



**CARIBBEAN CENTRE  
FOR MONEY & FINANCE**

# **CARIBBEAN ECONOMIC PERFORMANCE REPORT**

## **December 2010**

**CARIBBEAN CENTRE FOR MONEY AND FINANCE**

*Established under the joint auspices of the  
Central Banks of the Caribbean Community and  
The University of the West Indies*

**CARIBBEAN CENTRE FOR MONEY AND FINANCE**

The University of the West Indies  
St. Augustine, Trinidad and Tobago

**Phone:** (868) 645-1174, **Fax:** (868) 645-6017

**E-Mail:** [ccmf@sta.uwi.edu](mailto:ccmf@sta.uwi.edu)

**Website:** [www.ccmfuwi.org](http://www.ccmfuwi.org)

## TABLE OF CONTENTS

<b>1.0 EXECUTIVE SUMMARY.....</b>	<b>1</b>
<b>2.0 GLOBAL ECONOMIC DEVELOPMENTS .....</b>	<b>2</b>
<b>3.0 REGIONAL ECONOMIC PERFORMANCE .....</b>	<b>9</b>
3.1 <i>ECONOMIC GROWTH</i> .....	9
3.2 <i>INFLATION</i> .....	14
3.3 <i>LABOUR MARKET</i> .....	17
3.4 <i>FISCAL ACCOUNTS</i> .....	18
3.4.1 Current Fiscal Account .....	18
3.4.2 Overall Fiscal Balance .....	20
3.5 <i>BANKING AND FINANCE</i> .....	21
3.5.1 Domestic Credit .....	22
3.5.2 Debt.....	26
3.6. <i>EXTERNAL CURRENT ACCOUNT</i> .....	27
3.6.1 Sectoral Performances .....	30
3.6.2 Net Capital Flows .....	33
3.6.3 External Reserves.....	35
<b>4.0 ECONOMIC PROSPECTS.....</b>	<b>36</b>
<b>A Methodological Note:.....</b>	<b>38</b>

## 1.0 EXECUTIVE SUMMARY

The global economy registered growth of 5.5 per cent in Q1 of 2010. In the second quarter however, the fiscal crisis in many European economies and sluggish domestic demand gave rise to uncertainties about the performance going forward. Over 2010 world output is forecast to grow by 4.8 per cent coming from a decline of -0.6 per cent in 2009.

This recovery is remarkably uneven globally. The Advanced Industrial Countries (AICs) are projected to grow at the relatively slow rate of 2.7 per cent in contrast to China (around 10 per cent); India (about 9 per cent), Brazil and Mexico (around 6 and 4.5 per cent, respectively). The Emerging and Developing Economies as a whole are projected to have growth rates of around 7.1 per cent for 2010. These rates are all considerably above the 2010 growth rates projected for the AICs.

In addition, the AICs' growth has been driven by inventory accumulation and fiscal expansion, both of which cannot

be sustained. Inventory accumulation has a limited ability to generate growth and fiscal consolidation has become a pressing issue in some AICs where unprecedented government intervention has sharply increased public debt. This has curtailed the appetite of fiscal stimuli. Debt to GDP ratio in the AICs averaged 96 per cent in 2010 and is forecast to rise to 100 per cent in 2011. Emerging Economies have ratios of 37 per cent in 2010 and these remain the same for 2011. Unemployment in the AICs is expected to remain high (5.8 per cent in 2008 rising to 8.3 per cent in 2010) with consumer expenditure restraining growth in the medium term. This is in sharp contrast to some of the high-growth newly-industrialised Asian economies that are forecast to account for 50 per cent of global growth. The AICs with whom the Caribbean is closely tied therefore show relatively slow growth prospects.

For the region as a whole, the progress in 2010 out of what was expected to be the bottom of the recession in 2009 has been slow. In the first half of 2010 most countries in the Caribbean region reported negative or low growth rates. Belize (3.5 per cent), Guyana, Netherlands Antilles (0.8 per cent) and Trinidad and Tobago (1.9 per cent) were exceptions that showed first quarter growth but in the case of Trinidad and Tobago this was followed by a decline (-0.9 per cent) in Q2. Regional growth rates for the other countries ranged from a decline of -2.84 per cent (ECCU) to 0.4 per cent in Q2 (Barbados). As a consequence, unemployment in the region remains high. In Barbados the unemployment rate was 10.6 per cent in the first quarter of 2010, an increase of five percentage points compared to the rate in the same period in 2009. Jamaica and Trinidad and Tobago also reported first quarter unemployment increases.

Food prices, both domestic and imported, and fuel were sources of inflationary pressure in the Caribbean. Since the last quarter of 2009 inflation

rates have steadily increased in most countries with rates ranging from 1.78 per cent (Aruba) to around 13 per cent for Jamaica and Trinidad and Tobago. Food price inflation played a major role in the acceleration of inflation in both Jamaica and Trinidad and Tobago, notably domestic food prices in the latter case, with a September year-on-year food inflation rate of 29.2 per cent. Inflation in Jamaica was also influenced by increased taxes on fuel and public transport fares. Fuel price increases were also a factor in generating inflation in most other Caribbean economies.

On the fiscal side, the first half of 2010 indicated an improvement on the current fiscal account for most Caribbean countries when compared to the current fiscal outturn for the first half of 2009. For the first half of 2010, revenue increases (T&T 31 per cent; Belize 13 per cent; Barbados 4 per cent) were associated with smaller increases in expenditures resulting in a current fiscal improvement.

Regionally, for the period January to June 2010, most Caribbean countries

registered improvements on their overall fiscal accounts relative to the performance in the comparable period of 2009. Some countries moved from an overall deficit position to an overall surplus position, while other countries narrowed their overall deficit or increased the overall surplus position. The overall fiscal position for Trinidad and Tobago and Guyana was due in part to strong revenue performance. The ECCU and Barbados both benefitted from expenditure containment measures and slower capital implementation. Jamaica's overall fiscal outturn was mainly due to lower total expenditure and higher than anticipated revenue and grants.

The CARICOM territories varied in terms of debt accumulation in the first half of 2010. New debt was incurred by Guyana, Haiti and Trinidad and Tobago, causing the debt stock to expand by 3.5 per cent, 22.7 per cent and 2.5 per cent, respectively. However the debt stock contracted in The Bahamas (0.5 per cent), Belize (0.2 per cent) and ECCU (14.7 per cent) owing to debt

servicing. Suriname increased its debt in the second quarter of 2010 by 18.8 per cent.

Along with the slow growth out of recession, growth in domestic credit slowed in most countries relative to the performance in the first half of 2009 – with low single digits rates of growth. Most countries exhibited high levels of liquidity with a strong demand for short term government securities and this was associated with a lowering of short term average deposit rates and a marginal decline in average loan rates. Regionally, interest rate spreads widened in all countries except Trinidad and Tobago and Aruba. On a year-on-year basis ending June 2010, all reporting countries except Barbados posted increases in total deposits in the banking system. Total deposits in the banking system in Trinidad and Tobago increased by 22.7 per cent and in the ECCU total deposits in the banking system grew by 5.2 per cent.

There were mixed performances in the external current account balances of the Caribbean territories with most

countries recording better performances in the first quarter of 2010 than in the second quarter, with the exception of Aruba having recorded growth in tourism receipts for the first half of 2010. This seemed to underscore the uncertainty of output recovery for the region and follows the uncertain second quarter fortunes of the AICs in general.

Tourism performances showed signs of rebounding for most of the territories in 2010, in contrast to the steady decline over 2009. In many cases this was due to the intensification of marketing efforts and promotional programme. Barbados, Belize and The Bahamas recorded increases in revenue receipts over the first two quarters compared to the corresponding period last year. Aruba and Trinidad and Tobago recorded quarterly revenue declines.

The growth prospects for the region for the second half of the year are not bright, tied as they are to those of the AICs and long-term structural economic conditions. Developments in commodity markets are critical since many countries in the region are

significant commodity producers and the vast majority are net importers of energy supplies. Given the weaker growth being experienced in advanced economies driven by high unemployment and weak consumer demand, growth in many Caribbean jurisdictions in the near term would increase as the global recovery gathers pace but growth will tend to be on the low side. Additionally, oil prices have risen and although they are not close to the highs recorded in the pre-crisis period, they are still relatively high and are expected to remain in the band US\$70-80 per barrel which implies further pressure on the external accounts for many countries. Trinidad and Tobago has benefitted from the upward trend in oil prices and this, along with fiscal stimuli, has propelled the economy, but economic resilience requires that non-energy output growth increases, and there is little evidence of this. Based on IMF estimates, the average growth for the region is expected to improve to -0.2 per cent in 2010 relative to the -2.5 per cent recorded in 2009, with no country

except Suriname expecting to record growth in excess of 3 per cent. All countries except Haiti are expected to post improvements in growth relative to

2009; nevertheless, overall the region's output is expected to fall over 2010.



## 2.0 GLOBAL ECONOMIC DEVELOPMENTS

The global economy registered growth of 5.5 per cent in the first quarter of 2010 driven by a surge in inventory and fixed investments. In the second quarter, however, the fiscal crisis in many European economies, the related turmoil in sovereign debt markets in Europe and the correlation of these events to volatility in international stock markets reminded most policymakers that the legacy from the recent international financial and economic crisis in 2008 and the policy measures deployed to manage that crisis have resulted in a recovery in global growth, but one that is so far unbalanced, plagued by continuing uncertainties and downside risks and therefore vulnerable to reversals. The financial situation in Europe has since improved through forceful intervention by policymakers but this event highlighted the vulnerability of banks' balance sheets to sovereign risks and added to worries about the sustainability of the recovery. Global activity is forecast to expand by 4.8 per cent in 2010 and 4.2 per cent in 2012 with developing countries leading with growth forecast at 7.1 per cent and 6.4 per cent in these years. In contrast, advanced economies are expected to expand more slowly by 2.7 per cent and 2.2 per cent in 2010 and 2011 respectively (see Table 1). These projections are broadly in line with earlier growth forecast but are subject to many downside risks as markets and institutions are still vulnerable and volatility in financial and commodity markets remains relatively high.

**Table 1: GLOBAL ECONOMIC GROWTH**

	World	Advanced Economies	Canada	USA	Euro Area	Japan	UK	Emerging and Developing Economies	Brazil	Mexico	China	India
2008	2.8	0.2	0.5	0.0	0.5	-1.2	-0.1	6.0	5.1	1.5	9.6	6.4
2009	-0.6	-3.2	-2.5	-2.6	-4.1	-5.2	-4.9	2.5	-0.2	-6.5	9.1	5.7
2010	4.8	2.7	3.1	2.6	1.7	2.8	1.7	7.1	7.5	5.0	10.5	9.7
2011	4.2	2.2	2.7	2.3	1.5	1.5	2.0	6.4	4.1	3.9	9.6	8.4

Source: World Economic Outlook: October 2010, IMF.

The recovery in global growth has been driven in large part by inventory accumulation and fiscal stimulus. However, the inventory accumulation cycle is coming to an end and the need

for fiscal consolidation has led to the phasing out of such stimulus packages in some advanced and emerging economies. Fiscal consolidation is more pressing in advanced economies where unprecedented government intervention has ratcheted up public debt considerably (see Table 2).

**Table 2: GROSS DEBT TO GDP RATIO IN ADVANCED AND EMERGING ECONOMIES**

	Advanced Economies	USA	Japan	Euro Area	Canada	UK	Emerging Economies	LAC	China	India
2008	78.3	71.1	194.7	69.5	69.7	52.1	34.8	46.8	16.8	72.5
2009	89.9	84.3	217.6	79.0	81.6	68.5	37.7	50.1	18.6	74.2
2010	95.9	92.7	225.8	84.1	81.7	76.7	36.9	48.8	19.1	71.6
2011	100.2	99.3	234.1	87.0	80.5	81.9	36.7	48.5	18.9	71.4

Source: World Economic Outlook Dataset October 2010, IMF.

For the recovery to become widespread, robust and sustainable, private demand must be strong enough to fill the gap left as fiscal stimulus returns to normal levels. A fundamental problem in this regard is that private demand in developed markets remains weak with high unemployment constraining consumer confidence and demand. Very importantly, unemployment is expected to remain high and consumer expenditure weak in most advanced economies restraining global growth in the medium term. This is in sharp contrast to some of the high growth newly-industrialised Asian economies (see Tables 3 and 4). Additionally, weak business investment and low net exports have constrained growth in those economies. In contrast, consumption, investments and net exports have improved in emerging markets and this group of countries is expected to contribute close to 50 per cent of global growth between 2010 and 2012.

**Table 3: UNEMPLOYMENT RATES IN ADVANCED ECONOMIES**

Year	Advanced Economies	USA	Japan	Euro Area	Canada	UK	Germany	NICs
2008	5.8	5.8	4.0	7.6	6.2	5.6	7.3	3.4
2009	8.0	9.3	5.1	9.4	8.3	7.5	7.5	4.3
2010	8.3	9.7	5.1	10.1	8.0	7.9	7.1	3.8
2011	8.2	9.6	5.0	10.0	7.5	7.4	7.1	3.7

Source: World Economic Outlook Dataset October 2010, IMF.

**Table 4: CONSUMER EXPENDITURE GROWTH IN ADVANCED ECONOMIES**

Year	Advanced Economies	USA	Japan	Euro Area	Canada	UK	Germany	NICs
2008	0.2	-0.3	-0.7	0.4	2.9	0.4	0.7	1.0
2009	-1.0	-1.2	-1.0	-1.1	0.4	-3.3	-0.2	0.5
2010	1.6	1.5	1.6	0.6	3.4	0.9	0.0	4.3
2011	1.7	2.0	0.6	0.9	3.0	1.5	0.9	4.1

Source: World Economic Outlook Dataset October 2010, IMF.

