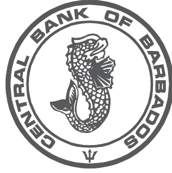

Central Bank of Barbados
ECONOMIC REVIEW
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Publisher's Note

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.

Articles and correspondence regarding the Review should be addressed to:

The Administrative Editor
Economic Review
Central Bank of Barbados
P.O.Box 1016
Bridgetown
Barbados
Tel: (246) 436-6870
Fax: (246) 427-1431
E-mail: cbb.libr@caribsurf.com
Website: www.centralbank.org.bb

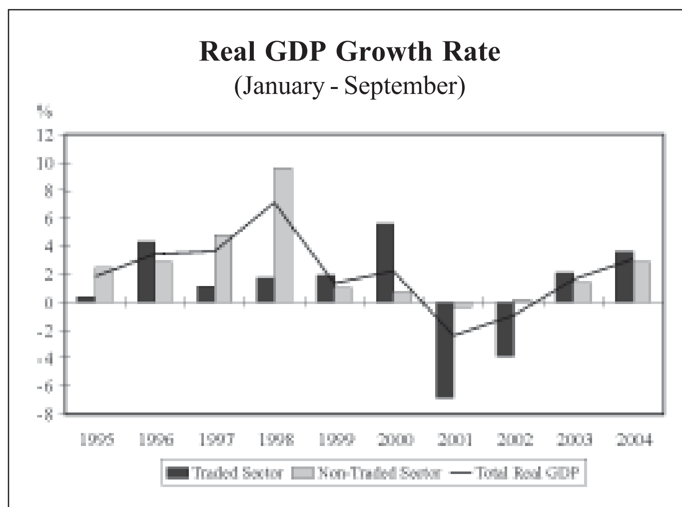
***The Editorial Committee**
Dr. Daniel Boamah
Mr. Harold Codrington
Dr. Roland Craigwell
Mr. Carlos Holder
Mr. Peter Whitehall
Mr. Neville Pollard, *Administrative Editor*

Review of Economy

Overview

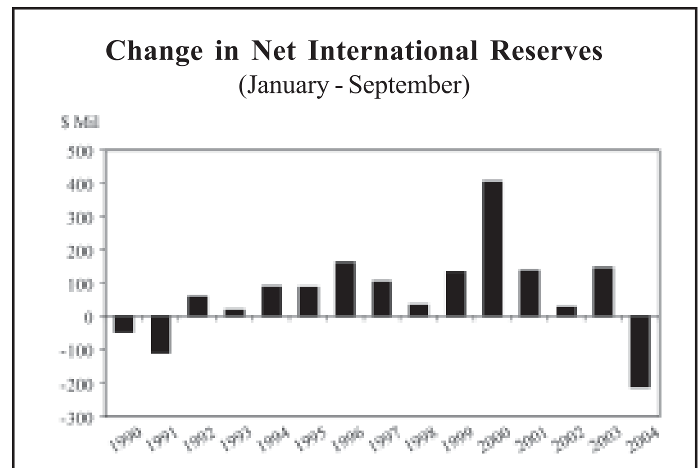
The Barbadian economy continued to expand in the first nine months of 2004, as real gross domestic product grew by approximately 3.1%, following a 1.6% increase in the corresponding period of 2003. The expansion was mainly driven by a bumper tourist season, which saw record arrivals of both long-stay and cruise visitors. However, higher tourism receipts and improved export earnings were overshadowed by a rising import bill, as reflected in a widening external current account deficit. In the absence of sufficient capital and financial inflows, this deficit was financed from the net international reserves (NIR), which consequently registered a significant decline. Excess liquidity in the financial system tightened, amid signs of a reversal in the dual trend of mounting deposits and flat credit that had contributed to the build-up of liquidity in the previous two years. Government issued securities to finance most of its fiscal deficit, which continued to narrow due to cutbacks in on-budget capital expenditure and increased revenues.

Output in the traded sectors rose by an estimated 3.6%, as the exceptional tourism outturn eclipsed poor performances in agriculture and manufacturing. Growth in the non-traded sectors, at around 2.9%, was relatively modest in comparison, yet more broadbased, drawing on contributions from the transportation, storage and communications and wholesale and retail trade sectors, as well as business and other services. With economic activity expanding in both the traded and non-traded sectors, the average unemployment rate for the period slipped back into single digits for the first time in three years, while a modest increase in prices was recorded.



Real GDP Growth Rate
(January - September)

The strengthening economic activity also boosted merchandise imports, which outweighed exports of goods and services, especially during the third quarter. As a result, the external current account deficit widened substantially. On the other hand, the capital account surplus was halved due to lower public and private inflows. In addition, there were significant outflows of approximately $65.0 million for overseas investment under the Second-Tier Reserves programme[1], which was nearly double the $36.9 million invested in the same period of 2003. Together, these developments led to a $210.8 million slide in the NIR, the largest-ever reserve loss in the space of nine months. Consequently, the liquid foreign assets of the monetary authorities were



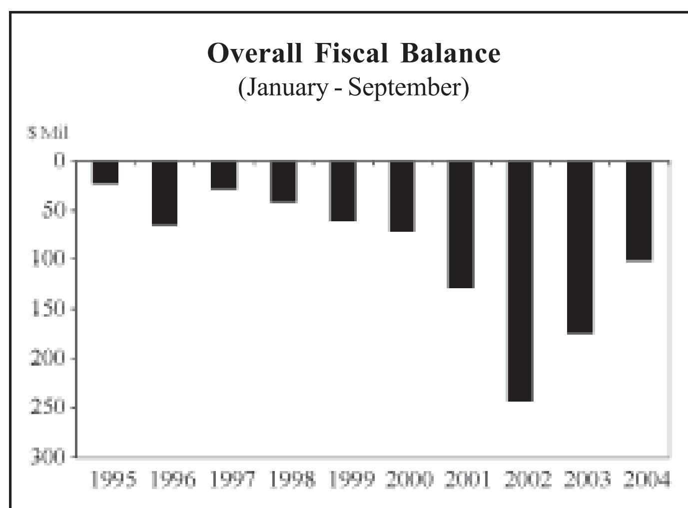
Change in Net International Reserves
(January - September)

[1] The Second-Tier Reserves programme was instituted in July 2002. Under this system, certain entities are allowed to invest funds overseas with the approval of the Central Bank on the condition that such funds would be repatriated on request. These funds may be sourced either directly from the foreign exchange market or from the reserves of the Central Bank. As at the end of September 2004, cumulative overseas investments under the programme amounted to BDS$149.2 million.

down to approximately $1.3 billion at the end of September 2004, providing reserve cover for 27.6 weeks of imports, compared with 36.1 weeks at the end of September 2003 and 35.2 weeks at year-end 2003.

Mirroring the deterioration in the NIR, liquidity in the domestic banking system tightened somewhat. The 3.9 percentage point reduction in the excess cash ratio reflected a pick-up in commercial bank credit and a fall-off in deposits in the third quarter.

Issuance of additional treasury bills by Government during the third quarter added to the total stock of domestic debt, which was Government's main source of financing during the review period. In effect, after recording a fiscal surplus during the first six months, the central government incurred a sizeable deficit in the third quarter. Nevertheless, the overall fiscal deficit for the nine months under review shrank by over 40%, as Government continued to scale back its on-budget capital expenditure, while tax revenues were supported by the firming economy.

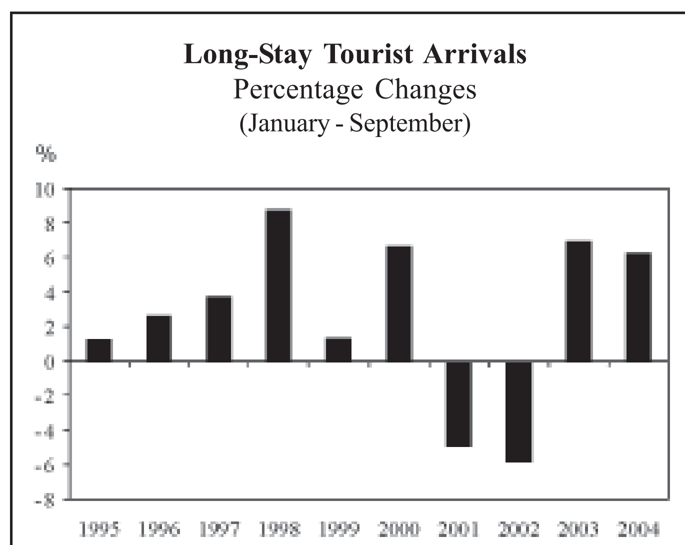


Production, Prices and Employment

Tourism

Barbados welcomed a record number of long-stay and cruise visitors to its shores between January and September 2004. Value-added in the tourism industry therefore grew by an estimated 9.6%, marking the second consecutive expansion and the largest in a decade.

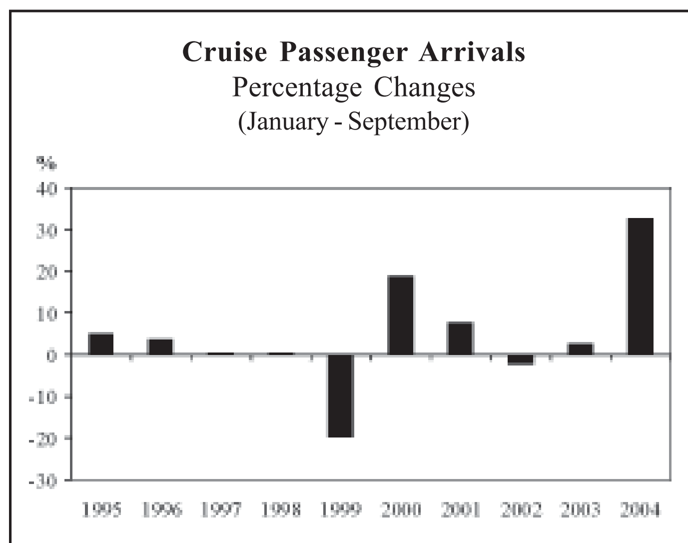
The number of long-stay tourists rose by 6.2% during the nine-month period, having increased by 6.9% in the comparable period of 2003. Over 70% came from Barbados' traditional core markets - the UK, Canada and the US - while the emerging CARICOM market continued to gain market share, accounting for nearly 20% of visitors. The UK was the top performer, advancing by 9.4%, or 13,753 persons. Visitors from the Canadian and CARICOM markets increased at roughly the same rate in percentage terms (8.2%), but in absolute terms CARICOM outperformed Canada by a margin of 3,000-plus persons, despite a fall-off in arrivals from Trinidad and Tobago. Arrivals from Continental Europe were up 6.4% overall, notwithstanding an 8.6% contraction in the German market, whereas US tourists were up by just 1.4%. There were fewer travellers to Barbados from other markets, which collectively declined by 7.4%.



On a quarter-by-quarter basis, the overall long-stay outturn was mainly attributable to an 11.5% spike in the first quarter. However, the third quarter figures were also significant (particularly for the UK), with September up 10.8%,

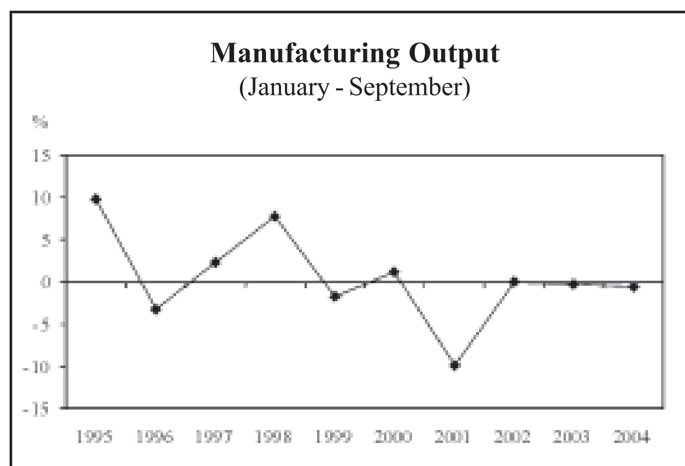
due in part to the diversion of vacationers to Barbados from hurricane-ravaged Grenada.

