,943	9,247,637,196	3,729,753,253

Source: UN Comtrade database 2013

For a number of years Trinidad and Tobago topped CARICOM in terms of exports to Canada led by water, crude petroleum oils, inorganic chemicals and compounds and precious metals and radioactive elements with Suriname, Jamaica and Guyana being close rivals. However in 2013 Guyana topped exports to Canada led by the export of gold while among the ECCU, export of electronics from St Kitts and Nevis account for more than 63 per cent of ECCU exports to Canada. Over the same period, the shares of exports from ECCU territories remained relatively flat hence the need to improve trading relations between Canada and CARICOM by means of an enhance preference trade agreement. An important consideration in the implementation of the Canada-CARICOM agreement then becomes whether or not the ECCU will achieve the desired objectives of enhancing trading relationships with Canada.

#### 3.0 LITERATURE REVIEW

A significant proportion of the literature done on the Canada-CARICOM FTA focused broadly on all CARICOM countries as a single trading bloc and presented relatively similar findings. A number of scholars found consensus that the primary objective of forming any preferential trade arrangements is to improve the economic outcomes of its members. The success of preferential trade arrangements in promoting intraregional trade is most realizable in an environment that is characterized by "situations where member states have comparative

advantages in diverse products and exhibit strong trade complementarities" (*Kemal*, 2003). The Canada-CARICOM relationship has traditionally been based primarily on developmental aid however over the last decade or so there has been increased merchandise trading, FDI flows and major advances made in the area of financial intermediation (*Wharton*, 2009). North-South trade arrangements of this sort have the potential to facilitate growth in emerging economies by providing their south counterparts with access to larger more developed markets and the transfer of technology, positively influencing external trade (*Khadan et al 2014; Rourke 2013; Hornbeck 2008*).

In the ECCU, St Kitts and Nevis dominates trade with Canada due to large volumes of electronic equipment being exported, however, the territories of Anguilla, Montserrat and Saint Lucia have engaged in insignificant volumes of trade with Canada. A Canada-CARICOM free trade agreement is expected to create new opportunities for Canadian and ECCU businesses in sectors including manufacturing, agriculture and financial services (*Khadan et al 2014*). As such negotiations should include a forward looking and creative instrument on sectoral development that would harness the talents in the Caribbean and Canada to stimulate the development of real sectors in CARICOM (*Chaitoo* 2013).

The initial environmental assessment<sup>6</sup> report done as part of the negotiation stage enlightened the fact that increased Canadian exports flows from the elimination of tariffs by CARICOM members on non-agricultural goods would have a minimal impact on the trade and production of these goods in Canada primarily due to the relative small sizes of CARICOM economies. However, Canadian imports are expected to increase since duty free will be extended on approximately 97 per cent of goods that are imported from CARICOM countries. Domestic services and foreign direct investment is expected to experience modest increases in CARICOM. Among the scholars<sup>7</sup> who examined the trade creation and welfare effects of the

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<sup>&</sup>lt;sup>6</sup> The initial environment assessment report was compiled by the Department of Foreign affairs, International Trade and Development (DFATD).

<sup>&</sup>lt;sup>7</sup> Chaitoo and Weston (2009), Hornbeck J.F. (2008), Rourke Phil (2013), Wharton Carlos (2009), Khadan, Jeetendra and Hosein (2014), Hosein and Khadan, (2011).

Canada-CARICOM FTA, Jeetendra, Khadan and Hosein (2011) highlighted the fact that negotiations should take a cautious route so as to mitigate the direct and indirect negative effects on CARICOM states.

#### 4.0 METHODOLOGY

The complementarity approach to assessing the potential impacts of free trade agreements was used to generate the empirical results in this policy brief. This ex-ante method of evaluating FTA's was introduced by the early works of Tinbergen (1962) and Linnemann (1966)<sup>8</sup> and most recently by Khadan, Jeetendra and Hosein (2014). The trade complementarity model and intensity index model (Yamazawa, 1970) concentrate on the structure of the variance of actual trade flows estimated in gravity models. A complementarity index would reflect how the commodity compositions of two trading partners complement each other or not. In trade, complementarity can be thought of as a proxy for relative resource endowments and can show how much scope there is for further trade. A different hypothesis was advanced by Linder (1961) which suggests that countries with similar income levels will trade more. With the complementarity variable inclusion in the form of a relative resource endowment variable, the expected result will be that countries which are less similar, and hence have different comparative advantages, could have complementary trade structures and be expected to trade more. Conversely, Intensity of Trade indices measure, on the basis of existing trade flows, to what extent countries trade with each other more intensely than with other countries, thus providing information on the potential welfare effects of a regional integration agreement.

<sup>&</sup>lt;sup>8</sup> Linnemann (1966) in his publication 'An Econometric Study of International Trade Flows' was one of the pioneer authors who examined the relationships that exist among the trade flows between countries using gravity models.

**Box 1: Formulation of Trade Indices** 

The Export Intensity Index (XIIij)

Trade complementarity index (TCIij)

$$XII_{ij} = \left(\frac{\frac{X_{ij}}{X_i}}{\frac{M_j}{M_w - M_i}}\right)$$

$$TCI_{ij} = 1 - \sum_{n} \left( \frac{\left| m_{ni} - a_{nj} \right|}{2} \right)$$

Where

Xij = country i exports to country j

Xi = total exports of country i

 $Mj \hspace{0.5cm} = total \hspace{0.1cm} imports \hspace{0.1cm} of \hspace{0.1cm} country \hspace{0.1cm} j$ 

Mi =total imports of country i

Mw =total world imports

XIIij =export intensity index.\

Where

mni = share of good n in total imports of i

anj = share of good n in total exports of j

#### 4.1 Data

External trade statistics between Canada and the ECCU for period 2006-2012 was obtained from the UN Comtrade Database and indices formulated using the World Bank's WITS and from own calculations<sup>9</sup>. The choice of the sample size was dependent on the ability to observe trends (if any) in the various indices over the said period. The main exports of the respective ECCU territories differentiated by the Harmonized System 2 (HS2) product groups were used to generate trade intensity indices while the overall trade volumes were assessed to formulate trade complementarity indices<sup>10</sup>. The formulated trade intensity and complementarity indices serve as indicators of the potential gains under the FTA while they can determine the existence of comparative advantages among the respective ECCU territories.

<sup>&</sup>lt;sup>9</sup> The World Bank Integrated Trade Solutions (WITS) mirrors external trade data from UN Comtrade. The export groups with the highest export receipts for the respective countries were used to formulate the trade indices. Additionally, it is important to note that the reported external trade data from UN Comtrade may vary slightly from the data recorded in the various ECCU territories.

<sup>&</sup>lt;sup>10</sup> External trade data by commodity groups for Anguilla were not available for certain periods in the data range hence the indices for such year was not able to be calculated. The indices for Montserrat were formulated from the authors' own calculations.

#### 5.0 RESULTS OF STUDY

The results displayed in the following table portray the ECCU's trade intensity indices for their major export territories to Canada over the 2002-12 periods. Intensity of trade indices are used to determine whether the value of trade between two countries is greater or smaller than would be expected on the basis of their importance in world trade thus providing information on the potential welfare effects of a free trade agreement. Table 4 displays the trade complementarity indices for ECCU territories over the same period. Trade complementarity indices (TCI) provide a mechanism through which the ECCU countries can assess the prospects of enhancing trade with Canada. The higher the degree of trade complementarity among the respective members of the FTA the more likely the economic outcomes will be positive. Therefore, changes in the value of TCI over time can assess whether the ECCU's and Canada's trade profiles are becoming more, or less, compatible therefore assessing the need for policy initiatives.

Table 3: Trade Intensity Indices for Major ECCU Exports to Canada (HS2 Product Codes)

Antigua and Barbuda	Trade Intensity Index						
	2006	2007	2008	2009	2010	2011	2012
Machinery/Mechanical appliances	19.38	8.3	5.94	0.2	0.08	0.3	1.3
Work of art and antiques	4279.7	175.2	60.2	18.05	6.98	67.4	67.6
Edible fruits and nuts	84.57	62.9	2.86	8.64	79.5	10.5	11.9
Beverages, spirits and vinegar	462.9	105	266	113.7	22.5	113.9	102.5
Electronic equipment	107.2	62.4	15.3	0	0.22	1.1	1.7
Overall trade intensity	3.36	10.1	56.3	0.94	0.59	0.34	10.8
Anguilla							
Paper articles	2.5	na	na	na	na	na	na
Beverages, spirits and vinegar	0.45	na	0.65	na	1.27	na	na
Optical/medical instruments	13.9	na	0.2	na	0.02	na	na
Overall trade intensity	0.15	0.42	2.66	1.1	0.96	0.86	2.0

Table 3: Trade Intensity Indices for Major ECCU Exports to Canada (HS2 Product Codes) cont'd

Dominica							
Soap/washing preparations	1.53	4.84	15.28	7.19	1.76	27.71	1.18
Edible fruits and nuts	0.08	1.05	1.21	0.09	0.07	0.24	0.85
Edible vegetables/tubers	14.68	15.87	7.12	41.81	5.69	0.57	14.56
Electrical equipment	24.29	28.73	25.98	44.06	49.66	25.82	12.89
Live trees and other plants	410	807.24	61.34	16.27	48.66	504.59	408.5
Machinery/mechanical appliances	7.28	7.52	11.09	8.10	19.17	1.93	49.24
Footwear	1.89	255.5	59.27	634.98	9.34	299.56	1.32
Overall trade intensity	10.14	16.47	13.10	11.13	9.36	14.76	11.08
Grenada							
Coffee, tea and spices	304.4	276.05	317.7	235.9	208.2	259.7	299.1
Fish/aquatic invertebrates	113.6	42.35	169.9	77.12	81.71	367.2	528.3
Edible fruits and nuts	32.18	60.66	242.4	300.68	346.1	101.35	101.4
Edible vegetable/tubers	120.6	80.9	75.5	141.4	283.69	34.13	62.3
Beverage, spirits and vinegar	75.74	0.08	926.8	18.72	0.05	3.45	132.4
Electronic equipment	77.25	2.12	8.3	21.44	20.37	2876.7	15.5
Overall trade intensity	116.6	47.92	87.8	49.39	79.21	193.77	222.7
Montserrat							
Electrical equipment	119.8	43.9	10.9	21.9	18.0	29.0	42.6
Machinery/mechanical appliances	21.5	24.7	1.5	2.6	3.4	10.6	7.2
Optical/medical instruments	0.9	0.6	0.04	1.4	0.1	1.7	12.1
Overall trade intensity	1.8	13.8	1.2	8.8	3.5	10.0	0.9

Table 3: Trade Intensity Indices for Major ECCU Exports to Canada (HS2 Product Codes) cont'd

St Kitts and Nevis	Trade Intensity Index						
	2006	2007	2008	2009	2010	2011	2012
Electrical equipment	615.1	333.2	416.1	577.5	673	733.6	721.3
Machinery/Mechanical appliances	13.76	8.61	0.26	1.2	50.4	5.68	65.4
Optical/medical instruments	974.8	675.6	18.6	209	22.4	6.65	6.1
Clothing/articles of apparel	616.5	39.36	618.5	90.5	4011	260.2	455.7
Edible fruits and nuts	24.95	12.3	17.6	1780	13.3	2.7	30.0
Overall trade intensity	382.7	195	260.2	334.5	383.7	415	416.6
Saint Lucia							
Beverages, spirits and vinegar	0.01	0.07	2.4	2.8	1.2	21.7	17.3
Edible fruits and nuts	0.67	0.11	0.51	1.5	7.3	6.9	7.1
Miscellaneous edible preparations	0.99	327.4	1.5	2.3	10.0	15.8	24.0
Electrical equipment	57.71	66.1	22.7	19.5	22.1	20.0	19.6
Optical/medical instruments	14.23	26.3	28.6	81.4	29.1	51.0	395.5
Edible vegetables/tubers	2.23	1.83	23.7	46.5	43.5	24.7	73.71
Overall trade intensity	3.09	8.01	4.9	36.5	7.7	5.7	11.2
St Vincent and the Grenadines							
Coffee, tea and spices	153.5	504.7	528.0	463.1	588.7	2591.0	1477
Electronical equipment	517.1	9.2	40.4	42.8	45.2	76.81	42.1
Edible fruits and nuts	3.7	3.2	5.3	4.3	2.33	28.6	63.1
Edible vegetables/tubers	2.4	3.3	5.6	0.5	0.12	7.0	12.2
Beverages, spirits and vinegar	12.7	14.3	21.6	15.7	23.5	15.5	30.7
Overall trade intensity	3.9	13.71	1.2	2.52	3.96	11.8	11.1