In this environment inflationary pressure would tend to be low given the continued excess capacity and high unemployment in advanced economies. Inflation rates are expected to rise moderately in 2010 driven by the recent rally in commodity prices (with reversals in May 2010 due to European fiscal stresses) but rates are generally expected to remain below historical averages in the near term. In the case of emerging economies generally, inflation rates are expected to increase as well in 2010 because of increased commodity prices, but exchange rate related inflation pressures may push up rates much higher in some jurisdictions (see Table 5).

**Table 5: GLOBAL INFLATION RATES**

	Advanced Economies	USA	Japan	Euro Area	Canada	UK	Emerging Economies	LAC	China	India
2008	3.4	3.8	1.4	3.3	2.4	3.6	9.2	7.9	5.9	8.3
2009	0.1	-0.3	-1.4	0.3	0.3	2.1	5.2	6.0	-0.7	10.9
2010	1.4	1.4	-1.0	1.6	1.8	3.1	6.2	6.1	3.5	13.2
2011	1.3	1.0	-0.3	1.5	2.0	2.5	5.2	5.8	2.7	6.7

Source: World Economic Outlook Dataset October 2010, IMF.

The October 2010 edition of the IMF's Global Financial Stability Report characterises the international financial system as the Achilles heel of the economic recovery. This is based on the fact that although conditions in financial markets have improved drastically since the worst period in 2008, significant uncertainties still persist. In particular, in advanced economies, although progress has been made in terms of improved capital adequacy ratios and in recognising losses (approximately 75 per cent have already been reported), significant

challenges in funding markets still remain since banks will have to roll over their debt in the next 24 months and work still needs to be done in terms of restructuring or resolving weaker financial institutions. In this environment the recovery in capital flows to emerging economies is likely to face challenges in terms of increased funding costs for developing countries which would be accentuated by developed market banks' need to rebuild their balance sheets and increased risk aversion on the part of international investors. Emerging economies are also likely to face competition from advanced economies because their high debt levels imply increased competition for financing. The possibility of the tightening of monetary policy on the part of some advanced economies is also likely to increase emerging market bond spreads. In this scenario capital flows to emerging markets are expected to recover to US\$771 billion in 2012 but still stay significantly below the pre-crisis level of US\$1.2 trillion recorded in 2007 (see Table 6).

**Table 6: NET INTERNATIONAL CAPITAL FLOWS  
TO DEVELOPING COUNTRIES (US\$B)**

Year	2005	2006	2007	2008	2009	2010	2011	2012
<b>Net Portfolio Inflows</b>	68.8	105.8	135.4	-57.1	87.5	59.5	63.2	77.8
<b>Net FDI Inflows</b>	281.1	363.2	528.4	593.6	358.3	438.0	501.0	575.0
<b>Net Equity Inflows</b>	349.9	469.0	663.8	536.5	445.9	497.5	564.2	652.8
<b>Net Private Inflows</b>	573.3	732.1	1223.7	752.4	454.0	589.5	670.2	770.8

Source: World Economic Prospects, Volume 1, Summer 2010, World Bank.

International trade has also rebounded on the heels of the economic recovery. Merchandise export volumes which had decreased dramatically in the first half of 2009 rebounded strongly in the third and fourth quarters of 2009. This trend moderated somewhat in the beginning of 2010 but trade volumes still increased by approximately 20 per cent in the first quarter of 2010. Trade is projected to grow by 11.4 per cent for 2010 and growth to moderate to 7.0 per cent in 2011 (see Table 7).

**Table 7: WORLD TRADE AND PRICES**

<b>Year</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>
World Trade Volume	2.9	-11.0	11.4	7.0
World Trade in US Dollars Price Deflators	11.2	-10.3	4.7	1.5
Volume of Exports in Advanced Developed Economies	1.9	-12.4	11.0	6.0
Volume of Exports in Emerging and Developing Economies	4.6	-7.8	11.9	9.1

Source: World Economic Outlook: October 2010, IMF.

Commodity markets have mirrored the trajectory in global growth. As such, commodity prices generally rose in the first quarter of 2010 due to increased demand especially from China (oil and metals) and some weather related events (agriculture). In the second quarter, commodity prices such as oil and metals that are closely correlated with the economic cycle fell off in early May. This occurred as European fiscal and debt problems generated volatility in international financial markets amid increased concerns about the sustainability of the recovery and the potential for a “double-dip” recession. Agriculture prices are not so closely tied to the economic cycle and were impacted less significantly during this period. Commodity prices since August have recovered these losses as strong action by policy makers allayed many of the concerns about potential defaults by some European sovereigns (see Tables 8 and 9). Going forward, the factors that will drive commodity prices include waning demand as the inventory cycle turns, demand from large emerging markets such as China and India, and commodity-specific bottlenecks and inventory buffers on the supply side. Oil prices are expected to increase about 25 per cent during 2010 staying mostly within the US\$70-80 a barrel price range which developed within the context of the forecast for global growth identified above. In contrast, natural gas prices in the US have remained relatively low by recent historical standards as weak demand in this market and the potential for huge supplies of natural gas from shale deposits put downward pressure on prices. Non-energy prices (except for agriculture) are expected to increase by 17 per cent. Prices for energy and non-energy commodities are expected to decline by 4.5 per cent and 4 per cent respectively as the recovery loses some steam and as output stabilises in 2011.

**Table 8: SELECTED COMMODITY PRICES**

Commodity	Annual Averages			Quarterly Average		Monthly
	J-D 2008	J-D 2009	J-S 2010	A-J 2009	A-J 2010	Sept 2010
Crude Oil	96.99	61.76	76.91	59.19	78.18	76.12
Natural Gas US	8.86	3.95	4.58	3.70	4.32	3.90
Aluminum	2573	1665	2116	1485	2096	2162
Rice Thai 5 per cent	650.2	555.0	481.7	552.4	452.4	448.0
Sugar (EU)	69.69	52.44	44.11	53.76	42.66	43.90
Bananas (EU)	1188	1145	992	1288	1029	974

Source: Commodity Price Pink Sheet, October 2010, World Bank

**Table 9: COMMODITY PRICE INDICES (2000=100)**

Commodity	Annual Averages			Quarterly Average		Monthly
	J-D 2008	J-D 2009	J-S 2010	A-J 2009	A-J 2010	Sept 2010
World (non-fuel)	272.0	213.2	257.8	207.8	255.3	285.2
Food	247.4	205.1	211.9	209.8	201.0	233.4
Beverages	210.0	219.9	249.7	207.3	247.4	256.6
Agricultural Raw Material	229.5	197.8	220.2	197.1	215.4	237.5
Metals	325.7	235.6	334.4	219.0	337.3	381.2
Energy	342.0	214.3	264.6	204.5	267.8	262.2

Source: Commodity Price Pink Sheet, October 2010, World Bank

The international tourism industry suffered badly in 2009 with international tourist arrivals falling by 4.2 per cent and tourism receipts falling by 5.7 per cent. This occurred as the global economy fell into recession with advanced economies, a major source market for tourist, being more severely affected. The tourism industry has historically been one of the most resilient sectors and based on recent preliminary data international tourist arrivals are estimated to have grown by approximately 7 per cent in the first half of 2010. Growth was recorded in all regions with arrivals in developing countries growing by 8 per cent compared to 5.7 per cent in advanced economies. In terms of regions, the Middle East, Asia and the Pacific, the Americas, Africa and Europe recorded growth in tourist arrivals of 20.4 per cent, 14.1 per cent,

7.3 per cent, 7.4 per cent and 2 per cent respectively in the first half of 2010. In the Americas growth was strongest in Central America (9.1 per cent) and weakest in the Caribbean (4.3 per cent) (see Table 10). The weak growth in Europe was due to the closure of European airspace in April due to the ash cloud from Iceland's Eyjafjallajokul volcano. The outlook for the tourism industry is for growth to exceed the historical average of about 4 per cent barring no major negative event. In any event, after a major reversal volume is likely to recover faster than income and tourists are likely to stay closer to home and travel for shorter periods. Price competition is therefore likely to intensify during the rest of the year with the prospect for more muted growth in tourism receipts.

**Table 10: International Tourist Arrivals**

Countries/Regions	Total (Millions)		per cent change over same period of Previous year					
	2008	2009	09/08	10/09	09Q1	09Q2	10Q1	10Q2
<b>Europe</b>	<b>487.2</b>	<b>459.7</b>	<b>-5.7</b>	<b>2.0</b>	<b>-13.0</b>	<b>-7.5</b>	<b>1.4</b>	<b>2.4</b>
Northern Europe	56.4	53.4	-5.5	-3.4	-11.6	-5.9	-5.1	-2.3
Western Europe	153.2	146.0	-4.7	4.6	-13.1	-6.3	3.1	5.6
Cent./East. Europe	100.0	89.5	-10.5	0.3	-14.5	-13.0	-0.1	0.6
South./Med. Europe	177.7	170.9	-3.8	2.5	-12.3	-5.9	3.4	2.0
<b>Asia and the Pacific</b>	<b>184.0</b>	<b>181.2</b>	<b>-1.6</b>	<b>14.1</b>	<b>-7.5</b>	<b>-6.2</b>	<b>13.0</b>	<b>15.3</b>
North-East Asia	101.0	98.1	-2.9	16.2	-7.6	-7.5	11.4	21.0
South-East Asia	61.7	62.1	0.6	12.4	-7.1	-5.3	16.1	8.5
Oceania	11.1	10.9	-1.8	5.4	-5.8	-3.2	6.5	4.0
South Asia	10.3	10.1	-1.5	14.5	-11.6	-0.2	17.0	11.5
<b>Americas</b>	<b>147.8</b>	<b>140.6</b>	<b>-4.9</b>	<b>7.3</b>	<b>-7.0</b>	<b>-7.3</b>	<b>6.6</b>	<b>8.0</b>
North America	97.7	92.1	-5.7	8.3	-7.6	-9.6	7.1	9.4
Caribbean	20.1	19.5	-2.8	4.3	-8.1	-2.4	5.6	2.9
Central America	8.2	7.6	-7.4	9.1	-8.4	-10.9	8.8	9.4
South America	21.8	21.4	-2.0	5.7	-3.8	2.0	5.6	5.8
<b>Africa</b>	<b>44.3</b>	<b>45.8</b>	<b>3.3</b>	<b>7.4</b>	<b>3.8</b>	<b>8.8</b>	<b>8.6</b>	<b>6.3</b>
North Africa	17.1	17.6	2.5	6.4	2.2	7.5	9.3	4.4
Sub-Saharan Africa	27.2	28.2	3.7	8.0	4.4	9.7	8.3	7.6
<b>Middle East</b>	<b>55.6</b>	<b>52.9</b>	<b>-4.9</b>	<b>20.4</b>	<b>-20.7</b>	<b>-10.9</b>	<b>24.2</b>	<b>17.0</b>
<b>Advanced Economies</b>	<b>494</b>	<b>470</b>	<b>-4.9</b>	<b>5.7</b>	<b>-11.8</b>	<b>-6.9</b>	<b>5.5</b>	<b>6.0</b>
<b>Emerging Economies</b>	<b>425</b>	<b>410</b>	<b>-3.4</b>	<b>8.0</b>	<b>-9.0</b>	<b>-6.8</b>	<b>8.6</b>	<b>7.5</b>
<b>World</b>	<b>919</b>	<b>880</b>	<b>-4.2</b>	<b>6.9</b>	<b>-10.3</b>	<b>-6.7</b>	<b>7.2</b>	<b>6.7</b>

Source: World Tourism Organisation, World Tourism Barometer, Interim Update, August 2010.

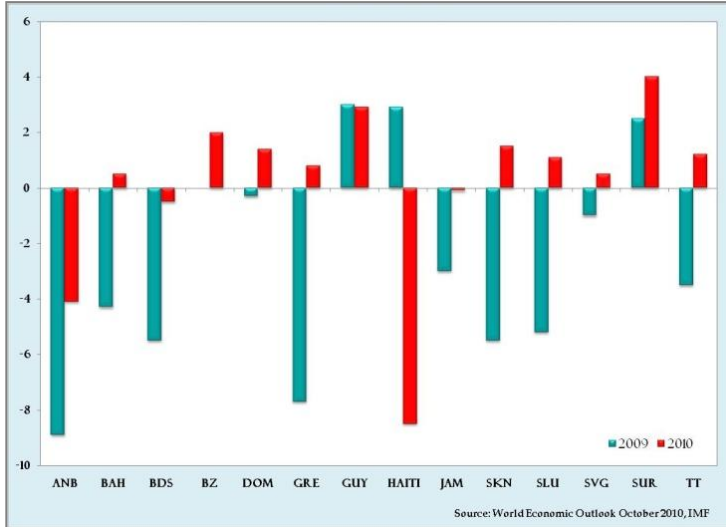
Note: Data for 2010 refer to the period January to June.



