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THE CARIBBEAN-NAFTA RELATIONSHIP: HAS THE CARIBBEAN ALTERED ITS PATTERN OF TRADE IN THE POST NAFTA'S DECADES?

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ABSTRACT: *The research investigated the impact of the North America Free Trade Agreement (NAFTA) on the independent Caribbean economies spanning two decades post NAFTA's implementation. Descriptive statistics were employed to demonstrate that in the preceding years and in the immediate aftermath of NAFTA, the Caribbean sustained market share losses in the NAFTA market. The effects of NAFTA on the Caribbean initiated a process of export and import partner diversification away from traditional markets to China, Brazil and other countries in Asia and Latin America. The research also found that import partner diversification was most pronounced in the second decade starting in 2004. With regards trade diversion, the research found that in the textile and garment sectors Jamaica and Barbados suffered significant displacement of exports in these sectors. However, in general there were not diversionary effect at the aggregate level of NAFTA-Caribbean trade.*

KEYWORDS: Export and import orientation, NAFTA parity, CARICOM, Trade diversion,

INTRODUCTION

A decade preceding the implementation of North America Free Trade Agreement (NAFTA) on 1st January 1994, the United States of America (USA) under the leadership of President Raegan threw the Caribbean a lifeline to assist with the diversification of their economies and to boost industrial production. The lifeline came in the form of the Caribbean Basin Initiative (CBI) (Bernal 1994, Vincent-Mark 2001). The textile and apparel industries were the primary sectors that benefited the most under the CBI where materials were semi prepared in the USA and sent to the Export Processing Zones (EPZ) of CBI participating countries (Vincent-Mark 2001). Local labour was used to complete cut fabric into finish garments which were re-exported to the USA. The textile industry rose to prominence due to the concessions provided under the 806 and 807 special access program embodied in the CBI (Vincent-Mark 2001). It was therefore expected that this sector would be the first to be affected by NAFTA's architecture.

During the rounds of NAFTA's negotiations the Caribbean countries and especially those that had grown depend on their apparel industry expressed grave concerns that the inclusion of Mexico in NAFTA would nullify the intensity of the lifeline provided under the CBI. NAFTA's creation was seen as a threat to the very survival of Caribbean economies given their close trade integration with the USA market (Lunan 1993, Bernal 1994, Worrel 1994) and also given the significant contribution of textile and apparel in the composition of exports to the USA market (Blackwell and Dickerson 1994). The voices of concerns extended beyond the

Caribbean to include those Latin American and Central America, hence the call for the Free Trade Area of the Americas (FTAA). The buzz words that were on the lips of academics and government alike were "NAFTA parity". NAFTA parity was the mechanism that was sought to lessen the disadvantage that was posed by Mexico's free access of goods into the Canadian and USA markets (Bernal 1994, Heron 2002).

There was a general consensus regarding the eminent trade diversion and displacement of Caribbean exports into the US market (Lunan 1993, Bernal 1994, Lederman, Maloney et al. 2003). Many writers at the time rose the issues of Caribbean de-industrialization and its related impact on jobs, economic stagnation, exchange rate instability among other negative consequences of NAFTA without parity for Caribbean economies (Rother 1997).

These concerns were justified given what was argued at the time that Mexico was more competitive at assembling textiles and apparel than most of its Caribbean neighbours. Labour costs were lower in Mexico than in the Caribbean, productivity was higher and importantly Mexico shared a common border with the USA, (For the effects of border on trade see McCallum 1995). In the context of trade liberalization and outsourcing, reallocation of resources happen across national borders. These are the central pillars of free trade predicated on Heckscher-Ohlin, Ricardian theories and offshoot trade theories such as New Trade Theories all of which provide explanations of the possible pattern of trade. Many concerns regarding NAFTA's arrival seemed to have ignored other comparative advantages of the Caribbean and focused more on the textile and garment sectors which were very sensitive to upward wage movements. These sectors are known to gravitate to low wage areas of the world in order to maximize returns on the investment.

The year 2014 marked twenty years since the commencement of NAFTA and what has been established so far is that during the immediate pre NAFTA years to present, trade between members of Free Trade Agreement has been intensified, (Lederman, Maloney et al. 2003). Canada is more integrated with Mexico and the USA and vice versa starting approximately two to three years before the implementation of the agreement (U.S Chamber of Commerce 2012). Studies have shown that Mexico has affected the Asian textile industry more than it did the CBI countries, (Lederman, Maloney et al. 2003). Other studies have shown that the Caribbean textile and apparel industries were by far the most affected among NAFTA's neighbouring countries. These studies called into question the high labour cost and other production costs as factors that were negatively bearing down on the Caribbean at the time, (World Bank and Oranization of American States 2009). Therefore, it has been argued that the reduction in exports in garment was inevitable even without NAFTA, (Vincent-Mark 2001, Lederman, Maloney et al. 2003).

There were a few who argued that increase trade and consequently economic growth of NAFTA members would likely benefited the Caribbean region. Such prospects were not at odds with the economic theory based on gravity model predictions that export growth are positively related to GDP, common language but negative related to distance of trading partners (Deardorff 1998, Anderson and Wincoop 2003). The major concern that arose was the potential diversion and displacement effect of Mexico's advantage in the NAFTA zone on the Caribbean and other LAC countries that shared similar factor endowment and production structure

similarities with Mexico (Rother 1997, Lederman, Maloney et al. 2003).

This paper aims to examine how the Caribbean has adjusted since the NAFTA arrangement twenty years following its implementation. The decade of the 1990s was characterized as the decade of trade liberalization and privatization for a region heavily saddled by debt (World Bank and Oranization of American States 2009, International Monetary Fund (IMF) 2011). Also during the middle of this period, the Caribbean had to deal with decline in foreign aid assistance from the developed economies as the focus of development shifted to Africa and on the new members of the European Union (EU) (Vincent-Mark 2001). These factors were destined to have significant effects on the pattern and structure of Caribbean trade with NAFTA and also the EU. Since this paper's attention is on the Caribbean-NAFTA relationship, then the second objective of the paper is to examine to what extent has Caribbean economies altered their trading pattern with NAFTA in response to the new trading environment. Causality regarding NAFTA's role in any shift in the pattern of Caribbean trade is difficult to establish given the emergence of Asia as the new growth pole and the WTO's implementation in the same decade as NAFTA.

For the purpose of this paper the, the Caribbean will be taken to mean the independent countries of Caribbean which total sixteen including Cuba, and Dominican Republic which are not CARICOM members (Definition of the Caribbean is consistent with World Bank and Oranization of American States 2009). Monserrat was not included among the list of CARICOM members.