Source: WITS-UNSD Comtrade, World Development Indicators

Also from own calculations based on UN Comtrade database (figures in bold are outliers)

Table 4: Trade Complementarity Indices for ECCU Territories with Canada

Countries	1	rade Con	plementa	rity Index	for ECC	U Territor	ies
	2006	2007	2008	2009	2010	2011	2012
Antigua and Barbuda	30.51	37.45	51.21	68.07	69.13	36.92	62.9
Anguilla	61.18	65.00	62.26	60.57	66.74	65.35	60.16
Dominica	52.07	55.23	52.9	46.96	51.55	57.77	58.81
Grenada	44.65	46.85	45.14	42.83	42.19	42.24	40.89
Montserrat	72.53	71.62	65.14	65.49	60.52	66.45	62.25
St Kitts	48.45	45.60	48.32	48.2	48.4	45.85	45.2
Saint Lucia	49.76	51.15	54.61	46.80	52.60	46.01	53.81
St Vincent	33.04	35.08	32.85	38.94	37.07	42.58	44.90

Source: WITS-UNSD Comtrade, World Development Indicators

#### 6.0 ANALYSIS

The results in table 3 depict that bilateral trade between Canada and the ECCU territories were relatively weak during the period of the study hence indicating smaller than expected trade flows between Canada and the ECCU territories vis-à-vis the rest of the world. The trade intensity results for Antigua and Barbuda, Dominica, St Vincent and the Grenadines and Saint Lucia shared similar intensity findings over the range period presenting very weak trade intensities for their exports to Canada. The islands' overall annual trade intensity indices were indicative of poor potential export gains for achieving extensive welfare benefits from the establishment of the Canada-CARICOM FTA. Beverages and spirits represented the exports with the highest trade potential from Antigua and Barbuda to Canada. Saint Lucia's' export structures were significantly smaller than expected in relation to the rest of the world indicating poor potential for exports under the agreement. Dominica and St Vincent and the Grenadines engaged in slightly higher volumes of external trade with Canada than Antigua and Barbuda and Saint Lucia evident by higher trade intensity indices. Dominica held a comparative advantage in the production and export of live trees and other plant parts to

Canada while St Vincent and the Grenadines exported large volumes of mace, spices and cocoa. Dominica's other main exports to Canada with the exception of footwear returned low trade intensities while the overall trade intensity indices for both countries were consistently low over the 7 year period.

Anguilla and Montserrat engaged in relatively insignificant volumes of trade with Canada during the study period indicative of very low trade intensity indices for their main exports. Conversely, Grenada revealed an obvious comparative advantage in the export of coffee, tea and spices to the Canadian market evident by consistently very high trade intensity indices all throughout the data range<sup>11</sup>. Low intensities persisted for electronic equipment and beverages while fish and aquatic invertebrates, edible fruits and nuts as well as edible vegetables and tubers returned fairly encouraging intensity indices. However, there existed mixed results in terms of the islands' overall intensity indices.

<sup>&</sup>lt;sup>11</sup> Nutmeg, Mace and Cardamoms represented the most exported commodities to Canada over the period followed by Fresh or Chilled Fish (Excludes Fish Fillets) which accounted from over 75 percent of total exports to Canada.

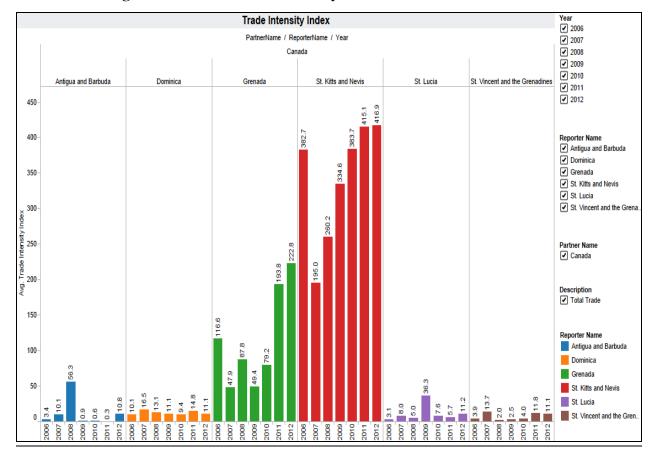


Figure 1: Overall Trade Intensity Indices for ECCU Territories

Source: WITS-UNSD Comtrade, World Development Indicators (excludes indices for Anguilla and Montserrat)

St Kitts and Nevis presented the most favourable results with high trade intensity indices for electronics as well as the overall annual trade intensity indices<sup>12</sup>. As such St Kitts and Nevis has a comparative advantage among the ECCU territories in the export of these products to the Canadian market hence the Canada-CARICOM FTA can potentially benefit the island's competiveness by enhancing exports.

<sup>&</sup>lt;sup>12</sup> Among the major components included in the electrical equipment product group exported to Canada are electrical resistors, transmission apparatus, boards and panels, connectors and parts for electric motors. These products account for more than 95 per cent of St Kitts exports with articles of apparel of clothing dominating the remaining 5 percent or exports.

The results in table 4 affirm a low trade complementarity between the ECCU exports and the Canadian imports structures. More specifically the results obtained indicate that the export and import structures of the ECCU and Canada are not compatible hence the establishment of the FTA will have marginal welfare and competitiveness implications. St Vincent and the Grenadines was found to have the lowest average trade complementarity over the period of study while Anguilla and Montserrat returned the highest. This result appeared rather counterintuitive and misleading since the size difference in the economies is large (i.e., a match in percentage terms does not imply a match in actual levels) consequently the relatively high complementarities can be considered to be overstated and inherent in the trade data statistics.

#### 7.0 POLICY DISCUSSION

The results presented in the above tables do not provide convincing evidence that a FTA between CARICOM and Canada will produce considerable positive benefits for ECCU territories, particularly from an external trade and competitiveness stance. Since the trade complementarity between the main exports of the ECCU and the imports of Canada is relatively small, the trade balance would always work to the disadvantage of ECCU territories. Trade liberalization can highly complement economic growth and competitiveness however it is not advisable to liberalize in the absence of clear policies, action plans, and proposed initiatives. Members of the ECCU may have little goods to export, while the new agreement would open up their economies to Canadian products entering duty-free or with preferential access. In such a scenario, those economies will lose revenue from Customs duties hence they should attempt to strike a balance between these losses and gains from exports receipts.

The ultimate objective therefore of ECCU territories after the implementation of the Canada-CARICOM FTA should essentially be to increase their competitiveness by exploiting any available opportunities that will trigger growth. One of the ways this can be achieved is by making the export and import structures of Canada and the ECCU territories increasingly compatible (more complementing) thereby providing Canada with an incentive to import ECCU products. Competitiveness in the ECCU territories however, may be achieved as the

structure of trade changes with the primary focus on the products that are characterized by comparative advantages. On the one hand, theses territories can continue to expand the export of the products that are competitive such as edible fruits and nuts, vegetables and tubers and beverages and spirits. Important to note is that a study of the complementarity between Canadian and ECCU services could portray different results.

There is no doubt that Canada will potentially be a net beneficiary from this agreement due to factors such as the size of its economy measured by Gross Domestic Product (GDP) and its fiscal space however there is consensus that both parties should benefit<sup>13</sup>. It is therefore critical that ECCU territories fully understand all relevant details and consider all pertinent factors in order that they maximize the potential gains possible. ECCU territories should pay more attention to the impact of other bilateral agreements between Canada and other countries such as the Canada-Costa Rica and the Canada- Panama FTA's and the potential implications this can create. Any inconsistency between these Agreements and such other agreements would result in these Agreements prevailing to the extent of the inconsistencies. Furthermore, Canada historically attempted to create subsets trading blocs within free trade areas in order to exploit some economic objectives. It is evident that under this new agreement the Canadian government might be attempting this same venture hence ECCU territories should remain vigilant of these actions. Furthermore, ECCU territories are in favour of the inclusion of a separate chapter on financial services as the financial services sector may offer an opportunity for both increased trade and enhanced stability of financial institutions.

Meanwhile, in the area of trade liberalization, there is contention over the method of liberalization that would be stipulated in the agreement. CARICOM is seeking a 'positive list' approach, while Canada would prefer a "negative list" approach. In the negative list approach, the listed commodities are those that will not be liberalized whereas in the positive list approach, the areas listed will be liberalized. There is a perception that the Canadian approach

Factors to consider in order that both parties benefit include: the impacts of full tariff liberalization, the ability to enhance current production of liberated commodities and the impacts of MDC's.

will be more liberalizing than the positive list approach however Canada has insisted that the same result will be achieved, but a consensus on this issue can possibly eliminate pessimism by CARICOM. Additionally, there is a concern that the commitments taken by Canada at the federal level would not include enough of the provinces. These provinces have significant power and may not automatically adopt the obligations under the treaty. CARICOM is therefore seeing a bit more certainty, as it relates to these provinces and the federal government. To date there are ongoing issues as it relates to putting together an acceptable market access offer for all respective countries. The main problem area centers on the differences in development of Canada and the CARICOM countries as well as the capacity and level of sustainability of these countries. As negotiations stand, a lot of emphasis is being placed on the issue of market access and the actions of the MDC's in CARICOM and their plans and initiatives as part of the FTA<sup>14</sup>. ECCU territories should be vigilant of the fact that countries such as Jamaica, the Bahamas, Trinidad and Tobago and Guyana can potentially degrade the potential gains of ECCU territories even in commodities for which there exist comparative advantages. Jamaica, for example enjoys a trade surplus with Canada, having exported US\$200m in 2013.

The evident lack of trade complementarity between the trade structures of the ECCU territories and Canada present other policy implications to increase growth and competitiveness. Policies aimed at directly improving the environment under which businesses operate can have potential positive externalities towards fostering enhanced competitiveness under the agreement. Making available the resources these businesses need, such as good infrastructure, capital, and an educated work force are areas that the ECCU can exploit. More productive business will translate into greater export potentials. Other policies can include reforms that involve limited political interference in the wealth-creation process, efficient legal systems, financial systems that allocate capital productively and improved ease of doing business in the region for both domestic and foreign investors. These two sets of policies adopted from Michael (2014) have very different political and economic implications however

<sup>&</sup>lt;sup>14</sup> Teleconference with country representatives and activists for the Canada-Caricom FTA on 23 July 2014.

the consequent transmission mechanisms through the economies of ECCU territories have the potential to enhance efficiency under the FTA.

Ensuring a very viable Canada-CARICOM trade agreement requires some degree of commitments on trade in services given the relative importance of services in the ECCU's economies, their long-term potential for growth, and the relative strengths of firms in the sector. The area of financial intermediation represents another area of importance given the high prevalence of Canadian based financial institutions in the ECCU territories.

#### 8.0 RECOMMENDATIONS

The lack of complementarity and low intensity between ECCU exports and Canada provide sound evidence that the potential for increased competitiveness through export growth is minimal under the Canada CARICOM FTA. As such, opportunities for growth is inevitable in areas such as the increase in trade in services, greater involvement of the islands' diaspora in Canada, strengthening relationships with Canadian institutions and investing in private sector development.

#### I. Direct Efforts Towards Trade in Services

Trade in services appeared to present the best outlook for ECCU territories since services exports account for more than 60 percent of GDP. Tourism, construction and financial services appear to have the highest levels of earning potential. The Canada-CARICOM FTA provides opportunities to transform the services sector in the ECCU by enhancing stability and facilitating the transfer of financial resources. However issues such as worker productivity and education which are relatively low and the lack the interest or technical and managerial knowledge of entrepreneurs for operating in the sector needs to be addressed. In addition there are licensing, registration and immigration barriers to free movement of services. A preferential tax agreement that eliminates double taxation is highly recommended for ECCU territories.

