

CENTRAL BANK OF BARBADOS



ECONOMIC REVIEW

VOL XXXVI NO.1  
JUNE 2009





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## **Publisher's Note**

The *Economic Review* is published three times a year in June, September and December, by the Central Bank of Barbados. It is prepared by the Bank's Research Department and contains articles of research undertaken at the Bank. In addition, we welcome contributions of a non-technical and empirical nature on economic and policy issues in the Caribbean. Book reviews and surveys are also welcome. All submitted papers are reviewed by the Editorial Committee\* and external referees.

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**Review of Economy**

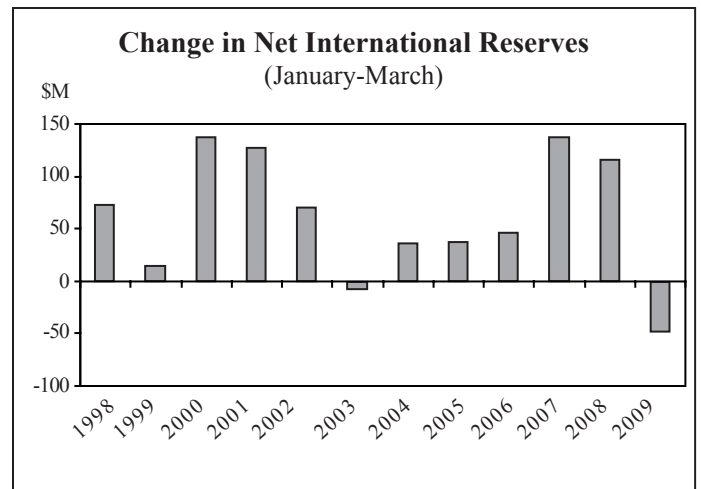
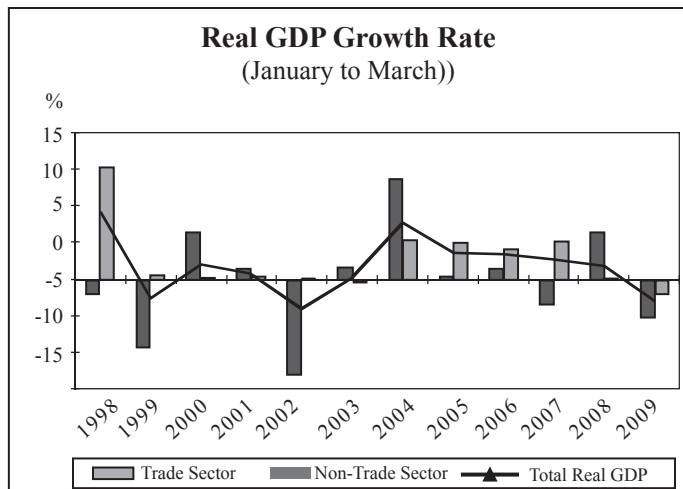
The prevailing global recessionary environment continued to suppress the performance of key productive sectors, resulting in a contraction in real economic activity in Barbados. For the first three months of 2009, real Gross Domestic Product fell by an estimated 3.1% in contrast to growth of 1.9% for the corresponding period in 2008. This weak outturn represents the first January-March decline since 2002 and largely reflects declines in tourism and construction value-added, which further adversely impacted on related industries, both in the traded and non-traded sectors. During the review period, the twelve-month moving-average rate of inflation increased, while the fiscal deficit of the central government was slightly higher than the amount recorded for the corresponding period of 2008. Additionally, a reduction in the value of retained imports, partially attributable to subsiding inflationary pressures, resulted in an external current account surplus. However, for the first time since 1995, the capital and financial account recorded a first quarter deficit, and, as a result, the net international reserves (NIR) of the monetary authorities declined by approximately \$48.5 million.

Due to the lacklustre performance of Barbados'

major trading partners, value-added in the traded sectors during the first quarter of 2009 declined by 5.7%, compared to growth of 6.8% in the first three months of 2008. This outturn was driven primarily by large reductions in tourism and manufacturing activities. Similarly, output in the non-traded sectors shrank by 2.1% on account of declines in construction, wholesale and retail activity, business and other services as well as transportation, storage and communication.

During the review period, both domestic deposits and credit to the non-financial private sector slowed significantly when compared to the same period last year. However, the magnitudes were such that the liquidity levels in the banking system were just slightly above those recorded at the end of 2008. At the same time there was a small contraction in the treasury bill rate.

Despite an increase in total tax revenue, the fiscal deficit for the first three months of 2009 widened marginally relative to the first quarter of 2008. Additionally, total government expenditure expanded, mainly on account of greater spending on goods and services, wages and salaries and transfers and subsidies. Consequently, the fiscal deficit stood at approximately \$218.2 million compared to \$199.3 million in the corresponding period of 2008.

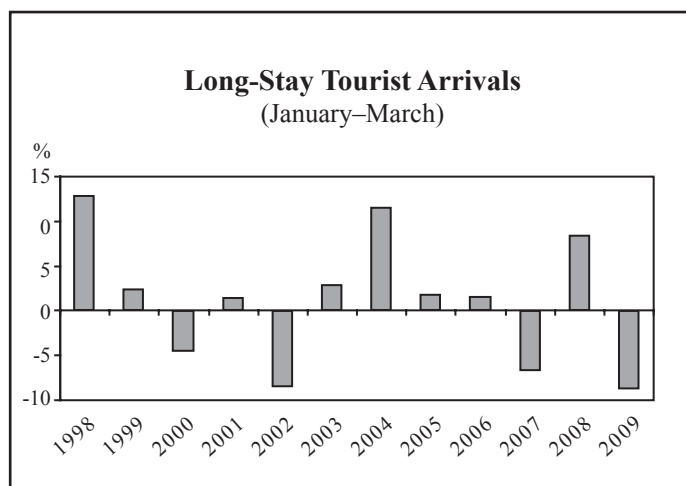


## Production, Prices and Employment

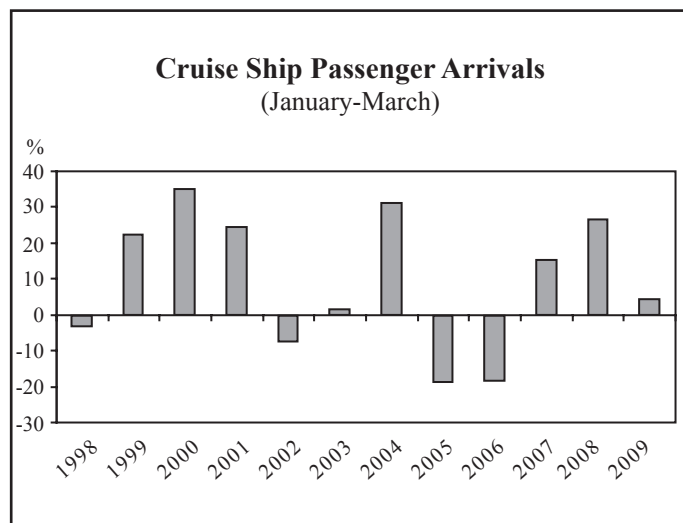
### Tourism

During the first quarter of 2009, real tourism value-added declined by 7.7%, compared to growth of 13.1% in the corresponding period of 2008, when the sector rebounded from three consecutive first quarter declines between 2005 and 2007. The downturn in tourism was driven by an 8.6% fall-off in long-stay arrivals, compared to an increase of 10.8% in 2008. This outturn was mainly attributed to reduced airlift capacity as well as the global economic downturn, which affected discretionary income in Barbados' major tourism source markets. Consequently, reductions in arrivals were recorded for every source market except Canada and Germany which expanded by 14.1%, and 2.3%, respectively. Visitor arrivals from the U.K and the U.S. fell by 7.4% and 19.7%, respectively, while those from Trinidad and Tobago, and other CARICOM countries declined by 17.2% and 18.8%, respectively. Additionally, long-stay arrivals from all other countries and other Europe dropped by 13.6% and 3.9%, respectively.

The performance of the cruise industry was not as buoyant when compared to that of the previous year, reflecting a fall-off in demand. For the first quarter of 2009, cruise passenger arrivals fell by 3.7%, in contrast to growth of 26.8% in the corresponding period one year earlier. The performance of the cruise industry was also hampered by increased competition from the Mediterranean region, as



well as a reduction in passengers owing to an ongoing legal dispute between a major cruise line and Puerto-Rico, the main cruise-passenger hub for Barbados.



### Manufacturing

Output in the sector fell by 6.4% for the first three months of 2009, compared to a decline of 3.8% a year earlier. This was in line with first quarter declines in 10 of the last 12 years. Large reductions were recorded for food processing (7.9%), garments (65.4%), electronics (45.3%), chemicals (20.9%), miscellaneous non-metallic mineral products (13.3%) and wooden furniture (21.6%). In addition, output for the miscellaneous manufacturing industries registered its third consecutive first quarter decline, falling by 4.5%, following contractions of 2.6% and 1.8% in 2007 and 2008, respectively. However, the beverages and tobacco sub-sector expanded by 23.2%, in contrast to a decline of 8.6% in 2008. The production of petroleum products remained constant during the review period.

### Agriculture and Fishing

As a result of a timely start to the sugar harvest sugar production grew by 11.9% during the first quarter of 2009, in contrast to two previous consecutive first-quarter declines. Real value-added in non-sugar agriculture remained relatively constant at 0.5%, compared to an average growth

rate of 2.9% for the first quarters of the preceding four years. Milk production improved by 1.4%, after virtually stagnating one year earlier, while fish catches increased by 2.9%, after escalating by 39.3% in 2008. Likewise, chicken production improved during the review period by 2.8%, compared to a decline of 8.8% in 2008 when the price of feed and diesel had surged. The outturn in the current review period was buttressed by lower diesel costs and a marginal decline in the price of feed. In contrast, the production of other meats declined by 9.0%, while output of food crops remained unchanged.

### **International Business and Financial Services**

The global economic recession resulted in the loss of asset values and reduced profitability of entities in the international business sector during the review period. For the first three months of 2009, ninety-four new international businesses were registered compared to 150 in the corresponding period of 2008. The number of new licences issued to societies with restricted liability amounted to seven, some 30 less than in 2008. No exempt insurance companies, offshore banks or exempt insurance management companies were registered during the review period.

With respect to the renewal of licences, 1,404 international businesses, and 324 societies with restricted liability renewed their licences, compared to 1,610 and 303, respectively, in the same period of 2008.

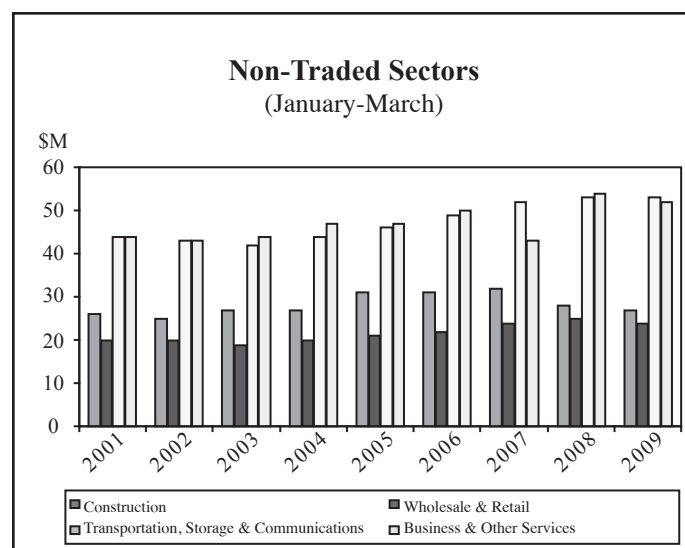
### **Construction**

Consistent with the prevailing economic downturn, construction activity for the first three months of 2009 fell by an estimated 4.6%, following a reduction of 11.9% in the corresponding period 2008, marking the sector's second consecutive first quarter decline. The reduction in construction activity was characterised by a contraction in cement consumption as well as imports of building materials, particularly wood, lumber and structural parts.

### **Other Non-traded Sectors**

Value-added in the wholesale and retail sector decreased by 3.1%, the sector's first January to March decline since 2002, after which it had been expanding by an average

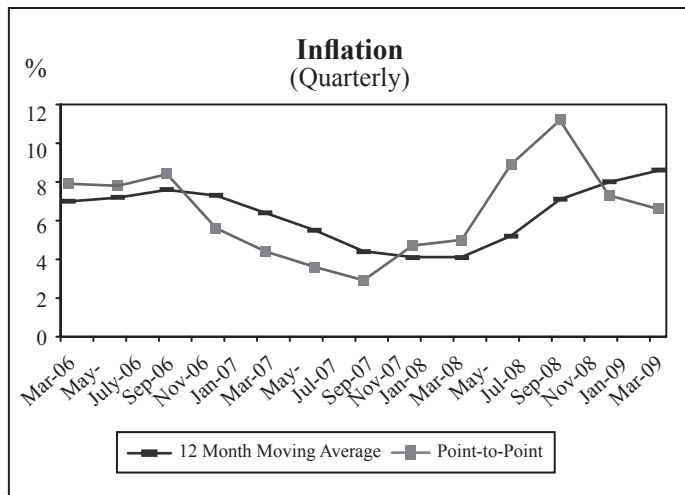
of 3.9%. The value-added in the business and other services sector fell by 0.2%, in contrast to growth of 2.6% in 2008, while output in the transportation, communication and storage sector shrunk by 2.8%, following growth of 3.1% in the corresponding period of 2008. Similarly, value-added for electricity, gas and water as well as mining and quarrying dropped by 0.6% and 27.6%, respectively.



### **Prices and Employment**

At the end of March 2009, the twelve-month moving average rate of inflation stood at 8.6%, up from 8.0% at the end of December 2008 and 4.5 percentage points above that recorded for the same period last year. The main drivers of inflation were food, household operations and supplies as well as medical and personal care, which surged by 15.5%, 7.4% and 8.8%, respectively. Increases were also recorded for clothing and footwear (5.1%), as well as alcoholic beverages and tobacco (26.6%).

The average rate of unemployment for the first quarter of 2009 was 10.1%, up from 7.6% in 2008. The male unemployment rate increased by 3.7 percentage points to 10.2%, while the female unemployment rate moved from 8.8% to 10.0%. There was a decline in the number of persons employed in construction, wholesale and retail trade, tourism, general services as well as finance, insurance and business



services. Consequently, the number of individuals seeking employment during the review period amounted to 7,200, compared with 4,100 in the same period one-year earlier.

### Financial Sector

Since late 2007, the Central Bank of Barbados, in response to the global economic crisis, has sought to lower the operating cost of businesses and individuals in

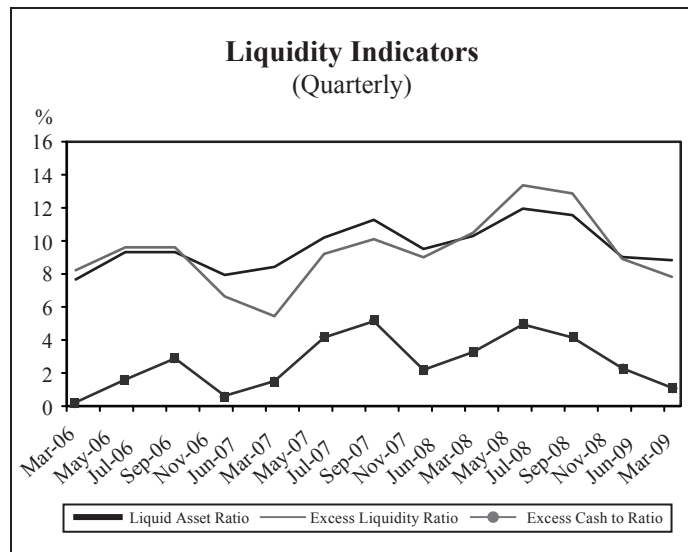
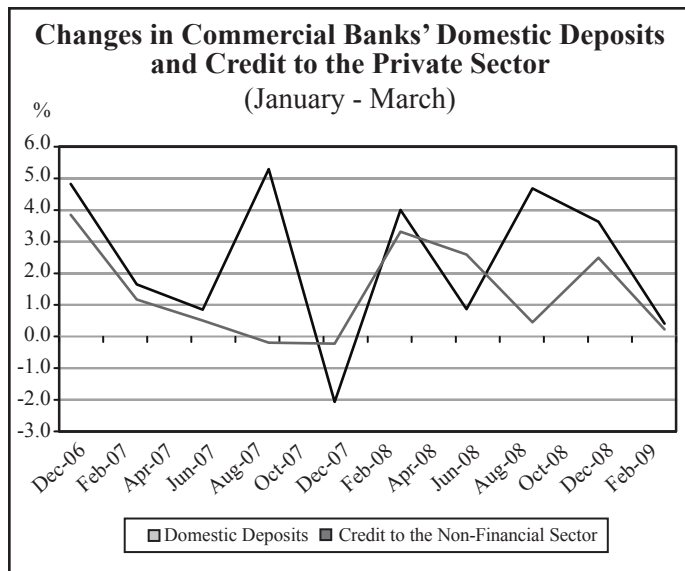
Barbados through interest rate reductions. Continuing in this vein, the Bank lowered the minimum deposit rate in February 2009 from 4% to 3%, with a view to recording consequential reductions in the lending rate. The rate is now 225 basis points below its level in 2007 and the weighted average lending rate was 9.80% at December 2007 and 9.33% at February 2009. In addition, a repurchase facility was introduced in February 2009 as a proactive measure to deal with any liquidity issues that may arise. By the end of the quarter, no entity had accessed the facility.

### Deposits

Total Barbados dollar deposits at commercial banks grew by \$35.1 million (0.5%) during the review period, compared to \$263.1 million (3.6%) for the corresponding period of 2008. The slowdown in deposit growth was attributed to declines in deposits of financial institutions and business firms, which fell by \$22.5 million and \$20.5 million, respectively. Deposits by statutory bodies increased by \$47.4 million, following an accumulation of \$40.1 million in the corresponding period of 2008. Government deposits grew marginally, by \$3.7 million, while deposits by private individuals rose by \$98.5 million, compared to a \$70.6 million increase one year earlier. Foreign currency deposits of residents grew by \$21.8 million, after rising by \$12.4 million in the corresponding 2008 period.

### Credit

Credit to the non-financial private sector fell by approximately \$13.7 million (0.3%) for the first three months of 2009, compared to \$113.0 million (2.5%) for the comparable 2008 period. Despite a \$22.5 million expansion in borrowing for new residential mortgages, loans to the personal sector remained relatively constant, in sharp contrast to an increase of \$28.0 million in the corresponding period of 2008. Additionally, lending to manufacturing, construction and professional and other services declined by \$4.7 million, \$2.6 million and \$6.4 million, respectively. Credit to the government fell by \$2.1

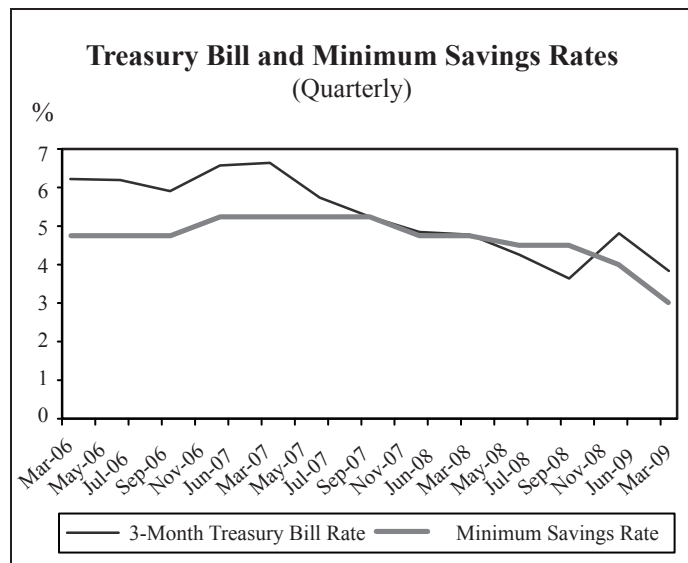


million, after declining by \$1.7 million in 2008. In contrast, increases were recorded for loans to financial institutions (\$4.3 million), entertainment and catering (\$4.8 million) and statutory bodies (\$3.4 million).