This research makes three important contribution to the existing literature. First, this research singles out the Caribbean instead of treating the sub-region as part of Latin America where the focus is on the larger countries. By studying the NAFTA's effects on individual countries, the research provides an improved method for tracking NAFTAs impact on the Caribbean. Second, it also departed from other research in that the paper provided a descriptive outline of the changes in the Caribbean's pattern of trade in two different ten year sub-periods post NAFTA's implementation. This is an innovation on past research which have assumed a constant effect during the post NAFTA years. The analysis was not just limited NAFTA but also accounted for BRICS and EU trade patterns with the Caribbean. Another important contribution of the paper is that it broadened the focus beyond CARICOM, which has received plenty of intellectual attention, to include all the independent countries of the Caribbean. This expanded focus is more relevant than before since each country interact with each other with more intensity than before. Studying of all Caribbean independent countries together while recognizing their heterogeneity provides an alternative angle on which broader policies can be formulated in order better understand the regional dynamics and growth potential.

The remainder of the paper is as follows: section two set out the theoretical foundation while section three provides an outline of the methodology employed to answer the questions raised by the paper. Section four presents the findings and provides a discussion of these finding. This section if further broken down several subsections which include; an overview of the trading environment of the Caribbean; detailed analysis of aggregate export of Caribbean

countries to NAFTA and evidence of the trading pattern of Caribbean trade in the post NAFTA years. Section five provides the concluding remarks.

THEORETICAL FOUNDATION

Early economists such as Heckscher and Ohlin conceptualized the pattern of trade between countries as a function of each partner's comparative advantage in a particular factor endowment. Based on this theory, countries that are intensive in capital, would specialize in capital goods while those countries that have a relative abundance in labour, would focus on goods that use a large proportion of labour (Feenstra 2002). Trade would therefore take place since surplus generated from specialization in one's comparative advantage could be traded. Trade improve the welfare of the people of each country and it also encourages efficient use of factors across countries (Krugman 1980). The pattern of trade therefore is matter of factor endowments. Ricardian theory views the pattern of trade as decide by technological difference across countries (Davis 1995).

Grubel and Lloyd (1975) researching the concepts of inter and intra industry trade declared that a well define pattern of trade exited and this pattern comprised a great majority of world global goods trade. Countries were predominantly trading within the same category of goods (Grubel and Lloyd 1975). This findings prompted other authors to search for an additional explanations to augment Hechscher and Ohlin and Ricardo explanations of the pattern of trade (Krugman 1979, Krugman 1980). Krugman (1979) framed his model on the concept of monopolistic competition with differentiated goods were produced in different countries. In the latter paper Krugman (1980) recognized the importance of home market in also determining trade pattern between countries with similar economic size. Countries essentially specialized in different goods. Other authors provided evidence that intra-industry trade was possible under conditions of Heckscher and Ohlin and Ricardian assumptions (Davis 1995, Deardorff 1998).

Tinbergen (1962) drawing from physics, empirically operationalized gravity equation in trade research. He studied the role of distance, partners Gross Domestic Product (GDP) and PTA as key variables in the explanation of trade pattern (Tinbergen 1962). Other authors built on the seminal work of Tinbergen (1962) in order to establish a theoretical structure to what later became gravity models of international trade (Anderson 1979), (Bergstrand 1985, Bergstrand 1989) (Anderson and Wincoop 2003, Anderson 2004). In their seminal paper, Anderson and Wincoop (2003) included the multilateral resistance terms, which improved the analyses of trade flow patterns. Therefore in addition to distance, GDP and PTA, (McCallum 1995) found that common border was highly significant variable in explaining world trade flows. Other factors that became crucial were common language, being a common colony with a partner, trade liberalization, level of infrastructure and other institutional variables.

As part of the drive to assist in enhancing multilateral liberalization of trade, PTA became widely supported. The general acceptance and usage of PTAs led researchers to become

interested in their impact on member countries and non-member countries alike. The concepts of trade creation and diversion developed by Viner (1950) have become common expressions that relate the effects of a PTA on trade (Lipsey 1957). The evidence of either can provide some level of indication of welfare effects of a PTA. Krueger (1999) studied the impact of NAFTA and its effects on several Latin American and Caribbean countries (LAC). That study revealed deeper integration of NAFTA member countries while no discernable evidence of trade diversion to neighbouring countries. Vincent-Mark (2001) examined effects of NAFTA on CARICOM by doing a case study on Jamaica. The author found that NAFTA accelerated internal issues that were haunting the garment and textile industries of that country prior to NAFTA. Leberman et al. (2003) broaden the focus to examine NAFTA impact on eight other regional trade agreements (RTA) which also included CARICOM. The findings showed that intra NAFTA imports intensified and that LAC lost market share in NAFTA market between 1994–2000. The authors attempted to study the effect of NAFTA on CARICOM using three short sub-period spanning three years each but looked at trade with individual NAFTFA members separately. Those results showed that exports from CARICOM to USA were positive and significant except for the 1986-1988 sub-period.

DESCRIPTION OF METHODOLOGY AND DATA

Market shares will be calculated on an aggregated level in order to determine market share shifts in the different sub-periods. This methodology has been widely used in order to determine competitive threat (see Feenstra 1998, Lall and Albaladejo 2004, Lall, Weiss et al. 2005) and trade pattern orientation (Moreira 2007, Rosales and Kuwayama 2012). Trade growth rate alone does not accurately reflects a true representation of trade patterns. Such pattern are better captured by shift share analysis and empirically by gravity model. For this research the former approach will be adopted. The methodology of examining shifts in market shares of trading partners is well established and widely used.

The aims of the paper will be investigated by preparing descriptive statistic from trade data accessed from the International Monetary Funds (IMF) Direction of Trade Statistics (DOTS) website and the United Nations Commodity Trade Statistics database. Data relating to GDP will be accessed from the World Bank website. The data will be segmented into three periods. The first period examine trade relation a decade before NAFTA. The second segment studies the trading pattern that emerged in the first decade after January 1994 and the remaining segment of analysis concerns 2004 to 2014. The period under investigation stretches from 1984 – 2014.