#### II. Fully Engage the ECCU's Diaspora in Canada

Remittances, technological transfers, transfer of equipment and skilled labour are among the contributions of the diaspora that ECCU territories should encourage under the FTA. Furthermore, these territories should increase the ease for the diaspora to start businesses and encourage financial and real sector investments which can take the form of diaspora foreign direct investments. Facilitating the opportunity for the diaspora to establish savings accounts in their respective home countries can increase the growth potential of ECCU territories. Diaspora bonds can be seen as a cheap source of income that is stable and available to developing economies. These bonds are ways of tapping into the diaspora's accumulated wealth in the host country therefore a great opportunity exists for the ECCU to issue diaspora bonds to members of the its diaspora in Canada.

#### **III.** Strengthening Relations with Canadian Institutions

ECCU territories should seek to strengthen their relationships with institutions such as the Department of Foreign Affairs, International Trade and Development (DFATD) originally the Canadian International Development Agency (CIDA) which greatly assist in debt management, developmental assistance, capital investment and social programs. These institutions can facilitate trade in services as well as assist in the restructuring efforts of ECCU territories.

#### IV. Taking Advantage of Canadian Major Exports

The prevalence of capital investment projects in ECCU territories can raise the demand for Canada's top exports including crude oil and petroleum products (27.8%) followed by vehicles/components (13.6%) and gold. Tapping into the availability of these exports can assist the ECCU territories in obtaining these exports at preferential rates. Other major exports of Canada are potassium fertilizers, wheat, and lumber and aluminum products.

#### V. Introduce Programmes Aimed at Private Sector Development.

The private sector has the potential to transform the economies of ECCU territories into more competitive and sustainable economies. Canada is well renowned for advanced business practices, technical knowledge and expertise which could be transferred to private sector

activists in the ECCU. As such, the transfer of training and development initiatives can play vital roles in allowing increase competitiveness for the ECCU under the FTA.

#### 9.0 CONCLUSION

This policy brief examined the trade intensity and complementarity indices between Canada and the ECCU territories as proxies to assess the viability of the establishment of the Canada-CARICOM FTA. The data analyzed are indicative of very limited economic benefits for ECCU territories as a result of the FTA however, it is advisable that these territories mitigate the risks involved and come to a clear consensus on the way forward. For this reason it is vital that the respective governments go in favour of a pro-development agreement which takes account of the differences in the levels of development between CARICOM and Canada and which would support sustainable economic and social development of the people of the ECCU.

Both indices predicted weak potential gains from the FTA with the exception of the indices for St Kitts and Nevis and Grenada which had a low complementarity but very high intensity indices for exports. These results were rather anticipated given the nature of the ECCU exports to Canada as well as the small volumes of exports to Canada over the study period. The results of this study revealed comparative advantages in exports for Dominica, Grenada and St Kitts and Nevis in 'live trees and other plant parts', 'coffee and spices' and 'electronics' respectively. The other countries of the ECCU held no comparative advantages for exports of any particular products to Canada hence policy formulation is essential to ensure these countries take full advantage of the Canada-CARICOM FTA. Anguilla and Montserrat were observed to have higher than expected trade complementarity indices but these results are counter-intuitive and inherent in the variance of the trade data statistics available for the islands.

Much of the efforts of ECCU policy makers under the FTA should be driven towards the advancement of trade in services rather than trade in goods while the engagement of the Caribbean diaspora in Canada, the strengthening of relationships with Canadian institutions

and promoting public sector development all are recommended strategies to achieve increased competitiveness. Despite the potential benefits that could be achieved as a result of the implementation of the FTA, opponents of the FTA worry, however, that the pursuit of free-trade agreements could divert the ECCU territories from multilateral negotiations and lead to the development of rival trading blocs centered on the Americas. Furthermore, Critics also argue that because of differences in negotiating dynamics, FTAs between small developing countries and such large entities as Canada are likely to leave some trade barriers that multilateral negotiations in the absence of FTAs would eliminate. Tactical considerations must be weighed alongside the economic arguments in determining whether the pursuit of the FTA is an advisable path to the goals of free trade. Nevertheless, the Canada-CARICOM FTA should provide enhanced opportunities for ECCU territories hence the need for strategies that will allow these territories to take full advantage of the Canadian market. This however cannot be achieved without paying specific attention to the various contentious issues present bearing in mind that what is an area on contention for one country may not necessarily be an issue for another.

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#### APPENDIX 1: TERRITORIAL RECOMMENDED STRATEGIES

The ultimate goal of the ECCU territories as part of this FTA should be to use it as a strategy to achieve the 3 per cent annual growth rate target and become increasingly competitive. Unlike certain MDC's in CARICOM, the ECCU is pegged to the US dollar at a fixed exchange rate hence in situations where these MDC's can devalue to increase export gains, this option is not available to the ECCU territories. This reinforces the case for prudential policy options and cautious attempts to achieve maximum results from the involvement of this FTA.

#### **Antigua and Barbuda**

In attempts to maximize potential gains from the implementation of the Canada-CARICOM FTA, Antigua and Barbuda should attempt to maximize its potential for the exports of alcoholic beverages however there may exist severe competition from Jamaica and other MDC's. In this situation export incentives play an important role in encouraging exports from Antigua and Barbuda to attempt to maximize the new trading environment created by the FTA. Antigua and Barbuda should seek to secure investor confidence in order to benefit from increased volumes of inward investments that may become an option due to the FTA. Additionally, the protection of infant industries while developing the striving industries can have positive externalities moving forward under the FTA. At least in theory, protection gives infant industries the opportunity to prepare for freer trade by becoming more productive through learning by doing hence facilitating local supplier networks, investing in physical capital, and undertaking research and development.

#### **Dominica**

Dominica is an agricultural based economy and attempts by the island to maximize the potential gains from the Canada-CARICOM FTA cannot ignore the contributions made by agriculture to the development of the island. Seeking a variety of markets in Canada can result

in increased export receipts for Dominica. Furthermore, agro-processing can be a viable option for the island if it is to maximize potential gains from the FTA. These however cannot be achieved without the relevant market research, demand modeling and market segmentation research. Discovering and using methods of competing which are distinct and offer consumers greater perceived value, than those of rivals in the market can be beneficial to the island's competitiveness. Dominica should be cognizant of the fact that MDC's in CARICOM may be threats since they may produce the same commodities at similar or lower costs hence sell at lower prices and this makes it even more pertinent to win Canadian consumer confidence. The island's geothermal energy exploration efforts should also be exploited under the FTA. The movement of the relevant technical and expert personnel should be facilitated as well as the necessary equipment that may be imported from Canada. Along similar lines, the island's ecotourism product for which it has developed a comparative advantage should be able to experience positive shocks as a result of the FTA. The ease in which Canadian tourists make their way to the island should be an incentive to visit the island. This leads to the other area of concern which is air access to and from the island. The absence of an international airport on the island can dampen potential gains from the agreement as there would be no direct flights to Canada. Dominica should improve arrangements with other airports: Martinique and Antigua and Barbuda to get produce to Canada while consistent improvements to both airport facilities on the island should continue at a moderate pace to ensure the effects of the absence of the international airport could be minimized.

#### Grenada

Grenada should attempt to maximize the gains from the products for which they have a comparative advantage. Grenada is second to St Kitts and Nevis as it relates to the expectation of potential gains from the Canada-CARICOM agreement judged based on the levels of trade intensity for its products. The island displayed comparative advantages in the export of 2 product groups to Canada namely 'Coffee, tea and spices' and 'Fish and aquatic invertebrates'. As part of the first product group, nutmegs seem to be the major commodity exported by Grenada and the protection and development of that industry is inevitable. Grenada is currently faced with high levels of debt, fiscal difficulties and is currently

undertaking a structural adjustment program with the IMF. Additionally, institutions such as the Caribbean development Bank (CBD) make low cost funds available to the island and these factors stress the importance of exploiting any possible opportunity made available from the FTA. Public spending should be directed at investments in the thriving industries that will potentially drive growth. Grenada should however not ignore the potential gains that can be realized from the export of agricultural based commodities to Canada but as highlighted earlier the necessary market research should be undertaken and the quality of the commodities offered should be tailored for the Canadian market.

#### Montserrat

The island of Montserrat is on the path of recovery from the devastations caused by volcanic eruptions in the 1990's. As such, the island plans to adopt and develop a new capital and establish innovative opportunities for developers, investors and tourists. Montserrat does not export any commodity in significant amounts to Canada therefore there exist significantly low trade intensities for the island's exports. Nevertheless, the island can attempt to maximize potential gains from its involvement in the Canada-CARICOM FTA. The island should focus on advances made in the services sector such as banking and tourism and seek to exploit any opportunity to increase its financial stability while increasing revenues from tourist arrivals from Canada. Similar to Dominica, the island should explore the new opportunities that may become available for its geothermal energy industry in its quest to fully transition from traditional energy sources to renewable sources of energy.

#### St Kitts and Nevis

St Kitts and Nevis was found to be the ECCU territory that should achieve the most gains from the establishment of the Canada-CARICOM FTA demonstrated by the largest trade intensity indices and reasonable trade complementarity indices. St Kitts and Nevis exports the largest volume of goods particularly electronic equipment to both the USA and Canada thus this FTA should work in favour of the island conditioned by the fact that the loss in revenue from tariff liberalization does not outweigh the revenues from increased export receipts. The island should not ignore the role of the Services sector which represents more than half of

GDP. It has also been successful at growing the apparel assembly industry jointly with the electronics assembly industry. Improvements in design and packaging of products to enhance their market image are essential in achieving full consumer acceptance and potentially enhancing the potential for increased exports particularly under the FTA. Just as important are efforts in advertisement and publicity as well as investing in the expansion of market share. Optimal trade taxes should be uniform across imported goods and weakly monotone with respect to comparative advantage across exported goods. Specifically, export goods featuring weaker comparative advantage should be taxed less (or subsidized more) relative to those featuring stronger comparative advantage, reflecting the fact that ECCU territories should have more room to manipulate world prices in their comparative-advantage sectors.

#### Saint Lucia

Results from this study found very weak intensity and complementarity indices for Saint Lucia indicative of marginal if any potential gains from the implementation of the Canada-CARICOM FTA. Saint Lucia's economy however, is primarily based on the services sector particularly tourism. As such, under this FTA the island should attempt to boost its growth prospects by exploiting new opportunities for tourism in the Canadian market with emphasis placed on publicity, increasing visitor arrivals and facilitating access to the island by policy makers. In Saint Lucia however, the high cost of energy (about US \$0.35 per kilowatt hour at the domestic level for electricity) makes it very difficult for many productive sectors to compete. A shift to renewable energy can positively impact Saint Lucia's debt to GDP Ratio by increasing income levels thereby reducing the dependence on borrowing. 30 per cent of the island's total export earnings are spent on financing energy imports and even a 20 per cent reduction in that figure will significantly reduce the debt to GDP Ratio in a way that no other indicator will. The involvement of Saint Lucia in this FTA presents an avenue for the island to partner with Canada and device ways to keep energy costs low thereby increasing the competitiveness of the island's productive sectors.

#### **St Vincent and the Grenadines**

St Vincent and the Grenadines recorded the lowest trade complementarity among the ECCU territories and this doesn't augur well as it relates to islands ability to exploit opportunities from the FTA. The island however had high trade intensity indices for the export of spices, cocoa and maces hence the aforementioned industries should all seek further expansion through improvement of product quality and standardization. With the recent collapse of the island's cocoa company, the opportunities for the advancement of a diverse group of agricultural produce for export to the Canadian market needs to be maximized. Additionally, research to understand trends in the Canadian market can be intensified in order to create trade opportunities for these and new agricultural products and to open up new market opportunities. Improvements made to the quality of the island's exports through branding and advertisement can assist improving market competitiveness. Additionally, with the construction of a new airport on the mainland, there should be attempts to make the optimal use of this facility to facilitate the movement of both goods and services to and from Canada.