#### Liquidity and Interest Rates

During the first three months of 2009, the banking system remained relatively liquid, as reflected in a 0.3 percentage point increase in the liquid asset ratio from 9.0% at December 2008 to 9.3% at the end of March 2009. However, there was a reduction in the holdings of cash by commercial banks, as the excess cash to deposit ratio decreased from 2.3% at the end of 2008 to 1.5% at March 2009. Over the same period, the three-month Treasury Bill rate fell from 4.81% to 3.85%, while the six month rate moved from 5.18% to 4.09%. Additionally, the weighted average rate on all loans fell by 0.33 percentage points to

9.92%, while the minimum deposit rate stood at 3% at the end of the review period.



**Summary Accounts of the Banking System**  
(\$ Million)

	2007				2008				2009 <sup>P</sup>
	Mar.	Jun.	Sep.	Dec.	Mar.	Jun.	Sep.	Dec.	Mar.
<b>Net International Reserves</b>	1,940.4	2,035.1	2,083.8	2,247.7	2,494.9	2,290.5	1,980.1	1,749.0	<b>1,801.6</b>
Monetary Authorities	1,333.0	1,454.3	1,464.6	1,548.0	1,664.1	1,662.0	1,534.2	1,356.9	<b>1,308.6</b>
Commercial Banks	607.4	580.8	619.2	699.7	830.8	628.5	445.9	392.5	<b>493.0</b>
<b>Net Domestic Assets</b>	3,987.6	4,202.3	4,272.2	4,340.7	4,220.8	4,471.7	4,674.1	5,006.4	<b>4,919.0</b>
Credit to public sector	161.2	274.1	388.0	452.1	273.1	415.1	534.7	516.9	<b>464.1</b>
Central Government (net)	391.2	508.9	683.8	533.6	499.2	715.7	823.3	732.8	<b>701.8</b>
Rest of Public Sector	(230.0)	(234.8)	(295.8)	(81.5)	(226.1)	(300.6)	(288.6)	(216.0)	<b>(237.2)</b>
<b>Credit to Rest of Financial System</b>	454.3	359.5	379.8	482.1	423.1	435.1	443.0	477.9	<b>482.2</b>
<b>Liabilities to Other Financial Institutions</b>	727.6	722.4	763.8	925.4	876.2	884.5	849.4	808.8	<b>794.9</b>
<b>Credit to Private Sector</b>	4,311.4	4,416.1	4,503.9	4,513.5	4,626.5	4,706.1	4,832.0	5,010.9	<b>4,997.2</b>
<b>Liabilities to the Private Sector</b>	5,928.0	6,237.4	6,356.0	6,588.3	6,715.7	6,762.2	6,654.1	6,755.8	<b>6,720.6</b>
Currency in Circulation	458.3	470.1	458.2	492.1	474.0	464.8	460.8	479.9	<b>465.3</b>
Demand Deposits	1,780.1	1,861.7	1,847.0	2,004.8	1,955.3	1,919.0	1,902.3	1,978.1	<b>1,883.6</b>
Time Deposits	672.7	784.3	812.3	763.9	869.3	868.2	733.8	713.5	<b>694.1</b>
Savings Deposits	3,016.9	3,121.3	3,238.5	3,327.6	3,417.1	3,510.1	3,557.3	3,584.2	<b>3,677.5</b>
<b>MEMO:</b>									
Domestic Deposits	6,978.7	7,267.4	7,471.5	7,690.1	7,942.4	8,095.6	7,966.1	7,883.4	<b>7,960.4</b>
Liquid Assets	1,452.6	1,576.0	1,592.0	1,721.2	1,856.5	1,822.6	1,686.5	1,532.8	<b>1,519.7</b>
Loans & Advances	4,871.0	4,857.5	4,978.7	5,097.2	5,167.4	5,281.1	5,454.2	5,703.0	<b>5,698.3</b>

Source: The Central Bank of Barbados

P: Provisional

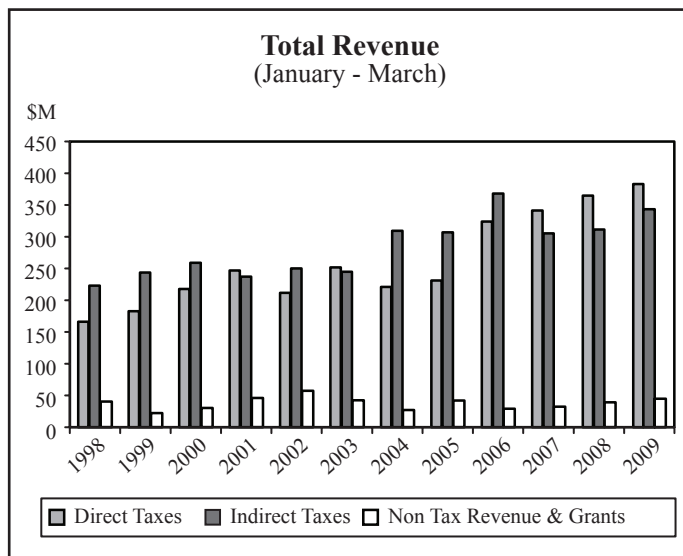
\* Domestic Deposits include the foreign currency deposits of Residents

## Public Sector

### Revenue

For the first quarter of 2009 total revenue rose by approximately 9.0% to \$780.5 million, compared to an increase of 5.4% for the same period in 2008. Boosted by expansions in most sub-categories, direct taxes grew by 9.6% after rising by 7.0% in the similar period of 2008. Personal tax receipts expanded by 19.3% to \$130.6 million on account of higher wages and salaries, as well as the disbursement of back-pay during the month of January. The growth in property taxes was attributed to the upward revaluation in properties undertaken in 2008. As a result, the intake from property taxes expanded by 30.9% to \$16.1 million, in sharp contrast to a contraction marginally by 0.6% in the corresponding period one year earlier. Corporate tax receipts for the first three months also increased by an estimated 7.7% to \$234.5 million, as receipts not received during the last quarter of 2008 as a result of late processing were collected.

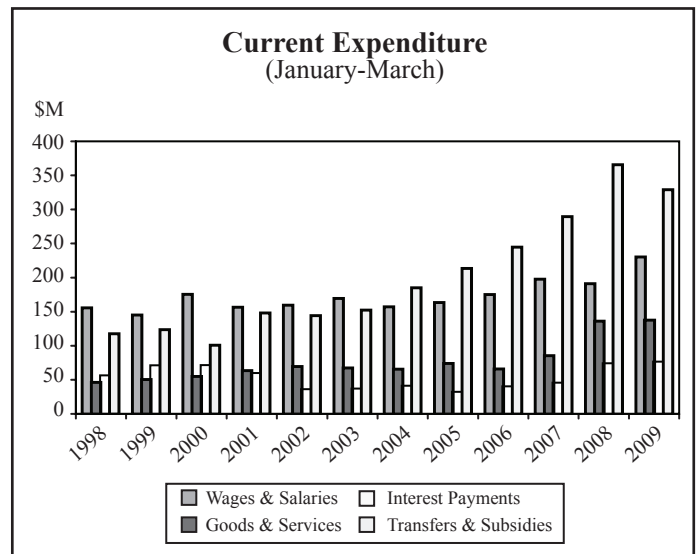
Indirect tax receipts contracted marginally by 0.6%, following an increase of approximately 2.0% for the first quarter of 2008. This outturn was driven by a reduction in value-added tax (VAT) receipts, which fell by



15.3% during the period, contrasting with gains in excise duties (14.3%), import duties (16.8%) and other indirect taxes (47.7%), including licence fees and road taxes.

### Expenditure

During the first three months of 2009, total expenditure increased by an estimated 9.1% to \$998.7 million. Current expenditure also grew by roughly 12.0%, reflecting higher spending on wages and salaries (21.3%), goods and services (2.9%) as well as greater interest payments (1.9%). Transfers and subsidies rose by 12.5%, as higher transfers were granted to the University of the West Indies, Queen Elizabeth Hospital and Barbados National Oil Company Limited during the review period. Additionally, capital expenditure fell by 5.6%, despite ongoing construction on the ABC Highway, the Harrison's Cave Redevelopment Project and the Urban Rehabilitation Programme.



### Financing

For the first quarter of 2009, the fiscal deficit was \$218.2 million, some \$18.9 million more than the deficit for the corresponding 2008 period, and was financed primarily by domestic sources. Commercial banks increased their net holdings of Government debt by \$4.7 million, while the National Insurance Scheme held an additional \$94.1 million. The quantum of funds available to finance the fiscal deficit was greater than the actual deficit incurred during the review period. As a result, Government increased its deposits at the Central Bank by \$63.5 million, compared to \$79.6 million in 2008.

### **Government Securities**

Treasury Bills outstanding at the end of March 2009 were \$693.4 million, compared to \$697.0 million for the same period in 2008, with \$473.8 million held by commercial banks and trust companies, \$101.8 by the National Insurance Scheme and \$46.8 million by the Central Bank. The nominal value of savings bonds at March 2009 amounted to \$97.1 million, compared to \$99.2 million one year earlier. In addition, the total amount of Government debentures and treasury notes outstanding at March 2009 was approximately \$3,337.5 million, up from \$2,818.3 million in March 2008. Of this, the National Insurance Service accounted for \$1,638.6 million, while the holdings at Deposit Money Banks and Trust Companies amounted to \$696.3 million, an increase of \$38.3 million compared to the previous review period.

### **Debt**

The stock of central government debt at March 2009 was approximately \$6,651.0 million, some \$611.0 million more than the amount outstanding at March 2008. Most of the funding was obtained from domestic sources. The stock of domestic debt stood at \$4,671.5 million at end of review period, \$646.4 million more than at the same period in 2008. The majority of domestic funding was through long term debentures.

#### **Central Government Debt (\$ Million)**

	Dec. 07	Mar. 08	Dec-08	<b>Mar-09</b>
<b>Central Government</b>	5,663.6	6,040.0	6,477.1	<b>6,651.0</b>
<b>Domestic</b>	3,929.5	4,025.1	4,482.4	<b>4,671.5</b>
Short Term	837.5	830.4	963.5	<b>943.3</b>
Treasury Bills	690.3	697	657.5	<b>693.4</b>
Loans & Advances	147.2	133.4	305.6	<b>249.8</b>
Long term	3,092.0	3,194.7	3,518.9	<b>3,728.2</b>
Debentures	2,701.5	2,818.3	3,129.9	<b>3,337.5</b>
Savings Bonds	101.5	99.2	94.6	<b>96.3</b>
Loans & Advances	289.0	277.2	294.4	<b>294.4</b>
<b>External</b>	1,734.1	2,014.9	1,994.8	<b>1,979.5</b>

Source: The Central Bank of Barbados

### **Fiscal Year Operations**

For the FY 2008/2009 growth in government expenditure continued to surpass that of revenue, resulting in a widening budget deficit. Consequently, the fiscal deficit of central government was estimated at \$451.4 million or 6.2% of GDP, compared to the 2007/2008 fiscal year deficit of \$291.6 million. The rise in total revenue for the FY 2008/2009 was approximately 2.2%, about \$50.0 million more than the amount collected in the 2007/2008 fiscal year, while total expenditure increased by 7.6% to \$2,978.4 million.

Despite a 3.6% increase in indirect tax receipts, total tax revenue only expanded by 0.6%. Increases were recorded in all indirect tax categories with the exception of stamp duties and VAT receipts, which fell by 15.0% and 2.1%, respectively. During the FY 2008/2009, excise and import duties grew by 2.6% and 11.2%, respectively. Similarly, government's other indirect tax revenue earnings rose by 35.3% to \$153.9 million. In contrast, the collection of direct tax revenue declined during the FY 2008/2009 by 3.0% to \$1,018.0 million. This downturn was attributed to a sharp decrease in corporate taxes of 15.1%, despite gains in property and personal taxes of 23.3% and 5.6%, respectively.

During the FY 2008/2009, government's current expenditure grew by 8.0% to \$2,691.6 million on account of expansions in goods and services, higher interest payments and greater transfers and subsidies. Expenditure on goods and services amounted to \$376.0 million, 3.9% more than the amount spent in the 2007/2008 fiscal period. Similarly, expenditure for interest payments expanded by an estimated 15.2% to \$395.8 million on account of new debt that was undertaken during the previous fiscal year. The amount of transfers and subsidies disbursed during the FY 2008/2009 expanded by 14.5% to \$1,119.5 million. However, expenditure on wages and salaries fell by 1.2% to \$800.4 million. Driven primarily by ongoing construction on the ABC highway, capital expenditure for the FY 2008/2009 rose by 4.4% to \$248.6 million, in sharp contrast to a decline of 22.7% in 2007/2008 fiscal year.

In line with favourable liquidity levels, government was able to finance its fiscal deficit for the FY 2008/2009

mainly through domestic sources. Commercial banks decreased their holding of government securities by \$12.2 million, while private non-banks and the National Insurance Scheme held additional securities amounting to \$169.4 million and \$284.0 million, respectively. Additionally, during the year, Government deposited \$196.2 million at

the Central Bank. With respect to foreign financing, project fund inflows of \$80.9 million, coupled with \$117.5 million in amortisation payments, resulted in a net foreign position outflow of \$36.7 million, compared to \$62.0 million in the previous fiscal year period.

### Government Financing (\$ Million)

	Fiscal Year				January-March			
	2005/06	2006/07	2007/08	2008/09 <sup>p</sup>	2006	2007	2008	2009 <sup>p</sup>
<b>Domestic Financing</b>	(4.0)	224.7	353.7	<b>488.1</b>	(75.2)	49.0	225.5	<b>233.5</b>
Central Bank	(26.9)	85.4	(135.3)	<b>196.2</b>	(24.9)	(0.9)	(79.6)	<b>(63.5)</b>
Commercial Banks	(279.5)	(91.5)	243.6	<b>(12.2)</b>	(138.1)	(17.9)	20.0	<b>4.7</b>
National Insurance Scheme	104.4	91.0	183.3	<b>284.0</b>	10.0	43.0	71.5	<b>94.1</b>
Private Non-Bank	267.3	139.7	149.6	<b>169.4</b>	101.7	102.5	27.5	<b>88.9</b>
Divestment	31.4	0.0	0.0	<b>0.0</b>	31.4	0.0	0.0	<b>0.0</b>
Other	(100.7)	0.2	(87.5)	<b>(149.3)</b>	(55.3)	(77.7)	186.4	<b>109.3</b>
<b>Foreign Financing</b>	184.3	8.8	(62.0)	<b>(36.7)</b>	3.9	(14.8)	(26.3)	<b>(15.3)</b>
Capital Markets	245.2	131.9	0.0	<b>0.0</b>	0.0	0.0	0.0	<b>0.0</b>
Project Funds	47.7	19.4	47.3	<b>80.9</b>	21.7	2.3	5.2	<b>14.6</b>
Policy Loans	0.0	0.0	0.0	<b>0.0</b>	0.0	0.0	0.0	<b>0.0</b>
Amortisation	(108.6)	(142.5)	(109.4)	<b>(117.5)</b>	(17.8)	(17.1)	(31.4)	<b>(29.8)</b>
Divestment	0.0	0.0	0.0	<b>0.0</b>	0.0	0.0	0.0	<b>0.0</b>
<b>Total Financing</b>	180.3	233.5	291.6	<b>451.4</b>	(71.3)	34.2	199.3	<b>218.2</b>

Source: The Central Bank of Barbados

**Government Operations**  
(\$ Million)

	Fiscal			January-March				
	2006/07	2007/08	2008/09	2005	2006	2007	2008	2009 <sup>P</sup>
<b>Total Current Revenue</b>	2,236.5	2,477.0	2,540.8	581.1	721.5	679.4	715.8	<b>780.5</b>
<b>Tax Revenue</b>	2,130.8	2,337.0	2,351.2	538.8	692.2	646.9	676.7	<b>709.9</b>
<i>Direct Taxes</i>	976.5	1,050.0	1,018.0	231.6	324.0	341.4	365.2	<b>400.3</b>
a) Personal	306.7	334.9	353.7	93.1	103.6	100.0	109.5	<b>130.6</b>
b) Corporate	445.5	521.0	442.3	116.4	182.0	196.6	217.8	<b>234.5</b>
c) Levies	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<b>0.0</b>
d) Stabilization	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<b>0.0</b>
e) Property	151.4	103.1	127.1	15.1	25.1	24.8	12.3	<b>16.1</b>
f) Other	73.0	91.0	94.8	7.1	13.3	20.0	25.5	<b>19.1</b>
<i>Indirect Taxes</i>	1,154.2	1,286.9	1,333.2	307.2	368.1	305.5	311.5	<b>309.6</b>
a) Consumption	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<b>0.0</b>
b) Stamp	26.9	22.0	18.7	5.0	6.2	8.0	5.3	<b>4.6</b>
c) VAT	674.8	789.6	772.6	152.7	225.5	195.6	192.7	<b>163.3</b>
d) Excises	145.3	164.3	168.5	64.2	64.0	33.6	40.7	<b>46.5</b>
e) Import Duties	186.5	197.3	219.4	50.2	39.0	36.9	39.9	<b>46.6</b>
f) Hotel & Restaurant	0.0	0.0	0.0	0.0	0.0	0.0	0.0	<b>0.0</b>
g) Other	120.8	113.7	153.9	35.1	33.5	31.4	32.9	<b>48.6</b>
<b>Non Tax Revenue &amp; Grants</b>	105.7	140.0	175.8	42.2	29.3	35.2	39.1	<b>70.6</b>
<b>Current Expenditure</b>	2,112.4	2,492.2	2,691.6	482.1	524.8	598.8	765.3	<b>856.9</b>
Wages & Salaries	698.6	809.0	800.4	163.5	175.0	179.5	190.9	<b>231.5</b>
Goods & Services	263.3	361.9	376.0	74.3	66.2	85.6	136.2	<b>140.2</b>
Interest Payments	329.9	343.6	395.8	31.2	39.1	44.7	73.2	<b>74.6</b>
External	119.2	140.5	134.5	9.7	9.3	7.1	35.7	<b>35.4</b>
Domestic	210.7	202.2	261.3	21.5	29.9	37.6	37.5	<b>39.2</b>
Transfers & Subsidies	820.6	977.7	1,119.5	213.2	244.5	289.0	365.0	<b>410.6</b>
<b>Current A/C Balance</b>	124.1	(15.2)	(150.8)	99.0	196.7	80.6	(49.5)	<b>(76.4)</b>
<b>Capital Expenditure</b>	249.5	238.2	248.6	104.3	123.3	105.2	140.2	<b>132.3</b>
<b>Net Lending</b>	108.1	38.2	38.2	0.2	2.1	9.6	9.6	<b>9.6</b>
<b>Total Expenditure &amp; Net Lending</b>	2,469.9	2,768.6	2,978.4	586.6	650.2	713.6	915.1	<b>998.7</b>
<b>Overall Balance</b>	(233.5)	(291.6)	(451.4)	(5.5)	71.3	(34.2)	(199.3)	<b>(218.2)</b>

Source: The Central Bank of Barbados

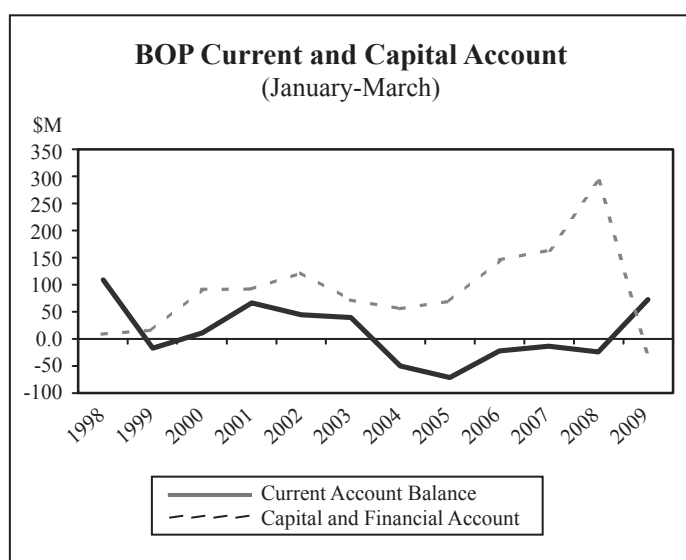
P: Provisional

Note: Domestic Deposits value is the sum of Barbados dollar deposits and foreign currency deposits of residents.