The success of land-based tourism was well supported throughout the period by a dynamic cruise performance. Six major cruise liners made Barbados their homeport during the winter season, while two new vessels docked in the summer months[2], replacing three ships that were removed from the schedule. The new additions had a larger carrying capacity and made far more calls than the ones that they replaced. As a result, the Bridgetown port recorded a 25.4% expansion in cruise-ship calls between January and September, while the growth in cruise passengers was upwards of 30% in each quarter, fuelling an impressive 32.5% increase in the headcount for the year to September. This contrasted sharply with growth of just 2.4% in the comparable period of 2003.



Manufacturing

The first three quarters of 2004 saw an extension of the flat trend in manufacturing activity observed during the previous two years. This was the net result of mixed performances from the various manufacturing sub-sectors. In the food processing industry (previously a key growth area), production levels were down by around 3.0%, while industries in the 'other manufacturing' category[3] registered a 3.3% fall-off in activity. Together, these two categories account for nearly 40% of all manufacturing output and therefore these declines weighed heavily on the overall outcome. However, this was more or less balanced out by significant upturns in the smaller categories of electronics (up 18.4%), chemicals (up 19.1%) and non-metallic mineral products (up 5.4%).



Agriculture and Fishing

Output in non-sugar agriculture and fishing is estimated to have fallen by approximately 7.2% over the nine months, after increasing by 3.0% in the same period of 2003. The fishing industry registered a steep decline of 22.8% in fish catches, which was partly due to reef damage caused by Hurricane Ivan. In addition, there was a 7.2% decrease in milk production, reflecting the general downtrend in the industry since the first quarter of 2002. In contrast, chicken production rose by an estimated 5.7%, as the strengthening of economic activity and the decline in fish catches stimulated greater demand.

[2] The winter season runs from October to April, while the summer season spans the period from May to September.

[3] The 'Other Manufacturing' category includes the production of fabricated metals, machinery and transport equipment, as well as printing.

International Business and Financial Services

The number of new licences issued to international business and financial entities between January and September 2004 amounted to 264, some 27 more than in the corresponding period of 2003. Of the new licensees, 209 were International Business Companies (IBCs), up from 203 in the previous year, while 41 were Societies with Restricted Liability (SRLs), which was double the average level of approvals for the previous three years. In addition, eleven Exempt Insurance Companies, one Exempt Insurance Management Company and two offshore banks were licensed during the period.

Non-traded Sectors

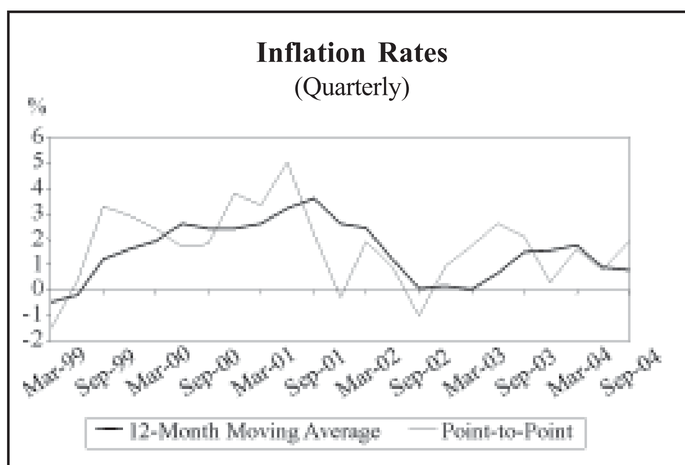
The outturn in the non-traded sectors was led by the transport, storage and communications industries, which rose by around 5.0% during the review period, compared with 3.8% and 1.5% in the comparable periods of 2002 and 2003. Telecommunications liberalisation accounted for stepped-up activity in cellular business, while transport and storage activity was up in response to the surge in imports. Business and other services, wholesale and retail trade and electricity, gas and water production went up by 3.1%, 2.8% and 2.4%, respectively, in line with economic growth.

Following a lull in activity in the first half, the construction industry posted growth of 5.0% in the third quarter, resulting in a net increase of just under 1.0% for the first nine months. New private residential and commercial building, coupled with ongoing public sector projects, underpinned this third-quarter recovery. The resultant heightening of demand for construction materials was associated with increased quarrying output, which offset lower oil production, leading to a 4.6% spurt in mining and quarrying activity for the July-to-September period. Therefore, despite recording negligible movement in the first six months, value-added in mining and quarrying grew by 1.2% in the year to September.

Prices and Employment

With greater economic activity, the average unemployment rate for the first three quarters of 2004 was 9.9%, dipping below 10% for the first time since 2001. Critical to this outcome was a decline in the female jobless rate, from

12.9% in the January-to-September period of 2003, to 10.7% in the review period. This compensated for a slight increase in unemployment among males, which up until the end of 2003 had also been trending downward, but then started to creep up from the beginning of 2004, averaging 9.2% in the year to September.

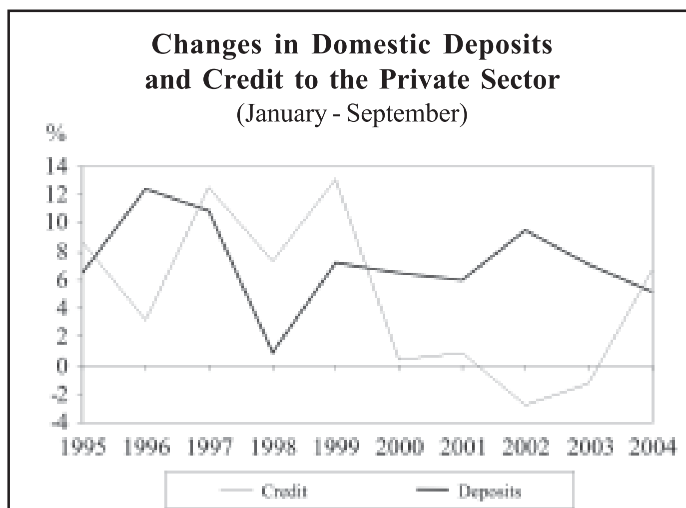


Consumer price inflation for the twelve months ending September 2004 was 0.8% on a moving average basis, compared with 1.5% in the same period of 2003. A significant increase in food prices and moderately higher prices on items such as clothing and footwear, transportation, medical and personal care, as well as education and recreation, outweighed reductions in the cost of housing, household operations and supplies and alcoholic beverages. Notably, Government subsidies prevented full pass-through of the hike in international oil prices to Barbadian consumers, while lower mortgage rates contributed to the moderation in housing costs.

Financial Sector

Deposits

During the first nine months of 2004, growth in domestic deposits slowed to around 5.2% ($248.8 million), compared with January-to-September rates ranging from 6.0% to 9.5% in the preceding five years. However, there had been significant deposit accumulation to the tune of 8.6% ($409.9 million) over the first half of the year. Therefore, the overall slowdown in deposit growth in the year to September was solely attributable to a 3.1% ($161.1 million) fall-off in deposits in the third quarter, which mainly reflected net withdrawals by a public financial institution for investment purposes. Most other categories expanded during the nine months under review in keeping with the rise in domestic income; the savings of private individuals were up $201.0 million, business firms, $135.0 million, and statutory bodies, $29.9 million.



Changes in Domestic Deposits and Credit to the Private Sector
(January - September)

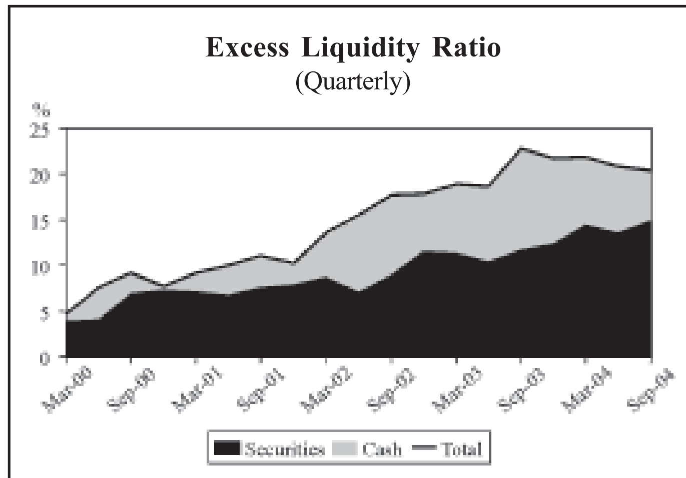
Credit

Credit to the non-financial private sector rallied from a four-year slump between 2000 and 2003, (during which the average rate of decline for the first three quarters of each year was 0.7%), to post a healthy expansion of 6.7% ($214.9 million) over the comparable period of 2004. Amid keen competition in the mortgage market and reduced borrowing costs, personal lending led this turnaround, increasing by $102.9 million, about half of which consisted of new mortgages for private dwellings. This was reflected in the construction sub-category, which was up $32.3 million due to land purchases and private residential building. In contrast, agriculture, fisheries, mining and quarrying, distribution, entertainment and catering, public utilities, and professional and other services all borrowed less during the period.

Credit to private financial institutions and statutory bodies expanded by $54.7 million and $46.8 million, respectively. The increase in credit to the financial sector mainly reflected an intra-corporate transfer from the commercial banking arm of a private financial institution to its finance and trust arm. The rise in credit to statutory bodies came in the form of several bonds issued by entities, such as the National Housing Corporation and the Barbados National Terminal Co., Ltd. which were taken up by the commercial banks.

Liquidity and Interest Rates

With the credit rally and the third-quarter dip in deposits, commercial banks' excess cash reserves plunged by nearly 40%. Securities holdings rose as Government issued new treasury bills in excess of the value of those maturing.



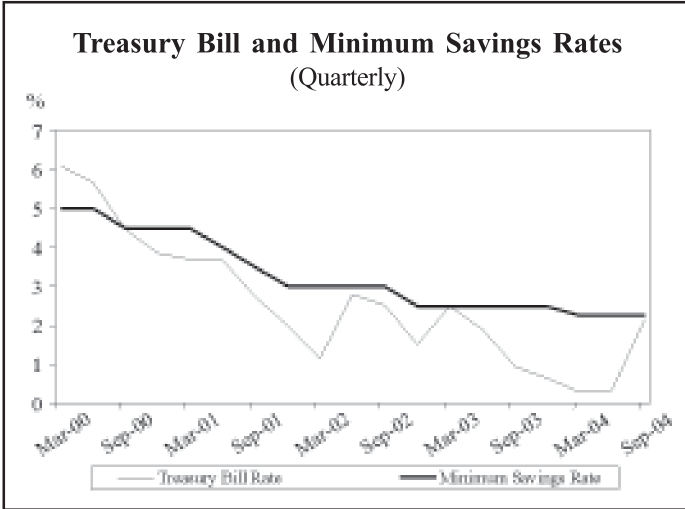
Commercial banks rolled back interest rates during the period, prompted by the intensification of competitive pressures, as well as the Central Bank's 25-basis point cut in the minimum savings rate in March[4]. Consequently, the weighted average lending rate on all loans moved from 10.16% to 9.74% in the year to September. With the tightening of liquidity in the banking system, the treasury bill rate rose from 0.64% at the start of the year to 2.14% at the end of September, after ending the first half at 0.35%.

[4] Effective March 15, 2004, the Central Bank lowered the minimum savings rate from 2.5% to 2.25%.