### 3.0 REGIONAL ECONOMIC PERFORMANCE

#### 3.1 ECONOMIC GROWTH

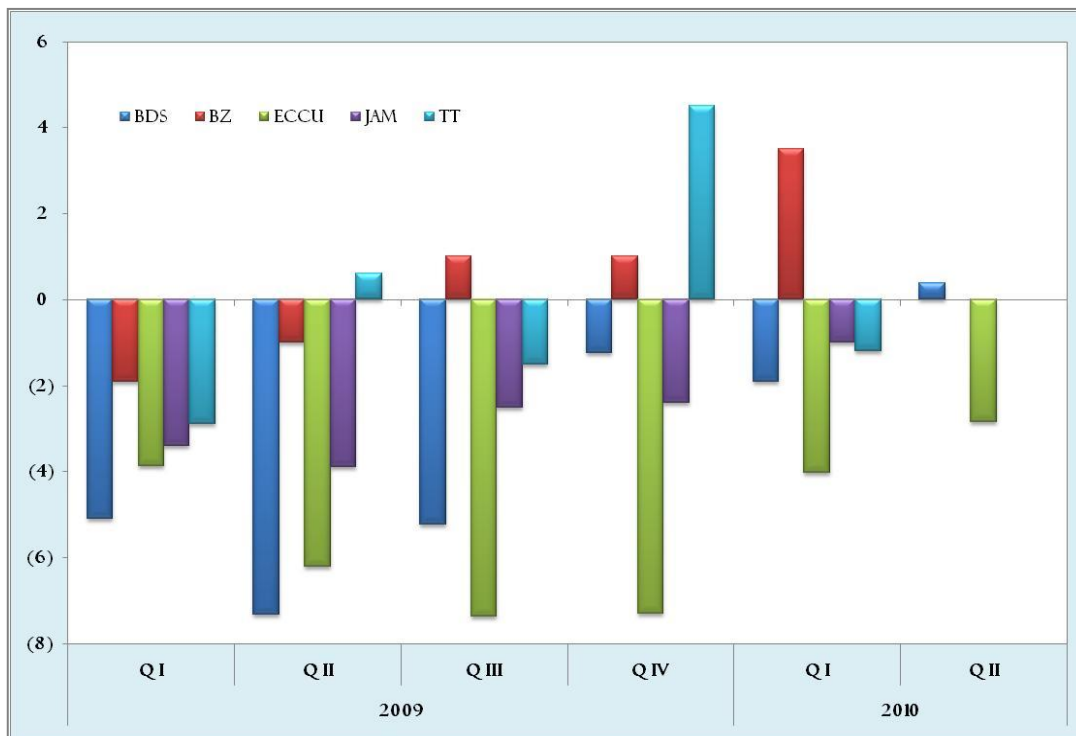
Figure 1: Projected Real GDP Growth Rates ( per cent)



Economic activity in the Caribbean continues to be sluggish in the first half of 2010, most countries reported negative or minimal growth. The growth rates for the region ranged from -2.84 per cent (ECCU) to 3.5 per cent (Belize). Data for Jan-June 2010 are not available for all the countries, but reports and projections for 2010 indicate that the growth prospects

for the region are hinged on the recovery of the world economy. Based on the IMF projections, the average growth rate for the region for 2010 is estimated to be 5.7 per cent.

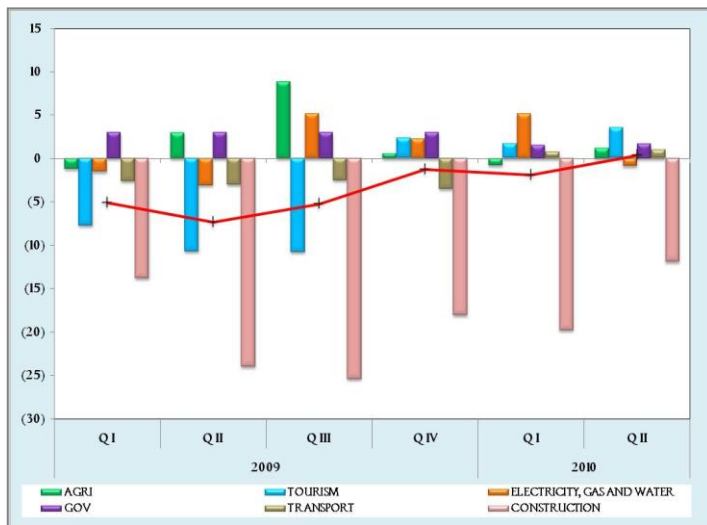
Figure 2: Real GDP Growth Rates of CARICOM Countries ( per cent)





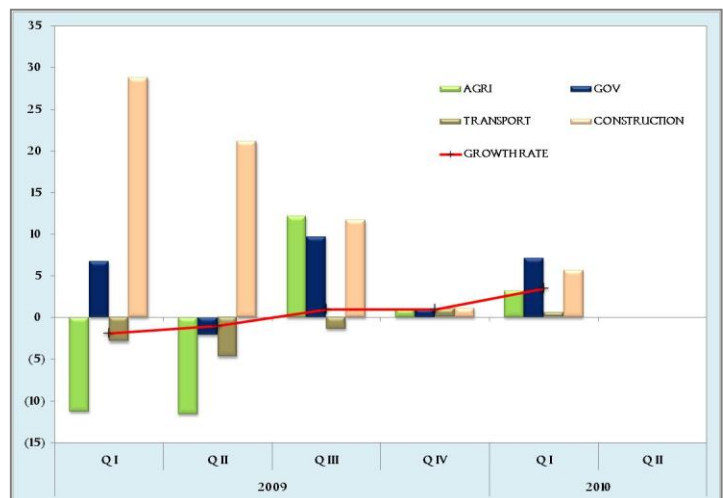
Aruba continues to experience a decline in its economic activity; the real turnover tax revenue (BBO) which is used as an indicator for its economic activity, recorded a contraction of 6.7 per cent for the first half of 2010. However, recovery in certain sectors has begun, tourism arrivals for the first quarter of 2010 grew by 6.2 per cent when compared to the corresponding quarter of 2009. Note that this increase is still below the level recorded in the first quarter of 2008. Similarly in The Bahamas, domestic economic activity also contracted for the first half of 2010, in spite of a modest increase in tourism activity, which was a result of a rebound in the high value-added air segment of the market.

**Figure 3: Real GDP Growth Rate (per cent) - Barbados** After six consecutive quarters of negative growth, Barbados recorded a minute positive growth rate of 0.4 per cent for the second quarter of 2010. While the Belizean economy grew by 3.5 per cent in the first quarter of 2010 after zero growth in 2009, its recovery was broad-based, with the exception of the fishing sector which contracted by 25 per cent due to a fall in



shrimp production. Its manufacturing sector registered the largest increase of 9.8 per cent due to a surge in oil production and the addition of the co-generator plant. Significant increases were also recorded for the first quarter of 2010 in construction (5.7 per cent), hotel and restaurant (9.3

**Figure 4: Real GDP Growth Rate (per cent) - Belize**

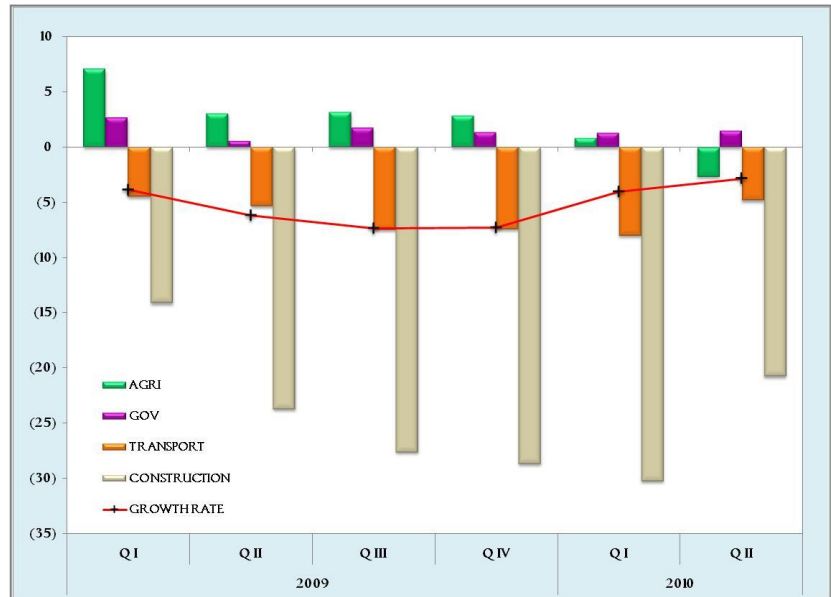


December 2010

per cent), distribution (two per cent ) and transport and communication (0.5 per cent).

Figure 5: Real GDP Growth Rate (per cent) - The ECCU

Economic activity declined in all the member countries of the ECCU with the exception of Dominica and Grenada, during the first quarter of 2010. It is reported that economic activity contracted at a faster pace in the first quarter of 2010 relative to the comparable period in 2009. There continues to be an accelerated rate of decline mainly in the construction,



wholesale and retail trade and transportation sectors due to the continued impact of the fall-off in private inflows, especially FDI on private construction and cut backs on capital spending by the governments as they face constraints in accessing finance. However there was increased activity in the agricultural, manufacturing and tourism sectors for the first quarter of 2010. Manufacturing activities increased as a result of an expansion in output of major commodities in key member states - in Grenada, production of soft drinks, beers, flour and paint increased, while in St. Lucia there was an expansion in the output of food, beverages and tobacco. These increases were partially offset by weak performances in the manufacturing sectors in St. Vincent and the Grenadines and St. Kitts and Nevis. Agricultural output was positive until the second quarter of 2010; this was due to declines in crop production as a result of drought conditions and the Black Sigatoka disease.

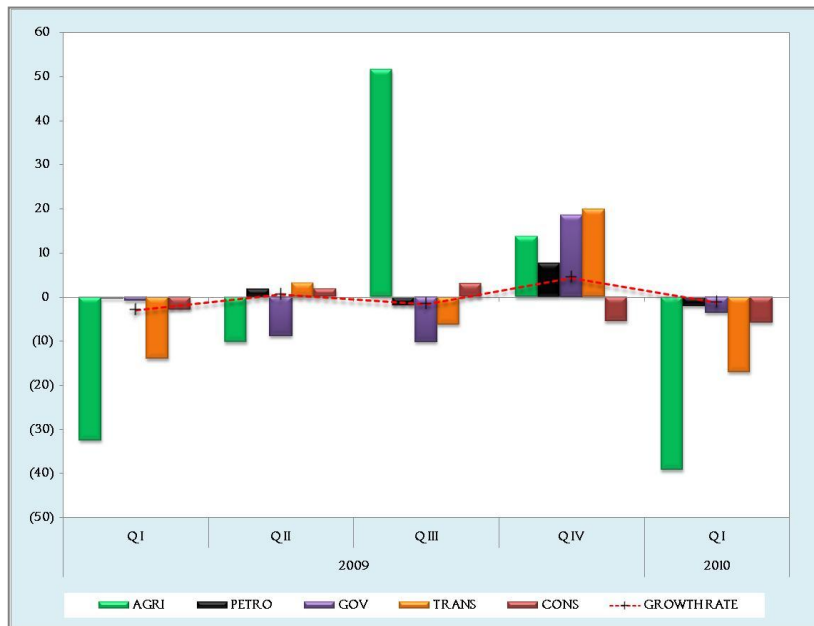
Guyana’s preliminary estimates indicate that most of the sectors recorded higher output during the first quarter of 2010 when compared to the same period in 2009. Agricultural output increased in sugar (by 39.4 per cent), rice (by 10.7 per cent) and forestry (by 8.6 per cent) despite severe dry weather conditions. However its manufacturing sectors are reported

have had mixed performance for this same period with increases in the production of alcoholic (35.7 per cent) and non-alcoholic (9.6 per cent) beverages and paints (41.9 per cent) , whereas there was a decrease in the production of liquid pharmaceuticals by 4.5 per cent. In the mining and quarrying sector, output declined with bauxite and diamond decreasing by 27.4 per cent and 49.7 per cent respectively, while gold output increased by 11.1 per cent due to favourable market prices.

The Jamaican economy's performance reflected declines in all sectors with the exception of agriculture, forestry and fishing and hotel and restaurants, for the first half of 2010. Its GDP is estimated to have declined by 1.5 per cent for the period Jan-June 2010, a notably slower pace than the decline of 3.6 per cent for the similar period in 2009. Agriculture, forestry and fishing is estimated to have grown by 1.9 per cent for the first half of 2010, relative to the growth of 10.6 per cent in the similar period of 2009; this low but positive growth rate was attributable to the severe drought conditions in the first quarter of 2010 which hampered crop establishments and yields. The hotel and restaurants sector is estimated to have expanded by 2.9 per cent for the period Jan-June 2010, relative to an increase of 1.9 per cent in the comparable period in 2009; this was a result of an increase in total stop-over visitor arrivals of 4.1 per cent, which was a result of the increased airlift to the island, major discounting by hotels as well as aggressive promotion by the government and industry players.

The Netherlands Antilles experienced an increase in real GDP of 0.8 per cent in the first quarter of 2010, which was attributable to a gain in both the private and public sectors. The growth in the private sector was caused largely by positive developments in utility, construction and financial services sectors. The tourism industry remained relatively subdued, resulting in a real value added of 0.7 per cent in the hotel and restaurants sector, while the manufacturing sector recorded no growth in the first quarter of 2010; the transport, storage and communications sector suffered a decline in this period because of the decrease in air transportation and harbour services.