## Foreign Trade and Payments

### Current Account

For the first quarter of 2009, a surplus of \$23.2 million was recorded on the external current account, its first since 2003, in contrast to a deficit of \$24.5 million in the comparable three months of 2008. The improvement in the current account was mainly driven by a sizeable reduction in retained imports, as the value of domestic exports fell.



For the first three months of 2009, retained imports contracted by 24.4%, in contrast to an expansion of 9.3% in the corresponding period one year earlier. Imports of consumer goods fell by 19.7%, following a decline of 4.1% during the previous first quarter, as a result of decreases

in imports of pharmaceuticals, motor and electrical items as well as food and beverages, while capital goods fell by 17.4% because of fewer machinery imports. As a result of lower fuel and crude materials, imports of intermediate goods decreased by 30.3%, compared to a 40.6% surge in the first quarter of 2008. This reduction was mainly a price effect, linked to declining international commodity prices.

Domestic exports contracted by 6.1% during the January to March period of 2009, after little or no increase in the relevant period of 2008. This downturn was primarily driven by a fall-off in exports of electrical components and chemicals by 27.0% and 41.7%, respectively. Additionally, in line with the dip in tourism value-added, travel receipts declined by 9.0% during the review period, following an expansion of 17% in the corresponding period of 2008.

### Capital and Financial Account

During the review period, the capital and financial account recorded a deficit of \$26.8 million, (the first for the first quarter since 1995) in sharp contrast to a surplus of \$291.3 million in the corresponding period of 2008. The poor performance on the capital and financial account was attributed to higher net long-term outflows amounting to \$45.4 million, on account of both net public and private outflows of \$21.1 million and \$24.3 million, respectively. A significant portion of public outflows was associated with debt amortisation payments, particularly IADB loans, while remittances from the sale of real estate and debt service payments were responsible for the large private outflows during the January to March period of 2009. Net short-term inflows for the first quarter of 2009 totalled \$1.1 million, compared to net outflows of \$47.2 million in the same period one year earlier.

## Balance of Payments

(January – March)

(\$ Million)

	2005	2006	2007	2008	2009 <sup>p</sup>
<b>Current Account Balance</b>	(72.5)	(22.4)	(13.6)	(24.4)	<b>23.2</b>
Merchandise Trade	(515.0)	(509.1)	(529.7)	(589.9)	<b>(425.5)</b>
Total Exports (BOP Basis)	112.9	161.9	178.7	154.5	<b>118.2</b>
<b>Domestic Exports</b>	85.4	128.4	109.7	109.6	<b>102.9</b>
Sugar	1.8	2.3	0.2	-	<b>0.4</b>
Electronic Components	8.0	16.1	5.8	6.3	<b>4.6</b>
Chemicals	14.1	14.7	14.5	20.4	<b>11.9</b>
Food/Beverages	21.8	26.5	32.7	28.3	<b>27.9</b>
All Other	39.8	68.9	56.6	54.5	<b>58.0</b>
<b>Total Imports (BOP basis)</b>	673.8	737.0	763.0	806.5	<b>616.2</b>
<b>Retained Imports</b>	682.8	727.2	731.7	799.8	<b>605.0</b>
Consumer Goods	265.5	261.1	299.5	287.1	<b>230.6</b>
Capital Goods	131.2	181.3	173.2	148.6	<b>122.8</b>
Intermediate Goods	284.0	280.8	254.6	358.0	<b>249.7</b>
Miscellaneous Goods	2.1	3.5	4.4	6.0	<b>1.8</b>
<b>Services (net)</b>	439.0	465.6	492.9	594.4	<b>487.0</b>
Travel Credits	587.8	657.5	699.8	819.0	<b>745.6</b>
Other	(148.8)	(192.0)	(206.9)	(224.5)	<b>(223.5)</b>
<b>Investment Income (net)</b>	(80.8)	(83.8)	(55.3)	(102.3)	<b>(85.2)</b>
<b>Transfers (net)</b>	84.4	104.9	78.4	73.3	<b>46.9</b>
<b>Capital and Financial Account</b>	70.3	145.5	163.9	291.3	<b>(26.8)</b>
Long term	(8.8)	228.1	252.6	314.4	<b>(40.8)</b>
Public Sector	(0.4)	18.1	(62.5)	(8.4)	<b>(16.5)</b>
Private Sector	(8.4)	210.0	315.1	322.9	<b>(24.3)</b>
Other	2.3	21.5	0.2	24.1	<b>12.8</b>
Short-term	76.7	(104.1)	(88.9)	(47.2)	<b>1.1</b>
Errors & Omissions	7.9	(2.7)	97.4	(19.7)	<b>62.2</b>
<b>Balance for Official Financing</b>	5.7	120.5	247.7	247.2	<b>52.0</b>
Official financing (net)	-	-	-	-	-
IMF	-	-	-	-	-
Other Financial Institutions	-	-	-	-	-
<b>Reserve movements (CBB basis)</b>					
<b>(-Increase/+Decrease)</b>	(5.7)	(120.5)	(247.7)	(247.2)	<b>52.0</b>
Change in NIR (IMF basis)					
(-Increase/+Decrease)	(37.4)	(44.7)	(137.4)	(116.1)	<b>48.5</b>

Source: The Central Bank of Barbados

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## **Regional Economic Developments**

The global economic turmoil continued to adversely impact the rest of the Caribbean region, as the performance of major sectors either slowed or deteriorated, with a corresponding rise in the level of unemployment during the review period. However, inflationary pressures began to subside, as international commodity and oil prices declined.

As in Barbados, value-added in the tourism sector throughout the region suffered from a reduction of tourist arrivals during the first quarter of 2009.

Long-stay arrivals declined in all countries except for Cuba, Jamaica and Cancun (Mexico), as arrivals to these territories rose by 2.0%, 0.2% and 4.7%, respectively. Long-stay arrivals for Grenada, Antigua and Barbuda and St. Lucia fell by 4.6%, 14.3% and 13.7%, respectively. Similarly, tourist arrivals for Anguilla, Belize and St. Vincent and the Grenadines declined by 21.4%, 7.7% and 12.9%, respectively, for the first two months of 2009. The downturn in long stay arrivals throughout the Caribbean region was driven by a fall-off in visitors from major source markets, namely, Europe and the United States.

The performance of the other productive sectors was mixed throughout the region, specifically with respect to the construction and agricultural sectors. Construction value added in Jamaica and the Bahamas remained moderate during the last quarter of 2008. However, in Trinidad and Tobago the sector continued to benefit from ongoing work on a number of private and governmental projects. With respect to agricultural output, value-added in the sector declined in Jamaica, the OECS and Trinidad and Tobago, while marginal growth was recorded in Guyana.

The level of inflation in Jamaica and Trinidad and Tobago eased during the first quarter of 2009. At February 2009, the rate of inflation in Jamaica was 0.8%, compared to 1.8% in the corresponding period of 2008 and 0.0% in December 2008. Increases in all sub-categories fluctuated between 0.1% and 1.1% except for housing, water, electricity, gas and other fuels. Similarly, the rate of inflation in Trinidad and Tobago slowed from 14.5% at the end of December 2008 to 11.7% in January 2009. This outturn was mainly driven by a reduction in food prices. However, inflationary pressures strengthened in the Bahamas, as the rate of inflation moved to 4.28%

at March 2009, compared to 2.63% one year earlier.

As with the case of Barbados, the external current account deficit for Jamaica improved, moving from US\$180.5 million in January 2008 to US\$134.5 million in January 2009. This was primarily driven by a reduction in imports of US\$225.4 million but was partially offset by a US\$80.5 million decline in exports. However, net inflows received during the period were not enough to outweigh the current account deficit, even though smaller than it was in the previous year, and as a result the NIR fell by US\$8.0 million.

The monetary policy stance adopted by the Jamaica authorities remained tight in an attempt to moderate liquidity levels and reduce inflationary pressures. In an effort to achieve its monetary policy objectives, the Bank of Jamaica increased its open market operations across the entire spectrum of instruments in December 2008. In contrast, the monetary authorities in Trinidad and Tobago reduced the repo rate by 25 basis points to 8.5% in March 2009 to boost liquidity levels. Similarly, the 3-month Treasury bill rate fell by 426 basis points to 3.26%.

## **International Economic Developments**

Indicators for the first three months of 2009 confirmed that the global economy remained in the midst of a steep downturn, which originated with the collapse of the US sub-prime mortgage market. As the repercussions of the ongoing financial turmoil spread across the globe, both developing and emerging economies continue to arm themselves with expansionary policy measures with the hope of weathering the financial storm. During the review period, the global economy witnessed lower output levels, as global demand remained sluggish, which in turn resulted in a contraction in international trade. Higher unemployment levels and lower commodity prices were also common occurrences across the globe during the period under review.

### ***Industrial Economies***

In the United States, real GDP contracted by 2.5% in the first quarter of 2009, in contrast to growth of 2.5% in the previous quarter. The contraction was underpinned

by a shortage of credit, which continued to constrain personal consumption and private fixed investment. The downturn in personal consumption was also impacted by dwindling wealth from declining home and equity prices and a deterioration in labour market conditions. The rate of unemployment moved from 5.1% in March 2008 to 8.5% in March 2009. Owing to downturns in the performance of its major trading partners, the US economy also suffered from a contraction in exports during the review period. In an attempt to support economic activity through the implementation of various stimulus measures, the US current account deficit worsened and was expected to reach around 12% of GDP for the fiscal year. On account of reduced energy cost and commodity prices, the US witnessed deflation, as the annual CPI<sup>1</sup> inflation rate fell to -0.4% at March 2009, its first decline since 1955, compared to 4.0% for the relevant period in 2008. Core inflation<sup>2</sup> stood at 1.8%, unchanged from that recorded in February 2009. Additionally, the US Federal Open Market Committee kept the target policy rate unchanged, at a range of 0% to 0.25%, while the Federal Reserve System expanded the use of non-conventional policy measures to include purchases of long-term Treasury securities in an attempt to support the functioning of financial markets and further stimulate the economy.

During the first quarter of 2009, real GDP in Canada contracted by 1.4%. Additionally, like the US, the inflation rate in Canada fell, declining to 1.2% at March 2009 relative to 1.4% in the corresponding period in 2008, while the unemployment rate increased by 1.9 percentage points to 8.0% for the same period.

In the United Kingdom, real GDP contracted by 4.2% during the review period, on account of a decline in manufacturing activity. The unemployment rate in the United Kingdom also rose to 4.5% at March 2009, up from 2.4% at March 2008. During the review period, the Halifax House Price Index continued its downward trend, falling by 17.5% in March 2009, while the annual Harmonised Index of Consumer Prices (HICP) inflation rate declined

<sup>1</sup> Consumer Price Index

<sup>2</sup> The Rate of Inflation excluding food and energy prices

### Economic Indicators: Industrial Countries

Countries	Real Output (% Growth)		Unemployment (% Rate)		Inflation (% Rate)	
	2008 Q1	2009 Q1	2008 Q1	2009 Q1	2008 Q1	2009 Q1
Canada	3.1	-1.4	6.1	8.0	1.4	1.2
Euro zone	2.2	-4.8	7.2	8.9	3.6	0.6
Japan	1.3	-9.7	3.8	4.8	1.2	-0.3
United Kingdom	2.6	-4.2	2.4	4.5	2.5	2.9
United States	2.5	-2.5	5.1	8.5	4.0	-0.4

Source: Various Central Banks and National Statistical Offices

n/a – Not available

P – Preliminary

Q1 - First Quarter

to 2.9%. On March 5, the Bank of England's Monetary Policy Committee reduced the official Bank Rate paid on commercial bank reserves to 0.5% and undertook an asset purchase programme, financed by the issuance of central bank reserves, to the tune of GBP 75 billion.

Real economic activity in Japan contracted by 9.7% in the midst of deflation, as the rate of inflation moved from 0.0% in January to -0.3% in March 2009. The contraction in economic growth was accompanied by a 45.6% reduction in exports and a corresponding decline in imports of 36.7% at March 2009.

### Emerging Markets

Economic activity in Asia slowed significantly during the review period, with declines recorded for some countries in the region. This outturn was attributed to a plunge in exports due to falling external demand. Unemployment rates rose in most countries throughout the region causing domestic consumption and private investment to dampen. Additionally, inflationary pressures further moderated in most countries, allowing several central banks to continue to loosen their monetary policy efforts.

Industrial output in China was hampered by weak exports and a slowdown in the construction sector during the first quarter of 2009. As a result, real value added increased

by 6.1% compared to 6.8% in the last quarter of 2008. In addition, the annual growth rate of investment rose to 30.0% on account of the implementation of a fiscal stimulus package, which was approved in November 2008. Both credit and consumption growth remained strong and relatively resilient despite the ongoing global economic downturn. At the end of February the stock of loans was 30.0% higher than that recorded in 2008. In March 2009 annual CPI inflation stood at -1.2% from 1.0% in January.

Economic activity in Latin America continued to weaken on account of sluggish external and domestic demand, with inflationary pressures subsiding, albeit only gradually. In Brazil, real GDP fell by 13.3% in March 2009 because of a slowdown in investment and, to a lesser extent, in private consumption growth. Real economic activity in Argentina also declined by 1.5% in the first quarter of 2009, while inflationary pressures remained strong at 6.3% in March. In Mexico, real GDP continued to decline and was

estimated to have fallen by 9.7% in February 2009. Annual inflation in Mexico remained high at 6.0% in March 2009.

### **Commodity Prices**

During the review period the price of commodities rose marginally as indicated by a 1.9% increase in the overall commodity price index. Prices advanced for all sub-categories except aluminium, which declined by 11.1%. Due to the lower global aggregate demand, commodity prices for the first quarter of 2009 were significantly below those recorded for the corresponding period one year earlier. For the first three months of the year the cost of food products advanced by 4.3%, mainly driven by surges in rice (13.5%), bananas (7.5) and wheat (5.0%). The cost of metals remained relatively constant during the first quarter of 2009, despite substantial increases in copper (21.4%) and silver (14.0%). Although the price of petroleum climbed by 13.3% to US\$46.95 per barrel, up from US\$41.50 per barrel in December 2008, this was still significantly below its average.

### **Commodity Prices**

Commodities	Mar-08	Dec-08	Mar-09	Change on Mar-08	Change on December-08
Total (Index of Market Prices)	181.2	98.0	99.9	-44.9	1.9
Non-Fuel (Index of Market Prices)	168.4	108.9	110.3	-34.5	1.3
Food (Index of Market Prices)	172.5	119.6	124.7	-27.7	4.3
Sugar (US ¢ / lb)	20.6	20.0	20.5	-0.5	2.5
Bananas (US \$ / metric ton)	1027.4	842.5	906.1	-11.8	7.5
Rice (US \$ / metric ton)	672.6	550.8	625.3	-7.0	13.5
Wheat (US \$ / metric ton)	439.7	220.1	231.0	-47.5	5.0
Soybeans (US \$ / metric ton)	495.7	318.8	333.7	-32.7	4.7
Metals (Index of Market Prices)	201.1	103.4	104.1	-44.2	0.7
Aluminium (US \$ / metric ton)	3012.1	1504.4	1338.1	-55.6	-11.1
Iron Ore (US ¢ / metric ton unit)	140.6	140.6	140.6	0.0	0.0
Copper (US \$ / metric ton)	8434.3	3105.1	3770.9	-55.3	21.4
Silver (US ¢ / troy ounce) 1	17.2	11.4	13.0	-24.4	14.0
Gold (US \$ / troy ounce) 1	916.1	882.1	919.5	-0.4	4.2
Petroleum (US \$ / barrel)	101.8	41.5	46.95	-53.8	13.3

Source: IMF Commodity Prices





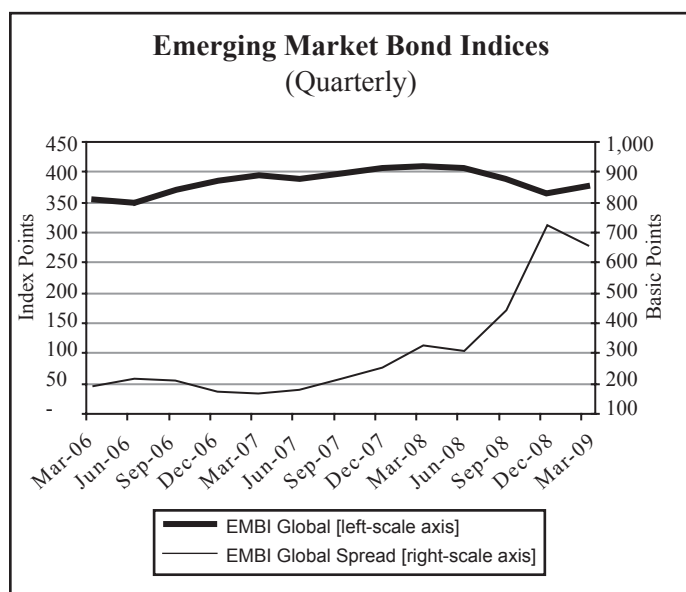
**Emerging Markets**

Falling commodity prices, which categorised the latter part of 2008, carried over to the first quarter of 2009, resulting in lower global asset prices. Emerging market assets however, still remained relatively more attractive than those of developed economies.

**Bond Markets**

The global easing of credit conditions, which was facilitated mainly by record low interest rates (Bank of England 0.5% and Fed 0.18% in March 2009), boosted emerging markets' confidence in the international bond market. During the review period, the additional yield demanded by investors to hold emerging market bonds instead of US Treasuries, shrank - narrowing spreads in the process.

Indonesia, Brazil, Mexico and the Philippines issued additional debt during the period, in an effort to finance budget deficits, which had expanded due to the falloff in exports during the recessionary climate of the first quarter of 2009.



Source: Bloomberg L. P.

**Equity Markets**

Investors' risk aversion began subsiding during the January to March period of 2009, as reflected in the overall performances of emerging markets stock indices. Unlike the previous quarter when all indices were extremely bearish, the review period revealed remarkable improvements across all emerging markets stock indices.