Barbados: Summary Accounts of the Banking System
($ Millions)

	2001		2002				2003				2004		
	Sept.	**Dec.**	**Mar.**	**June**	**Sept.**	**Dec.**	**Mar.**	**Jun.**	**Sept.**	**Dec.**	**Mar.**	**Jun.**	**Sept.**[P]
Net International Reserves	1,214.6	1,533.7	1,623.4	1,606.1	1,570.6	1,711.3	1,940.3	1,929.3	2,053.1	2,087.1	2,169.1	2,244.4	**1,880.9**
Monetary Authorities	1,106.4	1,413.7	1,482.1	1,485.3	1,441.3	1,366.4	1,358.3	1,379.2	1,513.0	1,503.3	1,539.3	1,478.2	**1,292.5**
Commercial Banks	108.2	120.0	141.3	120.8	129.3	344.9	582.0	550.1	540.1	583.8	629.8	766.2	**588.5**
Net Domestic Assets	2,266.5	2,002.9	2,004.9	2,133.6	2,157.2	2,186.4	1,944.5	1,973.9	1,976.0	2,086.8	2,231.4	2,386.2	**2,781.4**
Credit to Public Sector	125.0	-66.7	-98.2	-3.8	160.9	347.7	350.3	332.2	322.7	480.8	294.2	367.4	**773.4**
Central Government (net)	477.4	242.0	229.2	390.7	553.2	654.4	641.7	680.4	657.7	722.7	659.7	707.2	**835.4**
Rest of Public Sector	-352.4	-308.7	-327.4	-394.4	-392.3	-306.7	-291.5	-348.2	-335.0	-241.9	-365.5	-339.7	**-62.1**
Credit to Rest of Financial Sector	128.6	115.9	148.1	250.4	238.4	167.1	143.6	144.3	145.5	155.6	161.2	160.9	**221.0**
Liabilities to Other Financial Institutions	254.5	265.8	349.9	359.2	374.0	403.8	378.5	372.6	362.6	390.1	403.3	416.1	**489.3**
Credit to Non-Financial Private Sector	2,526.1	2,512.6	2,506.9	2,513.5	2,442.0	2,599.2	2,592.6	2,590.7	2,564.4	2,622.6	2,702.0	2,766.4	**2,798.6**
Liabilities to the Non-Financial Private Sector	3,481.1	3,536.6	3,628.3	3,739.7	3,727.8	3,897.7	3,884.8	3,903.1	4,029.1	4,173.9	4,400.5	4,630.6	**4,662.3**
Demand Deposits	784.3	836.6	895.8	926.7	905.5	1,096.6	1,053.6	1,009.6	1,121.4	1,200.3	1,273.1	1,432.1	**1,399.2**
Time Deposits	425.0	413.1	399.1	417.3	384.0	345.9	347.7	341.1	333.4	313.2	374.6	362.7	**396.3**
Savings Deposits	1,964.9	1,974.5	2,015.4	2,074.6	2,117.2	2,117.7	2,154.2	2,211.0	2,235.3	2,331.5	2,410.5	2,490.0	**2,498.8**
Currency in Circulation	307.0	312.4	318.1	321.1	321.1	337.5	329.3	341.4	339.0	329.0	342.3	345.9	**368.0**
MEMO:													
Domestic Deposits	3,978.1	3,971.8	4,183.2	4,417.7	4,360.6	4,524.7	4,430.0	4,505.1	4,751.7	4,917.1	5,278.1	5,457.7	**5,258.6**
Liquid Assets	1,075.2	1,392.0	1,459.9	1,471.4	1,436.5	1,365.5	1,356.9	1,382.2	1,518.7	1,504.9	1,533.0	1,480.4	**1,298.3**
Loans and Advances	2,757.1	2,732.5	2,771.5	2,876.2	2,792.8	2,910.3	2,811.0	2,801.0	2,793.2	2,867.0	2,950.0	2,974.3	**3,082.0**

Source: Central Bank of Barbados
P: Provisional



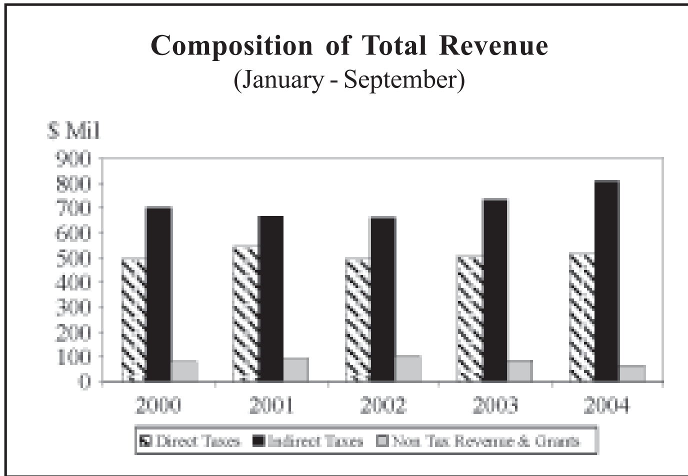
Government Securities

The stock of treasury bills outstanding increased by $51.0 million between January and September, all of which took place in the third quarter. This brought the total holdings at the end of the period to $631.1 million, of which $548.4 million was held by commercial banks and trust companies. During the same time-period, the value of Government of Barbados debentures outstanding increased by $55.2 million to $2.1 billion, most of which was taken up by the National Insurance Scheme, banks, trust companies and insurance companies. The stock of Barbados Savings Bonds outstanding increased by $1.0 million to $109.9 million.

Public Sector

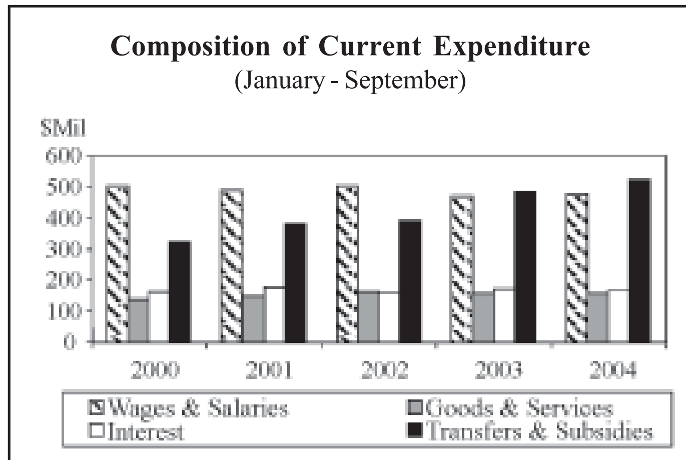
Revenue

In a repeat of the previous year's performance, total Government revenue rose by 4.2% during the first nine months of the year, on the strength of a 6.1% expansion in tax revenues. Indirect tax receipts climbed by 10.5%, with collections of Value-Added Tax (VAT), import duties and excise taxes up 12.0%, 16.1% and 16.0%, respectively. These three revenue streams benefited from the growth in the economy and the resulting spurt in import demand, with motorcar imports in particular driving excise taxes. Overall, direct tax revenues declined marginally, after growing by 5.3% a year earlier, as a 6.2% decrease in income tax receipts overshadowed increased collections of 1.7% and 21.3%, respectively, in corporation and property taxes. The fall-off in personal income taxes was attributable to the raising of allowances and the lowering of the threshold tax rate for 2004, whereas greater corporate profitability accounted for the rise in corporation tax receipts, outweighing the effects of a lower rate of corporation tax. In addition, the intake of property taxes was boosted by an ongoing drive by the authorities to collect arrears.



Expenditure

For the second year running, total expenditure dipped during the January-to-September period. Government continued to rein in its on-budget capital spending, which plunged by 23.0%, following a decline of similar magnitude in the previous year. However, current expenditure increased by 3.4%, with most of the funds going towards transfers and subsidies, which grew by 8.9%. The transfers and subsidies figure continued to be distorted by the inclusion of operating expenses at the Queen Elizabeth Hospital (QEH), following that institution's redesignation as a statutory body in 2003. In addition, the wages and salaries bill grew by 1.0%, after declining by 6.7% a year earlier due to the same reclassification of QEH expenses. Government outlays on



Government Financing
(January - September)
($Million)

	1998	1999	2000	2001	2002	2003	**2004P**
Domestic Financing	48.7	-78.7	-156.9	118.1	263.6	-4.5	**144.5**
Central Bank	-80.3	-112.6	-307.0	-45.0	199.8	9.3	**62.2**
Commercial Banks	-28.4	-44.3	133.2	69.0	117.8	-5.8	**105.4**
National Insurance	118.1	9.3	-10.1	14.1	72.2	45.7	**-3.5**
Private Non-Bank	34.6	11.2	11.4	11.8	37.9	28.4	**111.2**
Other	24.7	63.9	35.1	14.9	-195.9	-82.1	**-130.8**
Foreign Financing	-29.7	139.1	227.2	10.4	-21.6	165.6	**-43.3**
Capital Markets	0.0	150.0	200.0	0.0	0.0	0.0	**0.0**
Project Funds	22.6	14.3	55.6	41.8	38.9	43.9	**29.2**
Policy Loans	20.0	0.0	0.0	0.0	0.0	0.0	**0.0**
Amortisation	-72.3	-25.1	-28.4	-31.5	-60.5	-67.3	**-72.4**
Divestment	0.0	0.0	0.0	0.0	0.0	189.0	**0.0**
Total Financing	41.2	60.5	70.2	128.5	242.0	161.1	**101.3**

Source: Central Bank of Barbados
P: Provisional

goods and services also increased marginally, following a 3.2% reduction in the previous year. However, overall interest payments fell by 2.7%, despite a 5.4% rise in external debt payments, as domestic debt payments were down 7.8%, coming off of a three-year high in 2003.

Financing

With revenues up and expenditure largely stabilised, the overall fiscal deficit for the first nine months of 2004 contracted to $101.3 million from $161.1 million a year earlier. Government financed this deficit from domestic sources, with commercial banks providing $105.4 million and private non-bank entities another $111.2 million. In addition, there was a net withdrawal of Government's deposits at the Central Bank in the amount of $60.3 million. However, the National Insurance Board reduced its holdings of Government debt by $3.5 million over the period, while financing from other (unclassified) sources amounted to $130.8 million, bringing total net domestic financing inflows to $144.5 million.

Of the $130.8 million in unclassified outflows, $63.2 million went towards extra-budgetary expenditure. The main recipients of this off-budget financing were statutory bodies and various funds for public investment. Among the projects being funded off budget were the airport refurbishment, the Needhams Point Development and the Concorde project. Most of the remaining funds were allotted to Government sinking funds and amortisation payments on domestic debt.

The excess of net domestic financing over the budget deficit compensated for a net outflow of $43.3 million on the foreign financing side. This shortfall occurred after project funds received by government totalling $29.2 million were more than offset by $72.4 million in amortisation payments for central government foreign debt.

Government Operations
(January - September)
($Million)

	1998	1999	2000	2001	2002	2003	**2004**
Total Current Revenue	1,145.3	1,188.6	1,278.8	1,307.3	1,260.6	1,340.3	**1,395.8**
Direct Taxes	393.8	449.5	492.5	546.0	494.6	520.7	**518.4**
Personal Income Tax	204.2	197.5	216.7	246.8	259.0	255.2	**240.1**
Corporate Tax	115.5	167.0	194.5	192.7	149.1	178.0	**180.9**
Levy Tax	12.1	13.1	11.1	13.9	14.9	4.7	**0.0**
Property Tax	36.9	47.0	46.0	55.4	41.9	46.8	**56.8**
Other	25.2	24.9	24.2	37.2	29.7	36.0	**40.6**
Indirect Taxes	661.6	675.2	703.5	666.9	662.0	734.5	**812.0**
Consumption Tax	0.5	0.0	0.5	0.0	0.0	0.0	**0.0**
Stamp Duty	11.1	10.1	9.5	13.1	8.3	11.0	**13.6**
VAT	340.3	339.0	386.5	369.2	368.5	403.4	**452.0**
Import Duty	97.2	104.9	90.4	92.7	115.9	123.9	**143.9**
Excise	131.5	142.3	130.7	115.2	83.6	97.3	**112.9**
Hotel & Restaurant	0.7	0.5	0.5	0.4	1.2	0.2	**0.0**
Other	80.3	78.4	85.8	76.4	84.6	98.8	**89.7**
Non Tax Revenue	91.0	64.0	82.7	94.4	104.1	85.1	**65.4**
Current Expenditure	998.5	1,044.3	1,127.4	1,192.2	1,220.6	1,283.8	**1,327.3**
Wages and Salaries	434.4	428.5	502.8	487.1	504.7	470.8	**475.6**
Goods and Services	114.0	127.0	138.4	147.9	162.8	157.6	**157.9**
Interest Payments	149.5	165.8	163.8	178.0	161.8	172.2	**167.5**
External	29.7	58.6	55.4	75.3	77.9	67.2	**70.8**
Domestic	119.8	107.2	108.4	102.7	84.0	105.0	**96.7**
Transfers & Subsidies	300.6	322.9	322.4	379.4	391.2	483.2	**526.3**
Current A/C Balance	147.9	144.4	151.4	115.0	40.1	43.5	**68.5**
Capital Expenditure	197.1	204.3	219.6	224.0	281.6	216.9	**167.1**
Net Lending	8.0	0.6	2.0	19.5	0.5	0.6	**2.7**
Total Expenditure & Net Lending	1,187.6	1,249.1	1,349.0	1,435.8	1,502.6	1,501.4	**1,497.1**
Overall Balance	-41.2	-60.5	-70.2	-128.5	-242.0	-161.1	**-101.3**