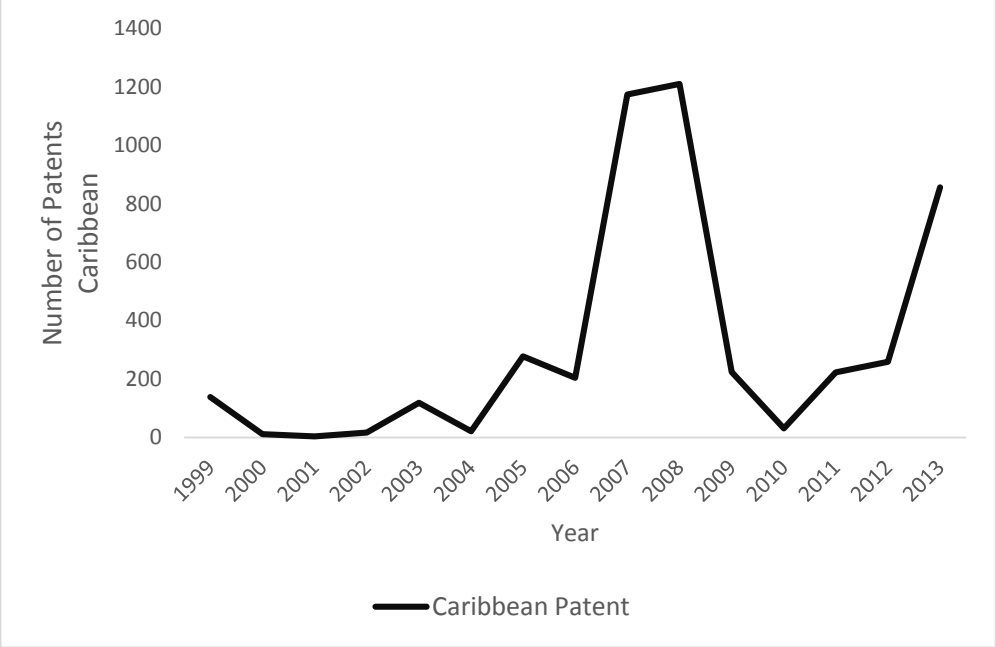
Countries to be included in addition to the Caribbean sixteen, include NAFTA members, Brazil, China, Japan, Venezuela, and United Kingdom.

FINDING AND DISCUSSION

Overview of the Caribbean's Trading Environment

The Caribbean economies are known to be very small; that is small in geographic size, economic size and market size (World Bank and Oranization of American States 2009). This is compounded by the fact that the product density space of the respective economies is regarded as being very sparse (Hausmann and Klinger 2006). Leapfrogging from the region's static comparative advantage – resource base products - to manufactured goods has been proven to be a huge challenge for Caribbean economies. The distance between resource base products and manufactured products requires huge investment in research and development and the adaptation of existing production capabilities to new products (Hausmann and Klinger 2006). However as Hausmann and Klinger (2006) argued that successful production of new products which are far from the reveal comparative advantages of a countries have a low probability of success because the capabilities of the old products and technologies do not lend support to the new products (Hausmann and Klinger 2006). This explanation to a large extent may explain the Caribbean economies difficulty with structural transformation and many failed attempts at export product diversification.

The Caribbean during the period of this study has not recorded sustained significant uptick in its technological progress. The leaders in patent registration have been Cuba, Barbados and Jamaica. Figure 1 shows a spike during 2007 and 2008 mainly arising from a bump in Barbados registration of patents by non-residents. The region has therefore underperformed especially where the number of resident patent registrations is concern. Creative destruction requires that for firms and countries to keep up their production and exports of goods and services, they will be required to create new products to replace old ones as consumer preferences and technologies change over time (Schumpeter 1943). The low level of patent registration provides an indication of the failure of the Caribbean to keep up with the changing global environment where products lifespan have become shorter. Underperformance in patent registration and low expenditure on research and development are not unrelated to weak export performance and declining share in world total merchandise exports (**see figure 2**).



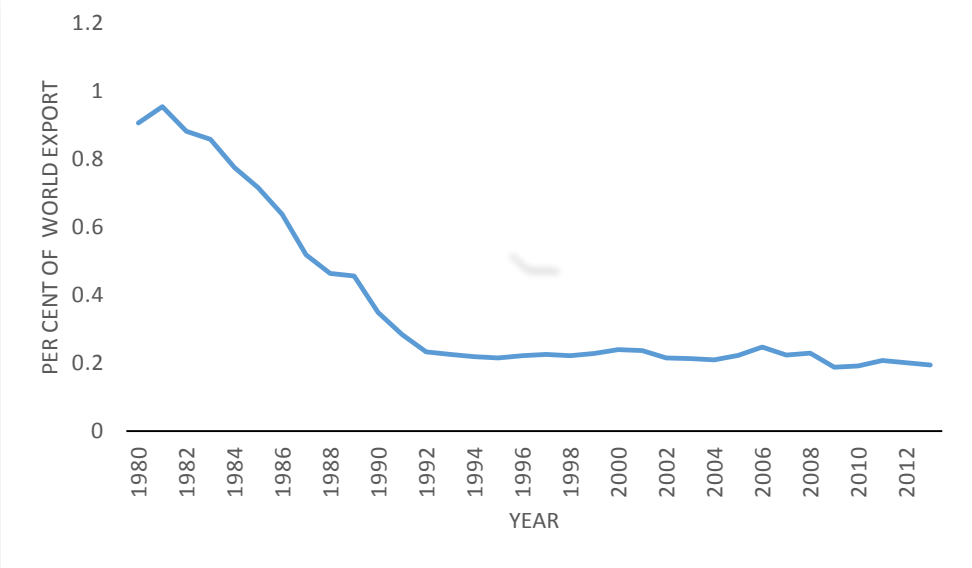
Source: World Intellectual Property Organization
Patents include those of residents and non-residents

Figure 1. Number of Patents Registered by Caribbean Countries 1999 - 2013

Within the NAFTA bloc and predating its implementation, the USA market has been the primary export destination for Caribbean economies post World War II – Cuba been the only exception. Feenstra (1998) published two important findings regarding the USA economy that cannot be ignored. One was that imports into the USA has been shifting away from resource based commodities to imports at an advanced stage of manufacturing (Feenstra 1998). The second finding was that liberalization, falling transportation costs have fostered USA outsourcing to low cost production destination (Feenstra 1998). These findings have important implications for Caribbean trade with NAFTA and with the rest of the world. This is partly because the bulk of world trade has been intra industry trade and partly because higher income countries trade more with each than with lower income countries (International Monetary Fund (IMF) 2011).

Caribbean economies made higher contribution to world merchandise exports share before the NAFTA decade than after its implementation. Figure 2 below shows a constant decline in share of Caribbean merchandise export as a percentage of global export. The decline was sharp two years leading up to NAFTA and levelled off at 0.2 per cent of global exports. The sharp decline in export share prior to NAFTA could be linked to unilateral liberalization of trade in Mexico as it prepared for accession to NAFTA (Krueger 1999). Those leading years would have resulted in a realignment of investments and trade towards Mexico especially in the textile and apparel industries. Much of the sharp decline can be attributed to a decline in textile exports from Jamaica (**see figure 5b**). In the two decades that followed there was no noticeable

bumps in the world export share of the Caribbean. The financial crisis of 2007 not only resulted in a fall in Caribbean exports but also in its share of global exports.