The Venezuela Index was the leader (24.5%). Similarly, the Brazilian Bovespa ended the quarter up 9%, as higher iron-ore imports from China sparked a rally in the Brazilian-based Cia Vale do Rio Doce, the world's largest manufacturer of steel. In line with rallying metal prices, the world's largest copper producer led the performance on the IPSA index in Chile. Mexico's

**Emerging Market Equity Indices (Quarterly)**

Country/region	Index	Dec-08	Mar-09	% Ch
Argentina	Merval	773.60	<b>716.10</b>	-7.4
Brazil	Bovespa	37,550.31	<b>40,925.87</b>	9.0
Chile	IPSA	2,376.42	<b>2,478.94</b>	4.3
Mexico	IPC	22,380.32	<b>19,626.75</b>	-12.3
Venezuela	Caracas	35,090.08	<b>43,674.30</b>	24.5
<b>MSCI * Emerging</b>				
<b>Latin America</b>		<b>2,077.68</b>	<b>2,171.40</b>	<b>4.5</b>
China	Shanghai	1,820.81	<b>2,373.21</b>	30.3
Hong Kong	Hang Seng	14,387.48	<b>13,576.02</b>	-5.6
India	Mumbai	9,647.31	<b>9,708.50</b>	0.6
Indonesia	Jakarta	1,355.41	<b>1,434.07</b>	5.8
Malaysia	Kuala Lumpur	876.75	<b>872.55</b>	-0.5
Philippines	PSE	1,872.85	<b>1,986.22</b>	6.1
Singapore	Straits Times	1,761.56	<b>1,699.99</b>	-3.5
South Korea	Seoul	1,124.47	<b>1,206.26</b>	7.3
Thailand	SET	449.96	<b>431.50</b>	-4.1
Taiwan	Weighted	4,591.22	<b>5,210.84</b>	13.5
<b>MSCI* Emerging Asia</b>		<b>235.84</b>	<b>238.65</b>	<b>1.2</b>

Source: Bloomberg L. P.

\* Morgan Stanley Composite Index

IPC index was down for the first quarter by 12.3%, to record a slower rate of decline than that of the previous quarter's low of 24.2%, due to the government's decision to approach the IMF for aid. Argentina's Merval was the only other index in the Emerging Latin America group that declined for the review period, by 7.4%.

The increase for the Emerging Asia stock indices was led by China's Shanghai index, which was up by 30%, on account of the country's US\$585 billion stimulus package that is expected to result in the desired growth target of 8%. Taiwan's index was also another big performer, ending the quarter with a 13.5% increase.

### ***Currency Markets***

Some emerging market currencies rallied during the review period, in line with easing inflationary pressures. For the Latin American territories in particular, increased copper prices led some currencies, such as the Chilean peso, to gain on the dollar and appreciate from its weaker level for the previous quarter.

The Argentine real recorded the largest depreciation for the Latin America region, of 7.7%, followed by the Mexican peso with a decline of 3.6%.

The South Korean won and the Singapore dollar led the decline of the Asia's currency for the first quarter of the year. This was in spite of a weakened dollar and global stock gains, promoting the demand for emerging-market assets from this region.

### **Emerging Market Currencies (Quarterly)**

Country/region	Currency	Dec-08	Mar-09	% Ch
Argentina	Peso	3.45	3.72	-7.7
Brazil	Real	2.31	2.32	-0.4
Chile	Peso	638.50	583.20	8.7
Mexico	Peso	13.67	14.17	-3.6
China	Yuan	6.83	6.83	-0.1
Hong Kong	Dollar	7.75	7.75	0.0
India	Rupee	48.80	50.73	-3.9
Indonesia	Rupiah	11,120.00	11,700.00	-5.2
Malaysia	Ringitt	3.47	3.65	-5.2
Philippines	Peso	47.52	48.33	-1.7
Singapore	Dollar	1.43	1.52	-6.5
South Korea	Won	1,259.55	1,383.10	-9.8
Thailand	Baht	34.74	35.50	-2.2
Taiwan	Dollar	32.79	33.91	-3.4

Source: Bloomberg L. P.



## Trade-related Aspects of the G20 Plan for Global Recovery and Reform: A Critical Analysis

### Introduction

In the face of the current global economic and financial crisis, leaders of the Group of Twenty (G20) held a summit in London on April 2, 2009 and pledged to do whatever was necessary to: (1) restore confidence, growth, and jobs; (2) repair the financial system to restore lending; (3) strengthen financial regulation to rebuild trust; (4) fund and reform international financial institutions; (5) promote global trade and investment and reject protectionism to underpin prosperity; and (6) build an inclusive, green, and sustainable recovery. The main objective underlying these pledges was to bring the world economy out of recession and prevent similar crises in the future.

In particular, the fifth pledge was a response to the fall-off in world trade that has been observed as a result of the crisis, with stagnating demand exacerbated by growing protectionist pressures and tightened conditions for trade finance. Indeed, World Bank estimates indicate that trade in goods and services may drop by as much as 6.1% in 2009, while the World Trade Organisation (WTO) estimates that export volumes will contract by 9%, whereas the Organization for Economic Co-operation and Development (OECD) expects world trade to drop by 13.2%. Given the significant role of trade in driving output, the G20 leaders have recognised that bolstering world trade and investment is essential for restoring growth in global output, which the IMF now predicts will slip by over 1% in 2009, after six decades of continuous growth.

This article outlines the trade-related aspects of the reform agenda and critically analyses the G20's commitments in this regard. The analysis focuses on their alignment with key objectives, their adequacy and likely effectiveness in addressing the issues at hand, as well as the feasibility of their implementation.

### The Reform Agenda

In pledging to promote global trade and investment and reject protectionism, G20 leaders committed themselves or reaffirmed previous commitments to:

1. Refrain from raising new barriers to investment or to trade in goods and services, imposing new

export restrictions, or implementing World Trade Organisation (WTO)-inconsistent measures to stimulate exports, and promptly rectify any such measures;

2. Minimise any negative impact on trade and investment of domestic policy actions including fiscal policy and action in support of the financial sector;
3. Eschew financial protectionism, particularly measures that constrain worldwide capital flows - especially to developing countries;
4. Notify the WTO promptly of any such measures, and call on the WTO, together with other international bodies, within their respective mandates, to monitor and report publicly on adherence to these undertakings on a quarterly basis;
5. Take steps to promote and facilitate trade and investment;
6. Ensure the availability of at least \$250 billion over the next two years to support trade finance through export credit and investment agencies and through the multilateral development banks (MDBs);
7. Ask regulators to make use of available flexibility in capital requirements for trade finance; and
8. Build on the progress already made (including with regard to modalities) to reach an ambitious and balanced conclusion to the Doha Development Round, which is urgently needed as it could boost the global economy by at least \$150 billion per annum.

### Rejecting Protectionism and Embracing Trade Liberalisation

The G20 members' commitments at the April 2 summit to refrain from protectionist trade or financial measures and rectify such measures already in existence are seen as critical for achieving the objective of promoting and facilitating trade and investment.

Unfortunately,<sup>1</sup> World Bank President Robert Zoellick has been forced to issue a stern warning to G20 leaders in light of the fact that in the three weeks following the

<sup>1</sup> "World Bank Chief Scolds G20 Leaders for Backsliding on Protectionism", Bridges Weekly Trade News Digest, Volume 13, Number 15, 29th April 2009

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summit, nine members of the group had either implemented or were considering putting in place new measures to restrict trade. According to a World Bank fact sheet,<sup>2</sup> six of the members — Argentina, Brazil, the European Union, India, Russia and the United States — had implemented trade-restricting measures, specifically, anti-dumping duties and safeguard duties, since the summit.

On the other hand, the fact sheet notes that, over the same period, several countries had taken steps to open their borders to trade: South Korea had begun accepting imports of US beef; Japan lifted a ban on Chilean pork and ended a punitive import duty on Korean computer chips; and India eliminated import duties on sugar and soybean oil. Moreover, the World Bank chief's warning and the release of the fact sheet are in keeping with the commitments to notify the WTO promptly of any such measures and call on international bodies for regular monitoring and public reporting of adherence to these undertakings.

However, the threat of being named and shamed in such a way has clearly not served to deter G20 members from breaching their commitment to reject protectionism. Domestic political and economic pressures, with voters looking to their elected leaders to protect local production and employment in recessionary times, have proven to be a greater influence. Consequently, attempts have been made to justify protectionist measures while giving assurances about continued commitment to rejecting protectionism. For example, US Agriculture Secretary Tom Vilsack has cited the European Union's reintroduction of support for some dairy products in January as justification for reintroducing export subsidies on US dairy products in May, while affirming that, "the Obama Administration remains strongly committed to the pledge by the Leaders of the Group of Twenty to refrain from protectionist measures"<sup>3</sup>.

The introduction of these types of protectionist measures has undermined the credibility of G20 members' commitment to work towards an ambitious and balanced conclusion to the Doha Round of trade talks and to trade liberalisation in general. Furthermore, this latest commitment by the G20 is seen as simply the latest in

a series of similar clarion calls issued by the leaders of major trading economies as well as spokespersons for key international organisations, including WTO Director-General Pascal Lamy in particular. Previous calls have all failed to jumpstart the negotiations, which have experienced repeated setbacks since the launch of the round in 2001, further widening the credibility gap.

### **Promoting and Facilitating Trade and Investment**

The commitments to promote and facilitate trade and investment, while laudable, are conspicuously lacking in specifics on precisely what steps will be taken to promote and facilitate trade and investment or how countries will go about minimising the negative impacts of domestic policies on trade and investment. The vague wording of these commitments provides no basis on which to measure their likely effectiveness in achieving their objective and therefore undermines their credibility.

### **Boosting Trade Finance**

Of all the trade-related commitments made at the summit, the pledge of at least \$250 billion to support trade finance is the most specific — with concrete and measurable steps to be taken — and therefore the only one that is being effectively operationalised at present. For example, the World Bank Group and several partners have already set up a new Global Trade Liquidity Programme that aims to support up to \$50 billion in trade. Moreover, the quantum of the support initially pledged is in line with estimates of the current trade liquidity gap.

### **Conclusion**

In summary, the trade-related aspects of the reform agenda are generally on target in terms of their alignment with the overarching objectives of promoting trade and investment. However, given the considerable scope of the problem — that is the sizeable liquidity gap in trade, the steep fall-off in global demand and the rising tide of protectionism — there are concerns about the commitments

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<sup>2</sup> <http://www.worldbank.org/html/extdr/financialcrisis/pdf/G20TradeFactSheet.pdf>  
<sup>3</sup> "US Export Subsidies Condemned by Developing Countries, Exporters",  
Bridges Weekly Trade News Digest, Volume 13, Number 20, 3rd June 2009

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in terms of their adequacy for effectively addressing the problem.

With regard to trade and investment promotion and facilitation, these concerns are exacerbated by a lack of specificity about modalities for operationalising the commitments, which in turn calls into question their feasibility. There are also questions about the feasibility of fulfilling their commitments to reject protectionism in light of the political pressures and economic realities facing the G20 members. These questions feed into the credibility gap that G20 members must overcome with respect to their commitment to the Doha Round and the trade liberalisation in general. On the positive side, the commitments related to boosting trade finance are widely regarded as sufficient to bridge the liquidity gap and are already being operationalised.

Going forward, therefore, G20 members must make specific commitments on trade and investment promotion and facilitation and they must be effectively held to account in respect of these commitments as well as their current commitments to reject protectionism and embrace trade liberalisation.

These two key things are critical to ensuring the full implementation of the G20's reform agenda and therefore achieving the objective of reversing the current contraction in global trade, which in turn is aimed at reinvigorating the global economy. It is not just the prosperity of G20 countries that is at stake. The economic fortunes of almost all countries are tied to global trade and investment growth, with developing economies — particularly small, open developing economies— being the most vulnerable.



## What are the Determinants of Health Status in Latin America and the Caribbean?

By Kevin Greenidge<sup>1</sup> and Sunielle Stanford<sup>2</sup>

### Abstract

Health is one factor that improves the quality of life and well-being of people and thus, researchers have investigated various aspects that influence health outcomes of a society. The conceptual literature points to several factors which influence health status and these can broadly be grouped according to economic, social, environmental, biological and endowment determinants. Using a panel consisting of 37 countries, this paper seeks to identify those variables that are statistically robust in determining health status for Latin America and the Caribbean. The study finds that increases in health expenditure as a ratio of GDP, per capita calorie availability and the literacy rate add to a population's health status (as measured by life expectancy), while per capita carbon dioxide emissions reduce longevity.

### Introduction

The pioneering work on human capital investment by Schultz (1961) made a significant contribution to the literature on the links between human capital investment and economic growth, in addition to the broader subject of improving human welfare. Health is one factor that improves the quality of life and well-being of people and thus, economists have researched the factors that influence health outcomes of a society. In particular, governments have a vested interest in improving the population's health status and it is important that health gains made to date in the Latin America and Caribbean (LAC) region be continued and enhanced. Leaders in the region have recognised the significance of human capital in promoting economic growth and development. For example, these sentiments have been advanced in the Caribbean region – the Caribbean Community (CARICOM) Heads of Government Nassau Declaration, 2001 states that the health of the region is the wealth of the region – and the international community and are implicit in the Millennium Development Goals.

The conceptual link between health status and economic growth is articulated in the World Development

Report 1993: Investing in Health. According to the report, improved health 'reduces production losses caused by worker illness; it permits the use of natural resources that had been totally or nearly inaccessible because of lack of disease; it increases the enrolment of children in school and makes them better able to learn; and it frees for alternatives uses resources that would otherwise have to be spent on treating illness' (World Development Report 1993, p.17). From this point of view, policy-makers should therefore be interested in identifying the factors that are pivotal to improving health status. Since most of the research in this area utilises survey data or uses datasets of countries apart from the LAC region, this paper contributes to the literature, by specifically using macro data of a selection of LAC countries and applying empirical analysis to the research question. The conceptual and empirical literature points to several factors which influence health and these can broadly be grouped according to economic, social, environmental and biological and endowment determinants. This paper seeks to determine those variables that are statistically robust in determining health in the LAC region.

The rest of the paper is organised as follows. Section two highlights the conceptual determinants of health status. The following section describes the data and empirical methodology. Section four presents the results while the next section summarises and outlines some policy implications of the research.

### Determinants of Health Status: Conceptual Issues

In 2006, the total population of the LAC countries was estimated at 568.9 million, with Latin America accounting for approximately 98% of this total population. A review of some basic indicators for this group shows that both sub-regions have high rates of literacy - 90.5% for Latin America and 93.7% for the Caribbean-and can be classified as middle income and high income countries. Gross national income (US\$ per capita, 2004) for the group of Latin American countries was approximately \$3,660 compared to \$5,122 for the Caribbean. Morbidity indicators show that in 2003 the AIDS incidence rate (1 million population) was 122.9 (Pan American Health Organisation, 2006). Other summary statistics show that during the period 1995 - 2005

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<sup>2</sup> Miss Sunielle Stanford was an Economist at the Central Bank of Barbados who later died after the completion of this paper.

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life expectancy at birth averaged 71 years, ranging from 50.8 years (Haiti) to 79.1 years (Cayman Islands). Mortality analysis for 1985, 1990, 1995, 2000 for the Caribbean indicate that noncommunicable diseases were the most common causes of death, specifically, heart diseases, cancers, cerebrovascular diseases, diabetes and HIV/AIDS (Report of the Caribbean Commission on Health and Development, 2006).

Another often-mentioned indicator of health status is Years of Potential Life Lost (YPLL), which is basically an estimate of the average years a person would have lived if he or she had not died prematurely. It is, therefore, a measure of premature mortality, as it gives more weight to deaths that occur among younger people. The YPLL calculation mathematically weights the total deaths by applying values to death at each age group. Such detailed data on the number of deaths in the different age groups is not available for most of the countries in this study. Moreover, Gardner and Sanborn (1990) argue that in calculating YPLL the values that should be applied to each age at death vary from author to author, and often produce different rankings of YPLL across regions. Additionally, in cases where consistent estimates of YPLL are obtained and subsequently used in studies on health, there are no significant differences in the findings compared to when other more basic indicators are used, such as life expectancy.

Notwithstanding the difficulty in directly measuring health status, Fayissa and Gutema (2005) and Beherman and Deolalikar (1988) suggest using life expectancy at birth as a proxy for health status. In comparison, studies which use micro level data, tend to rely on self-assessed notions of health status. Respondents typically rank their own state of health, ranging from 'not healthy' to 'very healthy' (Kimhi 2003; Eyles et al. 2001; Birch 2000). Besides being rather costly to implement (in terms of conducting a survey large enough to adequately represent the country's population), such an approach is also quite subjective and thus, this is one reason why this study relies on macro-level data<sup>1</sup>.

As noted in the introduction, the group of variables considered in research on health status can be broadly

categorised into: economic (income, economic stability, employment and working conditions, government health expenditure and calorie availability); social (inequality and poverty measures, education and literacy, culture and ethnicity); environmental (working and living conditions) and biological (gender and chronic noncommunicable diseases).

#### *Economic Determinants*

Cullis and West (1979), argue that expenditure on health provides mental and monetary benefits. The authors note that mental benefits are derived from the curing of illness and the relief of pain, which enhance the enjoyment of life, while monetary benefits of health care are derived since health expenditures may increase output. In some LAC countries the provision of health services is heavily subsidised by governments. Thus, government expenditure on health, as opposed to total health expenditure may be more relevant in the context of this region.

In examining the socioeconomic determinants of health for the Caribbean region, Le Franc (1989) argues that conceptually, recessions and structural adjustments can have either a direct or indirect influence on health status. In periods of recessions or structural adjustments, governments usually seek to curtail spending (particularly on the provision of social services), in order to correct imbalances in the economy. If government opts to reduce its expenditure on health, this may adversely impact on the health status of citizens, particularly those poorer members of society who rely on public health services. For example, in Jamaica during the recessionary period of 1981-1982 and again from 1985-1986, per capita real health expenditure declined by 33 percent. This downturn was reflected in a falloff in the public health delivery system, as evident in the declines in public hospital bed occupancy. Unfortunately mortality rates were not available for the period after 1981 in order to establish a correlation with health status (Le Franc, 1989).

Evidence of the direct impact of recessions on health status occurs as a result of a decline or reduced nominal incomes, which then alters the consumption patterns of health. It is important to note however, that there need not exist a positive relationship between government health expenditure and health status. This is because the resulting

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<sup>1</sup> Nevertheless, it should be recognised that there is a body of literature that argues that self-reported health status is consistent with direct measures of morbidity and mortality.

relationship depends on the net effect of government health expenditure versus an individual's expenditure on preventative and curative treatments. If government health expenditure (which has to be financed from taxes or user fees) makes the individual worse off, then a resulting negative relationship may occur between health expenditure and health status (Fayissa and Gutema, 2005).

Employment, working conditions and income are also expected to influence health status. Employment can positively impact on physical, mental and social health. In particular, people with relatively stress-free jobs are expected to have healthier lives since they are less susceptible to stress-related illnesses. Moreover, with higher disposable incomes, people have more control over their lives and can purchase, for example, better housing and healthier foods (Population Health, 2005).

#### *Social Determinants*

The distribution of income tends to be more important than the actual level of income earned by society. Thus, the larger the inequality gap in the region, the lower the health status of the population (Population Health, 2005). Education also contributes to health status as it increases job and income security, and by extension mental and social well-being.

#### *Environmental Factors*

The physical environment in which people live and work is paramount to health status both in the long-term and short-term. Exposure to water, air or land contamination can have adverse effects on health (Population Health, 2005).