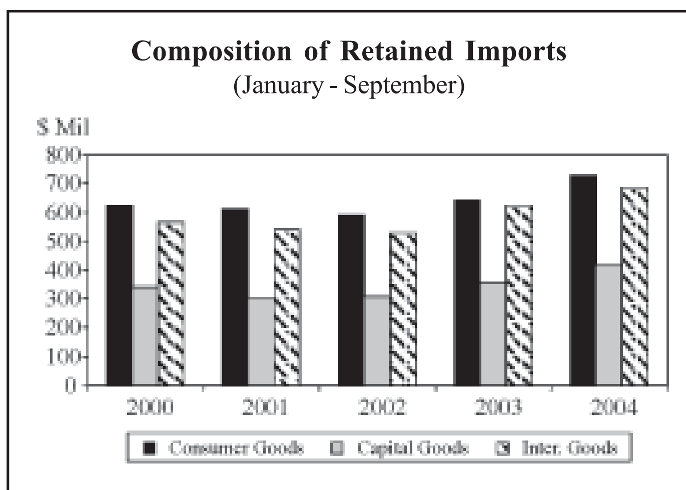
Source: Accountant General and Central Bank of Barbados

Foreign Trade and Payments

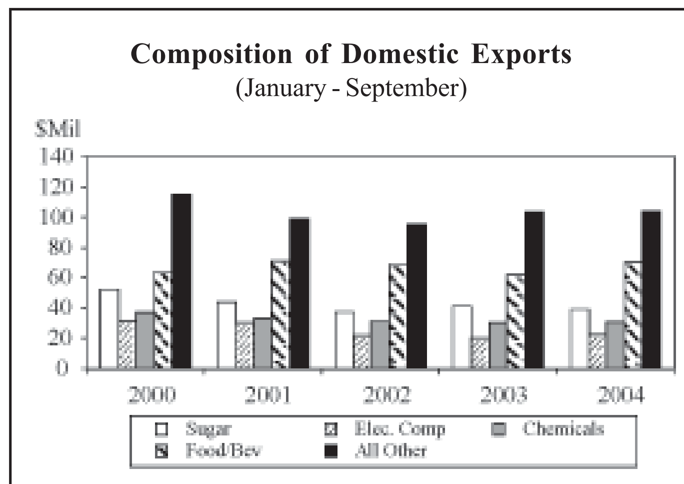
Current Account

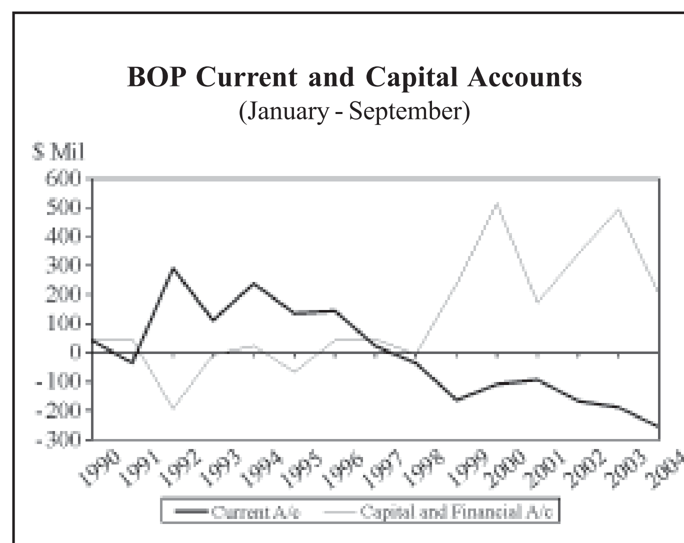
At an estimated $250.5 million, the external current account deficit for the first three quarters of 2004 was the largest on record, as neither strong growth in travel credits nor an improvement in domestic exports was enough to offset the wave of imports.

Retained imports soared by around 13.5% ($215.3 million), which was on par with the increase posted a year earlier, with consumer, intermediate and capital goods imports representing about 40%, 37% and 23% of total flows, respectively. In the consumer category, which was up around 13.7%, the most significant items were food and beverages, motorcars and other manufactured goods. Cellular phones and equipment for a local utility company made up the bulk of imported capital goods (up 17.6%), while the influx of intermediate imports (up 10.9%) reflected the importation of construction materials and an increase in the value of fuel imports. The latter was attributable to both higher fuel costs and larger import volumes.



Merchandise exports went up by approximately 6.4% during the period, after plunging by an average of 6.2% in the comparable periods between 2000 and 2002 and growing marginally in the same period of 2003. This improvement was underpinned by the outturn for food and beverages, which was up roughly 13.3% due to a third-quarter surge in rum exports, that resulted from the clearance of a backlog of export orders. Export earnings from services were shored up by an 11.2% rise in travel credits, reflecting the record number of tourist arrivals.





Balance of Payments
(January – September)
($Million)

	1999	2000	2001	2002	2003	**2004 P**
Current Account Balance	-162.6	-109.1	-50.7	-169.8	-275.3	**-250.5**
Merchandise Trade	-1035.6	-1,033.2	-995.7	-1,175.7	-1,366.9	**-1,329.5**
Total Exports (BOP basis)	337.1	350.7	343.5	361.8	382.9	**336.6**
Domestic Exports	309.2	299.7	277.2	254.9	257.0	**273.5**
Sugar	55.4	52.2	44.0	37.7	41.0	**44.9**
Other	253.8	247.5	233.2	217.2	216.0	**228.6**
Total Imports (BOP)	1456.6	1,474.6	1,419.2	1,537.5	1,749.8	**1,755.3**
Retained Imports	1536.6	1,536.1	1,463.9	1,430.6	1,623.9	**1,843.3**
Consumer Goods	634.6	624.7	613.9	590.1	639.8	**727.2**
Capital Goods	369.7	339.9	303.9	308.9	355.8	**418.4**
Intermediate Goods	528.6	566.7	541.4	526.5	622.9	**691.0**
Miscellaneous Goods	3.7	4.9	5.0	5.2	5.4	**6.7**
Services (Net)	874.3	925.2	893.2	849.7	995.4	**1,108.0**
Travel (Net)	927.7	970.9	940.1	868.7	1,015.2	**1,139.8**
0f which travel credits	1061	1,113.4	1,099.9	1,022.5	1,177.9	**1,309.0**
Other	-53.4	-45.7	-46.9	-19.0	-19.8	**175.5**
Income	-95.3	-115.3	-134.0	-144.1	-158.7	**-161.7**
Current Transfers	94	114.2	144.1	122.4	131.7	**132.8**
Capital and Financial Account	235.6	515.3	173.1	340.3	494.6	**182.0**
Long Term	216.5	463.1	177.7	94.4	405.0	**133.3**
Public	153.1	244.7	-13.3	-36.2	151.8	**-50.9**
Private	63.4	218.4	191.0	130.6	253.2	**184.2**
Other	-23.4	29.3	-14.5	9.4	0.0	**5.1**
Short Term	41	33.7	3.5	111.0	0.0	**43.5**
Errors and Omissions	94.1	-6.8	16.1	-8.5	199.9	**-137.5**
Balance for Official Financing	165.6	410.2	133.9	36.5	341.8	**-206.1**
Official Financing (Net)	0	0.0	0.0	0.0	0.0	**0.0**
IMF	0	0.0	0.0	0.0	0.0	**0.0**
Other Financial Institutions	0	0.0	0.0	0.0	0.0	**0.0**
Reserve Movements (CBB Basis)						
(-Increase/+Decrease)	-165.6	-410.7	-133.9	-36.5	-341.8	**206.2**
Change in NIR (IMF Basis)						
(-Increase/+Decrease)	-132.8	-407.3	-137.8	-27.2	-34.3	**210.8**

Source: Central Bank of Barbados
P: Provisional

Capital and Financial Account

The $182.0 million estimated surplus on the capital and financial account for the first nine months of 2004 was less than half the size of the surplus a year earlier, when public long-term capital inflows had been boosted by $189.0 million in divestment proceeds. In the absence of any such divestment proceeds or foreign debt issues, the $29.2 million in project funds received during the period was more than offset by amortisation payments of $72.4 million and $7.6 million on central government and government guaranteed debt, respectively. Consequently, there was a net outflow of public long-term capital, which, together with reductions in net private long-term capital inflows and net short-term inflows, resulted in the smaller capital account surplus.

Regional Economic Developments

Overview

The unusually active 2004 hurricane season significantly impacted some regional economies during the third quarter. Hurricane Ivan devastated the Grenadian economy, destroying key infrastructure, decimating the island's manufacturing and tourism plants and fishing fleet, and wiping out crops. The Jamaican economy was also hard-hit by Ivan and, before that, by Hurricane Charlie. Hurricanes Frances and Jeanne also damaged the Bahamas, Haiti and the Dominican Republic on their way to Florida. The region as a whole is still counting the costs of this highly destructive storm season.

However, according to the available data, higher levels of economic activity were recorded during the first half of the year and, for most regional economies, this trend persisted into the third quarter. In the Bahamas and Jamaica, two major tourism destinations, output for the first nine months was boosted by substantial increases in tourist arrivals, which was also a key factor in the improved economic fortunes of the Organisation of Eastern Caribbean States (OECS) in the first half. Rising crude oil prices contributed to accelerated growth in the Trinidad and Tobago economy, but also to inflation in the other countries. Nevertheless the fuel-price controls maintained by many regional governments cushioned the impact of the hike in international oil prices.

With economic activity expanding in most of the region, strong growth was recorded in commercial bank deposits, particularly for businesses and private individuals. This was generally accompanied by a resurgence of previously stagnant bank credit, as interest rates remained relatively low. The pickup in overall economic activity also generated more tax revenues, allowing governments in the region to consolidate their fiscal positions. In addition, most regional economies turned in improved external current account performances during the period. However, the three floating currencies in the region all depreciated slightly during the period.

The Bahamas

Although some contraction in output was recorded toward the end of the period due to the September hurricanes, leading economic indicators suggest that the Bahamian economy continued to strengthen into the third quarter of 2004. The expansion was driven by a phenomenal first-half tourism performance, galvanised by the growth in the United States economy and the addition of new airline routes out of US and UK gateways. Thus, during the first nine months, cruise-ship passengers and stay-over visitors increased by 16.8% and 4.7%, respectively, bringing overall growth in arrivals for the period to 12.3%, up from 2.5% a year earlier.

This excellent outturn was accompanied by relatively benign inflationary conditions. In the twelve months ending September 2004, the average rate of consumer price inflation subsided to 0.5% from 2.9% in the comparable period of 2003. A slower rise in the cost of medical and health care, recreation, entertainment and other goods and services was the primary reason for the reduced rate of inflation.

Given this generally favourable economic climate, total resident deposits grew by 7.3% between January and September 2004, up significantly from 1.8% in the comparable period of 2003, as government, private individuals and business firms all increased their savings. On account of an upturn in residential mortgages and consumer loans, as well as greater lending to government, commercial bank credit also rose by 7.3%, which was 6 percentage points higher than the rate observed one year earlier. By the end of the nine-month period, the weighted average interest rate on loans and overdrafts had fallen 82 basis points to 10.95%, while its counterpart deposit rate was down 38 points to 3.66%.