### **APPENDIX 2**

## **Product Groups Used in Paper**

## **HS2 Product Code**

Nuclear reactors, boilers, machinery and mechanical appliances (84)	)
Work of art, collector's pieces and antiques(97	)
Edible fruits and nuts(08	3)
Beverages, spirits and vinegar(22	)
Electrical or electronic machinery and equipment(85	5)
Pearls, precious stones or metals, coins and jewelry(71	1)
Motor vehicles, trailers, bicycles, motorcycles and similar vehicles (87	7)
Optical, medical, photographic, scientific and technical instrumentation (90	)
Paper, paperboard and articles made from these materials	()
Knitted or crocheted clothing and articles of apparel (61)	)
Coffee, tea, mate and spices(09	))
Edible vegetables and certain roots and tubers(07)	)
Fish, crustaceans, and other aquatic invertebrates(03	)
Live trees and other plants(06	5)

## EXPLORING OPPORTUNITIES FOR ECCU TOURISM: LOOKING TOWARD THE EMERGING ECONOMIES



## BY MR CALVIN DUGGINS

#### Disclaimer:

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#### **EXECUTIVE SUMMARY**

The tourism industry has been earmarked as the lead transformational sector for growth in the ECCU<sup>i</sup>. From the industry's slow development as an economic alternative in the 1980s<sup>ii</sup> to becoming the key driver of economic growth from the 1990s<sup>iii</sup>, the tourism industry has played a major role in the development process of the ECCU economies. Consequently, St. Kitts and Nevis, Antigua and Barbuda, and Anguilla are among the most tourism-dependent economies in the world<sup>iv</sup>. However, in recent years, the industry has been affected by adverse exogenous shocks such as the after effects of the 11 September 2001 attacks, the revision of the UK Air Passenger Duty in 2009, which led to a decline of 6.0 per cent in UK arrivals over the comparative periods January to September 2009 and 2010<sup>v</sup> and the recent global financial and economic crisis, which originated in the ECCU's major tourism source markets. These markets comprise the USA, UK and Canada, to a lesser extent. Moreover, from the mid-1990s the ECCU experienced a declining trend in competitiveness that was evidenced by the slower rate of growth of tourist arrivals and expenditure, a decline in market share and lower FDI in the industry<sup>vi</sup>. The cost, reliability and frequency of intra-regional travel added to the decline as well.

These adverse exogenous shocks emanating from the advanced economies, along with natural disasters, have contributed to a downward trend in the industry's performance and by extension the real GDP growth rate of the Currency Union. Thus, the governments of the ECCU have been motivated to seek ways of limiting the vulnerability of the industry to such exogenous shocks.

This policy brief aims to propose the emerging economies of Brazil and China as viable additional tourism source markets in an effort to reduce the vulnerability of the industry to negative shocks originating in the present major source markets. The analysis reveals that the travel distance between the ECCU region and China may prove to be the greatest challenge, along with the unpopularity of Mandarin. Additionally, the ECCU tourism product may need to be further developed so as to clearly distinguish it from the present offerings of Brazil, and to include some common aspects of Chinese lifestyle in order to attract Chinese travellers by allowing them the opportunity to feel 'home away from home'.

### 1.0 CONTEXT AND IMPORTANCE OF THE PROBLEM

Prior to the 1990s and following independence the ECCU experienced an average rate of growth of 6.0 per cent<sup>vii</sup>. This was in part due to the expansion of agricultural exports under existing preferential trade agreements, large aid inflows from the UK and initial gains from tourism in St Kitts and Nevis, and Antigua and Barbuda. Since then, the growth performance of the economies has been challenged by a number of factors including the removal of trade preferences, the 11 September 2001 terrorist attack in the USA, the 2007/2008 global financial and economic crisis, and frequent natural disasters. These events have contributed to a lower average growth rate of 3.0 per cent in the 1990s way below the period prior (see figure 1). Figure 2 shows that during the periods when these exogenous shocks occurred, the annual GDP per capita growth for the ECCU was exacerbated. For instance, when the USA annual GDP per capita growth fell in 1995, the ECCU annual GDP per capita growth worsened that same year. This phenomenon is evident subsequently in 2001 and 2009.

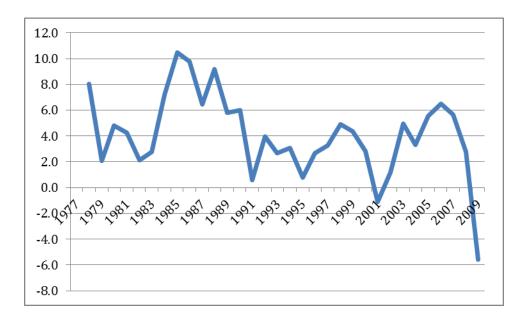


Figure 1: ECCU Real GDP Growth during the Period 1977-2009

Source: Eastern Caribbean Central Bank

10
8
6
4
2
United States
United Kingdom
ECCU

-2
-4
-6
-8

Figure 2: Annual GDP per Capita Growth during the Period 1988-2013

Source: World Bank

Tourism played a significant role in diversifying the economies of the region in the 1980s, and by the 1990s it became the key economic driver within several economies as evidenced by the large concentration of FDI within the industry. With the implementation of the EU Single Market in 1993, the gradual removal of preferential trade arrangements resulted in the inability of ECCU member countries to effectively compete with other countries in traditional agricultural exports, cementing the need for diversification. The relative ease of entry due to strong global demand, the geographical distance from the USA and the UK, the strong potential as a foreign exchange earner, along with piggybacking off the success of Jamaica, Barbados and the Bahamas made the transition into tourism seem like a worthwhile investment. In the 2000s tourism activity was impacted by the aforementioned shocks that significantly affected its contribution<sup>viii</sup> to nominal GDP. The industry attained a peak contribution of 60.0 per cent in 1993 and a minimum of 43.0 per cent in 2001 and 2012 (see figure 3). For instance, the declining trend in the industry's contribution to GDP over the period was worsened in 2001 as a result of the 11 September attacks on the USA and further

during 2007-2012 due to the combination of the revision of the Air Passenger Duty in 2009 by the UK and the after effects of the global financial and economic crisis.

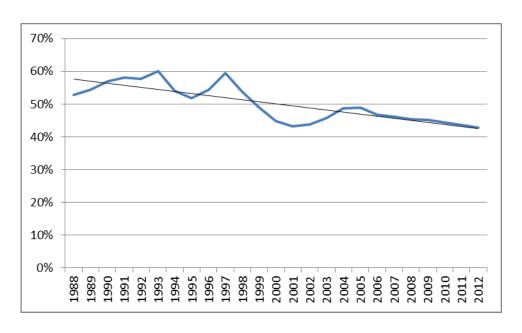
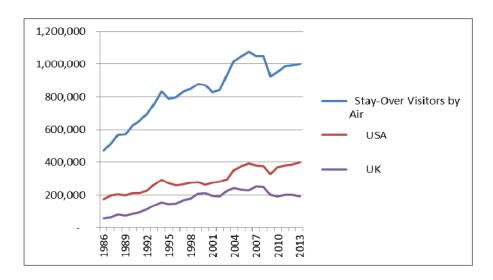


Figure 3: ECCU Travel and Tourism Contribution to Nominal GDP 1988-2012

Source: World Travel & Tourism Council, Eastern Caribbean Central Bank

This performance was reflected in the trend of stay over arrivals over the period (see figure 4)<sup>ix</sup>. The graph shows a dip in total stay-over visitors in 2001, which can be attributed to the terrorist attacks. There was an increase of stay-over visitors from the USA at that point which may be seen as a 'flight-to-safety' effect. The graph then illustrates a steady improvement in total stay-over visitors during 2002 – 2007, where its peak is attained. The USA and UK trend lines achieve their peaks in 2013 and 2007, respectively. The total stay-over visitors and the USA trend lines sharply decline following 2007 and bottom out in 2009, which may be attributed to the after effects of the global financial and economic crisis. A slight decline can also be observed in the UK trend line from 2007 to 2010, which can also be attributed to a combination of the global financial and economic crisis and the revision of the Air Passenger Duty by the UK Government.

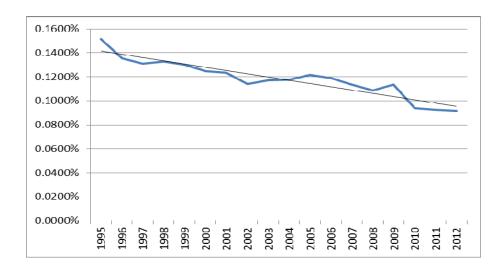
Figure 4: Annual Stay-Over Visitors to the ECCU during 1986-2013



Source: ECCB

Moreover, the ECCU's share of global tourist arrivals has been declining marginally over the period with exception of a slight hike over 2002-2005 and 2008-2009 (see figure 5).

Figure 5: ECCU Share of International Tourist Arrivals during 1995-2012



Source: United Nations World Travel Organisation, Eastern Caribbean Central
Bank

The high concentration on advanced economies such as the USA and UK, as source markets has in the past made the industry very susceptible to shocks that originated in these economies. In an effort to reduce the vulnerability of the industry, an expansion of the major tourism source markets to include emerging economies should be sought. Emerging economies such as the BRICS – Brazil, Russia, India, China and South Africa, have been predicted to be the driving force in global outbound tourism over the next decade following their favourable performance. Rising disposable incomes and growing middle classes enable the BRICS to lead the growth in tourism demand.

Moreover, the economies of China (1<sup>st</sup>), the Russian Federation (4<sup>th</sup>) and Brazil (10<sup>th</sup>) are ranked in the Top 10 Outbound Tourism Source Markets 2013, arranged by international tourism expenditure (see Figure 6). For the purpose of this paper, China and Brazil are the most feasible markets of the group owing to Brazil's close proximity to the region with already established direct airlift into the region and China's diplomatic ties with several countries in the ECCU as well as the expressed interest of Air China for airlift into the region.

Figure 6: Ranking of Major Outbound Tourism Markets

Rank		International Tourism Expenditure (US\$ billion)			
		2012	2013*		
1	China	102.0	128.6		
2	United States	83.5	86.2		
3	Germany	81.3	85.9		
4	Russian Federation	42.8	53.5		
5	United Kingdom	51.3	52.6		
6	France	39.1	42.4		
7	Canada	35.0	35.2		
8	Australia	28.0	28.4		
9	Italy	26.4	27.0		
10	Brazil	22.2	25.1		

Source: United Nations World Tourism Organisation

# 2.0 CRITIQUE OF CURRENT POLICY

### 2.1 The Nexus between Tourism and Economic Growth

Tourism has been the most significant contributor to long-term economic growth in the ECCU. The industry has continued to be the key driver of economic growth within the Union since the 1990s following its development as an economic alternative in the 1980s. The growth in stay-over tourist arrivals in the ECCU and real economic growth had a correlation coefficient of 0.7 over the period 1990-2001<sup>x</sup>.

Several studies have investigated the relationship between tourism and economic growth. Dritsakis (2004) in examining the causal relationship between tourism and long-run economic growth in Greece found that there was a strong causal relationship between the two via the international tourism earnings and the real exchange rate. Eugenio-Martin, Morales and Scarpa (2004) using a panel data approach found that tourism growth was associated with economic growth only in low and medium income countries but not high-income countries. The study further inferred that tourism development might contribute to economic growth provided it is below a certain GDP per capita threshold. The United Nations Conference on Trade and Development (2013) in a study examining the contribution of sustainable tourism to economic growth and sustainable development concluded that tourism has the potential to contribute to economic growth and poverty reduction. The study also notes that the industry's ability to create employment and produce income inflows made it important for economic diversification and economic growth.

According to the United Nations World Tourism Organisation Tourism Highlights 2014 tourism contributes 9.0 per cent to world GDP and accounts for 1 in 11 jobs worldwide. The number of international tourists has jumped from twenty-five million (25m) in 1950 to one billion (1b) in 2013 making it one of the largest and fastest-growing sectors worldwide.

### 2.2 Nature of the Brazilian and Chinese Outbound Tourism Markets

The BRICS have been projected to lead growth in the outbound tourism market over the next decade. Their rapidly growing middle income and affluent classes, along with their strong economic growth as compared to the USA and UK make these emerging economies viable additions to the ECCU's major tourism source markets.

China continually recorded the highest rates of annual GDP per capita growth throughout the period 1988-2013 while Brazil showed a favourable trend and outperformed the USA and UK during 2005-2011 (see Figure 7). During the period the Brazilian economy proved to be a promising one, and by extension the Brazilian outbound market. The new middle class now consists of 60.0 per cent of the population in 2014 and the populace now enjoys increased access to credit.