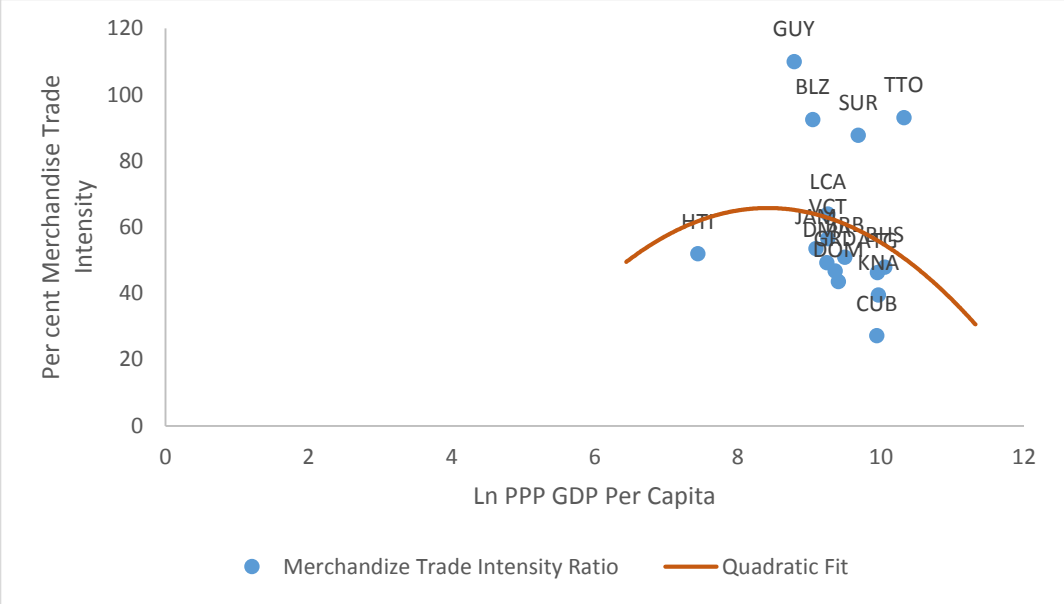
Source: IMF Direction of Trade Statistics

Figure 2. Caribbean Share of World Export 1980 -2013

Caribbean economies are known for the high dependence on foreign trade (World Bank 2015). They are classified by the World Bank (2015) as service economies where tourism plays a leading role and also the major attracting force of Foreign Direct Investments (FDI) (World Bank 2015). While this paper focuses on the merchandise relation of the Caribbean it also recognizes the important contribution of services especially the tourism sector.

Figure 3 below gives a graphical representation of the average merchandise trade intensity of Caribbean countries between 2010 – 2013 plotted against their natural logarithm per capita GDP at Purchasing Power Parity (PPP). Countries below the quadratic fitted line can be said to be trading below the average of the region. It can be seen that between 2010 to 2013 Guyana, Belize, Suriname, St. Lucia, St. Vincent and the Grenadines and Trinidad and Tobago were the most intensive merchandise trading countries in the Caribbean. The remainder of countries had lower merchandise trade intensity ratio ranging from 25-60 per cent on average. Trade theories predict that countries with higher level of GDP should trade more with themselves while smaller economies should have higher trade intensive ratio (World Trade Organization and UNCTAD 2012). This is partly borne out in figure 3. The highly populated countries and those with higher per capita PPP GDP such as Cuba, Dominican Republic and Jamaica, have lower merchandise trade intensive ratio with the lowest ratio being Cuba. Economic sanctions imposed on Cuba by the USA could account for its low ratio while Trinidad and Tobago's high merchandise intensity trade ratio can partly be explained by its Revealed Comparative Advantage (RCA) in petroleum, petroleum related products and light

manufactured goods exports.



Source: World Bank

Figure 3. Average Merchandise Trade Intensity Ratio 2010 - 2013

The Caribbean is a merchandise trade deficit prone region which runs persistent trade deficit with NAFTA, China, and European Union, however, it has a trade surplus with Canada, (author's calculations based on IMF DOTS). Attempts to improve the region's integration with the world should also seek out partners with high import content in their domestic production. Therefore focus on increasing export growth to countries outside of NAFTA. It is clear, that huge trade deficit with the above mentioned trading blocs and countries is not sustainable or growth enhancing for Caribbean's merchandise trade relation. The effectiveness of exchange rate depreciation as a policy to close trade deficit gaps may not be the appropriate measure to boost exports. The logic is that economies that are highly dependent on imports for transforming raw materials for exports and domestic consumption, cannot benefit much – if at all – from currency depreciation or devaluation. Currency depreciation for the Caribbean increase the costs of production which then cancels out productivity gains in the export sectors. Therefore the competitive performance of Caribbean exports may have been thwarted by currency movements. Text book economic theories point out that currency depreciation lead to an increase in exports since the price of domestically produced goods become cheaper to trading partners. This is likely to be true for Mexico in 1994 and China in 1997 where these countries faced rapid currency depreciation and also realized simultaneous increase in exports. The Caribbean exports are likely to move in the opposite direction in the face of depreciation because the import content in exports are extremely high. The support services for the exports sectors also have high reliance of imported products. This results in almost full exchange rate pass through and price volatility of exports. Where the exported good is a commodity that is priced by the global market place,

the cost of production becomes higher than the global price. This is the case of sugar production for most Caribbean economies. Exchange rate volatility may help to explain the declining market share of Caribbean exports as a percentage of world exports. Much of the recent studies concerning the region trade deficit has focus on the China-Caribbean merchandise trade relation (Bernal 2011, Montoute 2013). However, the trade deficit with NAFTA should be of equal concern.

Analysis of NAFTA's Dependence on Imports from Caribbean Countries

Import Share Orientation

The Caribbean's trading relations with North America followed similar trend with its global export share performance. In figure 4 the hyphenated fitted line indicates that import share by NAFTA members from Caribbean countries has been on a downhill trend prior to NAFTA's implementation and continued to 2014. In the decade preceding NAFTA's implementation that is about 1992, NAFTA's import share of Caribbean goods started to show gradual decline. Reduction in market share of NAFTA's import from the Caribbean represented the anticipatory effect of NAFTA on the Caribbean. Some authors argue that before a PTA comes in effect, there will be a rush by firms to reposition themselves early in order to take advantage of the PTA before its implementation (Krueger 1999). Figure 4 lends support that the anticipatory effect of NAFTA initiated a decline in NAFTA's import share of Caribbean merchandise. The rate of the decline in Caribbean's share in NAFTA's import accelerated until 2000 after which signs of recovery could be observed until the end of the first decade following NAFTA'S implementation. It appeared that the recovery of import share of the Caribbean in NAFTA'S import was correlated with and influenced by the Caribbean Basin Trade Partnership Act (CBTPA) which came in effect in during May 2000 (Heron 2002). The CBTPA was viewed as the antidote for the underperformance of Caribbean exports to USA.