Figure 6: Real GDP Growth Rate (per cent) - Trinidad and Tobago



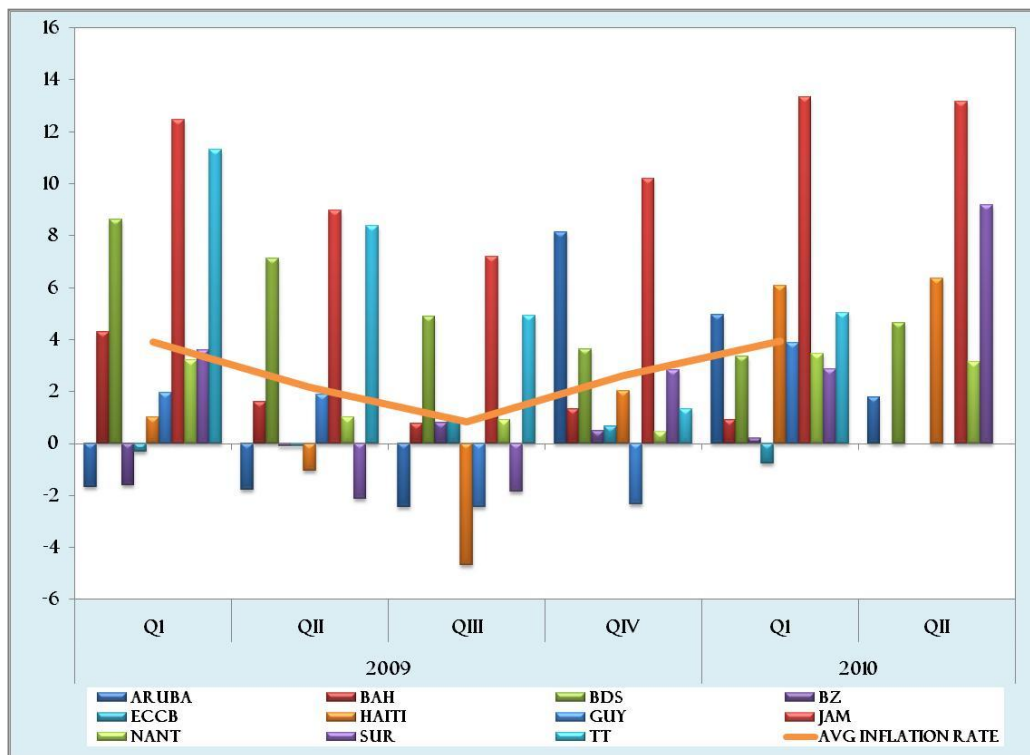
Trinidad and Tobago’s economy grew by 2.3 per cent in the first quarter of 2010; this was a direct result of the 5.5 per cent increase in output in the energy sector. The non-energy sectors’ performances were mixed during the same time period. The finance, insurance and real estate sector is estimated to have grown by 7.2 per cent; construction expanded by 5.1 per cent

; electricity and water is estimated to have grown by 8.5 per cent overall despite water production enduring a 12.8 per cent slump due to severe drought conditions. The transportation, storage and telecommunications sector shrank by 3.5 per cent, while the distribution sector recorded a small decline of 1.4 per cent due to weak retail sales and manufacturing output contracted by 1.7 per cent due to lower output in food, drink and tobacco sub sectors. Agricultural output fell by 5.7 per cent due to the drought.

### 3.2 INFLATION

The Caribbean began to experience an increase in inflationary pressures since the onset of the last quarter of 2009, and this has steadily increased in most countries in 2010, with rates ranging from 1.78 per cent (Aruba) to 13.17 per cent (Jamaica).

Figure 7: Inflation Rates of CARICOM Countries (per cent)



In July 2010 Aruba registered a deflation of 0.1 per cent compared to the same month of 2009; the last time a deflation was recorded was in October 2009. It should be noted that in the first quarter of 2010 Aruba had an inflation rate averaging 5.6 per cent. In Barbados the inflation rate steadied at 3.3 per cent at the end of March 2010, but due to the upswing in oil prices its inflation rate recorded at the July 2010 was 5.01 per cent.

The inflation rate for The Bahamas decelerated to 0.85 per cent for the 12-month period to May 2010 from 1.76 per cent over the same period in 2009. This low rate of inflation is

reflective of a fall in average price gains in most sectors: food and beverages (1.28 per cent), other goods and services (2.07 per cent) and housing (0.3 per cent). However there was an increase in fuel and electricity during the second quarter of 2010; this was due to the increase in gasoline and diesel prices which were 20.8 per cent and 42.2 per cent, respectively, higher than the previous year.

Belize CPI rose by 0.2 per cent over the quarter (Nov 09 – Feb 10) and by 1.4 per cent over the year (Feb 09 – Feb 10); this was driven by higher fuel acquisition costs. Transportation and communication experienced the steepest price hike of 15.2 per cent reflecting the increase in fuel prices; rent, water fuel and power also increased, by 4.1 per cent. Modest increases also occurred in clothing and footwear, household goods and maintenance, personal care and education and recreation. However there was a decline of 4.9 per cent in the food, beverage and tobacco subcategory.

Prices also rose in the first quarter of 2010 in all the ECCU member countries except St. Kitts and Nevis and St. Vincent and the Grenadines, with rates ranging from 0.3 per cent (Montserrat) to 4.5 per cent (Grenada). The rise in prices was largely influenced by the increased cost of food and fuel. Increases in the food sub index ranged from 0.1 per cent in St. Kitts and Nevis to 4.1 per cent in Grenada, while price increases for gasoline were recorded for all countries except St. Vincent and the Grenadines; as a result the cost of electricity rose for all countries except St. Kitts and Nevis because of the removal of the fuel surcharge in that country in December 2009. But by the end of the second quarter of 2010, prices were lower.

Guyana's inflation rate at the end of the first quarter of 2010 was 3.9 per cent, an increase of 20 percentage points when compared to the same time in 2009. This increase in inflation was due to an increase in raw food prices.

The annual average inflation rate for Jamaica was 10.7 per cent (Jan-June 2010), relative to 16.9 per cent for the comparable period in 2009. On a point-to-point basis, prices increased by 13.2 per cent compared to 8.9 per cent in the corresponding period in 2009. For the first half of the year, inflation was 6.6 per cent compared to 3.9 per cent for the similar period of 2009. Inflation for the first half of 2010 was largely influenced by administrative price adjustments such as increased taxes on fuel and upward adjustments to bus and taxi fares within the Kingston Metropolitan Area and rural areas. Inflationary pressures also emanated from the impact of drought conditions in the first four months of the year, which affected short-term crop yields and contributed to higher vegetable prices.

The Netherlands Antilles registered an inflation rate of 3.6 per cent in the first quarter of 2010 an increase of four percentage points when compared to this period in 2009. This increase in prices was due to the increase in world crude oil prices, the main price gains came from the categories housing (5.6 per cent) and transportation and communication (3.6 per cent). Examination of the islands shows that throughout the first quarter of 2010 the highest quarterly inflation rate was recorded in St. Maarten (5.5 per cent) followed by Curacao (3.1 per cent) and Bonaire (3 per cent).

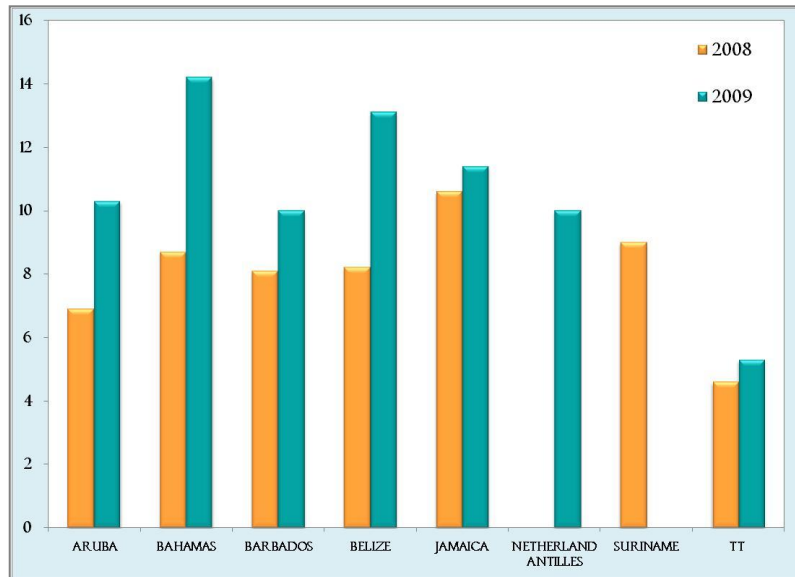
Trinidad and Tobago's inflation rate went from a historical low of 1.3 per cent (Dec 2009) to 3.7 per cent (Jan 2010) and by the end of the first quarter of 2010 it was reported at 5.1 per cent. This accelerated rate was due to severe weather conditions which affected the supply of agricultural commodities. In July 2010 the inflation rate reached 14.1 per cent, as food inflation reached 33.3 per cent. Other categories which displayed increases in prices include: transport (11.8 per cent), recreation and culture (4.6 per cent) and alcoholic beverages and tobacco (11.34 per cent); the key contributory factors for those increases are higher sales prices for new motor vehicles, the impact of higher jet



fuel prices on air fare costs and an increase in alcohol and tobacco taxes in September 2009.

### 3.3 LABOUR MARKET

Figure 8: Unemployment Rates of CARICOM Countries (per cent)



Unemployment rates for all countries in the region continue to be relatively high in 2010. In Barbados the unemployment rate increased to 10.6 per cent over the first quarter of 2010, an increase of five percentage points when compared to the rate in the same period in 2009. It is

expected that the unemployment rate is unlikely to improve before the year end.

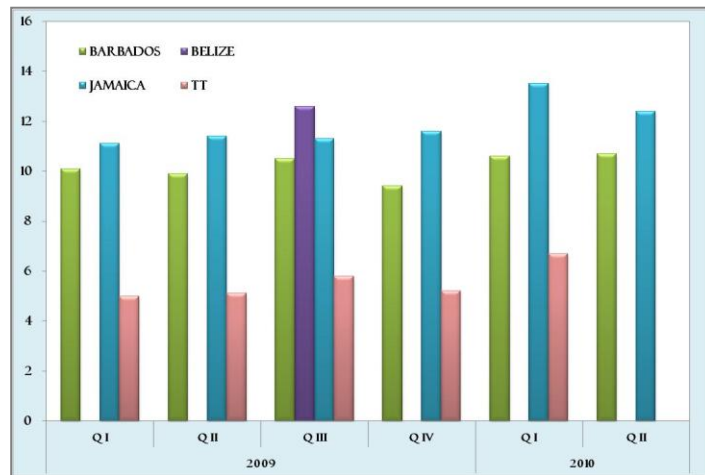
The downturn in economic activity in the non-energy sectors in Trinidad and Tobago also continued in the first quarter of 2010, causing the unemployment rate for that period to be 6.7 per cent, an increase from the five per cent reported for that same quarter in 2009. Preliminary data for the second quarter of 2010 indicates that the non-energy sectors have restructured to streamline the use of labour since the number of retrenchments reported to the Industrial Court has fallen from 2071 (July/May 2009) to 411 for the same period in 2010.

Jamaica’s average unemployment rate for the period Jan-June 2010 was 13 per cent, an increase of 1.7 percentage points relative to the similar period in 2009. This increase in unemployment was reflective of inactivity in the following sectors of the economy:



Figure 9: Unemployment Rates of Selected CARICOM Countries (per cent)

wholesale and retail, construction and installation and hotels and restaurants. The job-seeking rate in Jamaica also increased by 1.2 percentage points during the first half of 2010 from seven per cent in the corresponding period of 2009.



### 3.4 FISCAL ACCOUNTS

#### 3.4.1 Current Fiscal Account

Available data for the first half of 2010 indicates an improvement on the current fiscal account for most Caribbean countries covered by this report when compared to the current fiscal outturn for the first half of 2009. Belize, Trinidad and Tobago, Guyana and Barbados recorded stronger growth in revenue relative to expenditure. In contrast, the ECCU and Jamaica recorded significantly lower levels of current expenditure relative to current revenue.

The current fiscal surplus for Trinidad and Tobago almost doubled to US\$771.9 million compared to US\$415.6 million recorded for the first half of 2009. This performance was a result of stronger growth in current revenue (31.3 per cent) relative to growth in current expenditure (18.6 per cent). Growth in current revenue is consistent with higher than budgeted oil prices and collection of back taxes as a result of an audit exercise. Value added tax was the weakest revenue performer increasing by 8.5 per cent consistent with the sluggish domestic demand. In contrast, non-tax revenue more than doubled as a result of higher profits from state owned enterprises and interest income.

The current account surplus also widened for the Eastern Caribbean Currency Union and Belize. In the case of Belize the current surplus moved from US\$12.9 million as at July 2009 to US\$22.2 million for the first half of 2010. The outturn on the current fiscal account for the first half of 2010 is attributed mainly to a 12.7 per cent growth in current revenue reflecting significant growth in receipts from value added tax (47.9 per cent) and non-tax revenue (87.8 per cent). Total current expenditure for Belize for the first half of 2010 rose by a marginal 2.1 per cent reflecting decline in transfers/subsidies (4.7 per cent) and interest payments (23.3 per cent) which were more than offset by outlays on goods and services (16.1 per cent). The ECCU recorded a current surplus of US\$7.6 million for the first six months in 2010 up from US\$4.3 registered during the first half of 2009. This performance was mainly due to a 13 per cent contraction in current expenditure reflecting major declines in the goods and services (20.9 per cent), and transfers and subsidies (9.0 per cent) expenditure lines. The current surplus for Guyana almost doubled to US\$57.7 million in July 2010 relative to US\$32.8 million recorded in July 2009, as a result of flatter expenditure growth (6.6 per cent) relative to a 13.8 per cent increase in revenue. The yield from the value added tax increased by 31.3 per cent while income taxes increased by 21.8 per cent. On the expenditure side, outlay on goods and services dropped by 10.2 per cent while expenses related to wages and salaries increased by 12.1 per cent when compared to the performance in July 2009.

Jamaica moved from a current deficit position of US\$308.4 million for the first half of 2009 to a current surplus position of US\$39.7 million for the first half of 2010. Total current expenditure declined by 20.9 per cent when compared to the performance in June 2009 on account of a 50.4 per cent decline in interest payments as a result of favourable interest rate and exchange rate developments. On the revenue side, total current revenue increased by 20.1 per cent reflecting growth in taxes on international trade of 49.0 per cent, while non-tax revenue more than doubled. The current deficit for Barbados narrowed slightly by 4.1 per cent to US\$76.1 million, as growth in current revenue of 4.4 per cent outpaced the increase in expenditure of 3.2 per cent. On the

expenditure side outlays on wages and salaries (4.7 per cent), transfers/subsidies (4.9 per cent) and goods and services (16.7 per cent) were all contained relative to the performance for the first half of 2009. On the revenue side, the yield from the value added tax increased by 12.5 per cent for the first half of 2010, but was not sufficient to mitigate the fall in other revenue lines.

Haiti moved from a current surplus position for the first half of 2009 to a current deficit position for the first six months of 2010, reflecting the net effect of a 32.3 per cent drop in revenue and a 26.1 per cent fall in expenditure. This outturn generally reflects the collapse in the operations of central government as well as many other agencies following the earthquake in January 2010. As at September 2010, the current fiscal account for Haiti has reverted to a surplus position perhaps reflecting current grants received from the international community to maintain the health of the population.