However, although the upsurge in tourist arrivals led to a 8.8% rise in net travel-related inflows, this could not compensate for an oil price-driven 14.2% expansion in the merchandise trade deficit. Consequently, it is estimated that the external current account deficit widened substantially in the January-to-September period from the comparable period of 2003. At the same time, the capital and financial account surplus declined sharply, owing to a reduction in net public and private foreign investment inflows.

As of May 31, 2004, the Bahamas' central government fiscal deficit was B$32.8 million, an improvement of B$20.8 million. This occurred as a result of an 11.7% increase in overall revenue, especially non-tax and capital revenue, which surpassed the 4.4% growth in total expenditure.

Guyana

During the January-to-September period of 2004, economic activity in Guyana was characterised by mixed sectoral performances. After doing poorly in the first quarter of 2004, the agricultural sector rebounded in the next two quarters, with production of sugar and rice, two key export crops, growing by 14.5% and 3.3%, respectively, in the year to September. This compared favourably with respective losses of 10.4% and 1.2% in the same period of 2003. Among the mining industries, gold output rose by 7.9%, following a more than 20% slump a year earlier. Conversely, the bauxite industry, which had performed creditably in the first three quarters of 2003, expanding by 11.6%, did not fare well during the review period, recording a 19.4% fall-off in production.

Nevertheless, at the half-year mark, the external current account deficit had narrowed to US$17.8 million from US$65.7 million in the first half of 2003, as the increased production of agricultural commodities and gold translated into higher export receipts, while imports of foodstuff and intermediate and capital goods declined. The external capital account also registered an improvement in comparison to the January-June period of 2003, showing a surplus of US$49.2 million relative to the 2003 figure of US$27.6 million.

The fiscal accounts for the year to September showed a positive balance as well, as Guyana's central government ran a surplus of G$1.8 billion, moving from a deficit position of G$3.9 billion in the comparable period of 2003. This dramatic turnaround came about as the current account surplus increased seven-fold, due mainly to an increase in revenue from taxes on sales, income and international trade transactions.

Total deposits at commercial banks increased by 4.2% over the first nine months of the year, owing to a rise in the deposit holdings of business firms and private individuals. In contrast, total loans and advances decreased by 5.2%, as contractions were observed in credit to the public sector, as well as lending to business enterprises and private financial institutions. The savings rate on deposits at the end of September 2004 was down to 3.4%, while the commercial banks' average prime lending rate fell from 15.6% at the end of 2003 to 14.0% at the end of September 2004.

Jamaica

During the review period, real gross domestic product in Jamaica expanded relative to the comparable period of 2003, with tourism and mining accounting for most of the

expansion. The Jamaica Tourist Board's aggressive marketing campaign paid off, as evidenced by a 5.3% rise in tourist arrivals over the first eight months of the year, where stay-over visitors and cruise passengers increased by 8.6% and 1.2%, respectively. The depreciation of the US dollar during the period and the scheduling of additional flights to Jamaica also contributed to this outturn. Moreover, production of bauxite and alumina went up by 0.1% and 4.5%, respectively, due to expanded production capacity, resulting in the overall increase in the mining industry.

The different sub-sectors within the agricultural industry had varying results during the period under review. Sugar production rose by approximately 29,600 tonnes under a Sugar Corporation of Jamaica initiative to revitalise the sector. In contrast, output of bananas contracted by about 27,700 tonnes due to the impact of the Moko disease on the industry.

Prices in Jamaica rose faster during the period, with the twelve-month moving average rate of inflation going up 5.3 percentage points to 13.8%. Increased prices in a number of categories, including food and drink, transportation, fuel and other household supplies, as well as housing and other expenses, were responsible for this pick-up in inflation.

Between January and September, the average lending rate dipped by 0.65 of a percentage point to 24.95% at the end of the period. In keeping with this reduction in borrowing costs, total loans went up by approximately 9.9%, following a 23.4% expansion over the comparable period of 2003, with most of the new lending being channelled to construction and tourism, as well as the personal sector. The average interest rate on savings deposits was 7.8%, about 0.6 of a percentage point below the rate at the end of December 2003. However, despite lower returns on their deposits, government, business firms and individuals all saved more, bringing total deposit growth to 12.3%.

Estimates of the Balance of Payments for the year to July indicate a more than 75% reduction in the deficit on the current account to US$114.4 million. This vast improvement reflected a contraction in the merchandise trade deficit, which was due to a 19.2% increase in exports and a 5.6% decrease in imports, as well as an 11.3% expansion in the services surplus resulting from higher travel inflows and lower transportation outflows. The current account deficit was financed from significant inflows on the financial account associated with the government's debt-raising activities, leaving a net sum of US$429.7 million to be transferred to the foreign reserves.

Up to the end of June, central government operations resulted in a fiscal deficit of J$8.9 billion, some J$6.6 billion lower than the deficit in the comparable period of 2003 and well below the targeted deficit of J$13.9 billion. The reduced deficit stemmed from a robust revenue performance and lower expenditure, particularly on the current account side.

Organisation of Eastern Caribbean States (OECS)

During the first six months of 2004, economic activity in the OECS sub-region strengthened relative to the corresponding period of 2003. Preliminary assessments point to a partial reversal of this positive development during the third quarter, due to the effects of Hurricane Ivan. However, this setback occurred towards the very end of the quarter and should therefore have had only a limited dampening effect on overall growth during the review period.

The OECS enjoyed a 25.0% surge in tourist arrivals in the first half, with all the individual member states benefiting, from Montserrat, which saw a modest increase in arrivals of 1.7%, to Dominica with a 90.2% jump. The number of stay-over and cruise ship passengers grew by 10.4% and 54.4% respectively, whereas the number of yachting arrivals declined by 2.4%, mainly because fewer vessels berthed in St. Vincent and the Grenadines. Agricultural production also increased during the first half of the year compared with the same period in 2003, driven mainly by the improved performances of the banana and cocoa industries, which increased by 23.2% and 33.5%, respectively. Both the construction and manufacturing industries were also

estimated to have stepped up operations during the first half of 2004 compared with the corresponding period of 2003.

On average, inflation at the end of June 2004 for the member countries of the OECS was relatively low, ranging from 0.03% in Dominica to 2.78% in Montserrat. Nevertheless, all the territories except Antigua and Barbuda and St. Kitts and Nevis recorded higher rates of inflation than they did a year earlier. This increase was attributed to the hike in international energy prices (although price control measures limited the pass-through to consumers), as well as the depreciation of the US dollar against other major currencies and new fiscal measures introduced in many territories in 2004.

These measures included improvements in tax administration and new revenue-enhancing initiatives, which, coupled with higher grant receipts, resulted in a 13.6% rise in current revenue. The strides made on the revenue side compensated for the fact that current expenditure went up by 5.6%, due to a broad-based increase in its various components. Consequently, the combined fiscal deficit of the central governments narrowed from $205.9 million in the first half of 2003 to $110.5 million in the same period of 2004.

Although complete trade data was not available for all member countries, the external current account deficit of the OECS for the first half of 2004 was estimated to have widened compared to the corresponding period of 2003. This can be attributed to increased outflows associated with merchandise imports (partly attributed to growth in economic activity and the rise in oil prices) and debt service payments. On the export side, receipts from banana, cocoa and soap rose by 21.2%, 52.2% and 9.7%, respectively, and gross travel receipts grew by 12.5%, while sugar and nutmeg export receipts declined by 22.1% and 1.6% respectively. The capital and financial account recorded a deficit during the first half of 2004 as a result of higher principal repayments and a decline in loan receipts.

Total deposits recorded at the end of June 2004 amounted to EC$11.1 billion, an increase of 8.5 per cent when compared to the corresponding period of 2003, and total loans stood at EC$7.8 billion, an increase of 4.2 per cent. The provisional minimum prime lending rate at the end of June had declined by 50 basis points to 8.0 per cent, while all other interest rates remained stable.

Trinidad and Tobago

The Trinidad and Tobago economy continued to perform well during the first half of 2004. Buoyed by the energy industry, real economic activity grew by approximately 4.5%, up from 3.3% over the same period one year earlier. On the strength of increased natural gas and crude oil production, it is estimated that the energy sector expanded at a rate of 4.8%; however, due to industrial unrest, this represented a significant slowdown relative to the 12.8% rate recorded a year earlier. Despite a 21.3% decline in agriculture associated with a fall-off in sugar production, the non-petroleum sector registered an increase of 4.4%, as growth was observed in the other sub-sectors, including distribution (10.5%), construction (8%) and transport, storage and communication (7.5%).

The unemployment rate at the end of June 2004 was 7.8%, down significantly from 10.2% one year earlier, as new hires within the petroleum and construction industries offset job losses in agriculture. The 12-month moving average rate of inflation was 3.1% at the end of August 2004, down from 4.1% at the end of August 2003. Rising food prices were primarily responsible for the increase in the overall price level.

The overall balance of payments surplus for the first nine months was US$577.2 million (4.8% of GDP), up from US$529.2 million (0.4% of GDP) in the same period of 2003. Preliminary data for the first half suggest that this was mainly attributable to a large surplus on the merchandise trade account, which reflected increased oil and petrochemical prices.

During the period January to June 2004, the central

government of Trinidad and Tobago achieved a fiscal surplus of TT$1.7 billion (2.4% of GDP), an improvement over the TT$0.6 billion deficit over the similar period of 2003. Current revenue rose to 28.1% of GDP from 26.2% of GDP in the previous year, due to enhanced revenues from both the oil and non-oil sectors of the economy. Likewise, current expenditure amounted to 25.7% of GDP, compared with 24.7% in the comparable period of 2003. This expansion was mainly due to greater spending on goods and services and transfer payments.

At the end of July 2004, deposits held at commercial banks and total loans were up by 13.1% and 23.1% respectively. In addition, the ordinary savings rate on deposits was 2.0% at the end of August, the same as at the end of 2003, while the prime lending rate remained at the 9.5% level to which it had fallen in late 2003

International Economic Developments

Overview

In a broadly synchronised performance, the major world economies continued to expand through the third quarter of 2004, despite losing some of the momentum gained in the first half. This outturn was largely driven by the US, China and Japan, although the other Asian economies, and other emerging markets, also contributed. With trade and production volumes on the increase, unemployment concerns generally showed signs of easing. However, inflationary pressures seemed poised to influence performance, as both demand and supply factors precipitated a hike in commodity prices (oil prices in particular) prompting many central banks to move into a monetary tightening cycle.

Industrial Economies

Among industrialised countries, growth continued to be led by the United States economy, which expanded by 4.5% during the first three quarters of 2004, up from 2.6% a year earlier. However, analysts were concerned about the country's persistent twin deficits, with the US economy remaining heavily dependent on foreign investment inflows to finance a large budget deficit and a widening current account gap. Moreover, headline inflation went up in the twelve months to September 2004, due mainly to increases in the cost of energy, medical care and food. Notwithstanding downside risks, related to the geopolitical situation with implications for energy prices, the Federal Reserve began implementing its long-awaited rollback of monetary stimulus.

In Canada, economic growth continued to pick up, reflecting robust domestic and external demand. Domestic demand was driven by surging employment, rising disposable income, a buoyant housing market and increased corporate profitability. Despite a strong Canadian dollar, global demand (especially from the United States) and higher commodity prices led to an outstanding export performance, which boosted the current account surplus. Inflation was well within the Bank of Canada's 2.0% inflation target, but, with the economy operating at close to full capacity, the Bank still raised interest rates during the period.