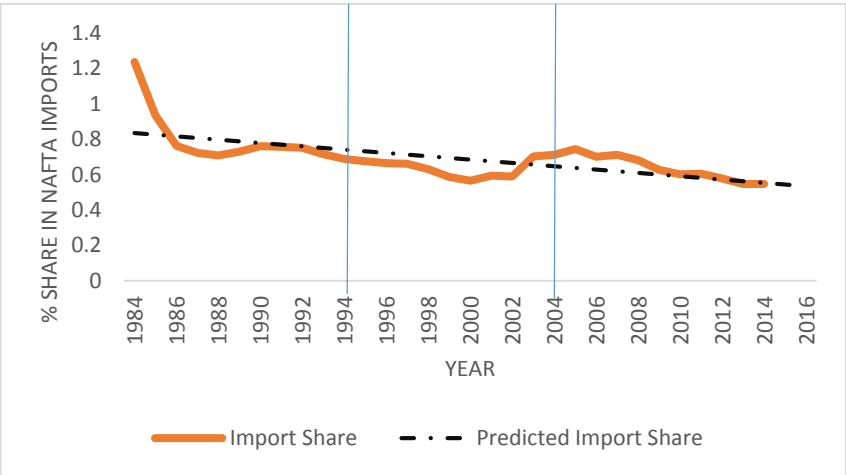
The CBTPA was not enough to revive the import share of Caribbean goods into NAFTA market. It can be observed from figure 4 above that the Caribbean was a looser region in the immediate aftermath of NAFTA. It under performed below the trend line for much of the first decade following NAFTA. The adjustment period started in 1992 and lasted throughout the first decade after NAFTA.

The second decade after NAFTA represented hope for Caribbean's merchandise penetration in NAFTA's market. However, disappointment showed in the form of the global financial crisis. In 2005 Caribbean import market share in NAFTA's imports rose to the 1991 level of 0.744 per cent. However, starting in 2006 to 2014 the Caribbean import share by NAFTA resumed it downward trend and fell to a new low of 0.55 per cent (**see figure 4**).

Trade Creation or Diversion?

The essence of figure 4 conveys a message of decline import share into NAFTA post the implementation period. It is clear that Caribbean share in NAFTA's total import was lower in the preceding years.

Heterogeneity of the Caribbean is an established fact, hence, not all the economies faired in the same manner from NAFTA's implementation. Table 1 provides a detailed picture of the pattern of import from the Caribbean respective countries by each of the NAFTA members spanning the three periods under review. The average volume of imports by the NAFTA members suggests that most of the Caribbean countries were least dependent on Mexico as market for their exports while being most dependent on the USA market followed in second place by Canada



Source: IMF Direction of Trade Statistic

Figure 4. Imports from the Caribbean as a Percentage of Total NAFTA Imports 1984 - 2014

It should be noted that Canada trade with CARICOM countries are govern under the CARIBCAN preferential trade agreement. Table 1 shows the average import of Caribbean merchandise by Canada over the three sub periods. The Bahamas suffered the largest decline in average imports by Canada in the 1994 -2003 sub period. Canada's average imports from The Bahamas fell to more than half of the previous sub period. Other countries which suffered in the sub period were Barbados, St. Vincent and the Grenadines, St. Lucia and Haiti. The remaining countries saw Canada increasing its import from them. The biggest winners in export to Canada during the 1994-2003 sub period were Cuba, Dominican Republic, Guyana, Suriname and Trinidad and Tobago.

Average imports by Canada from these countries more than double in the sub period following NAFTA. Jamaica experienced modest gains in its exports to Canada.

In the third sub-period 2004-2014, Canada's average import of Caribbean merchandise showed continued growth over the previous sub-period. In this sub -period, Trinidad and Tobago, Cuba, Dominican Republic, Surname and Guyana were some of the biggest winners in the Canadian market. Imports by Canada from the abovementioned countries more than doubled. A possible reason for this performance is that textile exports to Canada was not in Canada Caribbean trade relation (Trade Board Limited 2015).

Table 1. NAFTS's Average Import from Caribbean Countries (Millions of Dollars)

Table 1 NAFTA Members Average Import From Caribbean Countries in Millions of US$ Between 1984 - 2014

Countries	Canada			Mexico			United States		
	1984-1993	1994-2003	2004-2014	1984-1993	1994-2003	2004-2014	1984-1993	1994-2003	2004-2014
Antigua and Barbuda	0.18	2.31	1.12	0.00	0.00	0.00	5.17	4.96	7.11
Bahamas	41.44	18.82	61.59	6.88	18.76	66.75	568.50	268.67	657.74
Barbados	10.66	8.75	10.29	0.09	0.00	0.00	86.37	43.29	43.67
Belize	6.48	7.50	7.01	4.67	2.43	10.25	51.04	81.20	135.25
Cuba	96.90	257.42	662.36	17.15	2.50	24.39	0.00	0.14	0.08
Dominica	0.82	1.67	0.43	0.21	0.05	0.00	4.25	8.60	2.51
Dominica Republic	29.94	72.82	391.23	1.32	11.88	135.80	1677.7	4135.4	4301.2
Granada	0.28	0.78	1.28	0.01	0.00	0.00	4.89	12.55	7.58
Guyana	33.82	152.77	293.95	1.30	0.49	0.00	78.60	139.88	287.81
Haiti	8.63	5.69	26.32	1.09	0.68	13.97	331.62	232.21	615.51
Jamaica	136.70	182.45	272.46	1.00	6.53	4.65	513.13	699.13	515.98
St. Kitts and Nevis	0.08	3.65	7.91	0.00	0.00	0.00	12.70	35.79	57.90
St. Lucia	1.05	0.69	0.47	0.00	0.00	0.00	16.48	26.21	23.00
St. Vincent and the Grenadines	0.26	0.21	0.22	0.00	0.00	0.00	5.40	9.05	3.26
Suriname	0.78	26.85	307.70	0.01	0.36	0.00	66.50	116.60	233.24
Trinidad and Tobago	30.04	65.70	335.61	8.53	121.59	4147.9	979.85	1938.2	7711.9

Source: Author's calculations based on International Monetary Fund Direction of Trade Statistics

In the third sup-period big losers in the Canadian market would have been Dominica, St. Lucia and Antigua and Barbuda. Canada's average imports from these countries fell sharply over the previous sub period. In general, Caribbean exports to Canada showed remarkable signs of growth over the entire period of review. The decline in Canada share recovered during the second decade following NAFTA's implementation. This contrasts to the overall import market share trend NAFTA shown in figure 4.