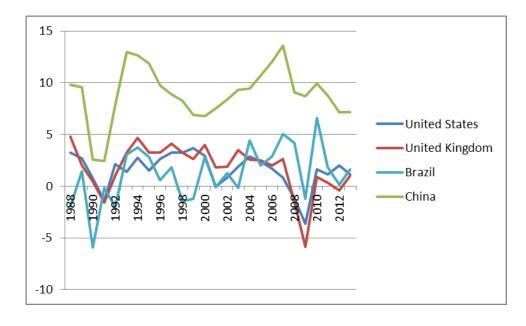


Figure 7: Annual GDP per Capita Growth during the Period 1988-2013

Source: World Bank

The growing disposable income, strong exchange rate and growing confidence in the Brazilian economy experienced during previous periods allowed overall international travel from Brazil to considerably increase during such periods. The increase in wealth has been translated into a growing demand for international travel. International trips by Brazilians grew on average

annually by 15.0 per cent during 2005 to 2010 and are further expected to grow by 8.0 per cent during 2010 and 2014 (Tourism Economics, 2011). In 2012, approximately eight million (8m) Brazilians travelled abroad, of which 30.0 per cent of departures were related to business and the remaining 70.0 per cent were for leisure activities. (Euromonitor International, 2013). The most popular destinations were the USA, Latin America<sup>xi</sup> and Europe<sup>xii</sup>.

With reference to the USA, its popularity stems from being the number one shopping destination for Brazilians. The popularity of the Latin American countries such as Argentina, Uruguay and Paraguay on the other hand stem from the strength of the Brazilian Real in comparison to these other currencies. The interest in Europe is as a result of strong cultural links, historical attractions and shopping opportunities, especially in the area of luxury brands.

Moreover, the Brazilian outbound market has been found to be price sensitive with the recent currency devaluations, having touched the four-year low against the US dollar in June 2013<sup>xiii</sup>, making affordability a major concern to travellers. In particular, as of October 2013, outbound travel to Europe has been negatively impacted by the depreciation of the Brazilian Real against the Euro by more than twenty-five per cent since its peak in 2010, thereby making European destinations relatively more expensive. Brazilian travellers have been noted to prefer cultural/historical offerings and urban experiences. The average traveller tends to be young, well-educated and a high income-earner. There tends to be a strong demand for high standards of service and luxury, and nightlife. Brazilians are widely regarded as racially tolerant but detest crowded attractions and long queues.

The major challenges faced by Brazilian tourists include the hike in the Tax On Financial Operations (IOF), along with language and cultural barriers. Having raised the IOF on domestic credit cards used to make foreign purchases from 2.38 per cent to 6.38 per cent in 2011, the Brazilian government also raised the IOF on domestic debit cards used to make payments abroad or withdraw foreign currency and on the purchase of traveller cheques from 0.38 per cent to 6.38 per cent in 2013<sup>xiv</sup>. This has eliminated the preference of use of either financial mechanism for transactions abroad.

In light of the fact that China has been named the number one outbound tourist source market worldwide in 2012 by way of international tourism expenditure, China further solidified its position by amassing an expenditure totalling US\$129b during 2013, an increase of 26.8 per cent over the previous year. This may be attributed to rising disposable incomes, fewer restrictions on foreign travel, greater availability of international flights and the appreciation of the Renminbi during the said period. During 2013 alone, 98.19m Chinese travelled internationally, an increase of 18.0 per cent over the previous year thereby maintaining a high rate of growth. The top outbound destinations for 2013 according to travel agencies include Hong Kong, Thailand, South Korea and Macau with the US, Europe<sup>xv</sup> and Oceania<sup>xvi</sup> falling behind.

Sightseeing, experiencing different cultures and relaxing are the main reasons to travel. However, shopping remains a major part of the travel experience as evidenced by the Chinese-fuelled expansion of the global luxury-goods sector during 2009-2012. Expenditure on accommodation, food and entertainment has increased in recent times. Spending on local specialties has also risen.

The Chinese outbound market is highly seasonal with May, October and December being the peak periods. As Chinese outbound tourists are better educated, have higher disposable incomes and are more adventurous, the desire to travel to destinations beyond the standard frequently visited destinations is becoming more apparent.

While the Caribbean region already has direct flights from Brazil to Barbados, there is no airlift present for Chinese travellers originating from the mainland. The recent announcement from an Air China executive on the interest of the airline to provide such connection to the region would however be by way of connections from the USA through partnership with local airlines already servicing the region<sup>xvii</sup>. Already an estimated 13-hour flight from Beijing to the JFK International in New York, a connection to the region would entail possibly an additional 5-hour flight. Given such, although banking on the Chinese traveller's desire to seek out new adventure further away from home, the current ECCU tourism product comprising sun, sea

and sand may not be enough to attract these travellers directly to the region. Hence, focusing on Chinese travellers already on vacation in nearby destinations may be more favourable.

The ECCU tourism product provides a great mix of adventure ranging from hikes to the mountain peaks and through the rainforests; nightlife activities ranging from the music festivals and shows to the club events, casinos and bar scenes; cultural and historic activities from the many historical/heritage sights to the museums and plantation. The ECCU tourism product is underpinned by the stunning Caribbean Sea, which allows for the many ocean-related activities such as scuba diving, water sports and the several well-supported yacht regattas. These ocean-linked activities serve as major selling points for the many outbound tourists from these mainland territories that live further inland.

Additionally, the USD/XCD peg of \$2.70 XCD per \$1 USD provides some certainty for travellers. With the Yuan Renminbi gradually appreciating over the decade 2004-2014 to approximately \$6.16 Yuan per \$1 USD and the Real appreciating relative to its initial position in 2004 to \$2.27 per \$1 USD, the EC dollar has become relatively cheaper thereby taking less of either currency to purchase XCD. The stability provided enables travellers some comfort against wildly exchange rate fluctuations.

### 2.3 Issues and Challenges

The ECCU's major tourist source markets consist of the USA, UK and Canada. The official language in these countries is English, which is the official language within the member countries of the ECCU. The USA and Canada are found in North America, which is considered close to the region and both have ease of access and great availability of airlift into the region. The UK, although further away from the region from North America, has cultural and historical linkages with the region owing to colonisation and the eventual British presence in the region during its premature stages, and as such has continued to have relations with the mother colony through membership in the Commonwealth diaspora. The region's tourism product comprising mainly sun, sea and sand has often been the focal point for tourists travelling from the above source markets as their nationals usually journey to the region during

the winter period to partake in the tropical temperatures, beaches and sunshine. Over time, the tourism product has been further developed to consist of other offerings so as to capture individuals from the many segments of such markets.

On the contrary, the official language of Brazil and China is Portuguese and Mandarin, respectively. China is located on the "other side of the world", much further away than the UK. Brazil, closely located to the region, shares many similar features as the region such as the tropical temperatures, the sunshine and the many beaches. To some, the Brazilian offering is more attractive than that of the region owing to the difference in cultural habits regarding female-wear, as Brazilian women tend not to dress as reserved as Caribbean women, especially on the beaches. Chinese cuisine is also completely different to the cuisine found here as we cater for a more western locale.

In both markets language creates an enormous barrier. According to the China Daily, at the beginning of this decade there were approximately 400m English-language learners in China. Joe Robinson for CNN stated that English is not spoken widely, especially outside of Rio de Janeiro and Sao Paulo. Here in the ECCU, Portuguese and Mandarin have not seen an uptick in learners as the foreign languages more commonly taught are French and Spanish owing to our historical ties with Europe. The lack of Mandarin and Portuguese speakers in the tourism industry poses a challenge to the region, as the difficulty to communicate with travellers from either emerging market would be greatly increased.

Travel distance and availability of airlift into the region also creates another problem. St Kitts and Nevis is approximately 14,000 km away from China with an estimated flight travel time of 20-24 hours. Such long travel time would hinder travellers from travelling such great distance unless perhaps the region is a one-of-a-kind, sought after destination. There is also no direct flight from China into the region and thus travellers would be forced to connect thereby making the journey longer and more tedious. Brazil on the other hand has several direct flights into the region via Barbados. Although the flight time for this trip would be relatively short, passengers would still need to use connecting flights to enter the ECCU.

Moreover, cultural and historical links, lifestyles and habits, and cuisine and architecture play a part. Brazilian and Chinese markets tend to flock to destinations with similarities in several of these aspects. Instances of this occurrence would be the preference of most Brazilians to travel to Portugal and several other close-by Latin American countries. Additionally, hordes of Chinese travellers would more frequently visit Macau and Hong Kong, Taiwan and South Korea, and Thailand and Singapore.

The visa process is also seen as a great deterrent to the inflow of travellers from the Chinese market as Brazilian travellers are exempt from this requirement. On average, it takes two weeks for an entrance visa into St. Kitts and Nevis to be processed. In this instance, as the ECCU countries are relatively unknown when compared to the popular destinations of travellers from the Chinese market the added visa requirement would add to the difficulty of attracting these travellers and/or the disinterest of these travellers about journeying to our islands.

The Chinese cuisine is very different to that of ours and requires specially trained individuals for its preparation. Their tastes, preferences and choice of foods often require the importation of ingredients from the mainland. Other issues affecting the Chinese market would be the limited acceptance of UnionPay cards in the ECCU. As this is the preferred choice of card by Chinese travellers, its limited acceptance would greatly hinder Chinese travellers from making purchases.

## 3.0 POLICY RECOMMENDATIONS

In an effort to improve the tourism industry in the ECCU, a number of initiatives should be implemented. These initiatives should assist in improving the image of the ECCU member countries in an effort to attract Brazilian and Chinese travellers.

Firstly, dedicated language institutes should be established so as to provide ease of access to persons interested in learning the language of either market. Tourism industry personnel, especially those who would be required to interact with travellers on a frequent basis, should be required to possess at least working knowledge of either language.

China UnionPay and Discover Financial Services have partnered thus allowing the acceptance of UnionPay cards on Discover's PULSE Network. Owing to Discover's partnership with solely foreign backs in the ECCU such as Scotia Bank and RBC Royal Bank, there is limited acceptance of eligible cards on the PULSE network. Hence, partnerships between Discover and the indigenous banks in the region should be established so as to allow for wider acceptance of Chinese traveller debit cards. Indigenous banks tend to host a larger portion of transaction activity hence the need for their inclusion in such partnerships. The provision of basic exchange rate transactions should be facilitated whereby travellers can buy and sell their respective currencies over the counter at banks and non-bank institutions, as well.

Moreover, the member countries of the ECCU would find it beneficial to relax visa policies for Chinese travellers following in the path of Barbados, thereby eliminating the average two weeks processing time. This may either be done through visa waiver agreements between countries or by way of visa-free entry once the traveller has a US Visa. This would result in improved travel interest in the Currency Union.

Alliances with travel agencies in both countries should be established so as to enhance marketing capabilities and reach within both markets. Promotional material should be printed and displayed in the respective official language of both markets. Issues pertaining to censorship in China have become predominant thus a promotional website for the ECCU focused on the Chinese market should be hosted on the mainland. The ECCU should be marketed as a complete package rather than individual countries so as to capitalise on the strengths of each island and thereby packaging a more complete and attractive bundle.

The ECCU tourism product should further be enhanced and developed. An expansion of additional aspects, as well as improvement in current aspects, of the tourism product should be sought. For instance, in looking toward the higher end of the tourism market, the product offering should not only include world class golfing but also yachting opportunities such as the regattas hosted in Saint Lucia and Antigua and Barbuda for the wealthy Russian owners. Luxury boutiques, upscale clubs and casinos are several other amenities that should be included.

Lastly, employees in the tourism industry serve as the main point of contact between tourists and the islands. Improvement in skills such as customer service, language and other technical skills needed in various areas are integral. Ensuring that the skillset needed to operate the industry is available and up-to-par is very necessary.