### 3.4.2 Overall Fiscal Balance

For the period January to June 2010, most countries covered by this report registered improvements on their overall fiscal accounts relative to the performance in the comparable period of 2009. Some countries moved from an overall deficit position to an overall surplus position, while other countries narrowed their overall deficit or increased the overall surplus position. The overall fiscal positions for Trinidad and Tobago and Guyana were due mainly to strong revenue performance and delays in implementation of the public sector investment programme. The ECCU and Barbados both benefitted from expenditure containment measures and slower capital implementation. Jamaica's overall fiscal outturn was mainly due to lower total expenditure and higher than anticipated revenues and grants.

Jamaica moved from an overall deficit position of US\$136.5 million for the first half of 2009 to an overall surplus position of US\$119.7 million for January to June 2010. The movement to an overall surplus position broadly reflects the containment of

expenditure both on the current and capital sides and higher than expected revenue and grants. Similarly, Guyana registered an overall surplus position of US\$11.1 million, up significantly from US\$1.6 deficit for the first half of 2010, reflecting higher growth revenue relative to expenditure. In Haiti, the overall deficit for the first six months of 2010 narrowed relative to the performance in 2009. For the third quarter of 2010, the overall fiscal accounts moved to a surplus position probably mainly reflecting inflows of grants associated with implementation of a new capital programme associated with earthquake recovery efforts.

Barbados and the ECCU both narrowed the deficit on their current fiscal accounts for the first six months of 2010 when compared to the outturn for the first half of 2009. The ECCU moved from a current deficit of US\$31.6 million to US\$21.9 million for the first half of 2010, consistent with contraction in current expenditure and slower implementation of the capital side. In the case of Barbados, the overall deficit closed marginally by US\$ 3.3 million to reach US\$3.6 million for the first half of 2010, reflecting the impact of expenditure containment measures, as revenues were lower relative to the comparable period in 2009.

The overall surplus on the fiscal accounts for Belize dropped to US\$12.3 million for the first half of 2010, down from US\$15.4 million which was recorded for January to June 2009. In Trinidad and Tobago, the overall deficit for January to June 2010 stood at US\$548.0 million representing more than twice the overall surplus for the comparable period in 2009. This outturn was due mainly to strong revenue performance and procurement setbacks associated with implementation of the capital programme.

### 3.5 BANKING AND FINANCE

Consistent with the continued impact of the global economic decline, growth in domestic credit eased for most countries during the first half of 2010. High liquidity in

most countries and strong demand for short term government securities in many countries resulted in lower short term deposit rates. The weighted average loan rate also declined for most countries resulting in wider interest rate spreads in all countries except Trinidad and Tobago and Aruba. All countries except Barbados registered increases in total deposits in the banking system, while total banking sector loans outstanding increased for all territories except Belize.

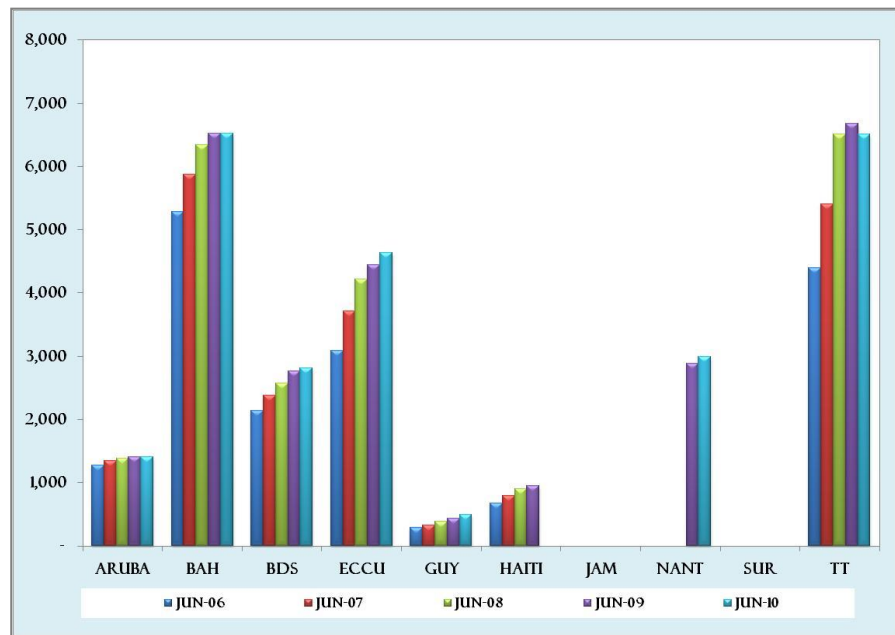
### 3.5.1 Domestic Credit

Growth in domestic credit slowed in most countries relative to the performance for the first half of 2009. Aruba and Bahamas both recorded minimal growth in domestic credit of 0.04 and 0.15 per cent

*Figure 10: Domestic Credit of CARICOM Countries (US\$M)*

*June 2006-2010*

respectively when compared to domestic credit levels in June 2009. Similarly, domestic credit in Belize as at June 2010 reflected zero growth in contrast to an increase of 7.2 per cent posted in June 2009. For the ECCU, growth



in domestic credit at June 2010 slowed to 4.2 per cent down from 5.4 per cent recorded in June 2009. Domestic credit grew by a sluggish 2.1 per cent in Barbados due to weak credit demand compared to modest growth of 7.5 per cent obtained as at June 2009. The Netherlands Antilles recorded growth in domestic credit of 4.0 per cent at the end

of June 2010 relative to the performance for the same period in 2009. Guyana posted strong growth in domestic credit of 13.5 per cent although slower than the rate of 15.0 per cent recorded in June 2009. Domestic credit for Trinidad and Tobago dropped by 2.4 per cent relative to the level in June 2009. This compares unfavourably to growth of 2.4 per cent obtained in June 2009. Despite accommodative monetary policy on the part of the Central Bank, private sector credit in Trinidad and Tobago remains sluggish with the exception of credit for mortgages and other real estate-related activity.

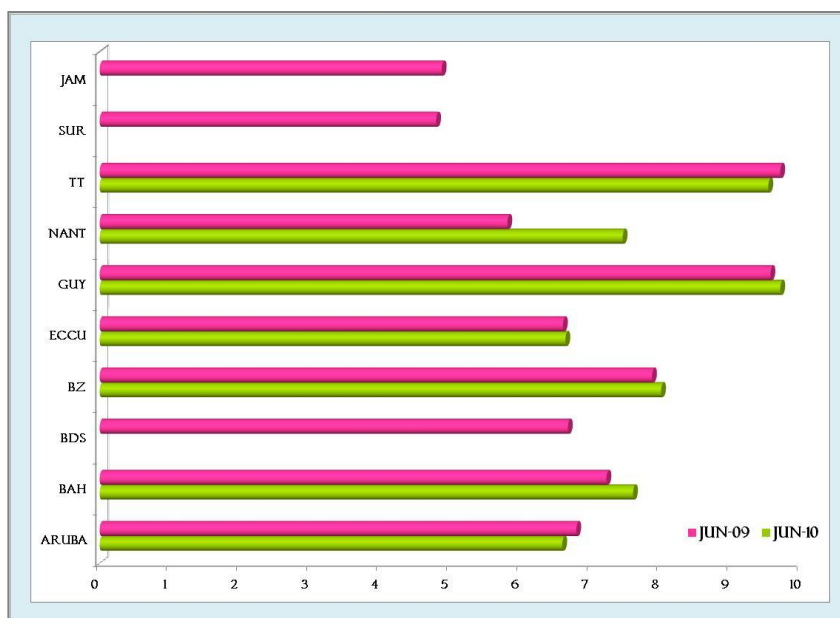
### ***1. Interest Rates and Spreads***

The weighted average loan rate decreased slightly for The Bahamas (0.10), The ECCU (0.09), Belize (0.20) and Trinidad and Tobago (1.42). In Trinidad and Tobago, Central Bank reduction in the repo rate in January 2010 was followed by declines in the prime lending rate at various commercial banks in February 2010. Despite lower lending costs, domestic credit declined in Trinidad and Tobago, reflecting a slower pace of economic activity. Aruba (0.30), Guyana (0.14) and the Netherlands Antilles (0.06) experienced marginal increases in the weighted average loan rate for the period ending June 2010 when compared to the performance for the period ending June 2009.

The average three-month deposit rate declined for all reporting countries except Aruba and Guyana. In the case of Aruba, the average three-month deposit rate increased by 50 basis points on a year-on-year basis ending June 2010. Guyana recorded no change in the average three-month deposit rate over the relevant period. In Trinidad and Tobago, easy liquidity conditions as well as strong demand for short-term government paper facilitated a drop in the three-month average deposit rate by 125 basis points over the year ending June 2010. Similarly, the average three month deposit rate for The Netherlands Antilles dropped by 158 basis points and for Haiti 73 basis points over the year ended June 2010. Declines in the average three-month deposit rate were recorded for The Bahamas (0.48), Belize (0.33) and The ECCU (0.13). In the ECCU, increased demand for 91 day Treasury bills on the Regional Government Securities market

resulted in softening of the average Treasury bill rate for all issuing governments during the first quarter of 2010. Similarly for Barbados, interest rates on deposits and loans for the first six months of the year remained relatively unchanged reflecting high liquidity in the domestic banking system. However, there was a slight easing of interest rates on government treasury bills, perhaps due to strong demand as a result of limited investment options in the domestic market.

Figure 11: Commercial Bank Interest Rate Spreads of CARICOM Countries (per cent)



Interest rate spreads declined by 20 basis points and 17 basis points in Aruba and Trinidad and Tobago respectively. The narrowing of the average spread in Trinidad and Tobago was due to a fall in the average loan rate of 142 basis points which more than compensated for the fall in

the average deposit rate of 125 basis points. All other countries recorded increases in the average interest rate spread over the year ended June 2010. The spread in the Netherlands Antilles widened by 165 basis points mainly reflecting a drop of 158 basis points on the deposit side, as average lending rates only advanced by six basis points.

## 2. Banking Sector Deposits and Loans

On a year-on-year basis ending June 2010, all reporting countries except Barbados posted increases in total deposits in the banking system. Total deposits in the banking system of Trinidad and Tobago increased by 22.7 per cent due to strong liquidity conditions, sizable net fiscal injections and negative growth in domestic credit activities.



In The ECCU, total deposits in the banking system grew by 5.2 per cent over the year ended June 2010, perhaps reflecting the impact of deposits associated with large issues of government securities on the Regional Government Securities Market. Aruba recorded a 6.9 per cent increase in total deposits in the banking system partly due to an accumulation of deposits during the high tourist season. Deposits in the banking system of Guyana grew by 11.2 per cent, while The Netherlands Antilles registered growth in deposits of 5.3 per cent. The Bahamas and Belize posted growth in deposits of 4.0 per cent and 1.1 per cent respectively on a year-on-year-basis ended June 2010. The Bahamas registered growth in total banking system deposits of 3.9 per cent, reflecting weak consumer demand and the one-off proceeds from the sale of a domestic business to a foreign entity.

All reporting countries except The ECCU and Belize recorded strong growth in United States (US) dollar deposits on a year-on-year basis ended June 2010. The ECCU posted a drop of 6.45 per cent, while the decline for Belize was a marginal 0.09 per cent. Guyana registered the highest growth of 15.3 per cent in US dollar deposits over the period. In contrast, the lowest growth of 1.1 per cent was witnessed by Barbados.

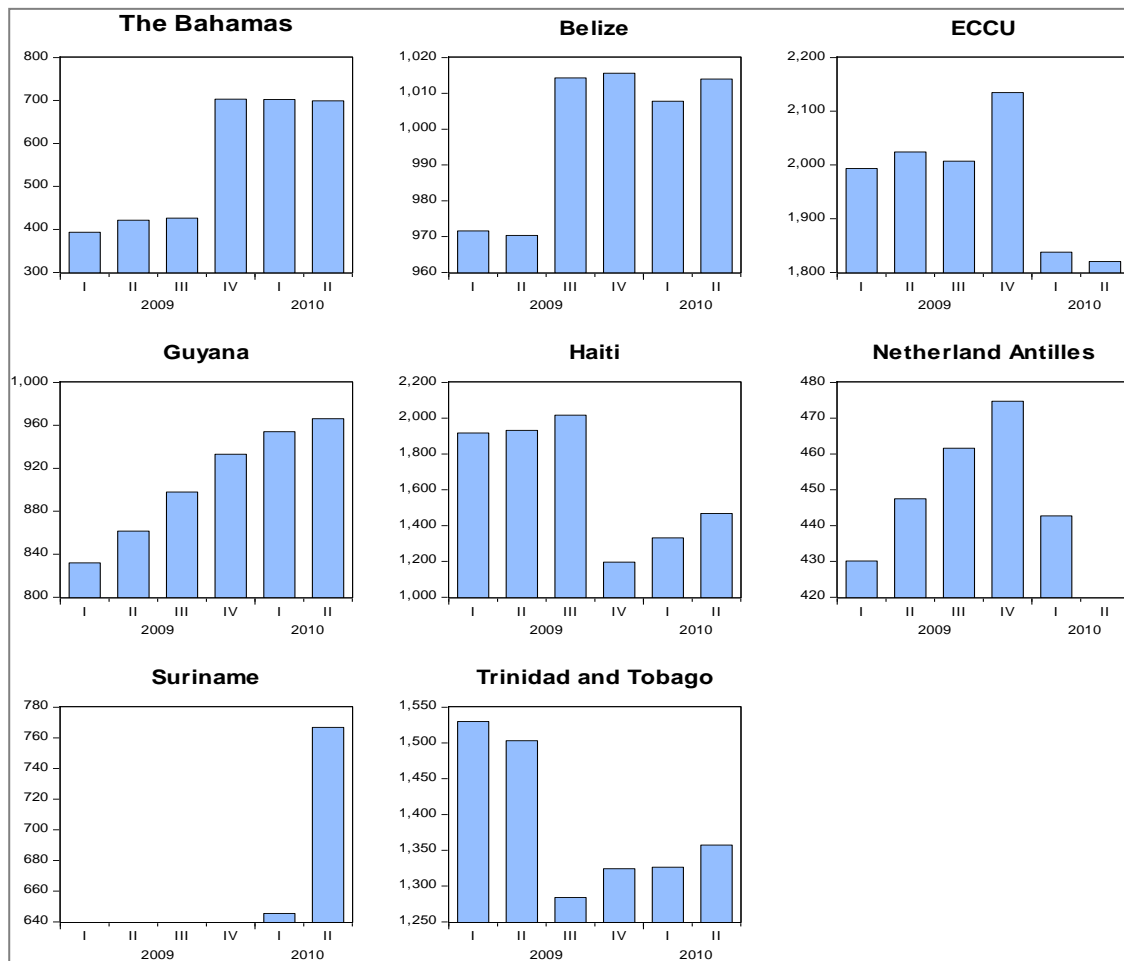
Growth in total banking sector loans outstanding for Guyana stood at 11.4 per cent for the year ended June 2010. The Netherlands Antilles and Barbados also posted modest growth in total banking sector loans outstanding of 4.0 per cent and 4.4 per cent respectively. Aruba, Bahamas and The ECCU registered minute increases of 0.18 per cent, 0.41 per cent and 1.7 per cent respectively, perhaps reflecting the sluggish pace of economic activity. On a year-on-year basis ended June 2010, total banking sector loans outstanding for Belize declined by 1.3 per cent. This may be due to the impact of a one-off repayment of private sector construction loans which occurred during the first quarter of 2010.