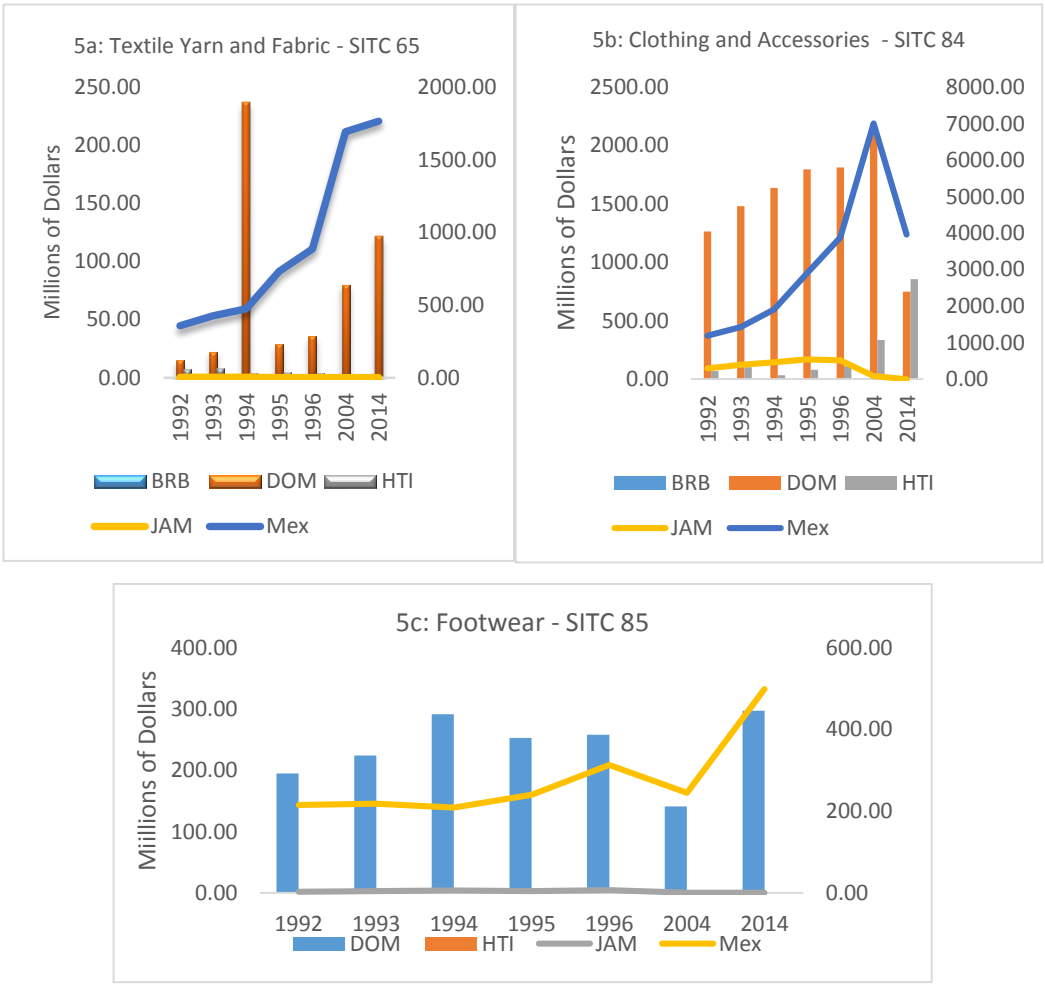
With regards to the USA's imports from the Caribbean countries, elven of the sixteen Caribbean countries experienced growth in exports to the USA over the pre NAFTA decade. However, it can be observed from Table 1 that growth in imports from the Caribbean by the USA was not as robust or impressive as those from its NAFTA counterpart – Canada. The Bahamas, Barbados and Haiti were the biggest losers from the Caribbean. Dominican Republic relations with the USA has other factors such as being part of a free trade agreement with the

USA and Central America (Pinder 2009, Hornbeck 2012). This may account for very high volume of imports by the USA from Dominican Republic. The average imports by the USA from Dominican Republic more than double the pre NAFTA volume. This happen when many economies in Caribbean were losing market share in USA imports for example Haiti, Barbados and Bahamas (**see Table 1 and figure 5a-5b**). The third sub-period for Dominican Republic was not as excellent as the second given its membership in the Central America Free Trade Agreement with the USA (CAFTA-USA). Trinidad and Tobago, The Bahamas and Suriname were among the best performers in the USA market from the Caribbean. Average imports by the USA from Jamaica receded almost to its pre NAFTA flow.

Spanning the three sub-period Mexico has shown no clear signs of greater integration with the Caribbean. Its imports from the Caribbean are lacklustre and receding. Language differences may play a significant role in the weak integration between Mexico and the Caribbean as well as lack of complementary merchandise to trade. Most of Caribbean trade with NAFTA seems to be inter industry trade, however, the production structure between Mexico and the Caribbean appears to be similar. Spanish speaking Cuba and Dominican Republic had relative sizable exports with Mexico along with Trinidad and Tobago and Belize. In addition to common language, distance between Mexico and the Spanish speaking countries render them relative close.

It has been difficult so far to draw the conclusion that NAFTA's implementation had a diversionary impact on the Caribbean as region. This is surprising given the concerns that were highlighted in earlier sections of this paper. Were all these concerns unfounded? Aggregated data would at this juncture leads to the affirmative. Given that the USA is the primary market in NAFTA and that it accounted for 53, 59 and 32 per cent of total Caribbean exports in 1994, 2004 and 2014 respectively (author's calculation based on IMF DOTS), then it is prudent to spotlight the USA relations with selected Caribbean countries at the SITC Rev3 65, 84 and 85 two digit level of aggregation, that is Textile, Yarn and Fabric –SITC 65, Clothing and Accessories –SITC 84 and Footwear –SITC 85.

The selected countries all have large population, therefore they were more attractive to USA's investments in textile and apparel. NAFTA's implementation immediately resulted in a sharp decline at the SITC 65 for Dominican Republic and Haiti (**see figure 5a**) while Mexico showed robust growth. Dominican Republic recovered some lost grounds but it was less that the pre-NAFTA years. Imports from the other selected countries never recovered in any of the decades and fell almost to zero in 2014.



Source: United Nations Commodity Trade Statistics Database

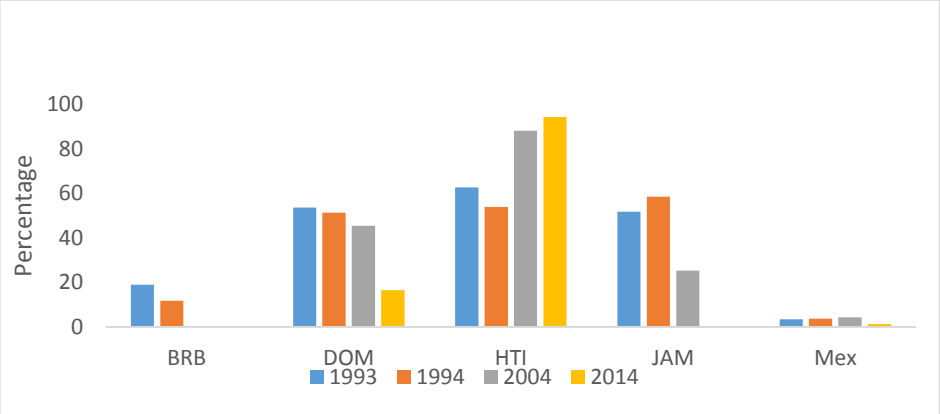
Note: All figure on the horizontal axes are expressed in millions of US dollars

Figure 5. USA Imports from Selected Caribbean Countries at SITC Two Digit

At the SITC 84 level, figure 5b showed that there was a co-movement of imports into the USA between Mexico and Dominican Republic. This can be deemed as trade creating for Dominican Republic in the garment industry. Jamaica suffered a lagged impact and in 1996 its exports suffered diversionary effects. Haiti suffered immediate diversion of its exports to the USA market in garment. However, recovery started a year later after NAFTA. The recovery extended throughout both post NAFTA's decades and in 2014 USA imports from Haiti at SITC 84 reached new high despite of decline from both Mexico and Dominican Republic. Jamaica and Barbados showed constant displacements which were sharper in the second post NAFTA's decade.