### 4.0 CONCLUSION

The present concentration of advanced economies has adversely affected the tourism industry in the ECCU over the last several years. Adverse occurrences emanating from or directly affecting advanced economies has translated into poor performance and rapid declines in the sector. The BRICS nations have been earmarked to lead growth in the global outbound tourism market over the next decade. Having achieved the highest rates of growth, these emerging economies stand out as very viable markets with continual expansion and development of their respective markets. With an expected total of one hundred million (100m) Chinese and close to ten million (10m) Brazilians expected to travel this year (2014), capturing a small percentage of these big-spending travellers, preferably interested in high-end tourism, can considerably add to growth in the sector, and by extension the ECCU economies. Moreover, with Air China very much interested in servicing the Caribbean region and the availability of direct flights into the region by GOL Airlines (Gol Transportes Aéreos, Brazil), ease of access has improved and as such the feasibility of attracting travellers from either market has improved as well. Russians are now becoming ever-present in the Caribbean region. Up until a few years ago, the only destination visited by Russians in the Caribbean was Cuba. However, these travellers have flocked in very large numbers to the Dominican Republic and are showing a growing interest in Jamaica. The growing feasibility of eliciting these high-end travellers owing to already established direct airlift into the region can greatly add to the industry. As these travellers enter the region for specific interests, niche markets among these travellers seem very lucrative.

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iii http://www.cepal.org/publicaciones/xml/1/39541/lcarl.255.pdf

<sup>&</sup>lt;sup>iv</sup> Eastern Caribbean Currency Union: 2009 Discussion on Common Policies of Member Countries (pg 62)

V Caribbean Tourism Organisation

vi Eastern Caribbean Currency Union: Selected Issues (2003)

vii ECCB: Spliced GDP Data 1977-2009

 $<sup>^{</sup>m viii}$  Travel & Tourism total contribution to GDP refers to GDP generated by direct Travel & Tourism industries plus the indirect and induced contributions, including the contribution of capital investment spending.

ix Data for USA and UK in 2000 excludes Dominica

<sup>\*</sup> Eastern Caribbean Currency Union: Selected Issues (2009)

xi Latin America includes Argentina, Uruguay and Chile.

xii Europe refers to France, Spain, Portugal, Italy, the UK and Germany.

xiii Bloomberg (http://www.bloomberg.com/news/2013-06-18/brazilian-real-pares-decline-after-central-bank-s-intervention.html)

xiv Bloomberg and the Wall Street Journal

xv Europe includes France, Italy, Switzerland, Germany and the UK.

xvi Oceania includes Australia and New Zealand.

xvii The Nassau Guardian

# SPECIALISATION VS DIVERSIFICATION: THE IMPLICATIONS FOR ECONOMIC GROWTH IN THE ECCU



### BY

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### 1.0 INTRODUCTION

The Eastern Caribbean Currency Union (ECCU) comprises of eight (8) small developing states. The sectors of focus within the region have varied over the years, but there is a common objective of promoting a transition to higher growth rates on both country and regional levels. The ECCU has experienced both a secular decline and increased volatility in real GDP growth over the past two decades. The agricultural sector traditionally provided the linchpin for sustained growth, but the focus has shifted over time towards services – primarily tourism. The tourism industry however, is vulnerable to external shocks as was emphasized by the effects of the global economic crisis in 2008. This realization has heightened the awareness of a need for a more balanced approach to economic growth and development.

One of the objectives of the Eastern Caribbean Central Bank (ECCB) is to promote economic growth and development in the member states of the ECCU. The choice between sectoral diversification and specialization is a possible step in the direction of this realization. As a policy prescription currently under consideration, it is imperative that an in-depth understanding of the possible implications of strategies along these lines be gathered within the context of the ECCU.

It is widely propagated in the economic literature that diversification<sup>1</sup> is essential for growth as countries are less vulnerable to economic shocks – as a result of being less dependent on a single sector or activity - will be more stable and can thus achieve higher, sustainable rates of growth. There is some opposition to this argument however, which mainly rely on the theory of comparative advantage. The proponents of this view suggest that economies should identify and invest in the areas in which they are more productive, capitalizing on these sectors in order to achieve growth. Some empirical studies have found a positive relationship between diversification and economic growth. However, some studies have also found support for the view that sectoral specialisation can lead to higher rates of growth. Research has also suggested the need for a balance between the two, relative to the wealth of the country and the

<sup>&</sup>lt;sup>1</sup> Diversification refers to the dispersion of economic activity across the sectors of the economy

growth potential of the identified sectors. Yet other studies have found no statistically significant relationship between either of the two strategies and growth. The debate is thus far from settled, and there is no clear consensus on the merits of either approach. Based on initial assessment of the member states of the ECCU over the past four decades, the region has been through spells of both diversification and specialisation. What is not clear however, is the effects of such cycles on growth and development in the region. The Monetary Council has endorsed a three-pronged growth strategy aimed at enhancing the economies of the region. A total of seven (7) main sectors of focus have been identified inclusive of Transportation, Energy, Environment, Education and Skills Training, Research and Development, Information Technology and Governance. The focus of the strategy however is aimed at tourism with the remaining sectors playing a supporting role. The proposed growth strategy gives rise to the question of whether it is best to focus on one or two niche sectors as opposed to a largely diverse strategy. The OECS growth and development strategy is also an important document aimed at improving the economies of the region.

The tourism industry forms a major part of the economies of the region, providing employment and contributing significantly to growth and economic development over the past four decades. The potential of tourism to drive higher growth cannot be dismissed and this applies most notably in the case of Anguilla, where the major contributor to GDP is tourism. In other countries of the region however these benefits have not been recognized to the degree that they have been in Anguilla. The majority of the member states have been more diversified over the years. There is a possibility - and the literature concurs - that the direction taken in relation to diversification and specialisation can play a major role in economic growth and development. Considering the fact that the policies of the ECCU are generally intended to be applied on an aggregate scale, there is the possibility of loss of growth potential in that while the ECCU member states are similar, there is some heterogeneity in economic outcomes. Therefore it is pertinent to examine the most optimal strategy for diversification policy so as to ensure the best outcomes on an individual and regional basis.

This study employs various strategies which have been utilised in previous studies on growth

outline of the paper is as follows; Section 2 presents a review of existing literature on sectoral diversification and specialisation. Section 3 provides a description of data as well as stylized facts about the sectoral composition of the ECCU. Section 4 illustrates the methodology employed for the study. Section 5 presents the results, while section 6 provides a brief policy discussion and section 7 concludes.

#### 2.0 LITERATURE REVIEW

To a great extent, the literature suggests a duality of perspectives on the direction economic policy should take in relation to economic diversification and specialisation. Pede (2013) conducting a study on diversity and regional economic growth in the United States using county level growth rates from 1990 to 2007 concluded that greater economic diversity was associated with increased levels of economic growth. In accordance with the findings of Pede (2013), Dissart (2003) found that in the presence of economic diversification, firms have the ability hire workers displaced by sectoral adjustments. The study highlights that economies seeking key areas of specialization can indeed discover opportunities for economic growth. This strategy however, allows for economic vulnerability to downturns in the sector of specialization such as a decline in demand, increased competition, and other shocks. Diversification thus fosters greater stability due to the increased ability of the economy to respond to negative shocks, hence creating a better atmosphere for economic growth.

Applying the analogy of a financial portfolio to the economy, Sherwood-Call (1990) posits that policy makers manage the economy in a similar manner to that of managing a financial portfolio. Economies which seek to reduce "risks" from economic vulnerabilities will hold a diversified portfolio much as in the case of the financial market. The author suggests in a manner similar to Dissart (2003), that a specialized "portfolio" increases risk and exposure to shocks. Economic diversity increases the level of stability in an economy and this provides a reasonable platform to recognize growth.

In alignment with Sherwood-Call (1990), Hammouda, Karingi, Njuguna, & Jallab (2010) using a sample of thirty-five (35) African countries, set out to uncover the relationship between growth, productivity and diversification. The results solidified the findings of Dissart

(2003) and Pede (2013), suggesting that diversification was associated with increased levels of economic growth. The study concludes that "African countries can scale up their economies' growth by raising their total factor productivity through pursuing policies that enhance diversification." Hammouda et al (2010).

Using a framework of regional input-output modelling to measure diversity, and the extent of inter-industry linkages in the U.S., Wagner and Deller (1998) uncovered results in favour of the existence of a positive relationship between economic diversity and economic growth. Interestingly, Wagner and Deller (1998) also made claims from their study in support of a degree of specialization. The authors outlined that economies which have identified a comparative advantage, can recognize growth by "building a core set of industries" based on that area of advantage, hence lending support to the concept of specialization.

O'Donoghue (1999) examined the findings of a number of studies conducted on the effects of diversification on growth. The study identified that it was generally accepted that growth was alligned with economic diversification, both on the basis of association and causation. Causation was possibly bi-directional. Comparing his study in the context of Britain to those previously examined within the context of North America, the results proved opposite. The paper noted an invsese relationship between diversification of employment and economic growth in Britain. The study thus provides evidence of the growth potential of economic specialization. Though the results differ from many other studies on the issue, O'Donoghue (1999) highlights that they should be view in light of the cyclical nature of the two economies and also taking into consideration the unique characteristics of each nation<sup>2</sup>. Along similar lines as O'Donoghue (1999), the Research and Economic Analysis Division (2008) of Hawaii conducted a study on economic diversification in Hawaii and concluded that their study did not provide any support for a positive relationship between economic diversity and growth.

Attaran (1986) did not find an eonomically meaningful relationship between industrial diversity and economic growth. However, the study posited that during the period of the analysis, more specialized regions in the United States enjoyed a higher level of per-capita

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<sup>&</sup>lt;sup>2</sup> United States and Britain

income than those that were more diverse. Hence in this context, specialization manifests more positive returns than diversification. According to Alhowaish (2011), efforts toward economic policy in relation to specialisation and diversification should be undertaken with respect to the requirement of specific areas. The paper outlined that regional and urban planners struggle with the choice between specialisation and diversification since they are viewed as alternatives. On one hand the paper hightlights that diversification is good for those sectors that need to keep up with structural, regional and natioal changes. On another account, it is suggested that specialisation policies for some regions may be best for growth especially where the area of specialisation is facing an increased demand for its output. It was underlined however, that these specialized areas are prone to vulnerabilities and are more times than not linked to economic stagnation and decline. These findings concurr with that of Dissart (2003) and Sherwood-Call (1990).

### 3.0 DESCRIPTION OF DATA AND STYLIZED FACTS

The data used in the analysis of this study consists of the sectoral value added to GDP for each country in the ECCU from 1985 to 2012. The real GDP figures employed for the analysis are based in 1990 as opposed to the new series calculated by the ECCB, which was rebased to 2000. The choice of the real GDP figures was done on the grounds that the new calculations of real GDP was not disaggregated prior to 2000 as is required to conduct the intended analysis. Additionally, the rebased real GDP figures only extend as far as the year 2000 while the figures based in 1990 spans 1977 to 2012. However, the figures were very much similar and therefore the results obtained will be valid.

The inclusion of other variables was merited in order to gather additional information that can serve to extend this study. The additional variables include; openness (trade to GDP), Gross Capital Formation (GCF), government consumption, and the Real Effective Exchange Rate (REER). The choice of variables was informed by the empirical literature, as well as taking due cognizance of variables that might have an impact on ECCU growth and development. Data on exports, imports, gross fixed capital formation, and government consumption was taken from the ECCB's AREMOS database, except in the case of Anguilla where the trade

data was downloaded from the International Financial Statistics database of the International Monetary Fund. The IFS was also the source for the real effective exchange rate.

Figure 1 illustrates the growth rate of the union over the period 1977 to 2013. Over the time span of the data, it can be seen that the region suffers from severe fluctuation in the level of growth with the highest growth rate between 1983 and 1984 while the lowest were observed between 2007 and 2008. Subsequent to the crisis in 2008 in which a major sector for many of the countries of the ECCU, tourism was severely affected, the region has been regaining strength.