#### *Biological Factors*

Some individuals are more predisposed to certain chronic diseases that can affect mortality and morbidity rates of a population. Both noncommunicable and communicable diseases have been identified as the major threats to the health of Caribbean people. In the late 1990s, cardiovascular diseases, diabetes mellitus, cancer and HIV together accounted for an estimated 54 percent of deaths in the Caribbean (Report of the Caribbean Commission on Health and Development, 2006).

## **Data and Methodology**

### *3.1 Model Specification and Data*

Based on the above discussion, we specify an empirical testable function of the responsiveness of the health status of the LAC countries to the economic, social and environmental factors, as:

$$y_{i,t} = d_i + X_{i,t}^d \beta_i + u_{it}$$

$i = 1, \dots, N$  countries over  $t = 1, \dots, T$  time periods. This model is basically a linearised Cobb-Douglas production function and is quite common to this type of research (see, for example, Grossman, 1972, Beherman and Deolalikar, 1988; and, Fayissa and Gutema, 2005).  $y_i$  is the natural log of country  $i$ 's health status, and here we follow the common approach in the literature and employ the country's life expectancy at birth as a proxy for its health status (see, for example, Beherman and Deolalikar, 1988; and, Fayissa and Gutema, 2005).  $d_i$  can be viewed as an estimate of the initial health stock and can be the same across the countries or allowed to vary.  $X$  is a vector of per capita economic, social and environmental variables in natural logarithms and  $\beta$  is a vector of respective elasticities.

The economic factors are estimated using health expenditure as a ratio of current GDP and calories available (kilocalories per day per capita). The health expenditure variable is the aggregate of public and private preventative and curative health expenditure and is intended to capture the provision of health services in the economy. Hadley (1982) posits that an 'expenditure' variable as opposed to 'stock' variables, such as hospital beds or physicians per 1000 people, is a better indicator of the variation in the quality and quantity of health services across countries. This is because variation in expenditures across geographic areas better reflects the differences in quality and quantity of such services. Fayissa and Gutema (2005) explain the difficulty in determining a priori, the relationship between health expenditure and health status (measured by life expectancy). Intuitively, higher per capita spending on health care contributes to the provision of health facilities and by extension may improve an individual's health outcome. However, the authors note that this relationship only holds if the marginal change in health expenditure does not make the individual's health status worse off. Such an outcome may occur, if the increase in health

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expenditure, financed by taxes or user fees, is greater than the individual's expenditure on basic preventative health care such as food, clothing and shelter. Thus, if the marginal increase in total health expenditure is insufficient to offset the individual's foregone preventative health care, then the relationship between per capita health expenditure as a ratio of current GDP and life expectancy will be negative. Additionally, we test for the non-linear effects of health expenditure as a ratio of current GDP on health status by including the square of the former variable along with its level.

The second variable used to proxy economic conditions (specifically, nutritional status) is calories available per capita. It is defined as the average nutritional energy content of the total daily per capita food supply, for a given country and is derived from food balance sheets standardised for a range of primary food commodities for human consumption. A positive sign is expected for the coefficient of per capita calorie availability since nutritious foods provide energy, which in turn is expected to impact positively on one's health status. Essential nutrients present in the diet are necessary for energy, and while energy requirements tend to decline with age, all things being the same, there is expected to be a positive impact on life expectancy. However, the relationship between calorie intake per capita and health outcomes is complex and can be different in very poor countries, compared to more developed countries. For example, in Haiti and Guyana, where the levels of calorie intake are less than half that of more developed countries like Barbados and The Bahamas, a positive relationship would be expected since an increase in calorie intake would have a significant impact on malnutrition and associated childhood and elderly mortality. In the latter group of countries, the complications of obesity "weigh in" on the relationship and therefore one may not find a positive impact on health from increased calorie intake. Furthermore, across Latin America and the Caribbean, poverty is linked to high calorie consumption (since some of the cheapest foods such as starch, sugar and fat have a high calorie content) and obesity.<sup>2</sup>

The social factor is represented by the education variable total adult literacy rate (the percentage of people ages 15 and above who can, with understanding, read and

write a short, simple statement on their everyday life). Although Wolfe and Behrman (1984) argue that education is a catalyst, studies by Grossman, 1972, Rosen and Taubau, 1982, Berger and Leigh, 1989, Grossman, 2004 and Fuchs 2004 find evidence to suggest that education contributes to health status by equipping persons with knowledge and understanding to keep them healthy. Therefore, a priori the coefficient of literacy rate is positive.

The relationship between environmental factors and life expectancy is estimated using the urbanisation rate and per capita carbon dioxide emissions. The urban population is defined as the share of the total population living in areas classified as urban in each country. Thornton (2002) notes the potential positive and negative effects of the urbanisation rate on health status. In urban areas, there is relatively easy access to health care facilities, however this environment is typically polluted and can thus adversely impact on physical well-being. Therefore, the resulting sign on the coefficient of the urbanisation rate depends on the net effect of the competing factors. Carbon dioxide emissions are defined as pollution from the burning of fossil fuels and the manufacture of cement. These emissions are the result of carbon dioxide produced during consumption of solid, liquid, and gas fuels and gas flaring. Exposure to pollution is expected to have an adverse effect on health and therefore one's well-being is expected to be adversely affected. Consequently, a negative relationship is expected between carbon dioxide emissions and life expectancy.

While the literature identifies several types of social, economic and biological factors in explaining health status, due to inadequate data coverage of these series for the LAC region, we could not include an extensive list of variables in the model. Three types of variables that would have been particularly interesting to examine because of their relevance to the LAC region - *prevalence of HIV, chronic noncommunicable diseases and food inflation* - were not included due to data limitations.

Data and definitions on health expenditure as a ratio of current GDP, urbanisation rate and carbon dioxide emission per capita are taken from the World Bank's *World Development Indicators 2007* online database. Observations and data descriptions for the literacy rate, per capita calorie

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<sup>2</sup> We thank a referee for pointing out this crucial link between calorie intake, poverty and health outcomes. For further discussion on the topic see Pena and Bacallao (2000).

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availability and the dependent variable life expectancy are sourced from the Pan American Health Organisation's database (<http://www.paho.org/English/SHA/coredata/tabulator/newTabulator.htm>). The dataset used in this research consists of observations from 37 Latin American and Caribbean countries over the period 1994 – 2005. The results in Table 1 generally show the individual significance of potential economic, social and environmental variables in explaining health status. However, because health status is obviously influenced by a combination of these variables, multiple regression analysis is employed in this paper.

### *Methodology*

Equation (1) is estimated using panel data analysis. This approach was chosen against individual regressions based on an examination of the variation coefficient for the individual explanatory variables over time and across countries, which revealed that the variability in the individual variables across countries is larger than the variability over time. Therefore, in accordance with Barajas et al (1988), a panel approach is more appropriate.

However, before proceeding with the panel estimation of Equation 1, the stationary properties of the series must be investigated. This is an important step since if the series proved to be non-stationary then the estimated procedure would have to take such into consideration and panel cointegration analysis applied. In this regard, several types of panel unit root tests (for recent surveys on panel unit root tests see Harris and Solis, 2003; Pedroni and Urbain, 2005) are undertaken. First, the paper utilised the Levin, Lin and Chu (2002) (LLC) test, which has a common unit root process as the null hypothesis and thus assumes cross-section dependence. In other words, LLC assumes that the persistence parameter that generates the non-stationarity in the series is the same across the countries. It also employed the Im, Pesaran and Shin (2003) (IPS), as well as the Augmented Dickey Fuller Fisher Chi-square (Dickey and Fuller, 1979) (ADFF) and the Phillips-Perron Fisher Chi-square (Phillips and Perron, 1988) (PPF) tests where the null hypothesis is an individual unit root process. Thus, these latter tests all allow for individual unit root processes so that the persistence component may vary across cross-sections, and then derive a panel-specific statistic by combining the individual unit root tests.

### **Results**

The unit root analysis is presented in Table 2 in the Appendix. The findings indicate that all the variables under consideration are stationary in levels. Thus, there is no need to conduct cointegrated analysis and standard panel analysis will yield consistent estimates of the parameters in Equation 1. In this regard, to account for the differences, such as initial health status, the level of economic development, social norms and infrastructure among LAC countries, a fixed-effects model is estimated (where  $\alpha_i$  's is fixed but not common across the countries) and an F- Test (see Green, 1993) used to determine between the fixed-effects specification and a common intercept (or pooled) model (where the  $\alpha_i$  's are fixed and common across the countries). If the fixed-effects model proves superior to the pooled model, a random-effects model is then estimated (by defining  $\alpha_i = \alpha + \tau_i$ , where  $\tau_i$  has a zero unconditional mean) and a Hausman test employed to choose between the random-effects model and the fixed-effects model.

The F-test yields a value of 644.489 with a p-value of [0.000], which indicates that the null hypothesis of common country-specific effects is strongly rejected in favour of the fixed-effects model. That is, there are significant country-specific effects in the data. For the choice of the random-effects versus the fixed-effects model, the Hausman-test produces a  $\chi^2$  value of 7.207 with a corresponding p-value [0.2057]. This is distributed as a  $\chi^2(2)$  under the null hypothesis that there is no correlation between the regressors and the country-specific effects. Since the null cannot be rejected, the underlying assumption of the random-effects model is valid and the random-effects model is preferred. The estimates from various random-effects model are given in Tables 3 – 6.

It is important to note that when non-linear effects of health expenditure was tested, through the squared term, this variable was insignificant in the full sample as well as the split samples and thus was excluded from the model. Table 3 presents the estimates from the full sample

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<sup>3</sup> It should however be noted that since the fixed-effects model assumes a common predicted health-status "trajectory" through time for each country, which probably does not hold, then there is a strong rationale for anticipating the need for a random effects model, even before performing the Hausman test.

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of 37 LAC countries. All the variables are significant and correctly signed, with the urbanisation rate displaying significance at the 10 percent level. The variables calories available per capita, adult literacy rate and per capita carbon dioxide emissions are consistent with a priori expectations. Of these three variables, the literacy rate displays the highest level of significance and the results suggest that on average, a 1 percent increase in adult literacy would lead to a 0.4 percent increase in longevity. As discussed previously, populations with higher levels of literacy tend to improve people's awareness and understanding of health issues. This knowledge may improve decision-making as it pertains to making healthy life-style choices, for example, eating healthier foods. In addition, people with higher levels of education are more likely to be employed and have access to 'better' living conditions which in turn may impact positively on longevity.

As noted in the conceptual issues of health status, the signs on the coefficient for the urbanisation rate and health as a percent of GDP could not be predetermined. However, both these variables show positive and statistically-significant coefficients. With regard to the health variable, the positive relationship indicates that the level of health expenditure (even if financed by taxes or user fees) does not make individuals worse off, and consequently improves longevity. Table 3 reports that a 10 percent increase in health expenditure relative to total output of goods and services improves life expectancy by 0.10 of a percentage point. In the case of the urbanisation rate, as the percentage of the population living in urban areas rise, on average these persons have more access to modern medical care facilities, which outweighs the effect of any adverse environmental conditions and raises life expectancy.

In order to test the robustness of the results across regions two methods were employed. In the first, the sample was split and the random effects model was re-estimated for Caribbean countries (Table 4) and then with Latin American countries in the sample (Table 5). For the Caribbean sample of countries, the coefficients of health expenditure, calories available per capita and adult literacy rate are statistically-significant and positive. While an increase in carbon dioxide emissions have a negative impact on health status, the inclusion of this variable in the random effects model is insignificant ( $p=0.2691$ ). Similarly,

the relationship between health status and urbanisation rate is negative but the result is statistically-insignificant in the model ( $p=0.3095$ ). In contrast, Table 5 reports statistically-significant results for literacy rate, carbon dioxide emissions and the urbanisation rate. It is interesting to note that in the full sample (Table 2) and the split samples (Tables 4 and 5), the literacy rate is consistently- positively related to health status, and moreover, in each case displays the strongest level of significance in the model.

The second way in which the model was tested for the robustness of the results for Caribbean countries was by introducing a dummy variable. The dummy variable was given a value of 1 for Caribbean countries and 0 otherwise and allowed to interact with each regressor. Table 6 reports the socio-economic and environmental variables as well as the interaction terms. Generally, these results are similar to the results reported for the split samples. For the Caribbean countries, the health expenditure and calorie available coefficients correspond to the positive and statistically-significant results reported in Table 4. After controlling for Caribbean countries, the urbanisation rate that was previously insignificant in the split sample, now becomes statistically significant ( $p=0.0017$ ). The findings indicate that for individuals from the Caribbean, a 1 percent increase in the urbanisation rate leads to a 0.1 percent reduction in life expectancy. The findings that literacy rate, per capita carbon dioxide emissions and urbanisation rate are statistically-significant and correctly signed for the Latin American countries is the same as reported in the split sample (Table 4). Nevertheless, when the results for Latin America and the Caribbean are compared (Tables 4 and 5), the results for the Caribbean are more robust.

### **Summary and policy implications**

Health is ultimately influenced by a range of inter-related social, economic, environmental and biological factors. Hence, improving the health well being of any population must investigate such factors, and this research has explored the relationship for a selection of regional economies. Due to data constraints, the methodology used panel data for 37 LAC countries over the period 1994 – 2005. The findings suggest that increases in health as a ratio of GDP, calorie intake,

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literacy rate and the urbanisation rate are all statistically-significant in improving health well being in the region. In contrast, higher levels of carbon dioxide emissions reduce health status. The finding for health as a ratio of GDP is a very important one. Economists generally agree that one of government's roles is the provision of social services; nevertheless our findings suggest that higher spending from both government and private sector budgets contribute positively to the population health status, as measured by longevity. In fact, the Report of the Caribbean Commission on Health and Development 2006, state that countries should aim for health expenditure of at least 6 percent of GDP. From our dataset, health expenditure as a ratio of GDP over the period 1994 - 2005, averaged 6.5 percent for our sample of 37 LAC countries. While on average the LAC region has reached the target, governments and the private sector must continue to allocate resources in preventative and curative areas. Additionally, the consistent finding that literacy rate is the most robust variable in the full sample of 37 countries and the split sample indicates the importance of an educated population in determining their own healthy well-being.

Of course, there are other factors that also influence health status and thus it must be noted that this work is preliminary in nature. The spread of diseases -HIV/AIDS- and the burden of noncommunicable diseases are a major problem for the LAC region. Additionally, within the context of income inequality, the greater the income gap, the lower could be the health of the population. These conceptual factors need to be investigated and thus, data permitting, this study can be extended to include more social, biological and economic variables.

Nevertheless, these results highlight a number of policy implications for the region and thus should be of interest to policy-makers. For example, both government and the private sector must continue to allocate high proportions of their budgets to health in order to strengthen health infrastructure and the provision of health services in the region. Additionally, because of the statistical significance of the literacy rate, regional leaders should continue educating the public on health choices. Moreover, the findings have implications for enhancing overall growth and economic development in the region, since a potential increase in years of life can positively impact on economic growth.

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## Appendix

The countries in the sample are: Antigua and Barbuda, Argentina, Aruba, The Bahamas, Barbados, Belize, Bolivia, Brazil, Cayman Islands, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El

Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Netherlands Antilles, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, and Venezuela

**Table 1: Coefficient results from potential bivariate regressions**

	Dependent Variable: Life expectancy at birth, total (years)							
Health expenditure to GDP ratio	0.010 (0.005)*							
(Health expenditure to GDP ratio) <sup>2</sup>	0.005 (0.002)*							
Per capita food production		-0.002 (0.005)						
Calories availability (Kcal/day per capita)			0.042 (0.015)*					
Literacy rate, adult total percent of people ages 15 and above)				0.241 (0.032)*				
Secondary education, pupils					0.014 (0.005)*			
School enrolment, tertiary (percent gross)						0.014 (0.006)*		
CO2 emissions (metric tonnes per capita)							-0.004 (0.003)	
Urban population (percent)								-0.023 (0.019)
Total pool (balanced) Observations	223	340	272	314	185	217	317	407

- Notes: (1) All variables are logged  
 (2) \* indicates significance at the 5 percent level of testing  
 (3) Standard errors are in parenthesis

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**Table 2 – Panel Unit Root Test Results**

<b>Variable</b>	<b>LLC</b>	<b>IPS</b>	<b>ADFF</b>	<b>PPF</b>
<b>LOG(Life expectancy at birth)</b>	-7.291 (0.000)***	-2.029 (0.009)***	119.381 (0.000)***	180.854 (0.000)***
<b>Log(HealthExp/GDP)</b>	-17.435 (0.000)***	-2.348 (0.009)***	102.048 (0.001)***	103.393 (0.001)***
<b>Log(Calories)</b>	-5.486 (0.000)***	-2.379 (0.009)***	86.891 (0.041)**	117.573 (0.000)***
<b>Log(Literacy Rate)</b>	-12.939 (0.000)***	-1.665 (0.048)**	73.523 (0.041)**	174.396 (0.000)***
<b>Log(CO2)</b>	-9.292 (0.000)***	-3.939 (0.000)***	138.530 (0.000)***	196.932 (0.000)***
<b>Log(Urban)</b>	-237.198 (0.000)***	-42.529 (0.000)***	141.304 (0.000)***	221.205 (0.000)***

**Note:** The test statistics are reported above, along with the probability values in parentheses.

The 1%, 5% and 10% levels of significance are represented by \*\*\*, \*\* and \*, respectively.