### 3.5.2 Debt

The CARICOM territories varied in terms of debt in the first half of 2010. New debt was taken by Guyana, Haiti and Trinidad and Tobago causing the debt stock to expand by 3.5 per cent, 22.7 per cent and 2.5 per cent. However the debt stock contracted in The Bahamas (0.5 per cent), Belize (0.2 per cent) and ECCU (14.7 per cent) owing to debt servicing. Suriname's debt increased in the second quarter of 2010 by 18.8 per cent.

Figure 12: External Debt Levels (US\$M)



### 3.6. EXTERNAL CURRENT ACCOUNT

There were mixed performances in the external current account balances of the Caribbean territories, see Table 11. Most countries recorded better performances in the first quarter of 2010 compared to the second quarter. From among the countries which recorded surpluses in the first quarter of 2010 – Aruba, Barbados, Trinidad and Tobago – surpluses were reduced compared to the corresponding period of the previous year. The reduction in surpluses was by 51.3 per cent, 71.2 per cent and 60 per cent respectively. For those territories which registered current account deficits in the first quarter of 2010, preliminary results show that in the majority of cases the territories exhibited lower current account deficits than for the corresponding period of the previous year. Jamaica showed the strongest improvement in this respect as its current account deficit was US\$31 million as opposed to US\$215.7 million for the first quarter of the previous year. The Bahamas and the Netherlands Antilles also showed improvements in the external current account as the deficits fell by 5.2 per cent and 48.2 per cent respectively.

**Table 11: EXTERNAL CURRENT ACCOUNT (ABSOLUTE US\$M)**

Countries	2009		2010	
	Q1	Q2	Q1	Q2
			Actual	Actual
Aruba	165.4	30.9	80.6	(115.2)
The Bahamas	(123.2)	(190.5)	(116.2)	n.a.
Barbados	33.3	104.5	9.6	110.1
Belize	(12.5)	(28.1)	4.8	(14.4)
EC Currency Union	n.a.	n.a.	n.a.	n.a.
Guyana	(63.8)	(39.1)	n.a.	n.a.
Haiti	n.a.	n.a.	n.a.	n.a.
Jamaica	(215.7)	(147.9)	(31.0)	n.a.
Netherlands Antilles	(37.1)	(24.4)	(19.2)	n.a.
Suriname	n.a.	n.a.	n.a.	n.a.
Trinidad & Tobago	2408.0	(218.2)	963.2	834.2

For Barbados, the external current account performance strengthened significantly in the second quarter of 2010 (US\$110 million), compared to the first quarter (US\$9.6 million). The second quarter level in 2010 was marginally above the previous year's second quarter surplus when it was US\$104.5 million. For Trinidad and Tobago the surplus of US\$963.2 million in the first quarter represented a reduction by 60 per cent of what was earned in the corresponding quarter of 2009. However the earnings strengthened in the second quarter of 2010 as they rebounded to reach US\$834.2 million compared to the deficit of US\$218.2 million in the previous year.

The generally improved performances on the external current accounts were ably assisted by early signs of exports rebounding in most territories as these territories showed stronger export performances in the first quarter, see Table 12. This was evident as first quarter growth in exports in 2010 was strongest in Suriname (28.2 per cent), Haiti (21.4 per cent), Belize (20.7 per cent) and Guyana (11.5 per cent). Growth in exports for the first quarter was also recorded in the ECCU (8.4 per cent), Barbados (8.2 per cent), Jamaica (5.8 per cent) and The Bahamas (1.3 per cent). ECCU and Haiti did not sustain the growth in export performance in the second quarter as exports declined by 13.4 per cent and 23.2 per cent respectively. Barbados, Belize, Guyana and Suriname sustained export growth into the second quarter of 2010 as growth was 2.7 per cent, 18 per cent, 13.2 per cent and 25.7 per cent respectively.

**Table 12: GROWTH IN TRADE IN GOODS AND SERVICES TO CORRESPONDING QUARTER OF PREVIOUS YEAR**

Countries		2009		2009	2010	
		Q1	Q2	Annual Growth	Q1	Q2
Aruba	Exports	(22.3)	(31.4)	(42.6)	(45.5)	(58.8)
	Imports	(38.4)	(27.5)	(47)	(44.4)	(48.6)
The Bahamas	Exports	(16.8)	(10.9)	(14.7)	1.3	n.a.
	Imports	(25.6)	(11.8)	(18.9)	(2.3)	n.a.
Barbados	Exports	(6.1)	(23.4)	(13.7)	4.2	2.7
	Imports	(25.7)	(29.7)	(23.4)	5.6	8.1
Belize	Exports	(19.5)	(26.7)	(18.1)	20.7	18.0
	Imports	(15.7)	(27.0)	(20.2)	(4.9)	2.9
ECCU	Exports	23.2	2.6	31.9	8.4	(13.4)
	Imports	(3.9)	(24.6)	(19.0)	(12.3)	6.7
Guyana	Exports	(3.0)	(12.1)	(3.8)	11.5	13.2
	Imports	(15.8)	(18.5)	(11.7)	27.2	123.3
Haiti	Exports	(8.2)	24.6	12.3	21.4	(23.2)
	Imports	11.6	(3.6)	(3.3)	(0.2)	35.1
Jamaica	Exports	n.a.	n.a.	n.a.	5.8	n.a.
	Imports	n.a.	n.a.	n.a.	(2.7)	n.a.
Netherlands Antilles	Exports	n.a.	n.a.	(9.5)	(0.8)	n.a.
	Imports	n.a.	n.a.	(10.5)	5.3	n.a.
Suriname	Exports	n.a.	n.a.	n.a.	28.2	25.7
	Imports	n.a.	n.a.	n.a.	(16.4)	6.8
Trinidad and Tobago	Exports	(31.0)	66.3	24.3	(69.0)	(50.6)
	Imports	(31.9)	(30.4)	-27.1	7.0	(12.6)

Both Aruba and Trinidad and Tobago recorded reductions in export revenues in both quarters of 2010 compared to the corresponding periods of the previous year. Trinidad and Tobago registered the steepest decline as exports in the first and second quarters declined by 69 per cent and 50.6 per cent respectively. However, the export revenue continued to be buoyed by credible performances in exports of energy, chemicals and manufacturing. In absolute terms, Trinidad and Tobago recorded the largest export revenue earnings in the region as exports in the first and second quarters were US\$2843.3 million and US\$2653.4 million respectively. There were reductions in Aruba with exports declining in the first and second quarters by 45.5 per cent and 58.8 per cent respectively.

Following the decline in energy prices, imports declined in some territories, the largest being Aruba where it declined by over 44 per cent in both quarters of 2010. First quarter declines were registered for The Bahamas (2.3 per cent), Belize (4.9 per cent), ECCU (12.3 per cent), Haiti (0.2 per cent) and Jamaica (2.7 per cent). Trinidad and Tobago registered a contraction in imports in the second quarter compared to the same period in the previous year. Contrary to the other Caribbean territories, Barbados and Guyana registered rising imports in both quarters of 2010. Some of this was attributable to rising fuel costs.

### 3.6.1 Sectoral Performances

The external current accounts of the various territories were assisted by improved showing in major exporting sectors and reductions in imports. As such, tourism has shown early signs of rebounding, commodity prices are beginning to pick up and export demand is slowly increasing. However, the improved performances were not widespread as the recovery of the global community is still to take firm root.

#### 3.6.1.1. Tourism Performance

There was some recovery in tourism performances across most of the territories for 2010, in contrast to the consecutive quarters of negative growth in this sector in the previous year, see Table 13. In many cases this was testimony to intensification of marketing efforts by various territories and the slow recovery of the global markets. Barbados was the most consistent as it recorded an increase in revenue receipts for the first two quarter of 2010 as receipts grew by 5.3 per cent and 3.6 per cent. Belize and The Bahamas recorded the strongest growth in tourism revenue in the first quarter as revenues grew by 8.2 per cent and 5.3 per cent respectively. The industry benefitted from promotional programmes. However, tourism revenue contracted for Belize in the second quarter of 2010 when compared to the corresponding period for the previous

year. Tourism also showed recovery in The ECCU during the first six months of 2010 compared to the same period of the previous year, following a 3.5 per cent rise in stay-over arrivals.

**Table 13: GROWTH IN TOURISM REVENUE COMPARED TO CORRESPONDING QUARTER OF PREVIOUS YEAR**

Countries	2009				2010	
	Q1	Q2	Q3	Q4	Q1	Q2
Aruba	(10.4)	(10.0)	(5.9)	(5.3)	(2.2)	(2.4)
Bahamas	(10.0)	(10.0)	(10.0)	(10.0)	6.0	n.a.
Barbados	(1.8)	(11.9)	(19.3)	(10.0)	5.3	3.6
Belize	(13.8)	(8.4)	(5.4)	(0.9)	8.2	(0.9)
Guyana	(64.2)	(38.6)	(62.4)	151.9	(0.0)	107.4
Netherlands Antilles	n.a.	n.a.	n.a.	n.a.	2.1	n.a.
Trinidad and Tobago	(7.8)	63.9	24.4	159.9	(4.9)	(37.8)

Amongst the other territories, tourism revenue in the second quarter of 2010 more than doubled in Guyana compared to the corresponding period of the previous year. Barbados was the only other territory to record positive growth in the sector as growth increased by 3.6 per cent. In contrast to the other territories, tourism revenue receipts continued to decline in Aruba, though in 2010, the contraction of the sector was at a slower pace. Tourism revenues contracted in Trinidad and Tobago for both quarters in the first half of 2010.

### 3.6.1.2 Mineral and Fuel Sector

Trinidad and Tobago, the major producer in this sector in the region, rebounded in the second quarter of 2010 with regards to revenues derived from oil and natural gas, (see Table 14) following four consecutive sectors of decline in revenue from this sector. The other economies recorded fluctuating earnings in exports emanating from this sector.

**Table 14: GROWTH IN MINERALS AND FUELS COMPARED TO CORRESPONDING QUARTER OF PREVIOUS YEAR**

Countries	2009				2010	
	Q1	Q2	Q3	Q4	Q1	Q2
The Bahamas	(49.9)	(13.9)	2.1	(3.5)	77.7	n.a.
Guyana	(11.4)	(8.6)	60.9	(7.4)	10.5	33.4
Jamaica	n.a.	n.a.	n.a.	n.a.	n.a.	65.8
Trinidad and Tobago	62.4	(68.5)	(77.1)	(57.7)	(36.5)	51.7

### 3.6.1.3. Manufacturing Sector

The manufacturing sector began to show signs of recovery in 2010 following continuous declines in 2009 in various CARICOM economies outside of Haiti, see Table 15. Still there has not been a complete recovery of this sector in the first half of 2010 as the sector exhibited mixed fortunes between quarters. Haiti stood out as the only economy that showed consistent growth of the sector between the second quarter of 2009 and the first quarter of 2010. Trinidad and Tobago showed growth for the first time in the second quarter of 2010 as the sector expanded by 281 per cent. The ECCU also reported an increase in manufacturing in the first six months as well, particularly as soft drinks increased fivefold.