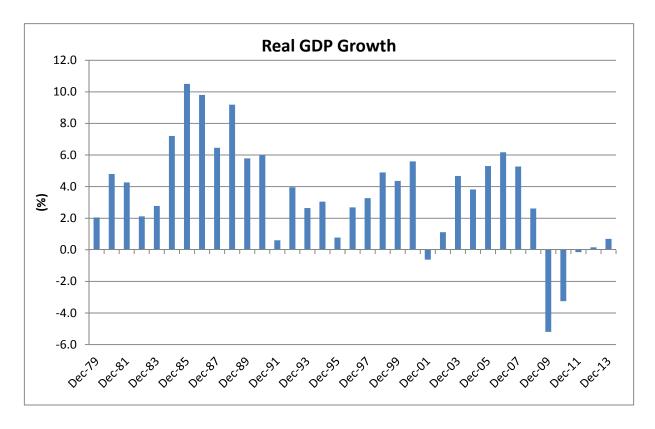


Figure 1: Real GDP Growth for the ECCU 1977-2013

Source: ECCB

A more volatile picture is painted when the countries are viewed indvidually. Over the period of the analysis, sustaining higher rates of economic growth has been a challenge for all eight (8) member states of the region. Additionally, there is a wide disparity in growth rates despite a common currency and economic structure. The most obvious syncronized movement in the

data occurred in 2009 when the region began to feel the effects of the global economic crisis. The effects were propogated mainly through a decline in the tourism industry. Interestingly, the contributions to GDP when disaggregated by sector, do not show tourism as a major contributor to the economies of the region except in the case of Anguilla, where the largest decline was recorded after the crisis (16 per cent).

On an aggregate level the contributions to GDP within the ECCU have mainly been from the government sector. In the initial stages of the period under consideration, the agricultural sector took precedence but only for a short period of time as can be seen in Figure 2.



Figure 2: Contribution to Real GDP by Seven Main Sectors within the ECCU, 1977-2012

Source: ECCB

The banking and insurance, transportation and wholesale and retail sectors have grown over the years and have made significant contributions to the economies of the region. Each sector has grown seperately in all the countries of the region. The agricultural sector has continued to be the major driving force in the Dominican economy while in Anguilla tourism thrives as has been the case throughout the period of analysis. The transportation sector in Grenada has grown to be the major contributor to GDP as opposed to former years when agriculture was the primary contributor to the economy. Montserrat is a major contributor to the dominance of the government sector in the region as this is the main sector in the country. Saint Lucia likewise has a large government sector. Both St Kitts and Nevis and St. Vincent and the Grenadines have traditionally had large contributions to GDP from the government sector. Recent years however have seen St Kitts and Nevis gravitating to the banking and insurance sectors while St Vincent and the Granadines has gravitated to the Wholesale and Retail sector.

### 4.0 METHODOLOGY

A vast number of studies have been conducted similar to this paper, most of which have employed similar estimation methods. Three main ratios of diversification have been identified which will be used to calculate the level of diversification in the region both on an aggregate level (ECCU) and country specific basis. To determine the implications of varying levels of diversification on economic growth in the region, regression analysis will be applied using both panel and time series analysis.

Employing the technique used by Attaran (1986), the Entropy index was determined as an appropriate means of estimating the level of diversity in the region. The formula is constructed as follows:

$$D = \sum_{i=1}^{N} S_i \ln(\frac{1}{s_i}) \tag{1}$$

Equation (1) can be simplified as noted by equation (2)

$$D = -\sum_{i=1}^{n} S_i \ln(S_i)$$
 (2)

S<sub>i</sub> is the value added to total GDP from the i<sup>th</sup> sector of the economy while N is the number of sectors. The equation is completed by applying the natural log of the value added to GDP from each sector. Higher values of the entropy index values indicate greater levels of diversity while smaller values suggest more sectoral specialisation. A value of zero would signify a concentration of the economic activity in one sector of the economy while the largest value of the index though not capped by literature would suggest a greater level of diversity. The index was also used by Hackbart and Anderson (1975). As the variable of measurement, most of the literature employs the use of employment data as a measure of sectoral concentration. However, due to a lack of labour specific data the value added to GDP will be used, similar to Imbs & Wacziarg (2003).

A widely employed measure of concentration/specialisation used in studies of industrial organization is the Herfindahl index. The index has also been employed by a number of studies as a means of determining economic diversification, notably, Tauer (1992). The format is illustrated in equation (3).

$$\mathbf{H} = \sum_{i=1}^{n} \mathbf{S}_{i}^{2} \tag{3}$$

Similar to the entropy index, Si is the value added to total GDP by the i<sup>th</sup> sector in the economy. The ratio uses the sum squared of the sectoral shares in GDP to determine the level of diversity in an economy. The index ranges from zero (0) to one (1). Values closer to zero signify higher levels of diversity while values closer to one would represent more specialisation.

The final index employed for the study is the Ogive index. The characteristics of this index are similar to both previously mentioned. The value added to GDP by each sector is identified by S<sub>i</sub> and N is the total number of sectors in the economy. Equation (4) depicts the structure.

$$\sum_{t=1}^{N} \frac{(St - \frac{1}{N})2}{1/N} \tag{4}$$

The index ranges from zero (0) to one (1), zero representing perfect diversification and one, perfect specialisation. The Ogive has been used in various studies on diversification and was also used by Pede (2013) to determine the effects of diversity on regional economic growth.

To ascertain the relationship between diversification and real GDP, both panel and time series regression models were constructed. The panel analysis will take the form of an instrumental variable regression, with panel corrected standard errors. The application of this technique serves to mitigate the effects of endogeneity in the model and thereby strengthen the results of the paper. Both estimation techniques will be conducted controlling for the level of openness (trade to GDP), Real Effective Exchange rate (REER), government consumption (Govt) and gross capital formation (GCF). Equation (5) illustrates the individual OLS estimation model while equation (6) depicts the model for the panel regression analysis.

$$ly_{tb} = \alpha_t + \beta_{1t} diversification + \beta_{2t} open + \beta_{2t} invest + \beta_{4t} reer + \beta_{3t} gov + s_{tb}$$
 (5)

$$ly_{tb} = \alpha_t + \beta_1 diversification + \beta_2 open + \beta_2 lnvest + \beta_4 reer + \beta_8 gov + s_{te}$$
 (6)

### 5.0 ESTIMATION AND RESULTS

Applying the diversification indices to determine the level of diversification in the ECCU highlighted that initially the region was primarily specialised. Subsequent years saw the member states gravitate in the direction of greater levels of diversification. This trend however was disrupted as the general move was made in the direction of becoming relatively more specialised.

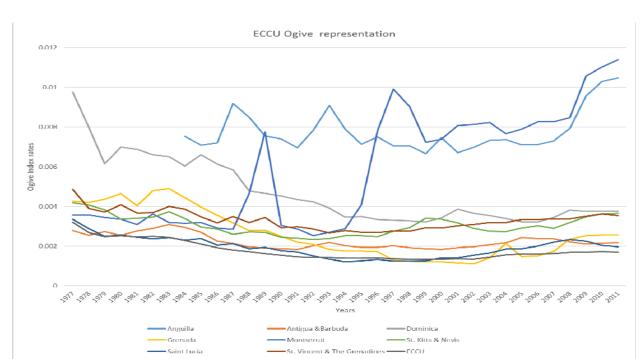


Figure 4: ECCU Diversification 1977-2012 Based on Calculations Using the Ogive Index.<sup>3</sup>

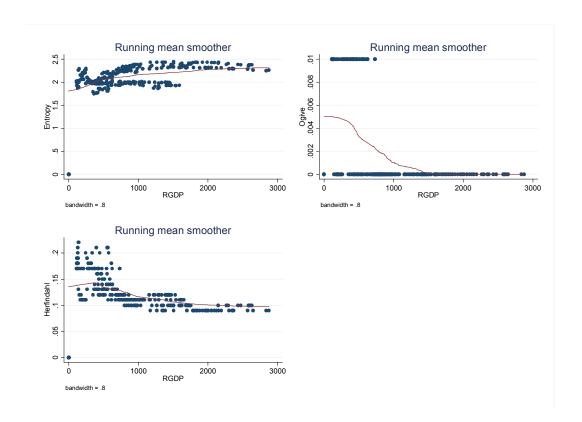
As outlined by Imbs & Wacziarg (2003), economies tend to gravitate to a certain level of specialization in their initial years. However over time, economies become more diversified. This diversification is not indefinite, as the study conducted by Imbs & Wacziarg (2003) shows that the stages of sectoral diversification traces out a U-shape in growth-diversification space. Low income countries generally specialise in a small set of products. With growth in per-capita GDP, over time economies will develope more efficient production techniques and diversify the product bundle available within the economy. This development will accompany a shift towards more diversification, followed by increasing levels of specialisation as the economy further develops. Advancing the work of Imbs & Wacziarg (2003), Kaulich (2012) sought to assess the connection between growth and diversification by applying the non parametric lowess technique. Using the lowess procedure Kaulich (2012) found evidence in

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<sup>&</sup>lt;sup>3</sup> Similar findings are recorded in using the Entropy index. See appendix.

support of the prenomenon described by Imbs & Wacziarg (2003). Applying a similar analysis to the ECCU, there was some evidence confirming the findings of both studies. Figure 3 illustrates the lowess description of the ECCU which maps the diversification indices againt real GDP steming from 1977 to 2012.

Figure 3: Illustration of Diversification and Growth 1977-2012 Using Three Separate Indices



The first illustration is based on the Entropy index which is formulated in a different manner than the other two indices which have similar constructs. However the same results are captured from observing all three. Therefore similar to the findings of both Imbs & Wacziarg (2003) and Kaulich (2012), evidence of a U-shaped construct can be observed. These findings indicate that as the ECCU accomplished higher levels of GDP over time, increased diversification took place. Based on the construct of the plot, the ECCU has not achieved a level of economic prosperity as Imbs and Wacziarg (2003) suggest, which would provide

incentives for specialisation. An individual assessment of the region applying lowess graphs highlights an adherence by most of the mamber states to the U-shape described by Imbs and Wacziarg (2003) as well as Kaulich (2012).<sup>4</sup>

According to the Herfindahl index, during the 1970's the region was primarily specialized. This specialization came in the form of the agricultural sector. Subsequent years signalled a move to a more diversified region during the 1980's up until the early 2000's where there was a move in the direction of a more specialized society. Most of the contribution to GDP in recent years has come about from Government services.<sup>5</sup>

The observed move to more specialization in recent years has seen the countries of the region gravitating in the same direction in relation to specializing but not so in the sectors chosen. Anguilla even though the country has always and still is focused on the hotels and restaurants sector, the contribution to GDP in the country from the sector has increased relative to the other sectors thereby the increased specialization. The evolution of economic concentration in the ECCU shows mixed results for both specialisation and diversification. During the early stages of the period of analysis in which agriculture was the area of focus with the region being relatively more specialised, growth was varied. However in the 1980's where the the move towards greater levels of diversification can been seen, growth was mainly on a downward trajectory. It can be observed that the trend was broken during the 1990's where the decline was halted. The late 1990's into the 2000's saw increases in growth as the region tended in the direction of specialisation once more, however coming to an abrupt stop in 2008 into 2009 due to the global economic and financial crisis.

<sup>&</sup>lt;sup>4</sup> Illustrations of the individual U-shaped structure of the countries of the ECCU

<sup>&</sup>lt;sup>5</sup> Illustration provided by figure 2

<sup>&</sup>lt;sup>6</sup> Based on the construct of the index, increased specialisation translates to an increase in the contribution to GDP from a single sector relative to the other sectors of the economy.

0.14 0.12 0.1 0.12 0.08 Herfindahl Diversification index 0.1 0.06 0.08 0.04 0.02 0.06 0.04 -0.02 0.02 -0.04 -0.06 1997 1987 7999 1997 1993 1999 2007 2003 2005 REAL GDP GROWTH ECCU H index

Figure 4: Joint Illustration of the Growth Rate of the ECCU and the Herfindahl Index

Source: ECCB

The Panel estimation was conducted to capture the overall effect of the diversification indices on growth. The findings proved to have strong evidence in favour of diversification being influential for growth. The variables in the models were linearized in order to reduce outliers observed in the data and thereby increase the inferential gain and also facilitate ease of interpretation. The results can be observed in table (1).