Japanese output swung into a higher gear in the first half, amid signs that its chronic troubles with deflation and

Economic Indicators: Industrial Economies

Countries	Real Output (% Growth)*		Unemployment (% Rate)		Inflation (% Rate)	
	Jan-Sept 2003	**Jan-Sept 2004 P**	Sept 2003	**Sept 2004**	Sept 2003	**Sept 2004**
Canada	2.1	**2.6**	7.4	**6.6**	2.2	**1.8**
Euro zone	0.4	**1.8**	8.9	**8.9**	2.2	**2.1**
France	0.3	**2.2**	9.9	**9.9**	2.1	**2.2**
Germany	-0.2	**1.6**	11.2	**11.4**	1.1	**1.8**
Italy	0.5	**1.1**	8.6	**7.4**	2.8	**2.1**
Japan	2.1	**3.2**	5.1	**4.6**	-0.2	**0.0**
United Kingdom	2.0	**3.3**	5.0	**4.7**	2.8	**3.1**
United States	2.6	**4.5**	6.1	**5.4**	2.3	**2.5**

Source: Various Central Banks and National Statistical Offices
P = preliminary estimate
*Percentage change from same period of previous year
** 12-month percentage change in price index

financial and corporate sector weakness were receding. Exports especially to the rest of Asia, and business investment were the main factors behind this renewed dynamism, although rising consumer confidence due to improving labour market conditions was also part of the equation. However, some moderation in growth and a slight negative shift in the balance of risks were observed during the third quarter.

In the UK, the expansion in economic activity stayed on track in spite of high oil prices. Private consumption and investment were increasingly sustained by income growth and wealth creation from a booming housing market. However, the latter sparked concerns about the possibility that an unsustainable speculative bubble was being created. These concerns were compounded by the Bank of England's move to raise interest rates, which was prompted by mounting cost pressures, although actual inflation rates remained relatively low. There were also worries about the growing trade deficit, which averaged more than 3% of GDP during the period.

The recovery in the Euro area continued to be modest in scale and remained largely dependent on external demand, in the face of soft internal demand. However, the overall position masked considerable regional differentiation, with final domestic demand growing strongly in France and Spain but stagnating in Germany. In general, the lacklustre German performance pulled down regional aggregates, reflecting ongoing economic and labour market dislocation stemming from attempts at economic restructuring.

Emerging Markets

Emerging and developing countries generally experienced a resurgence of economic activity. Despite Asia's relative vulnerability to higher oil prices, the region's economic resilience was underpinned by the global recovery, the rebound in the global information technology sector, sound macroeconomic fundamentals and policies and, increasingly, a solid domestic demand base. China was the main economic driver within the region, as production and exports, despite slowing somewhat, carried on at a very brisk pace. This led to fears that the Chinese economy could be overheating, with inflation on the rise after a long period of deflation. The Chinese authorities therefore took steps to cool down the economy and ensure a soft landing, including monetary tightening. For the region as a whole, large external current account surpluses represented the flipside of the US deficit, as Asian central banks continued to prop up the US dollar by purchasing US Government paper, thereby boosting exports to the US.

The positive outturn in Latin America was supported by the global recovery, higher commodity prices, mounting domestic demand, burgeoning trade, accommodative monetary conditions in most countries and improved confidence. The oil price hike benefited the major oil exporters such as Colombia, Ecuador, Mexico, and Venezuela but hurt oil importers, whereas higher non-fuel commodity prices led to trade gains for exporters of metals and agricultural products like Chile.

Economic Indicators: Emerging Markets

Countries	Real Output (% Change)*		Inflation (% Rate)**		Foreign Reserves (US$ billion)	
	Jan-Sep 2003	**Jan-Sep 2004**	Sep 2003	**Sep 2004**	Sep 2003	**Sep 2004**
Argentina	8.3	**7.8**	5.9	**3.5**	18.2	**13.4**
Brazil	5.3	**0.4**	6.7	**15.2**	49.5	**52.7**
Chile	5.6	**3.3**	1.5	**2.2**	15.8	**15.6**
China	9.5	**9.1**	5.2	**1.1**	514.5	**383.9**
Hong Kong	8.8	**2.6**	0.7	**-3.2**	118.4	**112.1**
Indonesia	4.9	**4.7**	6.3	**6.3**	34.8	**34.0**
Malaysia	7.6	**4.8**	1.6	**1.1**	56.9	**40.7**
Mexico	4.0	**1.1**	5.1	**4.0**	58.1	**53.6**
Singapore	9.2	**-0.2**	2.0	**0.7**	102.7	**91.1**
South Korea	5.1	**2.8**	3.9	**3.3**	174.4	**141.5**
Venezuela	21.2	**-12.3**	20.8	**26.6**	21.8	**19.2**

Source: Various Central Banks and National Statistics Offices
*Percentage change from same period of previous year
** 12-month percentage change in price index
# Based on provisional estimates of monthly economic activity

Commodity Prices

Oil prices spiralled upwards between January and September to end the period above the US$40-a-barrel mark. Both demand and supply forces were at work, with greater-than-anticipated demand for oil to fuel global industrial production interplaying with security and other supply-side concerns in major oil-exporting countries such as Iraq, Russia, Nigeria and Venezuela, weather-related supply disruptions on the US Gulf Coast, as well as other producers' limited spare capacity. Speculative activity in financial markets exacerbated the situation, creating an added element of price volatility.

Non-fuel commodity prices also escalated during the period, in response to the demand for industrial raw materials and intermediate goods, but appeared to bottom out during the third quarter. The commodities of interest to Caribbean countries were no exception to this trend, with the prices of bananas, sugar and rice all rising over the period.

Commodity Prices

Commodities	Sep-03	Dec-03	**Sep-04**	% Change Sep-03	% Change Dec-03
Total (Index of Market Prices)	114.92	127.02	**160.13**	39.3	26.1
Food (Index of Market Prices)	85.80	92.97	**95.78**	11.6	3.0
Sugar (US cents/lb)	26.69	29.01	**29.73**	11.4	2.5
Bananas (US $/40lb)	312.97	371.43	**520.47**	66.3	40.1
Rice (US $/metric ton)	202.86	197.00	**252.00**	24.2	27.9
Wheat (US $/bushel)	145.62	165.57	**151.03**	3.7	(8.8)
Soybeans (US $/metric ton)	265.36	334.96	**259.36**	(2.3)	(22.6)
Metals (Index of Market Prices)	80.78	94.17	**110.17**	36.4	17.0
Iron Ore (US$/metric ton)	31.95	31.95	**37.90**	18.6	18.6
Copper (US cents/lb)	1789.70	2202	**2903.20**	62.2	31.8
Petroleum (US$/barrel)	26.88	29.95	**41.65**	54.9	39.1

Source: IMF Commodity Prices

Regional and International Capital Markets

Caribbean Stock Markets: Q3 2004 Summary

Barbados Stock Exchange (BSE)

The third quarter was the most active one for the BSE in the year to September. Twenty-one of the twenty-four securities on the Regular Market traded a total volume of 81,268,819 shares, which had a total value of $270,959,199. Although August and September had two of the lowest recorded volumes of securities traded for the year to date, a large trade by FirstCaribbean International Bank on July 30 was the major contributing factor in this period's performance.

Indeed, at September 30, 2004, FirstCaribbean International Bank was the most actively traded security, representing 68.30% of the total volume traded in the year to date, followed by Sagicor Financial Corporation and A.S. Brydens Ltd, which represented 12.02% and 7.83%, respectively.

During the quarter, the Local Index continued its upward trend and topped the June 2004 index by 4.5%. Both the Cross Listed and the Junior Indices followed this trend, showing increases of 6.7% and 3.7%, respectively.

Market capitalisation rose for all markets during the quarter. In the Local Market, capitalisation expanded by 3.9% over the second quarter to $8,602.82 million at September 30, 2004. In the Junior Market, capitalization increased by 4.5% to close at $74.21 million. The greatest change was experienced by the Cross Listed Market, which showed a 52.8% rise over the last quarter. For the year to September, the Junior Market was the only one to suffer a decline.

Two securities, Grace Kennedy & Co. Ltd. and Sunbeach Communications Inc., were suspended from trading during the quarter.

As at September 30 there had been three put-throughs, involving shares of Sagicor Financial Corporation, FirstCaribbean International Bank and Cave Shepherd & Co. Ltd.

Barbados Stock Exchange Statistics
(Quarterly)

Index	Jul 2004	Aug 2004	**Sept. 2004**
Local	3,259.70	3,357.74	**3,355.07**
Cross-Listed	2,051.54	2,069.92	**2,080.59**
Junior	1,420.75	1,446.27	**1,446.27**
Market Cap. Bds($M)			
Local	8,472.54	8,574.61	**8,602.82**
Cross-Listed	7,079.22	10,341.43	**10,366.56**
Junior	72.61	74.21	**74.21**

During the third quarter, most mutual funds increased in value, except BNB Income Fund, whose net asset value (NAV) remained the same. CLICO Balanced Fund Inc. and Roybar Investment Corporation were the top performers, with NAV expansions of 2.5% and 2.13% respectively.

Mutual Fund Performance
(Quarterly)

Mutual Funds	Jun 30 NAV (Bds$)	Sep 30 NAV (Bds$)
Roybar Investment Corp.	13.61	13.90
Fortress Caribbean Growth Fund	3.33	3.38
Mutual Global Balanced Fund	1.86	1.87
BNB Income Fund	1.23	1.23
BNB Capital Growth Fund	1.30	1.32
BNB Gift Trust Fund	0.99	1.00
CLICO Balanced Fund Inc.	1.20	1.23

Jamaica Stock Exchange (JSE)

The JSE Index declined modestly during July and August by 3.62% and 0.895%, respectively, and advanced by 3% during September to register an overall decline of 1.5% for the quarter. The decrease in August was the first in five years and was attributed to the poor earnings results released by nine of the twenty-seven companies that reported in the month, as well as the fluctuation in oil prices over the period.

The activity in the stock market towards the end of September could be attributable to the fact that the anticipated pull-back in the stock market in the days leading up to and immediately after Hurricane Ivan turned out to be short-lived.

At September 30, 2004, the index closed at 99,819.82 points. The All Jamaican and the Select Indices both increased by 2%.

The major advancers for the month of September were Hardware & Lumber, up 36.36%, DB & G, up 29.74% and Berger Paints, up 25%. The main losers were Palace Amusement, down 14.29%, Jamaica Producers Group, down 13.27% and Pegasus Hotel, down 12.5%.

Trinidad & Tobago Stock Exchange (TTSE)

The TTSE recorded increases in trading activity for the first two months of the third quarter, but declined in September. In July and August, trading activity grew by 56.2% and 14.7%, respectively, but slowed by 35.5% in September to record an overall increase for the quarter of 35.4%.

During the first two months of the quarter, trade volumes were boosted by the release of results by some companies with quarters ending June 30 and July 31, 2004. The mostly favourable results reported by these companies spurred on the unrelenting bull-run on the market and drove share price advances, which continued to outnumber declines.

Of the companies listed on the TTSE, 16 advanced and 8 contracted. In July, FirstCaribbean International Bank was the most heavily traded share, while Capital & Credit Merchant Bank registered the best performance in August and September. Of the eight declines, Jamaica Money Market Brokers lost 16.67% off its share price for September, closing at $1.50 per share, down 30 cents.

Exchange Rates

Regional Rates

During the period January - September 2004, the Guyana dollar depreciated by about 3.0% to G$200.00 per US$1 when compared to the rate at the end of December 2003. Over the same time-period, the value of the Jamaica

Top Ten Performing Companies*

(Third Quarter 2004)

BARBADOS	%	JAMAICA	%	TRINIDAD	%
Grace, Kennedy & Co. Ltd	70.3	Cable & Wireless Jamaica	71.7	Capital & Credit Merch. Bank	30.0
McEnearney Alstons	10.2	Dehring Bunting & Golding	66.0	Agostini's Ltd	24.1
Barbados Shipping & Trading	9.68	Hardware & Lumber	50.0	C'bean Communication Network Ltd	17.7
Cave Shepherd	6.78	Capital & Credit Merchant Bank	37.3	Trinidad Publishing Co. Ltd	14.3
Goddard Enterprises Ltd	6.67	Lascelles, de Mercado	25.0	PLIPDECO Ltd	13.2
Sagicor Financial Corporation	6.02	Pan Caribbean Financial Services	20.0	Prestige Holdings	11.6
Barbados National Bank	5.48	Courts Jamaica	15.6	ANSA McAl Limited	11.5
Trinidad Cement Ltd	5.26	Life of Jamaica	15.2	Republic Bank Ltd	10.3
First Caribbean Int'l Bank	3.17	Ciboney Group	14.3	Neil & Massy Holdings Ltd	9.84
Cable & Wireless Barbados	3.03	Guardian Holdings Ltd	13.3	Trinidad Cement Ltd	9.12

* Based on share price appreciation

dollar depreciated by approximately 2.1% to J$61.89 per US$1, although this was a better performance than the 17.1% decline recorded in the previous year, when there was considerable volatility in the foreign exchange market. The Trinidad and Tobago dollar traded at TT$6.2523 to US$1 at the end of September, representing a marginal depreciation for the review period.