**Table 3: Random Effects Estimates of the Determinants of Health Status in LAC**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.947	0.164	11.851	0.000
Log (Health/GDP)	0.010	0.005	2.003	0.047
Log (Calories)	0.041	0.021	2.000	0.048
Log (Literacy Rate)	0.409	0.029	14.143	0.000
Log (CO2)	-0.019	0.005	-3.581	0.001
Log (Urban)	0.035	0.020	1.716	0.089
Random Effects (Cross)				
Argentina	0.002			
Bahamas, The	-0.043			
Barbados	0.031			
Belize	0.018			
Bolivia	-0.095			
Brazil	-0.019			
Chile	0.058			
Colombia	-0.009			
Costa Rica	0.062			
Dominican Republic	-0.018			
Ecuador	0.032			
El Salvador	0.036			
Grenada	-0.104			
Guatemala	0.051			
Guyana	-0.139			
Haiti	-0.105			
Honduras	0.025			
Jamaica	0.038			
Mexico	0.047			
Nicaragua	0.087			
Panama	0.041			
Paraguay	-0.035			
Peru	-0.035			
St. Kitts and Nevis	-0.035			
St. Lucia	0.074			
St. Vincent and the Grenadines	-0.022			
Suriname	-0.034			
Trinidad and Tobago	0.065			
Uruguay	-0.003			
Venezuela, RB	0.029			
R-squared	0.985			
Adjusted R-squared	0.984			
S.E. of regression	0.004			
F-statistic				
Observations	130			

**Table 4: Random Effects Estimates of the Determinants of Health Status in Caribbean**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.909	0.346	5.520	0.000
Log (Health/GDP)	0.028	0.011	2.547	0.014
Log (Calories)	0.127	0.051	2.470	0.018
Log (Literacy Rate)	0.298	0.069	4.317	0.000
Log (CO2)	-0.009	0.008	-1.119	0.269
Log (Urban)	-0.019	0.019	-1.028	0.310
Random Effects (Cross)				
Bahamas, The	0.014			
Barbados	0.054			
Belize	0.048			
Brazil	0.022			
Dominican Republic	0.028			
Grenada	-0.087			
Guyana	-0.122			
Haiti	-0.111			
Jamaica	0.062			
St. Kitts and Nevis	-0.014			
St. Lucia	0.068			
St. Vincent and the Grenadines	0.021			
Suriname	0.008			
Trinidad and Tobago	0.010			
R-squared	0.995			
Adjusted R-squared	0.994			
S.E. of regression	0.005			
F-statistic	1675.892			
Observations	50			

**Table 5: Random Effects Estimates of the Determinants of Health Status in Latin America**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.882	0.175	10.773	0.000
Log (Health/GDP)	0.003	0.005	0.537	0.593
Log (Calories)	-0.003	0.016	-0.217	0.829
Log (Literacy Rate)	0.449	0.049	9.236	0.000
Log (CO2)	-0.017	0.007	-2.506	0.014
Log (Urban)	0.099	0.031	3.144	0.002
Random Effects (Cross)				
Argentina	-0.031			
Bolivia	-0.115			
Chile	0.021			
Colombia	-0.033			
Costa Rica	0.051			
Ecuador	0.017			
El Salvador	0.030			
Guatemala	0.059			
Honduras	0.035			
Mexico	0.024			
Nicaragua	0.085			
Panama	0.018			
Paraguay	-0.042			
Peru	-0.061			
Uruguay	-0.039			
Venezuela, RB	-0.021			
R-squared	0.731			
Adjusted R-squared	0.713			
S.E. of regression	0.003			
F-statistic	40.252			
Observations	80			

**Table 6: Random Effects Estimates of the Determinants of Health Status in LAC  
(with dummy for the Caribbean)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.946	0.175	11.105	0.000
Log (Health/GDP)	0.002	0.005	0.322	0.748
Log (Calories)	-0.008	0.017	-0.485	0.629
Log (Literacy Rate)	0.461	0.049	9.443	0.000
Log (CO2)	-0.018	0.006	-2.904	0.004
Log (Urban)	0.079	0.027	2.968	0.004
Log (Health/GDP)*dumCarib	0.037	0.016	2.371	0.019
Log (Calories)*dumCarib	0.139	0.051	2.711	0.008
Log (Literacy Rate)*dumCarib	-0.171	0.094	-1.813	0.072
Log (CO2)*dumCarib	-0.114	0.035	-3.207	0.002
Log (Urban)*dumCarib	0.008	0.008	1.070	0.287
Random Effects (Cross)				
Argentina	-0.020			
Bahamas, The	0.031			
Barbados	0.062			
Belize	0.057			
Bolivia	-0.113			
Brazil	-0.034			
Chile	0.030			
Colombia	-0.028			
Costa Rica	0.052			
Dominican Republic	-0.033			
Ecuador	0.018			
El Salvador	0.033			
Grenada	-0.086			
Guatemala	0.057			
Guyana	-0.121			
Haiti	-0.115			
Honduras	0.032			
Jamaica	0.071			
Mexico	0.032			
Netherlands Antilles	0.088			
Panama	0.021			
Paraguay	-0.043			
Peru	-0.056			
St. Kitts and Nevis	-0.010			
St. Lucia	0.069			
St. Vincent and the Grenadines	0.028			
Suriname	0.018			
Trinidad and Tobago	0.000			
Uruguay	-0.029			
Venezuela, RB	-0.011			
R-squared	0.989			
Adjusted R-squared	0.988			
S.E. of regression	0.004			
F-statistic	1046.227			
Observations	130			



## The Global Financial Crisis – Can We Withstand The Shock

By Dr. Marion Williams\*

This address comes at a most important time. Often in times like these, in the interest of financial stability one tries to avoid controversy. However, regulators have an obligation to inform. It is important that we strike the right balance. I trust that at the end of this presentation I would have informed, would have inspired confidence in our financial system and would also have avoided controversy.

As you are aware, the genesis of the current crisis was shaped in the US by complex financing structures - structures which are generally not found in emerging countries such as ours so our financial system would largely have avoided a direct impact. It is true that it started as a crisis in the financial sector, particularly in the US, and then Europe, but it is no longer just a financial crisis. Indeed, though the financial sector in the developed world is in crisis the world is in a global economic recession. In some cases the financial sector in emerging markets has not been as seriously affected but almost all developing countries' economies are at best suffering a downturn.

Emerging countries have been hit on a number of fronts as a result of the global economic downturn. Firstly, through trade reduction, secondly, through liquidity tightness in some domestic financial markets and lower capital inflows, and thirdly, through a reduction or a slowdown in remittances from overseas. For these reasons, it will be a difficult 2009 for most developing countries. Having been until recently impacted by the twin food and fuel shocks, most emerging markets now have to face this additional financial and fiscal shock which may carry severe consequences, especially for those economies with weaker macroeconomic fundamentals.

Fortunately for Barbados it entered this period with relatively strong macroeconomic fundamentals. It had enjoyed seven years of positive growth, its fiscal deficit was manageable and though the debt ratio was relatively high, the external debt ratio was quite low. The country had also recorded annual surpluses on its balance of payments and its financial system was sound.

The continued global financial uncertainty can however deprive or slow the access of developing countries to funding for high priority development objectives including health, education and infrastructure – in our case primarily tourism-related activities - and can aggravate a likely economic downturn.

Central banks and governments across the globe have been forced to take unprecedented measures to preserve stability, in an attempt to cushion the impact of the financial crisis on their economies. They have been forced to broaden the pool of eligible collateral in order to provide liquidity. The speed and magnitude of monetary policy easing during the past six months or so, including recapitalisations and government guarantees have been unprecedented.

The ripple effects have adversely influenced the economic condition of the new industrialising export economies – as we have seen in China and the Far East – as global demand shrinks. How badly the less aggressive exporters – like those in the Caribbean – will be affected is not yet clear, but as prices fall those countries whose exports were barely competitive will have difficulty in retaining their market share. Those with special market niches will likely stand a better chance of maintaining volumes.

The brightest spot is likely to be a very low inflation rate, although there is concern in North America of possible deflation.

While the efforts of policy makers in the major economies will no doubt in time 'heal' their economies, in the short to medium term their responses are likely to impact on us in Barbados and the developing world generally. The severity of the impact is largely uncertain.

One can hypothesise about the impact on the regional offshore or financial services sector of the blanket guarantees to bank depositors and creditors by some of the governments in the developed world. These guarantees tend not to extend beyond national borders and may have consequences for the eagerness of investors to go offshore. In addition, much wealth has been lost in the financial meltdown and the international financial sector will need to market itself very aggressively in order to maintain the growth it has experienced over the past five years in the area of wealth management. Indeed recent events in Antigua should prompt us to more aggressively

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\* Dr. Marion Williams is Governor of the Central Bank of Barbados. An address delivered to the Barbados Chamber of Commerce at the Hilton Hotel on February 25, 2009.

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try to distinguish ourselves from the pack and try to avoid being linked by geography. Though the US economy has been weakening, the repatriation of funds to the US has been evident in the strengthening of the US dollar in the past three months versus most of the major currencies, with the exception of the Japanese yen. Of note, this is also likely to negatively impact capital markets in emerging economies, as foreign investors from Europe and North America retreat.

Much has been said about the impact of the global recession on the Barbadian economy, especially on sectors such as tourism and construction. At the Central Bank, we have recognised the need to keep the real economy going and accordingly have reduced interest rates rapidly over the past six months, so that the reduction being passed through translates to lower bank lending rates. This should serve to ease the financing conditions for companies and households.

I have spoken elsewhere about labour market flexibility as a key method for mitigating the effects of the downturn. Today however, I will speak primarily about how our financial system is positioned to withstand these global pressures.

Today, policy-makers all over the globe are assessing whether – and to what extent – certain features of the financial system encouraged market excesses and the buildup of large financial imbalances. Many are also considering what changes should be made to the financial system and to the regulatory and supervisory framework.

### *Capital Adequacy*

First I will start with capital adequacy and tell you where Barbados stands. Adequate capital provides the institution with a buffer to support it in bad times. It allows the bank to make losses without going insolvent and to effect writedowns and to suffer reductions in asset values without facing the prospect of its assets falling below its liabilities.

The capital adequacy framework based on Basel II emphasises greater sensitivity to risk, because it links required capital to the perceived riskiness of assets.

In the US, information available suggests that tier 1 capital of most large US banks is 7.5% of assets, and for European banks 3.3%. In Barbados a comparable ratio is about 11.5% well above the statutory threshold - somewhat higher than even the Canadian banks which are at 9%.

In normal times adequacy of capital can sustain an institution in a bad patch. However, we have observed such dramatic declines in the market value of assets that 8% - the Basel guideline for combined tier 1 and tier 2 - is no longer adequate, since market values can move swiftly and by large percentages, as has happened in recent times.

### *Reserve Requirements*

While many central banks in developed economies have virtually abandoned reserve requirements, commercial banks in Barbados are still required by the Central Bank to hold reserve requirements. This can act as a source of support should banks experience liquidity problems. The Central Bank discourages banks from falling below their required liquidity levels but if they are in difficulties and are willing to meet the costs, it is accessible. A second tier, called securities requirements, is also in place in Barbados. Central banks across the developed world do not require this tier of reserves – not even in Canada – though some central banks in the developing world still retain it. However, for years developing countries including Barbados, were pressured by the IMF to remove it. In these circumstances if banks in the US and UK and Europe had such reserves, they would have had a fall-back position – ability to sell off these securities or have the central bank lower the requirement so providing them with liquidity. Commercial banks in Barbados therefore have three tiers of support; cash reserve requirements, securities requirements and capital requirements.

### *Corporate Governance*

Part of the process of vigilance also includes the need to continuously look at the strengthening of corporate governance standards. Corporate governance over the past few years has been in the forefront of public opinion. In some markets, policymakers are rapidly taking steps to ensure that governing boards understand the nature and complexity of the risk a corporation is assuming.

### *Review of Accounting Rules*

There have been stringent calls to review the accounting rules applied to financial transactions, in particular the mark to market rules. Indeed, the current accounting rules have been highlighted as having contributed to financial market volatility in the US and Europe. When

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markets are erratic as they are in the US, marking-to-market does not provide accurate or useful information, especially from a medium or longer-term perspective. International regulators are currently reviewing those rules.

Moreover, the current impairment rules have not allowed banks to have forward-looking provisions so that they could build up provisions in good times, and draw them down when the cycle turns, and defaults surface. We should therefore reflect on how we can dampen or correct the pro-cyclical impact of fair-value accounting and provisioning regimes, without compromising the delivery of accurate and useful information or a “true and fair value” to investors.

#### *The Mortgage Market*

Barbadians are not a high risk-taking people and our banks have tended to be risk averse. For this reason, even 100% mortgages have been slow in coming to Barbados. Indeed some banks do not agree with it even now, because they believe that the borrower must have some stake in the borrowing or else if things get difficult early in the life of the loan or market values tumble, he can walk away with impunity. In addition, while banks in Barbados offer variable rate mortgages they have not got involved in step-up mortgages. Indeed our variable rate mortgages are always related to future market rates, not to a pre-determined schedule of step-ups in interest rates. The notion of having an enticement rate to lure borrowers in, which steps up sharply two to three years later irrespective of where market rates are at the time, has not been a part of our financial landscape. In our situation higher default rates tend to occur mostly if the job market gets difficult and borrowers cannot service their loans, or, as was becoming the case late last year when high rates of inflation eroded real incomes. Fortunately, that should be corrected in 2009 as low global demand will lead to lower inflation rates.

In recent times however, the lure of the credit card has become a potential problem. Borrowers must be more prudent in accepting the offer of an increasing number of credit cards. In this regard, the Central Bank has initiated a financial education programme which will include guidance

on money management and personal financial planning. This programme was launched last year and will continue in 2009, and will draw on presenters inside and outside the Bank. For the moment, however, although there has been an increase in delinquency as noted in the increase in commercial bank provisioning last year, it is within manageable proportions.

#### *Securitization*

The policy of originate and securitize taken to its extreme in the case of the US market is also a development that does not exist here. There is limited securitization here in Barbados. In fact there is not sufficient securitization. Entities which were supposed to be securitizing, that is, issuing commercial paper and money market instruments were issuing certificates that looked very much like deposits. Perhaps this is related to the Barbadian desire to avoid taking risks, but it shifts the risks on to the institution. In the case of commercial paper, it can be traded and could trade at above or below its nominal value, so that the institution does not bear all the risk. This allows the lender to take his money out at any time – at a price. In the case of deposits the institution has an obligation to return the value of the deposit plus interest at the due date, unless some prior arrangement has been agreed as to early removal. To this extent in the Barbados situation with its tendency to deposit-taking, systems are less liquid.

However securitization has its merits. It leads to a more liquid market where money moves more quickly. In times where liquidity is needed rapidly, thinly-securitized markets have their downsides, though they tend to be more safe and less volatile. In such cases the strength of the balance sheet is more important than changes in the market value of deposit institutions. All the balance sheets of financial institutions in Barbados that I have seen show solvent institutions so though this is not the only relevant factor, we start with an advantage.

#### *Risk Management*

Risk-taking is a necessary element in conducting business, and effective risk management systems, together with good governance, strong regulation and supervision all

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serve to mitigate risk exposure. Supervisors instill market discipline by employing strong licensing criteria that ensure the fitness and propriety of directors and executive officers. We should not use the opportunity of these hiccups to remove ourselves from risk-taking. We need to take well considered risk. It is part of the growth process. Enforceable guidelines (e.g. corporate governance, operational risk management and capital adequacy) and regulations must be supported by effective ongoing monitoring of risk exposures and monitoring for compliance with legal requirements. Sometimes legislation is necessary to ensure that supervisors have the needed powers of enforcement to intervene at various stages where infractions may be detected so as to avoid escalation of the problem. Both the Central Bank of Barbados and the Supervisor of Insurance possess legal powers to conduct inspections of their licensees. In some cases the strength of the oversight in the non-bank sector needs to be enhanced as was mentioned in the last Financial Sector Assessment programme report.

#### *Capital Controls*

In the Barbados situation, capital controls have served us well. They serve to control and monitor cross-border financial transactions. Further, entities that are licensed under the Financial Institutions Act, Cap 324 are additionally subject to credit exposure restrictions relative to capital - that is levels on lending to a single person or group. Where these are below acceptable levels, licensees are given specified time periods to have them corrected. This is a key credit risk control and is monitored on a quarterly basis using prudential returns submitted by all Central Bank licensees. Institutions are not always perfect, breaches can be corrected and the earlier the better, but it must be done in an orderly fashion. A disorderly correction is to be avoided.

#### *Consolidated Supervision*

Consolidated supervision of financial groups necessitates collaboration at different levels. Memoranda of Understanding among all domestic regulatory agencies are key in facilitating information exchange and collaboration. There is such an agreement among all domestic regulators in Barbados. Regulatory Policy Councils have also emerged in jurisdictions with multiple regulatory agencies (Jamaica

- 2000, The Bahamas - 2001, Trinidad and Tobago – 2005) as another forum for collaboration. These are however evolving. The Central Bank of Barbados hosts a similar forum with domestic regulators, on which cross-sectoral representatives from the board of national oversight bodies such as the Anti-Money Laundering Authority are included. This serves as an opportunity to share concerns on common issues or issues which affect some or all regulators. It is important also to note the ongoing work at harmonization of regulatory and supervisory standards by such bodies as the Caribbean Group of Banking Supervisors, a group which is over 20 years old, and works collaboratively with banking supervisors in the region. In addition, there is the Offshore Group of Banking Supervisors, the Association of Supervisors of Banks of the Americas which have wider representation within Latin America and the Caribbean Financial Action Task Force which is focused on anti-money laundering. Barbados is a member of all of these bodies and benefits from shared views. However there is clearly a need for greater intra-regional collaboration, particularly with respect to crisis management.

#### **Slipping Between the Cracks – Regulatory Arbitrage Investment Houses**

Regulatory and supervisory regimes differ across the region and models reflect shared responsibility between central banks or monetary authorities, and government departments. Consolidation of regimes has been a gradual process and Barbados is presently considering a revised model that will see the establishment of a Financial Services Commission. For example, insurance companies are supervised by the Central Bank of Trinidad and Tobago. This is not so in Barbados and Jamaica. Credit unions are also supervised by the Central Bank of Trinidad and Tobago and in Jamaica, by the Bank of Jamaica. This is not the case in Barbados. Despite the variance across the region, regulatory arbitrage has been minimized as all sectoral supervisors benchmark against international banking, securities, insurance and credit union standards and principles. (Regulatory arbitrage refers to a situation where regulations differ across jurisdictions and persons

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pick where they are going to do business to take advantage of these differences.)

Although a standardized CARICOM Financial Services Bill has been drafted, with facilitating financial services and investment Agreements, which collectively will provide a more harmonized legislative framework, it has not yet been finalised. It (a) establishes consistent legal and regulatory requirements for financial groups; and (b) engenders compliance with prudential norms (including capital adequacy and large exposure limits), and ensures evaluation and control of risk on a group-wide basis. In that environment the rules and guidelines involved would be the same even though the responsibility for oversight may be different. The pace of implementation has been challenged recently by ongoing efforts of individual jurisdictions to reform their own national frameworks. (For example, Trinidad and Tobago has just passed a new FIA and this would have been pre-occupying their attention.) Global and regional crises do not wait however until we are ready. Recent developments necessitate an acceleration of the pace of such work and ongoing events now spur us to re-evaluate mechanisms to prepare regional approaches to responding to such problems.

#### *Regional and National Responses*

As we in the region collectively grapple with the current financial crisis, originating in the Trinidad market we will continue to strengthen our own regulatory and supervisory frameworks at the national level. What we must not assume, is that because it happened in Trinidad and Tobago it must happen here. Within recent times, several regional jurisdictions have had Financial Sector Assessment Programme reviews performed by the IMF, or AML/CFT mutual evaluations by the Caribbean Financial Action Task Force. In the Barbados case, banking has traditionally received good ratings and findings were uneven as it relates to regulation in other sectors.

#### *The Need for Increased Co-operation*

Given the levels of financial integration globally, and notably, the growing systemic relevance of cross-border corporate groups, regulators are aware that they must look to enhance their cross-border relations particularly with respect to crisis management. At the last meeting of the

Caribbean regional Central Bank Governors a decision was taken that the Caribbean Group of Bank Supervisors (CGBS) should develop a management protocol to deal with events like the one currently being experienced. The CGBS provided an outline of what such a protocol should include, but it remains a work in process and has been overtaken by events. The plan is to submit it to Governors for their approval in 2009.

One of the key lessons of the global crisis stems from the fact that in an increasingly market-based and interconnected financial system, disturbances are likely to affect fundamental market mechanisms, such as the distribution of liquidity. This has cross-border implications. An adequate appreciation of these dynamics requires a systemic perspective for the analysis of financial stability which normally lies with the central banks, but clearly requires close interaction between central banks and other regulatory agencies. The Barbados Council of Regulators met twice within the last 3 months – most recently last week – to discuss areas of mutual concern and to discuss approaches to providing mutual support and to put preventative measures in place over the short to medium term.

#### *The Use of Macroprudential Indicators*

Macroprudential indicators have become more important in the current environment. Rather than concentrating only on the health and performance of individual financial institutions, macroprudential supervision uses a coordinated approach. This is necessary because financial institutions can influence asset prices, which can significantly affect the health of the economy as a whole. Greater emphasis on macroprudential supervision should produce “early warning” indicators, and macro-stress testing would serve to verify the resilience of the system. Already, regional governors through the Caribbean Centre for Money and Finance, are proposing this approach and seeking to fund it. Stress testing is also being developed largely because the extent to which market values and liquidity structures in other countries affect us is growing, more so because our economies are intertwined. Cooperation from all market participants in this regard can assist in countering the potential procyclicality of regulatory requirements and help us to identify early excessive leverage, risk concentration and the liquidity mismatch.