Figure 5c showed the same co-movement between Mexico and Dominican Republic in the Footwear category, the remaining Caribbean countries are not active participants. The findings at least suggest that Dominican Republic maybe having a displacement effect on the

rest of the Caribbean exports to the USA market. However this proposition has not been tested (further research is needed in this area). Haiti's garment industry seems to have a displacement effect on exports to the USA from the rest of the Caribbean.



Source: United Nations Commodity Trade Statistics Database

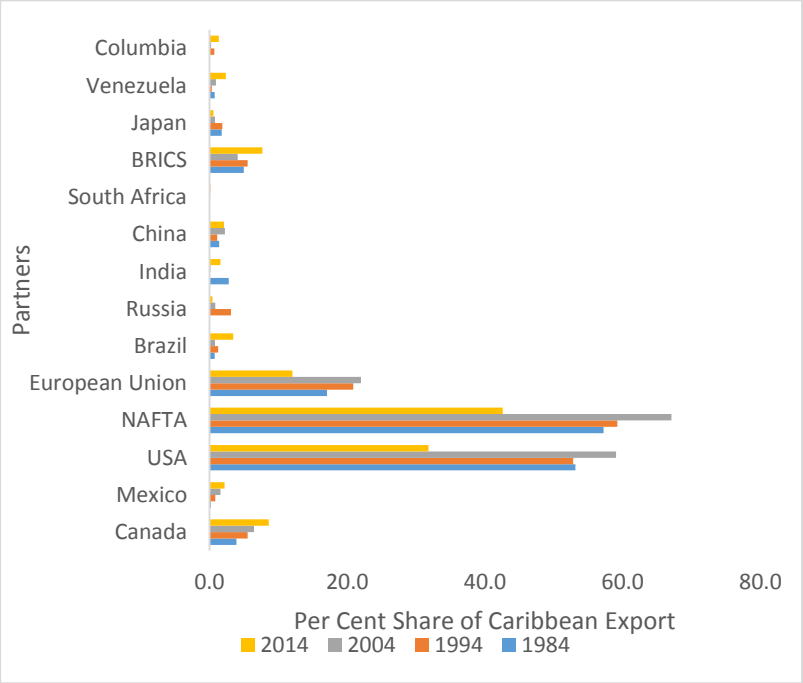
Figure 6. Composition of SITC 84 as a Per Cent of Selected Countries by Import USA

In the post NAFTA years, garment industry which was a mainstay of the populous countries of the Caribbean has been playing a diminishing role in their overall exports to the USA. The data points to two underlying reasons. The first is diversionary effect that Mexico had on Caribbean garment industry during the first decade post NATA. Secondly, many Caribbean countries returned to resource based exports to the USA markets in order to compensate for displacement in the garment sector. The exception is Haiti (**see figure 6**) where garment represented 94 per cent of total import by the USA from it in 2014. Jamaica, Barbados and the Dominican Republic showed reduction in the composition of garment in total partner imports by the USA (**see figure 6**). If cannot be implied that the declining share of garment in USA imports from the selected countries meant that they were more diversified at the second decade. In fact, garment export to the USA shrank to almost zero. Finally, increasing evidence is indicating that Dominican Republic membership in CAFTA-USA maybe having a diversionary effect on the rest of the Caribbean countries.

Market Share Approach Emerging Pattern of Caribbean Trade

The Caribbean region has shown resilience in its ability to transform its geographical orientation of both imports and exports during the period under review. Therefore tradition export and import relationships are being diversified. Notwithstanding the importance of traditional export and import destinations, these markets are playing diminishing importance in the Caribbean's market orientation landscape in the post NAFTA and WTO era (**see figures 7 and 8**). There are several primary factors that are instigating the realignment of the Caribbean's merchandise trade geographical orientation. Chief among them are reduction in trade costs, proliferation of PTAs or bilateral trade agreements and equally important are the

increases in product sophistication along with the transitioning of Emerging Markets in to high technology products (HTP). NAFTA's implementation did not only reduced the trade costs for its members but also affected the relative trade costs of all countries especially those of the Caribbean. This point is amplified by the introduction of Multilateral Resistance Terms (MRT) in gravity models (see Anderson and Wincoop 2003, Anderson 2004).



Source: Author's calculations based on IMF Direction of Trade Statistics

Figure 7. Geographical Orientation of Caribbean Merchandise Exports

Since the formation of NAFTA in 1994 to 2004, exports by the Caribbean to NAFTA has moved from US$6.5 billion to US$14.5 billion respectively and to US$18 billion at the end of 2014. The doubling of exports to the NAFTA market in the immediate decade preceding NAFTA provides early evidence that there might not have been trade diversion of Caribbean products at the aggregated level. The expansion of Caribbean exports masks several important facts concerning the impact of NAFTA on Caribbean economies. Since the Textile and Apparel sector was hit hard by Mexico preferential access to the USA market, then it must be that other areas such as resource base products expanded to compensate for displacement in the Textile and Apparel sector.