US Dollar

The trade-weighted index of the value of the US dollar relative to other major world currencies was 86.25 at the end of September 2004. This was roughly the same as the index value at the end of 2003, but 6.6% lower than the value at the end of September 2003. The latter decrease was more indicative of general trends, as stubborn budget and trade deficits continued to exert downward pressure on the Dollar.

Yen

Despite appreciating against the US Dollar in the first quarter of 2004, marking a third consecutive quarterly increase, the Yen depreciated by 2.6% for the year to September, weighed down by gloomy economic data releases from the middle of the year and concerns about high oil prices.

Sterling

The pound sterling appreciated against the US dollar to reach US$1.81 per £1 at the end of September 2004, representing a rise of 1.5% from the end of December 2003 and 9.0% year-on-year. Notwithstanding, the pound sterling effective exchange rate index registered a contraction over the same period, much of which was accounted for by a depreciation against the euro. The latter was in response to signs of weaker UK domestic demand and concerns about the sustainability of the UK trade deficit.

The Euro

At the end of September 2004, the Euro Area single currency was valued at US$1.24, just below its peak value of US$1.26, which it posted at the end of 2003. However, the slight decline was concentrated in the first half, as during the third quarter the Euro bore the brunt of the depreciation in the US Dollar, rising by 1.9%. Furthermore, the Euro's September value represented a significant 6.7% appreciation year-on-year.

Canadian Dollar

During the third quarter, the Canadian dollar continued to appreciate against the US dollar, climbing 5.4% from the previous quarter to record a cumulative increase of 2.8% for the year to September. Some of the factors contributing to this outcome included faster-than-expected economic growth and firm prices for key export commodities.

Interest Rates

United States of America

The Federal Reserve's Open Market Committee which sets interest rate policy in the US, continued the gradual raising of interest rates which began in June, with quarter percentage-point rises in August and September, taking the benchmark Fed Funds rate to 1.75% at the end of the quarter. These moves formed part of the Fed's plan to bring interest rates closer to cyclically neutral levels without jeopardising economic or financial market stability.

Canada

In line with market expectations, the Bank of Canada (BOC) ended its accommodative monetary policy, which featured rate cuts in March and April this year, instituting a 25bps increase towards the end of the third quarter. This brought the BOC's benchmark overnight lending rate up to 2.25%, 50bps higher than its US counterpart. Such a move was viewed as necessary to prevent the economy from overheating.

United Kingdom

At the beginning of the third quarter, there were fears that the Bank of England (BOE) would need to push inter-

est rates up from 4.5% to at least 5.5% in order to cool the housing market and to continue the policy of progressive tightening, which had begun in the previous November. However, the Bank of England (BOE) stuck to its "gradualist" policy and raised interest rates only once during the quarter, to 4.75%. The quarter-point rise was widely expected, amid signs that the Bank's incremental approach was having some impact on the potentially unsustainable housing sector boom. The Bank of England (BOE) kept interest rates on hold towards the end of September, driving some speculation that rates might have peaked.

European Central Bank (ECB)

Higher energy costs prompted the ECB to revise its inflation forecast for 2004 upward to a level just above the ECB's definition of price stability. The continued strengthening of the Euro in relation to the US Dollar was also a key consideration in ECB monetary policy discussions. However, with the recovery in the Euro Area still relatively fragile, the European Central Bank (ECB) chose to keep its key interest rates unchanged in an attempt to balance all of the various risks. The minimum bid rate for the main refinancing operations was held at the 2% level, while the deposit facility rate and the marginal lending facility rate were maintained at 1% and 3%, respectively.

Emerging Markets

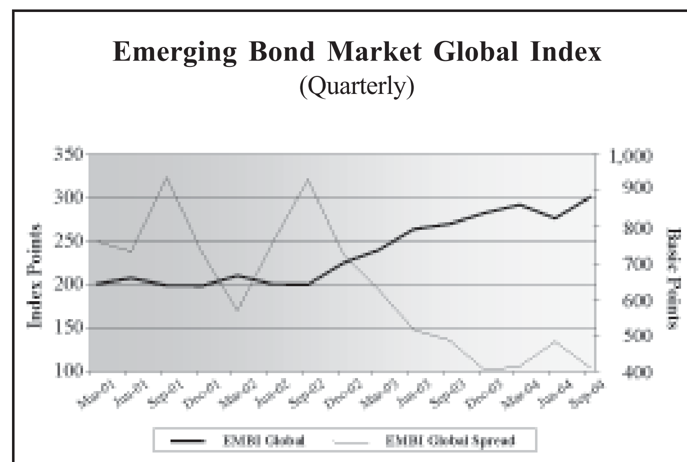
Bond Market Rallies

External financing conditions for emerging market borrowers improved during the third quarter, after having deteriorated in the previous quarter in response to higher interest rate expectations. Despite the initial setback, markets were eventually able to make a relatively rapid and smooth adjustment, amid high global liquidity, strong macroeconomic fundamentals in most emerging economies and falling yields on US Treasuries. Consequently, emerging bond indices rebounded from a second-quarter decline to resume the upward trend of the last two years, while spreads tightened considerably. In addition, the level of gross issuance compared favourably with previous quarters, with a record $34 billion in emerging market bond sales taking place during the quarter.

Notably, Mexico's oil monopoly Petróleos Mexicanos sold $1.75 billion in debt, the biggest-ever bond issue by a Latin American company and the region's first perpetual bond. The Brazilian government also took advantage of low borrowing costs to announce significant sales of new foreign debt during the period, while Brazilian companies used this window of opportunity to refinance maturing corporate debt. In addition, defaulted Argentine bonds were trading higher, as the government announced plans to refinance about US$100 million in defaulted debt.

Upturn in Equity Markets

Latin American equity indices generally performed well during the third quarter. At the top of the rankings, Argentina's benchmark index, the Merval, rose by nearly 20%, capping off the quarter with the biggest monthly gain in the world for September. This performance was fuelled by economic growth and optimism about the proposed debt swap. However, at the end of the quarter the Buenos Aires Stock Exchange de-listed the securities of two companies that failed to meet minimum share price and trading volume requirements, bringing the number of stocks listed on the



Emerging Bond Market Global Index
(Quarterly)

Merval down to 11. The Exchange also unveiled a new Merval 25 index, which comprises 25 different stocks, with the aim of providing investors with opportunities for greater portfolio diversification. The other leading Latin American index, the Brazilian Bovespa, was up 9.9%, as a pick-up in the economy and the prospect that the government would increase fuel prices stimulated profitability for utility companies and state-owned oil company Petrobras, respectively.

Car manufacturers and producers of technological products such as digital cameras and microprocessors, as well as other large exporters, boosted most Asian stock markets during the period, outweighing the effects of higher oil prices. However, China's Shanghai Index fell due to a glut of Initial Public Offerings.

Currency Markets Turn In Mixed Performances

Several Asian floating rate regimes saw their currencies depreciate slightly during the period, as their respective central banks continued to buy dollar-denominated assets in a bid to keep down the value of their currencies and boost exports. However, the Indonesian Rupiah and the Singapore Dollar bucked this trend, appreciating by 2.6% and 2.0% respectively. Indonesia's central bank had been reluctant to raise its policy rate to keep its inflation and exchange rates in check, so it did so by reducing the amount of local currency available to banks to buy dollars. The Monetary Authority of Singapore, which usually seeks to keep its dollar within an undisclosed band, shifted its policy in April to seek a modest and gradual appreciation.

Among Latin American currencies, the Brazilian Real and Chilean Peso stood out, appreciating by 7.3% and 4.0% respectively. The Real's ascent was partly the result of a 33% rise in exports for the year to September, but strong bond sales and the upgrading of Brazil's credit rating by the three major rating agencies also fuelled the gain in the currency. Meanwhile, climbing copper prices were the main impetus for the appreciation of the Peso. Most other currencies in the region remained relatively stable.

Emerging Market Equity Indices
(Quarterly)

Country/Region	Index	Jun-04	Sep-04	% Ch
Argentina	Merval	886.42	1063.05	19.9
Brazil	Bovespa	21,148.91	23,245.24	9.9
Chile	IPSA	1,482.98	1707.02	15.1
Mexico	IPC	10,281.82	10,957.37	6.6
Venezuela	Caracas	25,285.17	30,111.62	19.1
Latin America	MXLA	1,062.43	1,238.27	16.6
China	Shanghai	1,399.16	1,396.70	-0.2
Hong Kong	Hang Seng	12,285.75	13,120.03	6.8
Indonesia	Jakarta	732.40	820.13	12.0
Malaysia	Kuala Lumpur	819.86	849.96	3.7
Philippines	PSE	1,579.40	1,761.57	11.5
Singapore	Straits Times	1,838.00	1,984.74	8.0
South Korea	Seoul	785.79	835.09	6.3
Thailand	SET	646.64	644.67	-0.3
Taiwan	Weighted	5,839.44	5,845.69	0.1
Asia	MXLS	195.01	203.17	4.2

Emerging Market Currencies
(Quarterly)

Country/Region	Currency	Jun-04	Sep-04	% Ch
Argentina	Peso	2.96	2.98	-0.8
Brazil	Real	3.09	2.86	7.3
Chile	Peso	636.00	610.75	4.0
Mexico	Peso	11.49	11.38	0.9
Venezuela	Bolivar	1,917.60	1,917.60	0.0
Indonesia	Rupiah	9,400.00	9,155.00	2.6
Philippines	Peso	56.12	56.28	-0.3
Singapore	Dollar	1.72	1.68	2.0
South Korea	Won	1,155.45	1,151.85	0.3
Thailand	Baht	40.93	41.40	-1.1
Taiwan	Dollar	33.78	33.98	-0.6

Trade Issues

Reform of the EU Sugar Regime: Implications for the Caribbean

Background

Every year, six Caribbean countries[6] export nearly 430,000 tonnes of raw sugar to Europe under the so-called Sugar Protocol[7]. This Protocol guarantees that the European Union (EU) will purchase set quantities of sugar from African, Caribbean and Pacific (ACP) countries, free of duty and at prices well above world market prices. Indeed, ACP sugar exports currently fetch just under 30 cents per pound on the EU market, compared to less than 9 cents per pound on the world market.

This arrangement, which was born out of former colonial ties between the two groupings, is now an integral part of the EU sugar regime. It was designed to protect the livelihoods of sugar producers on both sides by ensuring that they receive a fair income. For ACP countries, it has also played a more multifunctional role in promoting rural development, poverty alleviation, environmental conservation, as well as the growth of the tourism industry. Thus, from its inception in 1975, it has underpinned development and raised living standards in the Caribbean and the rest of the ACP. However, its future survival has now been cast into doubt, as the EU sugar regime has been successfully challenged (pending appeal) under the World Trade Organisation (WTO) rules.

The challenge goes back to July 21 2003, when Australia, Brazil and Thailand initiated the WTO dispute settlement proceedings against the EU, after prior consultations failed to resolve the issue. They charged that the EU sugar regime provides hidden subsidies to its sugar industry that distort the world market for sugar, and which run afoul of the WTO rules and the EU's own WTO commitments. For its part, the EU defended its regime before the panel convened to look into the matter, refuting all of the alleged breaches. Several Caribbean sugar-exporting countries were among fourteen nations participating as third parties[8] and arguing against the erosion of preferences.

The EU Sugar Regime

In order to grasp the finer points of this dispute, it is important to understand a few things about how the European sugar regime is structured and how it works.