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Effective cross-border monitoring will require procedures that ensure that measures aimed at containing risks and vulnerabilities are identified and implemented. For example, in some situations in other jurisdictions it has been useful to have exchanges of currency deposits among central banks.

The appropriate balance of responsibility between home and host supervisors is another area that is being addressed. The Icelandic bank failures in particular taught us that when there is a problem, rescue procedures and fiscal support are national. It is for this reason that many regulators are requiring that operations be set up by way of subsidiaries. This way capital requirements are under the authority of the host supervisor.

#### *Regulation of Liquidity*

New approaches to the management and regulation of liquidity are just as necessary. Indeed the regulation of liquidity has been recognised as being at least as important as capital adequacy. Financial intermediaries can be faced with liquidity risk. However, the lack of a defined international standard has reflected the extreme complexity of the liquidity risk, and generally applicable quantitative ratios are difficult to identify. Effective ways for assessing and limiting the liquidity risks are however important and regulators have already begun to examine the possibility of introducing specific ways of measuring and monitoring liquidity risks.

#### *Regulation by Economic Substance*

My next point relates to the regulation of near-banks. Some jurisdictions have already commenced to regulate the financial institutions on the principle that if it looks and behaves like a bank, then it must be a bank. The Central Bank has recently extended reserve requirements and securities requirements to finance companies, (deposit-taking Part III companies), a decision taken before the regional problems arose, but which has turned out to be timely.

#### *Crisis Management*

Providing emergency liquidity funding can be a challenge in a regional setting. Experience has shown that host countries may need to maintain the capacity to protect the domestic financial system on a stand-alone basis, but must do so within a framework of close coordination with the home regulator while giving as much regional support as

possible. The bailouts in Europe are evidence of this. They concentrated on national bailouts but there was a coordinated approach.

#### **Summary**

Barbados' banking system was adjudged the third best regulated in the Western Hemisphere by the World Economic Forum. Barbados' onshore sector was adjudged by the IMF to be resilient to most market shocks. Notwithstanding the strength of the regulatory framework, it is however possible for a distressed situation to emerge. There is therefore the need to continue to strengthen financial regulation and to enhance regulatory resources in some areas and to be proactive.

Presently if financial sector indicators reflect that all domestic entities are adequately capitalized and liquidity in the system is adequate. The recent crises affecting the region make it prudent to constantly reassess our systems and controls to ensure that they remain robust in the current dynamic financial environment (as cross-border transfer risk may arise where there are weaknesses in group-wide consolidated supervision). We propose to pay heightened attention to conglomerate supervision in the banking sector, and to improve the level of collaboration between regulatory agencies, both at the national and regional levels, while ensuring that supervisory processes are flexible and proactive. Despite our past achievements there is further room for improvement as it relates to conglomerate supervision.

#### **Conclusion**

I have devoted most of my presentation to the financial sector and the banking sector in particular for which the Central Bank has responsibility because it is critical to confidence in the system and can be easily undermined. It is my view that while the financial sector is not perfect it is well run. International organisations confirm this, even when specific areas of weakness have been highlighted. However, unless we create a confidence problem, it is the global economic recession that is likely to affect us most. We must ensure that our financial system is safe and well run by being proactive and by taking corrective measures where necessary but simultaneously we must prepare ourselves for the impact of the global economic recession.



## Sustainable Effective Regulatory Systems

by Dr. Marion Williams\*

### Introduction

This presentation examines some critical areas in the development of sustainable effective regulatory systems, in the light of the reports of the G20, The Group of Thirty's report on Financial Reform and the recent IMF Report on Global Financial Stability. It analyses the issues in the context of the major financial markets and takes an emerging market perspective on many of the issues.

#### *Background to the Financial Crisis*

It is generally accepted that regulatory systems failed in the leadup to the financial crisis. It is also agreed that part of the problem was insufficient oversight, over-reliance on the market, weak underwriting standards, complex and opaque financial products, inappropriate incentive systems, insufficient regulation, and generally a lack of clarity about who should intervene and what measures the intervenor ought to take. In addition regulation had not kept up with the internationalisation of transactions and with the increasing complexity in financial markets, nor was there clarity about which financial markets should be regulated and which should be self-regulatory.

#### *Some Tenets of Sustainable Regulatory Systems*

In a rapidly-changing financial environment, it is clear that regulatory systems must be dynamic and flexible but must still avoid loopholes which allow financial institutions to circumvent regulation and benefit from regulatory arbitrage. At the same time regulation must not stifle innovation. The challenge is therefore to develop systems that are flexible and comprehensive without becoming onerous.

At the same time regulatory systems must be effective in the sense that they must identify the key reporting factors, areas that are important for measuring the stability of the entity, the level of risk to which it is exposed, its future viability in stressed scenarios, as well as the impact on the stability of the system. Speed of response, given the level of

technological advancement is also important. On-line real-time reporting should be the aim, so as to avoid regulators learning about crises after the fact.

#### *Common Themes Identified*

The need for national authorities to take a greater role in regulation while at the same time emphasizing the importance of international cooperation has been one of the frequently-repeated messages arising out of the financial crisis. Another has been the need to mitigate pro-cyclicality, the need for reform of the International Financial Institutions and the need to strengthen the macroprudential role of the IMF. A greater level of consolidated supervision and the need to include insurance companies, broker-dealers and bank holding companies in the supervisory framework where this is not yet the case, were also emphasized in most reports on the crisis. Maintenance of liquidity under stress conditions and the need for review of accounting standards, particularly the mark-to-market criteria were other areas identified.

#### *Bailouts and Rescue Packages and Implications for Regulation*

Many studies have cited critical regulatory weaknesses in the operation of the major financial institutions and more importantly authorities have taken steps to correct the immediate problems at the operational level. Rescue packages have helped to encourage the return of stability to the system, and are intended to urge the opening of the credit markets, and slow the widening global recession which has been a consequence of the collapse of the financial systems in US and Europe with consequential effects around the world. While this is critical, it is important and urgent to improve regulatory oversight and to ensure that remedial measures are both appropriate and implementable. Rescue packages will help the immediate problem but they are not preventative. In addition, it is important that financial institutions do not start to expect to be rescued and that there does not develop a danger that they postpone taking corrective action on their own while relying on the regulator or the monetary authority

#### *Speed in Putting Corrective Regulatory Measures in Place*

Issues such as large size of mega financial institutions and adequate capitalization in the financial industry remain matters which need to be addressed as a

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\*Dr. Marion Williams is the Governor of the Central Bank of Barbados. A Presentation at the Meeting of Shadow GN 2009 in Rome on May 6-7, 2009. This is a group of international experts and policy makers which is part of the International Policy Dialogue on International Governance Issues, a private sector-funded organization operating under the auspices of Columbia University. The meeting of 6th and 7th May was held in Rome in partnership with Luiss University, Italy.

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matter of urgency. While these areas have been flagged, actual corrective measures have not been put in place with a long term perspective. The measures put in place have been mostly stop-gap ones. Perhaps, part of the problem of the slow response of the credit market providers and suppliers of funds is that, bailouts notwithstanding, suppliers are aware that the matter has not moved sufficiently far beyond the problem identification stage.

Indeed, while there has been a fair degree of consensus on problem identification, the authorities have not approached the matter of remediation of the regulatory and oversight issues with the same immediacy as they have the bailouts. There seems to be the view that this can be done in a more leisurely fashion. However, market participants may not be of this view, hence the reluctance to open the credit markets.

#### *Lender of Last Resort Facilities - How Wide Should it Extend?*

Investment banks have been the most significant players in the international credit markets but the issue of lender of last resort facilities to the non-banks and insurance companies in post-crisis situations needs also to be addressed. It is not clear that crisis-related lender of last resort facilities are intended to become a statutory right. Will the involvement in the US of Government and of the Fed as providers of liquidity become a continuing source of funds availability going forward? What lessons are there here for other central banks in terms of liquidity provisions? And will the face of central banking change in the light of these expectations? What are the conflict of interest implications of such involvement, and what are the implications for risk-taking? In many of the situations of involvement of the regulatory authority, the problem arises also of an appropriate exit strategy. Such strategies need to be identified early in the bailout and liquidity provisioning process.

#### *The Cost of Financial Crisis and Who Bears It*

At the global level, seriously-affected developing countries and emerging markets that can least accommodate the global recession are examining ways to pass on some of the business costs of these collapses and near collapses away from their countries and institutions. However, they are

finding that there is no scope for so doing, as they are price-takers in the credit markets, worsened by unavailability of financing. They argue that it is important that these costs be shared by the creators of these difficulties. This introduces moral obligation problems whose solutions are difficult to pinpoint. It is noted that while additional borrowing on flexible terms from the IMF is appreciated as an attempt to recognize these asymmetries, many emerging markets are highly indebted and therefore require grants and not loans. This is so even for those middle-income countries which have no fiscal space.

#### *Reform of the Incentive System*

Perverse incentive systems in the industry have been identified as areas in need of change. There has been much debate about the size of compensation and incentive systems but not sufficient analysis of the manner in which this can be reconfigured to reduce risk assumption over the medium term by originating firms. In addition, the need to restrict the ability to securitize risks on to the portfolio of others may require that there be some time frame for holding of the asset prior to securitization and distribution. Indeed, there is a view in some quarters that the originator should be required to retain some portion of the asset to maturity. How much damage this would do in discouraging innovation in the industry remains to be assessed. Overall, there is increasing agreement that risk assessment techniques and the ability to transfer poor risks on to the books of other unsuspecting investors must be corrected, particularly given the role played by the credit rating agencies in failing to alert investors to these risks. Indeed, a related question is whether finance specialists should be compensated in ways which are related to sales? There may be a moral hazard here.

#### *Review of Basel II in Light of the Financial Crisis*

The proposed Basel II regulations pertaining to self assessment utilising the Advanced Internal Ratings Based Approach, in light of the failure of banks in the US and Europe to properly self assess, must be seriously questioned. This will involve also a review of the important proposed role for rating agencies in the Standardized Approach of Basel II, given their failure to provide early warning signals of the imminence of the financial crisis.

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### *The use of Risk Mitigation Techniques*

The role and prominence given to risk mitigation techniques and the fact that risk mitigation is only as reliable as the skills of the risk mitigator and the strength of the entity which assumes the risk protection will need to be addressed. Inter-linkages between insurance and banking in the presence of credit default insurance must be regulated or the danger of double jeopardy will be repeated where the two activities are too interlinked. In this regard, a relevant question is: should there be stricter guidelines for risk mitigators and should credit default insurance be more strictly supervised and should such paper be allowed to be purchased by banks whether or not the credit being insured is their own?

### *Should There Be Limits On Size?*

In explanation of the need for bailouts the issue of “too big to fail” has been a mantra frequently heard over the past several months. However, since the US economy has anti-trust legislation, it may be useful to re-examine this with a view to developing special laws for the banking industry, in order to deal with mega banks at levels which minimize the risk of becoming too big to fail. This could reduce the profitability and scale economies of banks, so the benefits and costs of these approaches require analysis and careful study. Another option is to increase capital requirements progressively when companies become too large. This would require a clear definition of “too big”. Should this be defined in terms of market share or the limit on the ability of the authorities to conduct a bail out?

### *Developing Wider Norms for Cross-border Supervision*

There is general agreement that the status of cross-border supervision needs to be fine-tuned. There are related questions to be answered. To what extent do regulators share responsibility for cross-border supervision of financial entities in situations where bailout funds come from the national treasury of particular countries? And who has responsibility for overseas branches? Splitting responsibilities for providing liquidity is one aspect of the problem, since liquidity is intended to be temporary and is expected to be repaid, but bailouts often tend to be permanent and one-way. This introduces the issue of the manner in which subsidiary legislation is written and whether such legislation should take precedence over the obligation for ensuring shared financial

stability, not only in the country of headquarters of the entity but in the country where its branches are located. It might appear that some international protocol may be required in order to clarify the rights and obligations of the parties.

### *Single Regulator? Complexity Versus Collaboration*

The role of a single regulator and the separation of regulation of the banking system from the central banks monetary role has always been a point of difference among central banks. It would be useful to review the stability of the financial systems in various countries to evaluate which system has had fewer regulatory problems, (those where the central bank is regulator and those where it is not). There is evidence that some cases of separation did not work out very well. Is there likely to be a trend back to the status quo before separation? It is sometimes argued that each area of regulation is becoming increasingly specialized and a general knowledge of finance is no longer what is required. Is it reasonable for a single regulator to have the depth required in each field? Yet there is undoubtedly need for regulatory collaboration given the increasing inter-relatedness of financial transactions. The question is: how is this best achieved? It may well be possible to have regulatory collaboration and in-depth expertise in specialist areas without having a single regulator. In the former scenario, rules of collaboration would need to be worked out in order to make this work.

### *International Oversight: the Scope*

A very important response of the G20 was the establishment of a Financial Stability Board, an institution with wider representation than the Financial Stability Forum. In this regard there is a question of the scope of the Board. There is an interesting issue which begins to emerge from the first set of correspondence coming from the Financial Stability Board which gives the impression that their mandate includes the cross-border activities of “firms”. It seems important to clarify whether theirs is a mandate which extends beyond banks to the wider corporate world. While it is true that globalized mega-corporations can become weak links in an increasingly inter-connected world, and that the same kinds of issues that arose in global banks could arise in global corporations in the real sector there is still the question of scope of the Board which appears to need clarification. This leads to the question of cross-border flows and the authority

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to deal with these issues. It is not clear how the Financial Stability Board will move from problem identification to implementation of recommendations which involve cross-border issues without being given greater authority.

#### *A Greater Role for Emerging Markets: the Asymmetry Between Cost and Control*

The emphasis in the regulatory world has been on systemically-important countries. However, the example of the last six months has shown that though it was the most systemically-important country which created the initial problem, it affected the entire world. This is vindication of the argument that developing countries should have a bigger voice in devising supervisory standards, since when a crisis arises as a result of their failure, developing countries are seriously affected even though they may have had no part in the construction. Gradual steps are being made in recognition of these facts but more is expected. It introduces the question of legitimacy, voice, representation and the authority to require compliance in these matters.

#### *Is Disintermediation Increasing?*

There are small signs that the post-crisis period has been seeing an increased level of disintermediation where brokers are bringing the larger borrowers and lenders together and where traditional banking arrangements are being avoided. This may just be temporary. If it is not, it would seem that this has even greater risks than the conventional financial institutional approach, since at least there were guidelines and provisos, whereas in private party contracts, the parties are covered by the law of contract and other very generalized rules governing the setting and

fulfillment of obligations. This may need to be monitored if it continues beyond the crisis period.

#### *Over-regulation as a Possible Over-reaction*

One concern coming out of the collapse of the financial system in the US and Europe is that, just as in the post-Enron situation, there was a perceived over-reaction in the form of the Sarbanes Oxley legislation, very shortly there could be an over-reaction in the financial regulatory domain, and that this could have adverse implications for financial liberalization and financial innovation. It will be important that we strike the right balance.

#### *Regional Regulatory Organisations*

The suggestion coming out of the Turner Report for the development of regional regulators (in an EU context) seems to be a useful one. Greater use of colleges of regulators is another option for achieving collaboration but the issue of national sovereignty and regional authority will need to be addressed on a case-by-case basis unless an international protocol is developed.

These points expand on, or are additional to, those made in the G20 report. In general, the problem identification process has gone well. There is clearly a great deal of work to be done to ensure that oversight systems in the financial sector are repaired to the extent where financial crises such as this do not re-occur. The experience of this crisis however has underscored the need to redefine what is “systemically important” more in terms of the inter-related nature and the international nature of transactions and not merely in terms of size of the entity. But it has also emphasized that because of public resource constraints, some action may need to be taken to prevent entities from becoming “too big to fail”.



A Review of Henderson Carter,  
**Business in Bim: A Business History of Barbados 1900 – 2000**  
by Carlon Walkes\*

## Introduction

In this enlightening book, well-known Barbadian historian Dr. Henderson Carter traces the development of business in Barbados from the era of the sugar cane plantation economy to the present age. Along the way he highlights the origins, progress, challenges, personalities, contributions and pitfalls of local businesses. The book adds to the body of existing literature by assessing businesses in the manufacturing, distributive and financial sectors in the twentieth century.

In particular, the book seeks to answer the following pertinent questions: Why were some black businessmen able to escape the economic stranglehold of the 1930s? What contributed to the rise and fall of the Roebuck Street merchants? Did post independence regimes favour large foreign establishments over small businesses? Why do black businesses usually fail to proceed beyond the second generation?

The author notes that the purpose of his study goes further than just filling the gaps in the Barbadian historiography. He suggests that the book has the potential to impart hope and inspiration to young and unborn entrepreneurs by providing success stories of Barbadian white and black enterprises.

### Overview

The nine chapters of the book were developed through the use of both primary and secondary sources of information. The primary information was obtained from interviews with local businessmen, workers and public servants who operated in the business world of the twentieth century. The secondary information came from letters, newspapers, government reports and previous literature.

The chapters are structured as follows. Chapter one gives the details of the colonial business framework that characterised Barbados in the early 1900s. The chapter also addresses the economic benefits received by Barbados

as a result of colonialism. In addition, selected regulatory bodies, and communication systems of the first half of the twentieth century are highlighted.

In chapter two, the author documents the financial support extended by the Barbados Mutual Life Assurance Society to Britain in an effort to secure their victory in both World Wars. Issues relating to plantation ownership, constraints to black businesses and public transport are also discussed.

The third chapter of the book describes 1940 to 1965 as an era of opportunity for many non-white businesspersons and foreign capitalists from North America and Europe. The chapter identifies a number of businesspersons and enterprises that made notable contributions to business in Barbados during the stated period.

Chapter four is designed to assess the influence government policies had on the business sector during the 50 years since the 1930s. In particular, it seeks to determine whether or not the government was fair to all business sectors.

Chapter five, entitled *Challenges and Change for the Business Community, 1940 – 90*, reports the establishment of the Barbados Workers' Union (BWU) in 1941 and it explains how the emergence of supermarkets adversely affected rural grocery shops. In addition, the chapter showcases a number of business personalities from the period 1940 to 1990.

The sixth chapter of the book explores some of the challenges local businesses faced throughout the last quarter of the century.

Chapter seven investigates the causes of black business failure. The author sensitises the reader to the fact that many black businesses fail to make it into the second generation.

The business survivors are highlighted in chapter eight. This chapter focuses primarily on businesses that have reached the 100-year mark, but special attention is also given to selected influential companies that emerged in the twentieth century.

Finally, Carter notes that no article on the history of business is adequately written without making reference to globalisation. In chapter nine: *Business in the Age of*

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*Globalisation*, the author analyses globalisation and its impact on business in a small island state.

### **Business Development in Barbados 1900 – 1940**

The British colonial system that typified the first six decades of the twentieth century in ‘Bim’<sup>1</sup> began in 1627 and lasted for over 300 years. Carter explains that after the abolition of slavery in 1834, colonialism was quite beneficial to both Britain and Barbados in terms of cross border trading. During the colonial period the sugar industry was the largest industry in the island and as a result Britain was able to benefit from the import of sugar cane products manufactured in Barbados. Due to this, Britain served as the main distributor of Barbados’ sugar, molasses and rum on the international market. On the other hand, Barbados took advantage of the fact that they did not have to worry about competition from other sugar producing countries, since Britain consistently absorbed the majority of their exports.