**Table 15: GROWTH OF MANUFACTURING COMPARED TO CORRESPONDING QUARTER OF PREVIOUS YEAR**

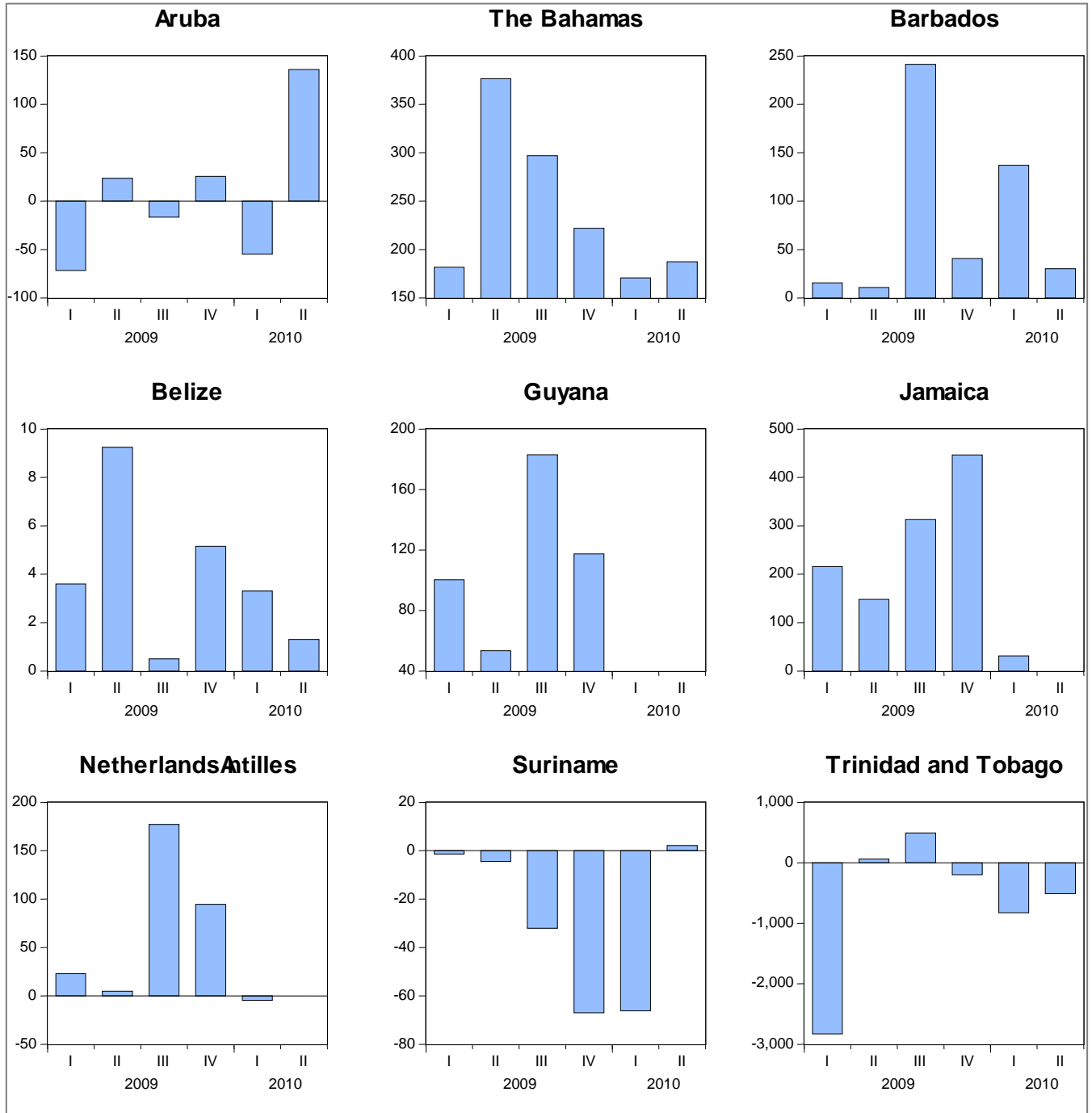
Countries	2009				2010	
	Q1	Q2	Q3	Q4	Q1	Q2
Bahamas	(8.0)	(38.0)	(54.2)	(40.4)	16.1	(8.0)
Barbados	(7.2)	(20.6)	(11.5)	0.0	3.3	(7.2)
Guyana	(21.7)	(6.6)	(473.4)	(57.2)	40.5	17.8
Haiti	(7.7)	35.3	29.8	15.0	23.2	(24.5)
Trinidad and Tobago	(29.3)	(76.3)	(41.3)	(47.9)	(8.0)	281.0

### 3.6.2 Net Capital Flows

The regional economies recorded mixed performances in terms of increases or declines of capital inflows between corresponding quarters in 2010 and the previous year, (see Figure 13). Inflows expanded in Aruba and Barbados between corresponding quarters, while they contracted in The Bahamas and Belize. From the data that are available, Aruba, The Bahamas and Barbados were the largest recipients of external capital inflows in the first half of 2010. Aruba attracted capital inflows of US\$112 million in the second quarter of the year. First quarter inflows recorded by The Bahamas and Barbados were US\$170 million and US\$137 million respectively. The Bahamas realised an increase in capital inflows in the second quarter of 2010 as inflows rose by US\$16.69 million to reach US\$187.7 million in the second quarter. The lowest capital inflows were recorded by Belize, US\$3.3 million and US\$1.3 million in the first and second quarters respectively. Jamaica recorded an external capital inflow of US\$31 million. This represented a reduction of US\$184.7 million. Suriname emerged to record net capital inflow in the second quarter of 2010, following consecutive net capital outflows since 2009. That country recorded the largest net outflow in the first quarter of 2010 of US\$66.2 million.



Figure 13: Capital Flows (US\$ Millions)



### 3.6.3 External Reserves

For the ten jurisdictions for which data were available, all except the Netherlands Antilles recorded increases in their gross international reserves between the second halves of 2009 and 2010. The total external reserves for the region excluding Suriname increased by approximately US\$2.1 billion from US\$16.5 billion in the first half of 2009 to US\$18.5 billion in the first half of 2010. The major contributors to this increase include Jamaica (US\$866.1 million), Haiti (US\$472.7 million), Trinidad and Tobago (US\$308.7 million) and Guyana (US\$245.1 million). More modest increases were recorded in The Bahamas, Aruba and Barbados. In contrast, the Netherlands Antilles recorded a decline in external reserves of approximately US\$131.1 million in this period due to a combination of increases in the oil import bill and lower tourism receipts (see Table 6A in Appendix). The improvements were based on a combination of better performance on the external accounts as export earnings rose relative to the first half of 2009, as well as inflows of funds from loans and bond placements. Alternatively, if we use the end of 2009 as our point of reference, the picture is similar except for Barbados which recorded a decline of US\$42.1 million between the end of 2009 and the first half of 2010.

## 4.0 ECONOMIC PROSPECTS

The prospects for growth in the Caribbean hinge on developments in the global economy. In particular, the fortunes of the Caribbean are closely linked to those of developed market economies since they are the major source markets for tourists and financing. Developments in commodity markets are also critical since many countries in the region are significant commodity producers and the vast majority are net importers of energy supplies, facts which have huge import for their external accounts. Given the weaker growth being experienced in advanced economies, driven by high unemployment and weak consumer demand, growth in many Caribbean jurisdictions in the near term would increase as the global recovery gathers pace but growth will tend to be on the low side. Additionally, oil prices have risen and although they are not close to the highs recorded in the pre-crisis period, they are still relatively high and are expected to remain in the band US\$70-80 per barrel. This implies further pressure on the external accounts for many countries which are already vulnerable in this area.

The outlook for most countries is for cautious optimism that their growth performance would improve in 2010 but a return to growth in all jurisdictions in 2011 depends on the recovery of the global economy. Based on IMF estimates, the average growth for the region is expected to improve to -0.2 per cent in 2010 relative to the -2.5 per cent recorded in 2009, with no country except Suriname expecting to record growth in excess of 3 per cent. All countries except Haiti are expected to post improvements in growth relative to 2009. However, of the 14 countries for which estimates are available for 2010, five countries (Antigua and Barbuda, Barbados, Haiti, Jamaica and St. Kitts and Nevis) are expected to record negative growth, four continuing to record negative growth albeit with an improvement over their 2009 performances while Haiti is expected to record a significant reversal of -8.5 per cent relative to growth of 2.9 per cent recorded in 2009 (see Table 16).

**Table 16: CARIBBEAN GROWTH PROSPECTS**

Country	Actual		Projections	
	2008	2009	2010	2011
Antigua and Barbuda	1.8	-8.9	-4.1	3.1
The Bahamas	-1.7	-4.3	0.5	1.5
Barbados	-0.2	-5.5	-0.5	3.0
Belize	3.8	0.0	2.0	2.3
Dominica	3.2	-0.3	1.4	2.5
Grenada	2.2	-7.7	0.8	2.0
Guyana	2.0	3.0	2.9	3.1
Haiti	0.8	2.9	-8.5	9.8
Jamaica	-0.9	-3.0	-0.1	1.8
St. Kitts and Nevis	4.6	-5.5	-1.5	0.5
St Lucia	0.7	-5.2	1.1	2.3
St Vincent and the Grenadines	-0.6	-1.0	0.5	2.0
Suriname	6.0	2.5	4.0	4.7
Trinidad and Tobago	2.4	-3.5	1.2	2.5
<b>Regional Average</b>	<b>1.7</b>	<b>-2.5</b>	<b>-0.2</b>	<b>2.9</b>

Source: IMF, Global Economic Prospects October 2010

\*\*\*\*

## A Methodological Note:

### CONSTRUCTING THE CARIBBEAN REGIONAL GROWTH RATES<sup>1</sup>

Data collection is an essential function of the CCMF; we aim to provide data for the Caribbean region that is accurate and in a timely manner. In compiling this regional data set many issues arise with regards to the quality and comparability of the data which is due mainly to gaps in the data requested by CCMF from the regional central banks. This article addresses some methodological issues that have arisen in the construction of the Caribbean regional growth rates.

We would normally request from each country's central bank their gross domestic product,  $Y_{i,t}$  in Purchasing Power Parity (PPP) dollars in order to allow cross country comparisons. We would request also their growth rate,  $g_{i,t}$ . There would invariably be gaps in the data we receive so in order to get a complete data set, we use various sources such as the *International Financial Statistics* from the International Monetary Fund, reports from the country's central banks and statistical offices. From these we would construct data sets such as reported in Tables 1 and 2.

**Table 1: Country Gross Domestic Product (PPP US\$)**

<b>Countries</b>	<b>2000</b>	<b>2001</b>	<b>2002</b>	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>
Aruba	2910.0	2898.7	2836.5	2851.1	3062.0	3092.0	3110.4	3123.9	3045.9	1875.0
The Bahamas	6411.1	6393.8	6599.3	6368.9	6604.3	6982.5	7280.1	7333.5	7208.2	6847.83
Barbados	488.2	475.7	479.0	488.3	511.7	531.6	548.6	567.3	570.5	543.2
Belize	832.0	873.0	918.0	1003.0	1050.0	1077.0	1132.0	1146.0	1184.0	1189.0
ECCU	1884.6	1862.5	1875.7	1937.0	2013.2	2123.9	2263.1	2390.4	2435.2	2256.6
Guyana	29.3	28.9	28.9	28.1	28.0	27.4	28.7	29.8	30.7	31.6
Haiti	1754.1	1735.8	1731.4	1737.7	1676.5	1706.7	1746.2	1806.3	1829.2	2359.72
Jamaica	8969	9118	9679	9416	10158	11172	11974	12985	14024	12396
Netherlands Antilles	2802.200	2858.244	2972.574	3477.911	3895.261	4284.787	5441.679	6203.514	6147.683	5987.843
Suriname	428.747	606.324	813.989	966.630	1102.922	1323.506	2091.139	3220.355	5313.585	6641.982
Trinidad & Tobago	7863.5	8631.4	9299.7	10553.9	11377.7	12095.1	13696.8	14284.8	14716.6	14491.0
<b>TOTAL</b>	<b>34372.3</b>	<b>35482.71</b>	<b>37234.31</b>	<b>38828.79</b>	<b>41479.48</b>	<b>44415.94</b>	<b>49312.16</b>	<b>53090.76</b>	<b>56505.89</b>	<b>54620.23</b>
<b>Growth Rate Regional</b>	<b>n.a.</b>	<b>3.129445</b>	<b>4.704272</b>	<b>4.106436</b>	<b>6.390358</b>	<b>6.611283</b>	<b>9.929031</b>	<b>7.117231</b>	<b>6.043857</b>	<b>-3.45232</b>
<b>Regional GDP Index</b>	<b>100</b>	<b>105</b>	<b>110</b>	<b>118</b>	<b>126</b>	<b>130</b>	<b>142</b>	<b>145</b>	<b>157</b>	<b>135</b>

<sup>1</sup> We would like to thank Dr. DeLisle Worrell (Central Bank of Barbados) for an initial methodological procedure; Professor Ron Smith (Birkbeck College) for an interesting proof. Thanks also to those who responded to our request for data: Alexis R. Lescott (Central Bank of Barbados); Gaitri Ramratan (Bank of Guyana); Keyra Primus (Central Bank of Trinidad and Tobago); Natalia Koster (Central Bank of Netherlands Antilles); Nickoyan K.L. Philbert (Eastern Caribbean Central Bank); Omar Williams (Bank of Jamaica); Rasiel Vellos (Central Bank of Belize); Serena P. Bethell (Central Bank of The Bahamas); Sherina Arends and Suraiika Tromp (Central Bank of Aruba) and for their comments Dr. John Robinson (Bank of Jamaica); Enid Bissember (CARICOM).