Table 1: Results from 2SLS IV Regression. (Dependent: In (GDP)

Variables	Model (1)	Model (2)	Model (3)
Ln(Entropy)	2.994542 (0.496635)***		
Ln(Ogive)		-0.358845 (0.053416)***	
Ln(Herfindahl)			-0.983268 (0.166897)****
Ln(Openness)	-0.033905 (0.087603)	-0.130979 (0.090075)	-0.098649 (0.094639)
Ln(Govt)	0.349350 (0.037100)***	0.384976 (0.046257)***	0.405680 (0.046118)***
Ln(REER)	-0.318795 (0.214010)	-0.272644 (0.214124)	-0.167250 (0.245300)
Ln(GCF)	0.107597 (0.048227)**	0.060904 (0.056246)	0.007717 (0.058531)
Constant	3.638690 (10239811)**	3.75680 (1.174071)**	3.413185 (1.384470)*
$\mathbb{R}^2$	0.978	0.977	0.974
anel correcto ** 1%Sig., ** 5%	ed standard	errors in	parenthesis

Panel corrected standard errors were selected based on their appropriateness for the analysis. The technique assumes no autocorrelation as well as the concept that the contemporaneous correlation of the variances of the error terms of all the counties are the same at every point in time. With the structure of the ECCU it is reasonable to make the assumption that the errors

will follow a constant pattern since the economies are largely similar and have the same sectoral composition. The standard errors produced by the technique are also adjusted to suit panel data. The method is therefore appropriate to conduct the intended estimation.

All three models indicate that a positive relationship exists between diversification and growth in the ECCU. Considering the effects of the crisis of 2008 on the region the analysis was conducted prior to 2008. The results of this estimation likewise confirmed the positive relationship between the two variables. The Entropy index of model (1) conveys that for every one percent increase in the level of diversification within the region, there will be a 2.99 percentage point increase in GDP<sup>7</sup>, net of the effects of the remaining explanatory variables. The results for the remaining two diversification indices were similar to that observed in Model (1). The coefficients on the Ogive and the Herfindahl indices are negative, indicating a negative relationship between specialisation and growth based the construction of the indices. According to the Ogive index, for every one percent increase in the level of diversification, there will be a 0.358 percentage point increase in GDP in the ECCU, ceteris paribus. The Herfindahl index suggests that a one percent increase in diversification will see an increase in GDP of 0.98 percentage points, all other things being constant. Openness along with real effective exchange rate did not appear to be statistically significant in neither of the estimated models. Government consumption proved to be statistically significant in all three models, suggesting that increasing government consumption will have a positive effect on growth in the region as per a-prior expectations. Gross Capital Formation was significant in only one model, where it was highlighted that a one percent increase in the variable will increase GDP by 0.107 percentage points.

To ascertain the individual effects of diversification on the economies of the region equation (6) was estimated for each country, the results of which can be seen in Table 2. There was no evidence of the statistical significance of the diversification indices for half of the member

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<sup>&</sup>lt;sup>7</sup> Higher values of the Entropy index suggest more diversification while lower values indicate more specialisation. The Ogive and Herfindahl are opposite to the Entropy.

states of the region. Statistically significant relationships were only found for Anguilla, Antigua and Barbuda, Grenada and Saint Lucia.

Table 2: Results from Individual Regressions (Dependent Variable: GDP Growth)

Variables	Anguilla(1)	Anguilla(2)	A&B (1)	A&B (2)	Saint Lucia (1)	Saint Lucia (2)	Grenada (1)	Grenada(2)
Entropy	-0.5877595		-1.090309		-1.213198		0.4538342	
	(0.212435)**		(0.441874)**		( 0.51466)**		(0.2324237)*	
Herfindahl		2.342423		1.569665		7.614644		-2.228278
		(0.731414)***		( 3.07107)		( 3.20867)**		(1.10811)*
GCF	0.0006949	0.0007293 (	0.0002063	( 0.0002334	0.000198	0.0002121	0.0004384	0.0004252
	(0.0001035)***	0.000116)***	0.0000424)***	(0.0000346)***	(0.00009)**	( 0.00009)**	( 0.000048)***	(0.000042)***
Openness	0.1929909	0.1512084 (	-0.0095234	0. 042681	0.1351988	0.1334371	-0.0447668	-0.0340179
	(0.0787694)**	0.0778858)*	(0.051936)	(0.0443199)	(0.0366199)	(0.0373236)**	(0.0604498)	(0.060702)
Government	0.005846	0.0213981	0.0392816	0.0325929	0.056768	0.0611215	0.0519868	0.051157
	(0.0902255)	( 0.0915537)	(0 .0390701)	(0.0647206)	(0.0587223)	(0.0624674)	(0.0287542)*	( 0.0303188)
Time	-0.0033225	-0.0033587	-0.0065229	-0.0026179				
	(0.0011714)**	( 0.0011918)**	(0.0036673)*	(0.0008425)**				
Constant	0.1040695	0.1069347	-0.0627332	0.048807	0.003189	0.0035028	0.024597	0.0250954
	(0.0333942)***	(0.0343058)**	(0.1280608)	(0.0328121)	( 0.003189)	( 0.009557)	(0.0054563)***	(0.0057233)***
R Squared	0.711	0.737	0.63	0.58	0.42	0.425	0.64	0.63
Obs.	27	27	35	34	34	34	34	34
				18				

Robust standard errors in parenthesis \*\*\* 1%Sig., \*\* 5%Sig., \*10% Sig

Being cognizant of the possible existence of non-stationarity in the data, all the variables employed in the analysis were tested for unit roots. The methods used were the Augmented Dickey-Fuller and Phillip-Perron unit root tests verified in some cases with the Dickey-Fuller Generalized Least Squares test for unit roots as well as graphical assessments. Lags selection for the tests was done by way of the Akaike Information Criterion (AIC). The existence of unit roots in the data will produce results leading to incorrect conclusions and will cause what is known as a spurious regression<sup>22</sup>. Where necessary the variables were differenced in order to conduct the necessary analysis with all the variables in their stationary forms<sup>23</sup>. Along with tests for stationarity the necessary steps were taken to ensure that the Classical Linear Model assumption (CLM) was met.

The entropy index was statistically significant for all the countries reported in Table 2. The Herfindahl was significant for all but one country, Antigua and Barbuda. The results obtained from both estimations for Anguilla gives support to a positive relationship between specialisation and growth. According to the Entropy index, a one unit increase in the change in the index, translated as an increase in diversification, will result in a 0.58 percentage point decline in the growth rate of the country. Along similar lines the Herfindahl representation of the economy posits that for every one unit increase in the change in specialisation in the economy, growth will increase by 2.34 percentage points. The results for Antigua and Barbuda resemble those discovered for Anguilla. The Entropy index highlights that as the change in diversification increases (greater levels of diversification) in Antigua and Barbuda, it will be accompanied by decreased growth so much as for each unit increase, growth will decrease by 1.09 percentage points. Both indices' representation of Saint Lucia produced results suggesting that increased specialisation will have positive returns for growth. As per the Entropy index, increased diversification by a one unit change will result in a decline in

<sup>&</sup>lt;sup>22</sup> A spurious regression is the estimation of a regression model which produces incorrect results due to unobserved relationships between the variables of interest and other variables or the passage of time.

<sup>&</sup>lt;sup>23</sup> For the aesthetic benefit of the paper the functional form of the variables have not been noted in table 2. The functional forms were selected based on their adherence to criteria necessary for correct economic modelling.

growth of 1.21 percentage points. The Herfindahl index produced the same result however more pronounced than that reported by the Entropy.

Antithetical to the findings for the previous three countries, the results for Grenada were in support of diversification. Based on the Entropy index, the resulting change in growth in the economy from a one unit increase in the change in diversification will be an increase of 0.45 percentage points. Corresponding with the conclusion of the Entropy index, the Herfindahl index outlined that increasing the level of specialisation will result in a decline in growth. According to the model an increase in the change in specialisation by one unit will result in a decline in growth of 2.22 percentage points. The significance of the remaining explanatory variables varied across the models except for Gross capital formation which appeared significant in all the models. All results are interpreted net of the effects of other explanatory variables in the models.

### 6.0 DISCUSSION AND POLICY RECOMMENDATIONS

The development strategy outlined by the OECS is constructed along the lines of moving the region into a more specialised state under the umbrella of Tourism. Though this study does not provide an industry specific direction for policy, it brings to the fore an overall view of the sectoral structure that will serve to conjure growth within the region. Specialisation in and of itself is not bad for economies, neither is diversification, however as was noted in the literature, economies go through spells of both over their growth paths. Different levels diversification concurs with different levels of growth. The results of the study suggest that on an aggregate level, the benefits of diversification outweigh that of specialising in the ECCU. However, a country specific observation suggests that the relationship varies.

Growth being positively related to diversification calls for a reassessment of the proposed growth strategy. As an alternative to the single sector focus intended to take precedence in sectoral policies going forward, plans to develop the remaining six (6) which have been identified as growth sectors may also be put in place. Literature outlines that economies in

relation to diversification and growth typically go from the state of specialisation to diversification and back, based on the level of growth. In the context of the ECCU the application of similar analysis to the region proves that a level of economic prosperity has not as yet been identified that can provided sufficient impetus to venture on to re-specialisation once more. Therefore these results suggests that policy makers consider that the current economic position of the region does not call for specialisation but greater level of diversification through multiple sector development policies. In order to facilitate the suggested development, financial institutions can enter into venture capital arrangements, an avenue which will inspire entrepreneurial exploits along with the expansions required to increase diversity. Created in 2009, the Eastern Caribbean Enterprise Fund (ECEF) according to the ECCB web page, was organised to promote the development of the private sector as well as the "creation and growth of productive sectors in the economies of the region through the injection of equity and debt financing" providing also technical support to these entities. Therefore in fulfilling the outlined mandate of the entity, the ECEF can play a major role in the achievement of this development policy.

A country specific assessment of the region painted a mixed picture of the ideal sectoral policy which will influence growth in a positive way. The findings for Grenada indicate the existence of a positive relationship between growth and diversification. Similar to the policy outlined by the three-pronged growth strategy and the OECS growth and development strategy, a mix of sectors should be identified which will form the foundation from which growth will occur. However, this should be undertaken in the context of developing the identified sectors in a manner that will spread economic activity more evenly across the sectors. Similar ventures can be undertaken as was mentioned for the case of the region on a whole.

The results for Anguilla suggest that continued specialisation will bring positive returns for the economy. Alhowaish (2011) posited that in cases where a particular sector is in demand in an economy it works in its favour to focus on the identified sector and reap the gains. It was highlighted however that specialisation renders one vulnorable to shocks and down turns in the sector of focus. For the case of Anguilla, the main sector contributing to GDP has been the

tourism sector. Therefore it could be rationslised that relative to the other sectors of the country, that sector is in high demand within the economy. Seeing that the results suggest that the country should specialise, as sugested by Alhowaish (2011), policy makers should endeavour to develop this sector causing the economy to become more specialised in coming years. The economy will be vulnerable to shocks. However, being a small economy it is a strategy that will work more in their favour than would an attempt to stretch limited resources to diversify. Antigua and Barbuda as well as Saint Lucia produced results which indicate similar to Anguilla that specialisation is optimal for growth in those counties. Therefore as a country specific policy these countries should identify main sectors which have significant growth potential in their contexts and employ strategies which will facilitate their development.

### 7.0 CONCLUSION

Diversification is a dynamic process and over time countries come to experience different levels of it. The level that is required varies depending on the level of development within an economy, therefore it was important to uncover the current position of the ECCU in relation to diversification so as to chart the correct path to recognise growth on a sectoral basis. The study highlighted that the ECCU has not as yet on an aggregate level arrived at an economically prosperous position which merits a move in the direction of specialisation. Thus signifying that a policy geared towards economic growth in the union should be one which embodies the development of a diverse set of well-functioning sectors which will serve as channels to this realisation.

On a country specific level, the results pointed to the fact that some countries were better off specialising, namely Anguilla, Antigua and Barbuda and Saint Lucia. In terms of diversifying, it was noted that diversification was the optimal strategy for Grenada. The remaining countries did not register a statistically significant relationship with the measures of diversification. This however does not diminish the significant role which sectoral composition can play in their development. The disparity displayed between the aggregate and the individual analyses is

possibly a function of the strength of the five economies which did not exhibit a preference for specialisation.

An alternative method which can be used to measure the level of diversification is the use of labour force data which was not available at the time of this study. Using labour force data can give an idea of the gains to be obtained on a sectoral basis depending on the share of the labour force invested in each sector. In that light, policy makers will be able to identify the responsiveness of the economy to each sector and thereby determine those sectors which possess the ability to inspire growth in the member states of the Eastern Caribbean Currency Union.

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## **APPENDIX**

Figure 5: Diversification within the ECCU as Shown by the Entropy Index