The unique socio-cultural characteristics of pre-independence Barbados are also featured in the book. For instance, the author explains that Barbados was once referred to as the ‘jewel in the English crown’ because certain aspects of its culture closely reflected that of Britain’s. He further notes that the local governments of British colonies were given greater independence in decision making, when compared to the French and Spanish models of colonialism. However, the author does not explain how this characteristic of the British colonial framework aided business development in Barbados. A brief analysis comparing the development of business between colonies that had less political independence and Barbados who had a relatively independent government system would have served well in the book.

Nonetheless, the historian documents well developments of the sugar industry. He reports that during the late 1800s sugar plantations utilised the majority of total arable land in the island, while absentee owners were responsible for more than 50% of these plantations. Upon

entering the twentieth century there was a decline in the number of absentee-owned plantations and an emergence of additional local family-owned plantations. Soon after, the industry saw yet another change in ownership of plantations, members of the mercantile sector accounted for a significant portion of the new owners of sugar estates. Carter remarks that the acquisition of plantations by merchants transformed them from being mere agricultural properties to corporate entities that were managed by a board of directors.

The new strain of plantation owners sought to maximise profits by minimising costs via estate mergers and factory efficiency. However, despite efforts to preserve the buoyancy of the sugar industry, by the year 1930 it was evident that the industry’s land monopoly was beginning to diminish. The primary reason for the reduction of sugar plantations was the narrowing profit margins of the estates that led to the sale of plantation properties to white speculators and Barbadians who acquired substantial sums of money from working in Panama.

Although the impact of the falloff in the sugar industry on other sectors of the economy is not explicitly stated in the book, Carter alludes to the fact that after its decline, the distribution sector, which was second to agriculture in terms of market share, became the leading sector in Barbados’ economy. The author notes that despite numerous challenges, the black population of Barbados made significant contributions to the development of the new dominant sector in the island.

### **Constraints to Black Businesses**

Although colonialism yielded significant macroeconomic benefits, the book suggests that the system was not conducive to the development of black entrepreneurs.

Carter informs the reader of the small black business class that existed in Barbados and other British colonies of the Caribbean during the colonial period was nothing more than a continuation of a practice that started during slavery. The small society of emerging entrepreneurs consisted of hucksters (vendors of small confectionary items), hawkers, washerwomen and small traders. However, even after the abolition of slavery, this ambitious class was

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<sup>1</sup> Bim is short for ‘Bimshire’: a name given to Barbados during colonial times. Barbados was once referred to as little England because of its political and cultural resemblance to Britain. Due to this, like many counties in England, Barbados was given a name that ended with ‘shire’.

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unable to expand due to land and capital constraints, racial discrimination, poor wages and lack of encouragement.

Carter points to the issue of land deprivation as a significant source of poverty and small-business corrosion. He suggests that emancipation without ownership of certain assets was virtually a means of keeping the once-enslaved in a form of bondage. Landlessness forced many Afro-Barbadians to remain on plantation tenancies. Although a few free villages were established in 1841, the sluggish pace of land subdivision and out-of-reach land prices kept the majority of freemen poor. He further explains that the condition of landlessness prevented many black small business people from setting up small shops and growing crops on a large scale, making business expansion impossible.

The author does not ignore the ‘capital’ factor either. He asserts that while the planter elite (the white sugar plantation owners) and commission merchants easily obtained loans and mortgages from various financial institutions to finance their businesses, Afro-Barbadians were not that fortunate because the state of landlessness rendered them as unfavourable candidates for loans.

Indeed, the issue of race was an important facet of the Barbadian business environment in the twentieth century. It served as a major source of bias in the banking system. The author reports the rampant prejudice that existed among the white minority against the black majority in all spheres of life during the beginning of the 1900s. He portrays a society where whites and mulattoes were given preference over blacks, while whites were preferred to mulattoes.

Racial discrimination coupled with poor wages restricted the economic and social mobility of blacks. The book brings to light the ‘low wage bill’ philosophy of the plantation system, which was developed to maximise the profits of plantation owners. The example provided is that of a first class agricultural labourer earning only one shilling and three pennies a day in 1838 and 100 years later in 1938, there being no change in the wage rate. The author also brings into perspective the planter-merchant elite dominated government, a characteristic of the political economy that compounded the challenges facing plantation workers. For example, trade unions were non-existent in Barbados during the 1900 to 1940 period, even though at that time trade

unions were very active in Britain. This gave motivation for some employers to exploit their workers, which eventually led labourers to join together and riot violently against the system. Nonetheless, employers still remained unsupportive of trade unions.

Restricted educational opportunities and high licence fees for selling discouraged blacks from pursuing business ventures. Poverty was the main reason why most blacks were uneducated, this translated into a vicious cycle that forced them to work for low wages on sugar plantations. At the same time, since most Afro-Barbadians were poor, the elevated licence fees enforced by regulatory agents prevented street-side vending.

The historian presents emigration as the critical path that led to the strengthening of the small black business class, enabling them to break out of the stranglehold of the 1930s. Prior to this period, many black Barbadians ventured to Panama, Cuba and Costa Rica in search of employment. The author points to evidence from Savings Banks, Postal Records and life stories of many emigrants as a suggestion that foreign remittances bolstered the growth of small black businesses in earlier times.

### **The Rise and Fall of the Roebuck Street Merchants**

Roebuck Street saw most of its renowned businessmen in the area of provision<sup>2</sup> during the 1890 to 1920 period, at a time of substantial rural-urban migration and remittance inflows from Panama, Cuba and the USA. These inflows helped boost the provision merchant class of that time. Some of the prominent names from this era were J. R. Bancroft, Stuart and Sampson (two black entrepreneurs), C. A. Rogers, A. A. Cole, C. S. Pitcher & Co. and C. M. Manning. James Tudor later joined the Roebuck Street merchants in 1937.

Carter maintains that the demise of the Roebuck Street merchants resulted solely from competition and failure to adjust to change. He describes the introduction of the supermarket as one of the major causes of the decline in small shops and provision merchants. Since supermarkets offered a wider variety of goods, and their prices were generally lower than those of the small shops, this presented a severe challenge

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<sup>2</sup>For example: butter, flour, meat, rice and the like.

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to shop operators. Moreover, he also points to the price ceilings of the 1970s and lack of storage space as significant constraints to the provision merchants. The author declares that the falloff in shops inevitably altered the operations of the Roebuck Street provision merchants in an adverse way, since shop-owners were the main customers of the Roebuck Street provision merchants. The commission merchants who were the main importers of merchandise at that time adjusted to suit the situation by supplying shops with goods directly, avoiding the provision merchants, the middleman.

The drastic drop in the number of merchants on Roebuck Street stemmed from the fact that most of them failed to restructure their businesses in order to be compatible with the changing times. However, a few provision merchants were taken over by commission merchants such as S. P. Musson and K. R. Hunte, while others like R. L. Seale and Co. Ltd and M. E. R Bourne and Co. Ltd moved their businesses to more spacious locations that offered them the much needed elbow room for growth and diversification.

### **Success Stories and Survivors**

The book showcases many intriguing success stories of business personalities. However, this review will highlight only three of the individuals who displayed strong determination and the willingness to take risks. This section will also list businesses in Barbados that reached the one hundred-year milestone.

#### *Personalities*

Carter depicts the story of a young poverty-stricken black man who accumulated \$150.00 and started a small retail dry goods operation in Upper Roebuck Street, Bridgetown, in 1912. That young man was James A. Tudor; who by 1937 had erected a resilient business in wholesaling and retailing. Coupled with his business in Upper Roebuck Street, Tudor also controlled 23 village shops, which offered goods supplied from his store. Tudor's establishments increased to somewhere between 30 and 35 by 1952.

Joseph N. Goddard was another outstanding Barbadian who defied the odds. Goddard was a descendant of the poor white servants that migrated to Barbados in the seventeenth century. The book describes the immense poverty

experienced by Goddard at various stages of his life. First he moved to Bridgetown and acquired a job in a shop in Milk Market. Later, he ventured into the trading of livestock, starting by leading one cow from St. John to Bridgetown, which helped him obtain enough money to establish his shop on Prince William Henry Street in 1921. After a series of local and regional business acquisitions and amalgamations, Joseph Goddard and his children eventually built the most progressive family business in the history of Barbados: Goddard Enterprises Ltd.

The author makes a deliberate effort to highlight the females of the business arena. In his discourse, he gives a miniature autobiography of Enid Maxwell, a black businesswoman, emphasizing her vast management skills and notable contribution to the hotel industry. Her career as a hotelier started after her father's death in 1969, when she took up full responsibility for managing the Atlantis Hotel, which her father had owned.

The book explains how Maxwell provided business for small farmers by incorporating Barbadian dishes in her menu. Her sound management skill gave the hotel a unique identity, particularly in the area of personalised service. In addition to its Sunday buffet and lunch, the hotel also made its mark in catering for weddings and other social events. In January 2001, Maxwell retired and leased the hotel to Bathsheba Hotel Co. Ltd.

#### *Survivors*

The book identifies a number of businesses that have survived one hundred years or more in operation. The list is as follows: The Barbados Mutual Life Assurance Society, BICO Ltd, Cole's Printery, Harcourt Optical, Carter and Co., Collins Ltd, The Barbados Advocate, Harrison's, Dacosta and Co., Knights Pharmacy, Barbados Fire and General Insurance Company, R. S. Nicholls and Son, Cave Shepherd and Co. Ltd, D. M. Simpson and Mount Gay Distilleries Ltd.

The author outlines three common features of the centenarian businesses. He notes that although all of them started with fine products and services, they diversified their product lines in order to stay competitive. Secondly, the majority of them adapted to the social and technological change that comes with time. Thirdly, many of the survivors extended their businesses beyond Barbados, hence widening their market.

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## Government Policies and Business

The fourth chapter emphasizes the key role that the state plays in facilitating business development. According to the author: “Businesses do not operate in a vacuum. The development or regression of any business is determined by the nature of government policy, as much as the internal management decisions by an entrepreneur.”

### *Opportunities*

Carter reports some of the strategies implemented by government in support of the business sector. He also documents the establishment of certain institutions that fostered a climate conducive to the development of business. In particular, this review will focus on manufacturing incentives, hotel development, international business incentives, and regulatory and training institutions. Additionally, the issue of whether or not post independence regimes favoured large foreign establishments over small businesses is addressed.

The book shows that from 1951 to 1974 the Barbados government formulated numerous pieces of legislation to kindle growth in the manufacturing sector. These involved tax holidays on profits (five to ten years), tax holidays on dividends and interest payments, depreciation allowances, carry-over losses, duty-free concessions on raw materials, machinery and equipment and the provision of factory space.

These and other government incentives provided impetus for foreign companies such as Bottlers (Barbados) Ltd, a soft drink plant otherwise known as ‘The Ju-C factory’, and Banks Breweries, to establish operations in Barbados during the 1950s.

Government continued to support the manufacturing sector by encouraging locally developed industries. The book chronicles the development of Solar Dynamics: a manufacturer of solar water heaters. The company started its operations in 1973 with a relatively small capital investment from a certain non-financial institution. According to Carter, the Fiscal Incentive Act of 1974 allowed Solar Dynamics and other solar energy businesses to enjoy exemptions from the import duties on materials used to build the solar water heaters. To further encourage the industry’s growth a 30% consumption tax was levied on electric water heaters.

In the services sector, the tourism industry has been a major focus of government policy since 1958. Under the Hotel Aids Act of 1958, tax relief was offered to any person or party who desired to construct or upgrade a building to be used as a hotel. The Coral Reef Club and Colony Club were constructed in 1961 under the umbrella of this Act. Government itself became a major player in the development of the tourism plant. It constructed the Hilton Hotel in 1964 then leased it to Hilton Hotels International to manage it.

Boosting the services sector remained high on the list of government’s priorities well into the latter half of the twentieth century. For instance, offshore businesses received tremendous incentives from government since their entry into Barbados in the late 1970s. However, to avoid the suspicion of fraud and money laundering in the island’s offshore business arena, government has put tight regulations in place to maintain the integrity of its financial sector.

Barbados Institute of Management and Productivity (BIMAP), a combined venture between government and the private sector was created in 1972 to enhance management expertise in Barbados. Since its establishment over 30 years ago, BIMAP has trained more than 12,000 individuals and more than 1,200 small businesses have participated in their Entrepreneurship and Small Business and Development programmes.

Carter also credits the establishment of the Central Bank of Barbados in 1972 for spurring growth in the business sector. He posits that the institution supplied the needed regulatory mechanism for commercial banks and an array of schemes in support of the business sector. For example, through the Industrial Credit Investment Fund, the Central Bank provides medium and long-term credit to enterprises capable of creating jobs, and earning substantial foreign exchange. He also notes that the Central Bank, along with Sir Arthur Lewis Institute of Social and Economic Studies (SALISES) provided technical support for the Young Entrepreneurship Scheme (YES), a programme for young aspiring entrepreneurs.

In response to the question of whether or not post independence regimes favoured large foreign establishments over small businesses, the evidence suggests that even after independence in 1966 government supported small business development. The author notes that tax incentives and the provision of training facilities all aided in nurturing small

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businesses. The book does not state who was favoured more between the large foreign establishments and small enterprises but in surveying the book it seems government might have struck a relatively fair balance between the two.

### *Challenges*

In reviewing the impact of government policies on enterprise, the author takes the reader back into 1991, a year of immense economic turmoil for Barbados. During this period the business community expressed great distrust in the then government, mainly because of an unusual mini-budget that increased customs and stamp duties on raw materials and other manufacturing inputs.

For the first time in the twentieth century in Barbados the business community demanded the removal of a Prime Minister. Six major business associations were responsible for this call. These associations were: The Barbados Chamber of Commerce and Industry, the Barbados Manufacturing Association (BMA), the Barbados Employers Confederation (BEC), the Barbados Sugar Industries Ltd, the Barbados Agricultural Society (BAS) and the Barbados Hotel Association.<sup>3</sup> The associations accused the government of fiscal irresponsibility and expressed their displeasure that it had entered an agreement with the International Monetary Fund (IMF) without properly consulting with the social partners and the masses.

### **Reasons for Failure of Some Black Businesses**

In the seventh chapter of the book, the author attempts to answer the question: 'Why do black businesses normally fail to proceed beyond the second generation?' He discusses a wide range of issues that affected black businesses for much of the twentieth century, pointing out some of the reasons behind the collapse of black businesses.

The issue of white dominance is addressed in the book as one of the possible reasons for failure of black enterprises. The example is made of black provision merchants, such as J. A. Tudor and Stuart & Sampson, who still had to depend on white commission merchants for

imported goods, which they bought on credit.

In addition, it is alleged that black businessmen used the revenues from their businesses to finance extravagant lifestyles consisting of expensive cars, plenty girlfriends and frequent overseas vacations.

The author also suggests that the one-man type business usually operated by blacks did not work. He reports the argument that the one-man-show philosophy was an effort geared towards the preservation of ownership and management status.

On the subject of succession, Carter notes that many black entrepreneurs of the early 1900s opted for their children to pursue professional careers, rather than taking up ownership of their business after they retired or died. He reasons that the proprietors saw professional qualifications as a prized attainment in a society where in times past black children were not allowed the privilege of a decent education. Secondly, the book argues that quite a few black businessmen were sole traders; therefore the structure of the business did not lend itself well to succession. Partnerships and shareholding enterprises are more likely to carry on in the event of an owner becoming unavailable. Thirdly, evidence suggests that some children just did not want to deal with the stress their parents bore as proprietors.

Carter concludes that no single factor caused the failure of some black businesses in Barbados. According to him, many who failed to survive were quite different in age, size, product offerings and managerial expertise. Therefore, generalising on the causes of failure is inappropriate.

On the other hand, Carter makes mention of three black businesses that continued into the second generation: the credit union movement, Clyde B. Jones Funeral Home and Hinds Transport. The one important feature that stands out in Carter's historical report of Clyde B. Jones Funeral Home and Hinds Transport is that both started as sole proprietorships but later changed to limited liability companies.

### **Globalisation**

The ninth and last chapter of the book seeks to define and explain the concept of globalisation, its philosophy, nature and impact on society. Special attention is given to business in a small open economy. The author states that

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<sup>3</sup> The name of this organisation was subsequently changed in May 1994 to the Barbados Hotel and Tourism Association.

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Barbados was one of the first colonies to engage in the first wave of globalisation in 1640 with the advent of sugar and slavery. The English and Dutch capitalists used Barbados as a base for trading goods and services internationally to support the sugar and slave industry. This activity was constructed to generate wealth for the English capitalists. Carter views globalisation as: “simply another term for rampant capitalism in an integrated global economy”. The author propounds that neither technology, nor trade liberalisation by themselves can be defined as globalisation. He states that capital accumulation by metropolitan countries through a complex interplay of business activities is the root of globalisation. The author notes that capital accumulation is not an automatic process; he describes capital accumulation as a function of technology, consumerism, low production costs, efficiency, trade liberalisation and specific ideologies.

Globalisation has significantly changed the business conduct in Barbados. The book explores how the proliferation of technology over time influenced the Barbados business climate. To this end, the author makes reference to companies such as The Barbados Mutual, Barbados Shipping and Trading (BS&T) and the Foundry group, which invested large sums of money in computer technology in the 1970s. The Automatic Teller Machine (ATM) is not excluded from the discussion, as the author highlights the notable positive impact ATM technology has on commercial banks’ profits, as well as the business environment as a whole.

The historian documents the acceleration of Barbadian business takeovers by Trinidad and Tobago interests. In his report of this phenomenon he even goes beyond the twentieth century and lists some of the prominent local businesses that were absorbed by Trinidad and Tobago entities. He notes that the sale of Barbadian businesses to such interests was not viewed in a positive light by some and was described as selling the ‘family silver’.

The book however, makes it clear that Barbadian businesses also ventured into other Caribbean territories. Examples are given of Barbadian plantation owners and merchants that started businesses in Dominica, Nevis and Tobago during the 1700s and 1800s. Moving into the twentieth century (especially the latter half) numerous

Barbadian companies continued to expand their businesses into the sub-region. The author explains that Barbadian businesspersons who resided in the Eastern Caribbean served as a means of establishing contacts for other Barbadian entrepreneurs interested in operating in those countries. However, cross border expansion during the first half of the 1900s was constrained by the persistence of poverty and dilapidated public infrastructure in some of the Eastern Caribbean countries. The author also provides evidence which suggests that the risk averse attitudes of some local businessmen were responsible for the slow expansion of local businesses into the rest of the world.

Overall, the ninth chapter of the book is a fair disquisition on the relationship between business and globalisation, but the author overlooks financial liberalisation as a characteristic of globalisation although it is an integral part of the whole globalisation process.

## Conclusion

*Business in Bim: A Business History in Barbados 1900 – 2000*, is a very informative, well-motivated book, which documents in some detail the development of business in Barbados over the twentieth century. The author communicates effectively with the reader by coherently tracing all the stages of enterprise in the small island economy. Most fascinating is the author’s ability to comprehensively examine all the dimensions of business in ‘Bim’. However, the major drawback of the book, is the author’s failure to speak to issues such as: (1) the benefits Barbados derived from its independent colonial political system, and (2) financial liberalisation.

For all who are interested in business, economics, sociology, politics or Barbadian history, the book is highly recommended. The book should be of special interest to the business community, academics, students, the political directorate and social commentators. Three major lessons emerge from the study: (1) determination and hard work foster success, (2) in order for businesses to stand the test of time the ability to adapt and diversify is of the utmost importance, and (3) sound government policies both sectoral and over arching, are necessary for business development and economic growth.





Printed in Barbados by Panagraphix Inc.

ISSN 0255-7460