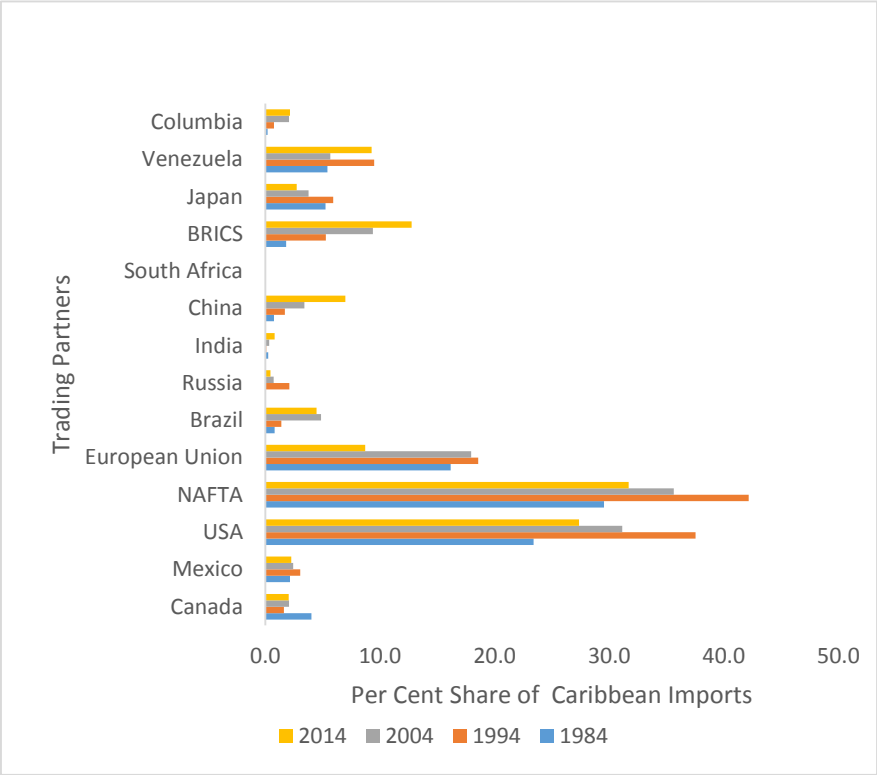
Evidence provided in Figure 6 shows that the Caribbean began a process of redefining or realignment in its export partners following the NAFTA and the WTO implementation. North America's share per cent in total Caribbean exports rose from 1984 to 1994 and carried over into 2004, a decade after NAFTA. The Caribbean was heavily exported oriented towards NAFTA market, however, in the second decade after NAFTA, export re-alignment became strikingly evident and with significant decline in NAFTA's share per cent in total Caribbean

exports. This is was not surprising as has been argued by Feenstra (1998) that the USA which is the major export market among NAFTA has been moving away from resource based imports to more technologically advanced intermediate products. Under the CARIBCAN PTA, Canada has continued to show growth in export share of Caribbean merchandise total export in all periods. Canada is one of few major trading partners for which the Caribbean runs a merchandise trade surplus (the other being Russian Federation). The merchandise trade surplus spanned 1990 – 2014 while average growth in merchandise exports during the second decade stood at twelve per cent. It can be seen from Figure 6 and Table 1 that Mexico as an export destination has not been integrated with the Caribbean countries in the study. The bulk of Mexico's trade has been with the Spanish speaking Cuba and Dominican Republic and with Trinidad and Tobago.

NAFTA's decline in export share of the Caribbean was followed by a simultaneous decline in the share of exports to the European Union. While there may be some fluctuations in the yearly trend, the overall trend is that the EU share as a percentage of total Caribbean exports, moved from approximately twenty two per cent to twelve per cent in 2004 and 2014 respectively.

The BRICS countries became increasingly important as an alternative destination for Caribbean exports. This started in the post NAFTA and WTO years but was most pronounce in the second decade after NAFTA's implementation. BRICS as an export destination has been led in first place by China followed by Brazil and India respectively. Post the economic crisis of 2007, China has been ceding market share in Caribbean exports to Brazil. The BRICS as export destination underperformed arising from export to China falling for three consecutive years at an average of (18.5) per cent.

The import orientation of the Caribbean has undergone more rapid changes since the implementation of NAFTA and the WTO (**see figure 7**). The North American countries prior to NAFTA accounted for thirty per cent of Caribbean imports in 1984 and in 1994 NAFTA's share rose to forty two per cent of all imports. However, the decade that followed, saw NAFTA losing market penetration down to thirty one per cent in 2014. The lost in market share was across NAFTA members with the USA showing the big lost in the penetration of Caribbean market. The immediate gain by NAFTA in the Caribbean market in the first decade could be attributed to the liberalization that the Caribbean undertook in order to fulfil WTO commitments. Traditional markets such as EU and NAFTA were already familiar with the Caribbean supply network and vice versa. Information and search costs world be less for these traditional trading partners in the first instance. This is a likely explanation for the growth in import merchandise market share for both EU and NAFTA during the first decade 1994-2004. NAFTA would have created production sharing synergies especially between Mexico and the USA market. This resulted in Mexico more than doubling its exports to both Canada and USA markets within six years of NAFTA's implementation (author's calculation based on IMF DOTS). It is not far fetch that such rapid growth in NAFTA's intra bloc trade and outsourcing to Mexico would have improve the competitiveness and attraction of members exports to destinations such as the Caribbean.



Source: Author's calculations based on IMF Direction of Trade Statistics

Figure 8. Import from Trading Partners as a Percentage of Total Merchandise Import 1984 - 2014

The second decade post NAFTA saw China joining the WTO in 2001 with an export led growth focus and with a sea of surplus labour. This undoubtedly impacted on the Caribbean dependence on NAFTA and the EU for its manufactured imports. Losses in the traditional import destination market share in Caribbean imports were pick up both by Brazil and China with the latter being the leader (**see figure 7**). This was especially the case between 2004 – 2014 the second decade after NAFTA. The other members of the BRICS countries had marginal impact on the Caribbean in all of the three sub-period.

Venezuela trades with the CARICOM primarily under the Petro Caribe agreement therefore, oil imports forms the basis of this relation (Trade Board Limited 2015). Imports share from Japan as a per cent total Caribbean imports showed a consistent decline. Used cars imports would be the major product imported by the Caribbean from Japan.

CONCLUSION

The implementation of NAFTA had mixed results on the Caribbean countries. In the first decade post NAFTA there was evidence of decline market share of Caribbean products in the

imports of the USA. This suggests that the Caribbean countries were becoming less important to the USA as a market for it imports. On average many Caribbean countries did not suffer in the immediate aftermath of NAFTA. There was evidence of trade creation in general, however, Haiti, Barbados and Bahamas suffered trade displacement in the first decade. Examination of imports into the USA market at SITC 65 84 and 85 level of aggregation revealed trade diversionary effect for Barbados and Jamaica which stretched across the two sub-period post NAFTA.

The CBTPA did little to help some of those garment dependent countries. It seems to benefit Haiti and the Dominican Republic more than it did other countries. The co-movement in imports from Dominican Republic and Mexico needs to be assessed to determine the impact of the special arrangement between Dominican Republic and the USA has on the rest of the Caribbean countries.

The Caribbean has begun a process of recalibrating or realignment of its trade relations away from it traditional trading partners that is USA and EU towards Brazil, China and other Asian countries. This realignment is more intensive in imports in the second decade post NAFTA. This type of analysis is required in services to determine and emerging trends and to chart a comprehensive policy response from the Caribbean to better grasp emerging opportunities outside tourism and outside the sphere of traditional partners.

Many opportunities exist in the Chinese and Russian markets for the Caribbean to develop or tap in to existing supply networks of fresh fruits and process fruits. In these two markets many fruits which the Caribbean produced are supplied in supermarkets from Chile and Ecuador.

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