**Table 2: Growth Rates ( per cent)**

Countries	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Aruba	6.6	-0.4	-2.1	0.5	7.4	1.0	0.6	0.4	(2.5)	(7.6)
The Bahamas	4.3	(0.3)	3.2	(3.5)	(0.2)	3.3	4.6	0.7	(1.7)	(5.0)
Barbados	2.3	(2.6)	0.5	1.7	3.4	3.7	3.8	3.4	(0.2)	(4.8)
Belize	12.3	4.9	4.3	9.0	4.6	3.0	5.6	1.2	3.6	(1.1)
ECCU	2.8	(1.1)	0.8	3.2	4.1	5.3	6.2	5.6	1.9	(7.3)
Guyana	(1.4)	2.3	1.1	(0.6)	1.6	(1.9)	5.1	5.4	3.1	2.3
Haiti	n.a.	(1.0)	(0.3)	0.4	(3.5)	1.8	2.3	3.4	1.3	2.9
Jamaica	0.9	1.3	1.0	3.5	1.4	1.0	2.7	1.4	(0.9)	(2.7)
Netherlands Antilles	(1.9)	0.2	0.4	1.7	1.20	1.00	2.20	3.5	1.9	(2.6)
Suriname	1.9	4.3	2.8	4.7	8.0	2.0	5.8	5.4	6.5	2.5
Trinidad & Tobago	7.3	4.2	7.9	14.4	7.8	6.1	12.0	4.6	2.3	(3.2)
<b>Regional Weighted Average</b>	<b>3.6</b>	<b>1.3</b>	<b>2.9</b>	<b>1.1</b>	<b>3.5</b>	<b>3.1</b>	<b>5.7</b>	<b>2.9</b>	<b>1.0</b>	<b>(2.6)</b>

We would calculate the regional growth rate for time  $t$  as  $g_t^w$  where  $w$  indicates that it is constructed as a weighted average of the individual  $g_{i,t}$  ;

$$\begin{aligned}
 g_t^w &= \frac{\sum Y_{i,t}}{(\sum Y_{i,t-1})} * g_{i,t} \dots\dots\dots (1) \\
 &= \frac{\sum Y_{i,t}}{Y_{t-1}} * g_{i,t} \\
 &= \sum w_{i,t-1} * g_{i,t} \dots\dots\dots (2)
 \end{aligned}$$

In this case each country's  $g_{i,t}$  is weighted by the last period proportion of the regional GDP contributed by the particular  $i^{th}$  country, where,

$$Y_{t-1} = \sum Y_{i,t-1}$$

So that the weight for the  $i^{th}$  country  $w_{i,t}$  may be written as,

$$w_{i,t-1} = \frac{Y_{i,t}}{\sum Y_{i,t-1}} = \frac{Y_{i,t}}{Y_{t-1}} \dots\dots\dots (3)$$

This would give us the regional growth rate as a weighted mean reported in the last row of Table 2. This weighted growth procedure is the way CCMF would normally construct the Caribbean regional growth rates.

Note that the individual growth rate of the countries  $g_{i,t}$  that is reported by the central banks will be,

$$g_{i,t} = \frac{\Delta Y_{i,t}}{Y_{i,t-1}} \dots\dots\dots (4)$$

The absolute change in regional output in the numerator will be,

$$Y_t - Y_{t-1} = \Delta Y_t = \sum_{i=1}^N \Delta Y_{it}.$$

### *An Exact Proportional Measure*

Having constructed Table 1 we have a table in levels of GDP and are in a position to calculate  $g_t$  as an *exact* proportion of the reported  $Y_{i,t}$ , as a simple proportion of the last period level as,

$$g_t^p = \frac{\Delta Y_t}{Y_{t-1}}$$

Here  $g_t^p$  will be an exact calculation of the relative increase of the regional GDP year on year.

### *Theoretical*

The two methods, that is the simple proportion shown above  $g_t^p$  and the weighted growth rate  $g_t^w$  should provide the same results.

We can show this by transforming the above equation, if we rewrite the numerator in terms of the country changes and rearrange we get,

$$g_t^p = \frac{\Delta Y_t}{Y_{t-1}} = \frac{\sum_{i=1}^N \Delta Y_{it}}{Y_{t-1}} = \sum_{i=1}^N \frac{\Delta Y_{it}}{Y_{t-1}}.$$

We can now show that the two methods are equivalent. Starting with the expression for  $g_t^p$ , if we divide *and* multiply it by  $\sum_{i=1}^N Y_{i,t-i}$  we obtain,

$$\begin{aligned} g_t^p &= \frac{\Delta Y_t}{Y_{t-1}} \sum_{i=1}^N \frac{Y_{i,t-i}}{Y_{i,t-i}} = \sum_{i=1}^N \frac{Y_{i,t-i}}{Y_{t-1}} \frac{\Delta Y_{it}}{Y_{i,t-i}} \\ &= \frac{\sum Y_{i,t-i}}{Y_{t-1}} \cdot g_{i,t} \text{ given by equation (4)} \end{aligned}$$

So the using both expressions in (3) and (4) we are able to write,

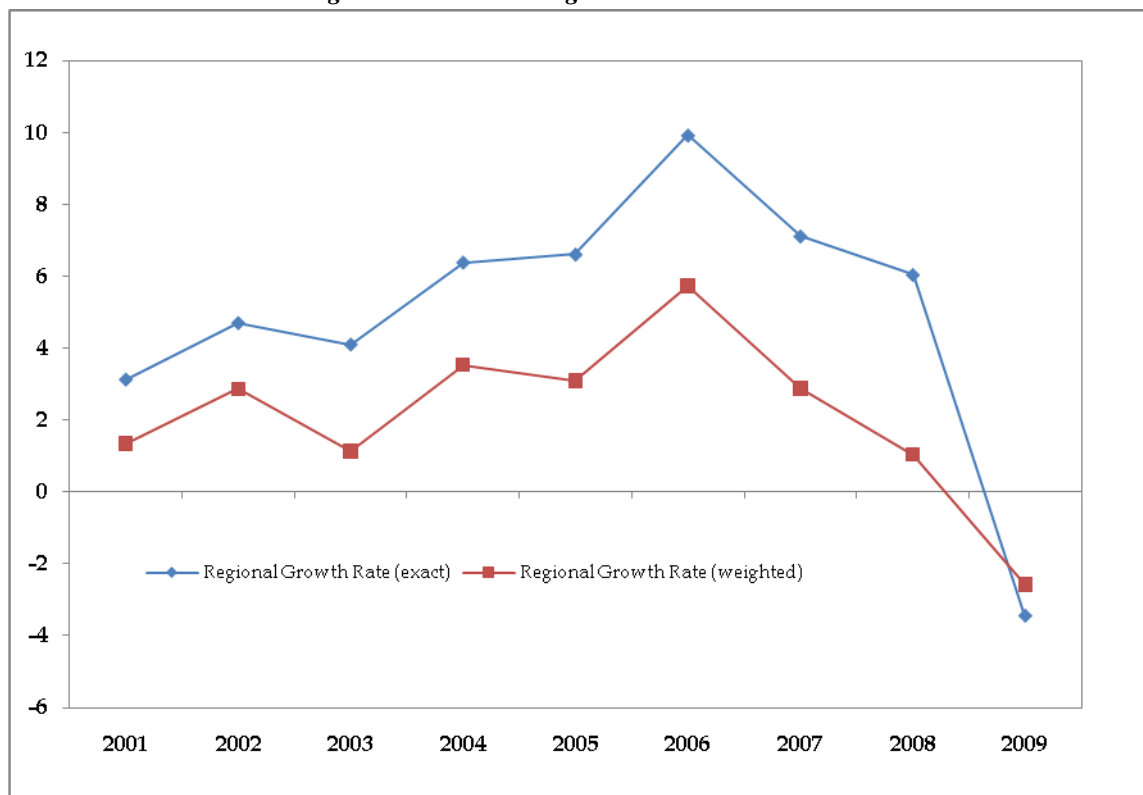
$$g_t^p = \sum_{i=1}^N w_{i,t-1} \cdot g_{it} = g_t^w \text{ as in equation (2).}$$

where both methods provide the same results when their growth rates are weighted by last period regional proportions.

*The Caribbean Experience*

However, from the series in Tables 1 and 2, Figure 1 shows that the growth rates using the two measures are not identical. If the levels data in Table 1 were consistent with the growth rate data in Table 2, then both lines in Figure 1 would be equal. For the most part they move together over the period; it is only in 2009 there is a structural break in the series.

*Figure 1: Caribbean Regional GDP Growth Rates*



We get data on growth rates and GDP levels from the central banks that may or may not be consistent. We also get data with gaps such as we may get data on growth but not on GDP levels, and as we said above we fill in the gaps using data from various sources. Figure 1 shows clearly that the data in Tables 1 and 2 are not consistent. The source of this inconsistency resides both in the datasets the Central Banks sends and in the data set we import to fill in the gaps. We could have improved the consistency by using the growth series to generate the level series or the level series to generate the growth series. By importing IMF data for the GDP levels for instance, it is



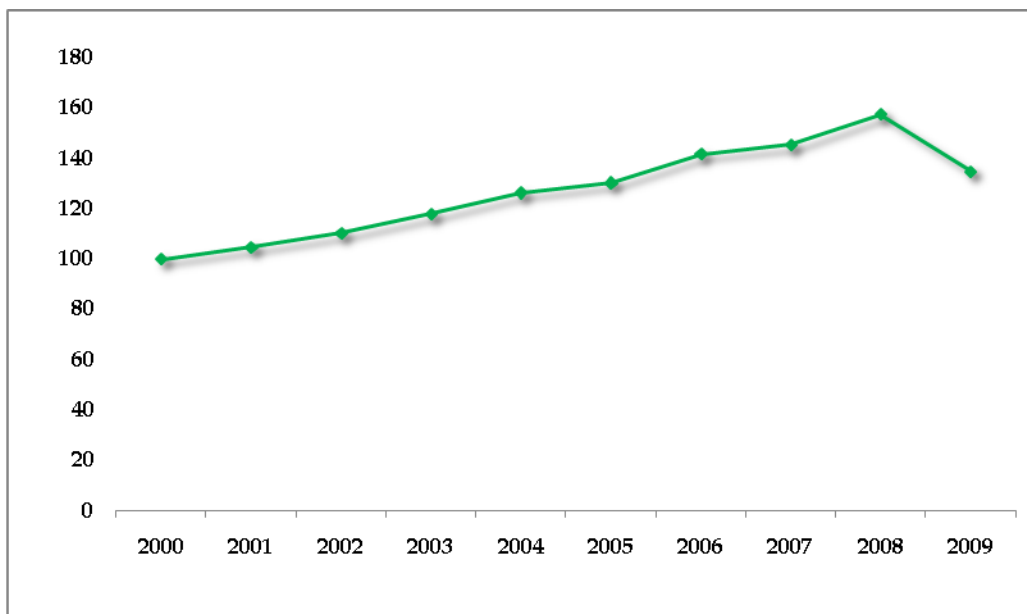
very unlikely that it will be consistent with the growth rates. As a consequence, our calculation of the regional growth rate produces differing results as seen in Figure 1.

The main advantage of using different data sources for the same information is that we obtain insight into the various measurements of the same thing. It would be easy to generate consistency between Tables 1 and 2 by using a base year in levels and applying the growth rates, but this would give a false sense of accuracy to the level series that are generated. There is simply no way of telling which is the more accurate measurement. It may be however that using different data sources allows us to appreciate the degree of variation arising from the differing estimates.

**Examination of the Weights**

The country weights reported in Table 3 offer some interesting insights into the GDP performance of the countries. For the region output rose on trend to the start of the 2007 crisis and was 35 per cent higher than the 2000 output (see Figure 1).

*Figure 2: Caribbean Regional GDP Volume Index*



If the weight of a country is constant over the period it indicates that the proportion of the regional output is constant, and none of the weights indicate this. Belize shows the smallest variation with a range of .021 to .026 of regional output, accounting on average for 2.4 per cent of regional output over the period. The average variation of the Belize share of regional output was 7.1 per cent of its mean. Trinidad and Tobago had consistently the largest share of regional output rising on trend from 22.9 per cent in 2000 to 26.5 per cent in 2009. Trinidad and Tobago had an average share of 26.1 per cent for the period although with such a rising trend one has to be careful in interpreting this average. The variation of Trinidad and Tobago share is also quite small, averaging less than 10 per cent of its mean over the period.

Therefore we can obtain interesting/important insights into the dynamics/movements of regional output and its individual country components; for instance, it is clear that whilst Guyana represents a consistently small proportion of regional output; Trinidad and Tobago on the other hand has increased its regional share from 22.9 per cent to 26.5 per cent of a larger regional output. The data show that Jamaica almost doubled their regional share over the period.

**Table 3: Weights of the GDP**

Countries	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	Std Dev	Mean	Coeff of Var
Aruba	0.085	0.082	0.076	0.073	0.074	0.070	0.063	0.059	0.054	0.034	0.015	0.067	0.224
The Bahamas	0.187	0.180	0.177	0.164	0.159	0.157	0.148	0.138	0.128	0.125	0.022	0.156	0.138
Barbados	0.014	0.013	0.013	0.013	0.012	0.012	0.011	0.011	0.010	0.010	0.001	0.012	0.120
Belize	0.024	0.025	0.025	0.026	0.025	0.024	0.023	0.022	0.021	0.022	0.002	0.024	0.071
ECCU	0.055	0.052	0.050	0.050	0.049	0.048	0.046	0.045	0.043	0.041	0.004	0.048	0.088
Guyana	0.0058	0.0009	0.0008	0.0008	0.0007	0.0007	0.0006	0.0006	0.0006	0.0006	0.0006	0.0001	0.0007
Haiti	0.051	0.049	0.046	0.045	0.040	0.038	0.035	0.034	0.032	0.043	0.006	0.042	0.155
Jamaica	0.261	0.257	0.260	0.243	0.245	0.252	0.243	0.245	0.248	0.227	0.010	0.248	0.041
Netherlands Antilles	0.082	0.081	0.080	0.090	0.094	0.096	0.110	0.117	0.109	0.110	0.014	0.097	0.144
Suriname	0.012	0.017	0.022	0.025	0.027	0.030	0.042	0.061	0.094	0.122	0.036	0.045	0.805
Trinidad & Tobago	0.229	0.243	0.250	0.272	0.274	0.272	0.278	0.269	0.260	0.265	0.016	0.261	0.061
<b>Sum of the Weights</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>	<b>1.0</b>			

One of the useful insights provided by Table 3 is that filling in missing weights in the future may not be such a troublesome task since shares tend to be either fairly constant or moving on trend. So, we may be able to use a simple extrapolative method to predict a weight over one of two periods without doing too much damage. This is a useful insight in building a regional analysis.

However, getting an absolutely correct regional growth rate may be more problematic as Figure 1 indicates since there may be no definitive way to choose between methods in the presence of measurement errors.

\*\*\*\*\*

**CARIBBEAN CENTRE FOR MONEY AND FINANCE**

The University of the West Indies  
St. Augustine, Trinidad and Tobago

**Phone:** (868) 645-1174, **Fax:** (868) 645-6017

**E-Mail:** [ccmf@sta.uwi.edu](mailto:ccmf@sta.uwi.edu)

**Website:** [www.ccmfuwi.org](http://www.ccmfuwi.org)