Basically, the regime consists of a three-tiered quota system, where the different quotas are distinguished by the labels 'A', 'B' and 'C'. Under special intra-EU arrangements, nearly 12 million tonnes of A sugar is sold on the European market, while about 2.6 million tonnes of B sugar is produced for export, both at highly subsidised prices. These prices are usually 10 to 20 percent above the minimum price guaranteed by the EU, called the 'intervention' price. All other European sugar production, C sugar, is sold at world market prices.

The system also makes special provision for imports of sugar from a number of external sources at zero duty and guaranteed prices. For example, the price paid to European beet-sugar producers under the 'A' quota is the same price that is guaranteed to ACP cane-sugar producers under the Sugar Protocol[9]. India also benefits significantly from guaranteed exports of 10,000 tonnes to the EU. In addition, special preferential raw cane sugar (SPS sugar) may be imported from the same countries that benefit from the ACP/India preferential arrangements in order to ensure adequate supplies to Community refineries. A reduced rate of duty is levied on imports of such sugar.

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[6] Barbados, Belize, Guyana, Jamaica, St. Kitts and Nevis and Trinidad and Tobago.

[7] The Sugar Protocol was established on February 28, 1975, as a stand-alone sub-agreement (Protocol 3 to Annex IV) within ACP-EU cooperation arrangements, which at the time took the form of the Lomé Convention and have since evolved into the present-day Cotonou Agreement.

[8] Barbados, Belize, Canada, China, Côte d'Ivoire, Cuba, Fiji, Guyana, India, Jamaica, Kenya, Madagascar, Malawi, Mauritius, New Zealand, Paraguay, St. Kitts and Nevis, Swaziland, Tanzania, Thailand, Trinidad and Tobago and the United States

[9] The European Union is required to import 1,294,700 tonnes (white sugar equivalent) of cane sugar, called "preferential sugar" under the Protocol.

Notably, the sugar imported under these preferential trade arrangements is refined in the EU and re-exported to third countries using export refunds. The export refunds granted to this so-called 'ACP/India equivalent sugar' are the same as those granted to A and B quota sugar.

The WTO Dispute and Proceedings

It was this 'ACP/India equivalent sugar', along with the C quota sugar, which was the focus of the challenge brought by Australia, Brazil and Thailand. The complainants argued before the Panel that the EU has been subsidising exports of these two categories of sugar. They also contended that the EU had not included these subsidised sugar exports in its WTO commitments to reduce agricultural subsidies[10] was in violation of the Agreement on Agriculture, which stipulates that all of the sugar to which the EU grants direct export subsidies should be included in its commitment schedule.

The EU maintained throughout the proceedings that they were within their rights not to include exports of 'ACP/India equivalent' and C sugar in their schedule. When making their commitments to reduce subsidies under the WTO, the EU had incorporated a footnote to the schedule, which stated that the amount committed "does not include exports of sugar of ACP and Indian origin, on which the Community is not making any reduction commitments". At any rate, the EU insisted that neither 'ACP/India equivalent' sugar nor C sugar was being subsidised and therefore there was no need to schedule them.

The ACP countries that participated as third parties to the dispute were also given an opportunity to plead their case before the Panel. They pointed out that sugar exports under the Sugar Protocol represent a large proportion of agricultural exports, foreign exchange earnings, national income and employment in their countries. They were therefore of the opinion that upholding the claims of the complainants would impair the economic and other benefits they currently derive from the Protocol. They also emphasised that the ACP holds a very small share of the world sugar market and that the maintenance of these preferences therefore had a negligible effect on global trade. Finally, they pointed to the provisions of the WTO Agreement on Agriculture that aimed to foster the sustainable development of developing and least developed countries and urged the Panel to ensure the proper interpretation and application of these provisions to the dispute.

The Panel Ruling and EU Reform Proposals

Coming out of these proceedings, the Panel produced a report, which was made public on October 15, 2004. The report concluded that the current EU sugar regime does violate WTO precepts and that the EU has been acting inconsistently with its commitments.

More specifically, it found that the EU has indeed been subsidising exports of 'ACP/India equivalent sugar' and that although C sugar is exported at world market prices, it is being sold at below production cost, pointing to cross-subsidisation from 'A' and 'B' sugar. The panel further concluded that the footnote to the EU schedule does not allow the EU to "carve out" 'ACP/India equivalent' and C sugar exports from its commitments and that by not including them it had flouted the terms of the Agreement on Agriculture. The report therefore called on the EU to bring its sugar regime into line with its obligations.

However, in so doing, the panel recommended that the EU should honour its obligation to maintain ACP countries' current level of preferential access to the EU sugar market. This is a very important statement, as it clarifies that the EU is not obligated to (and should not) reduce preferences granted to developing partners in order to comply with its liberalisation commitments under the WTO.

The basic premise underlying this decision is that it is the EU's exports of ACP/India equivalent sugar, and not its imports of ACP/India sugar, which are infringing against WTO rules. Even so, the fact that the panel made the rec-

[10] The commitments set out in the table in Section II, of Part IV of the EC's Schedule amount to •499.1 million and 1,273.5 thousand tonnes.

ommendation owed much to the strong representation made by Caribbean countries and other ACP third parties as to the potential for massive dislocation if preferences were eroded and the importance of consistency with special and differential treatment provisions of the relevant WTO agreements.

However, this case has been a hard one to make to an enlarged EU, where the ACP interests are fairly low down on the list of priorities. And although sugar producers are a less and less powerful domestic constituency, the EU is loath to slash benefits to European producers while maintaining subsidies to ACP producers. For this reason, the EU has signalled that it is determined to go through with a previously tabled proposal to overhaul its sugar regime, which, contrary to the Panel's guidance, breaches the terms of the Sugar Protocol and has adverse implications for ACP producers.

If the planned reform is allowed to go forward, the preferential price paid to ACP sugar producers will fall by more than a third, with the reduction scheduled to take place in two phases spread out over three years, beginning in July 2005. The EU has given the assurance that it would continue to buy the same quantity of sugar from the ACP every year, but this is cold comfort to ACP producers. For them, access is meaningless if they cannot get a decent price for their produce in order to earn a proper living. Nor will there be any relief via compensation, while provisions have been made for the EU producers to be compensated for up to 60% of lost revenue, no such support is envisaged for the ACP producers.

The Caribbean Response

Naturally, these proposals for drastic price cuts and a narrow timeframe for implementation, added to the perceived discrimination against the ACP producers in favour of European suppliers, have been met with consternation and condemnation by Caribbean and other ACP stakeholders. In a communiqué issued at the conclusion of the Twenty-Fifth Meeting of the Conference of CARICOM Heads of Government, the Heads called the proposals a 'betrayal' and an 'act of bad faith' on the part of the EU. By their reckoning, the reforms would leave CARICOM sugar suppliers facing a loss of income of about US$180 million in the first three years and a recurring annual loss of US$90 million thereafter. They noted that this fall-off in revenue would exceed by more than 150% the total amount of aid committed to the region by the EU for the current five-year cycle.

The Heads therefore agreed that regional stakeholders needed to meet to develop a common CARICOM position and plan of action to deal with the reform proposal. A meeting was duly held in Georgetown, Guyana from the 28th to the 29th of September 2004, which was attended by government ministers and other senior officials, representatives of regional organisations, sugar industry representatives and representatives of cane farmers and sugar workers.

The common position and Action Plan developed in the meeting encompass the following four principles:

1. Rejection of the EU's proposals as stated and initiation of a policy of structured engagement with the EU and European Commission to insist on the legally binding status of the Sugar Protocol and the need to safeguard its benefits.

2. Factoring of a unified regional response into the formulation of a common ACP policy with regard to the proposed changes. To this end, CARICOM participated in an ACP Workshop held in Brussels, Belgium on 4-6 October 2004.

3. Diplomatic lobbying and meetings with EU member states, the European Parliament, NGOs and other stakeholders such as cane refiners and beet sugar producers. In this regard, CARICOM Ministers participated in a joint ACP lobbying mission to Belgium, Denmark, Poland, Portugal, Sweden and the United Kingdom on 10-14 October 2004.

4. Education and mobilisation of the Caribbean Diaspora in the United Kingdom in support of the regional position.

However, while it may be the best available roadmap as to the way forward, this Action Plan may not be able to

prevent what appears to be inevitable. The fact remains that Caribbean production costs are uncompetitive and with the possible exceptions of Guyana and Belize, the regional industry will have grave difficulty in surviving in the long term without guaranteed prices. There is every indication that sooner or later EU sugar prices are going to fall, and when they do, Caribbean sugar producers will be left with few choices, unless a plan is put in place to salvage the parts of the industry that are viable or shift into other activities

Estimates of the Long Run Equilibrium Exchange Rate in Three Caribbean Countries

By Winston Moore, Ryan Skeete and Kevin Greenidge*

Abstract: This paper investigates whether the real effective exchange rates (REER) for Barbados, Jamaica and Trinidad spanning the period 1970-2001 are over or under their equilibrium values. A long run cointegrating regression of the REER and five fundamental variables is obtained, and the degree of over- or under-valuation is obtained by comparing the actual REER to the equilibrium REER value. The paper finds that the actual REER for Barbados and Jamaica are currently above the equilibrium REER, while Trinidad and Tobago's REER is below the level it would have been in equilibrium.

Introduction

The equilibrium Real Effective Exchange Rate (REER) is the rate that achieves internal as well as external balance. It is generally accepted in the literature that maintaining the correct REER promotes economic welfare, while maintaining the real exchange rate at the "incorrect" level (a value considerably different from its long run equilibrium) reduces a country's welfare. This occurs since disequilibrium gaps send incorrect signals to economic agents, and thereby result in greater economic instability.

There are two main approaches used to derive the equilibrium REER: the fundamental equilibrium exchange rate (FEER) approach and the behavioural equilibrium exchange rate (BEER) technique. The FEER framework, popularised by Williamson (1994), attempts to derive a REER that is consistent with internal (full employment) as well as external (a sustainable current account position) equilibrium. The degree of exchange rate misalignment is, therefore, calculated as the difference between the actual REER, and the FEER derived from sustainable values of the fundamental variables. In contrast, the BEER approach first estimates a long run behavioural model of the REER, and then calculates the degree of exchange rate misalignment as the difference between the actual and the predicted REER, based on the current values of the fundamental variables (see Clark and MacDonald, 2000). In this study, the BEER approach is employed since the calculation of the FEER is less precise in practice, given that it requires the researcher to make normative judgements about the desirable values of the fundamental variables (for a comparison of both approaches see Clark and MacDonald, 1998).

The fundamentals are those real variables that play a key role in the determination of the country's internal and long run sustainable external position. Although the equilibrium real exchange rate is a function of real variables only, the actual real exchange rate responds both to real and monetary variables. Therefore, the actual real rate does not have to be always equal to its equilibrium value. Indeed, it will often depart from its steady state in the short-run due to temporary changes in real variables or economic shocks (e.g. a spike in oil prices). However, other types of deviations, such as the adoption of monetary and fiscal policies that are inconsistent with the chosen nominal exchange rate regime, can generate large and persistent differences between actual and equilibrium real exchange rates. These large departures are referred to as misalignment of the real exchange rate (see MacDonald, 1997; Edwards, 1987).

The purpose of this paper is to assess whether the real effective exchange rate (REER) for Barbados, Jamaica and Trinidad and Tobago are misaligned. This analysis comes against the backdrop of a recent agreement for monetary union with the Caribbean Community and Common Market (CARICOM)[1] (see Farrell and Worrell, 1994 for further details). One of the criteria for accession to this union calls for the maintenance of an unchanged U.S. dollar value of member country's currencies for at least thirty-six consecutive months. However, many of the floating exchange rate economies have experienced some difficulty in achieving this accession criterion, since it assumes that the REER for each prospective member is at, or relatively close to its equilibrium value and therefore has no tendency to change. The

* Messrs. Winston Moore and Kevin Greenidge are Senior Economists and Mr. Ryan Skeete is an Economist in the Research Department of the Central Bank of Barbados.

[1] The member countries of CARICOM are: Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, and Trinidad and Tobago.

results presented in this study can aid policymakers in the various territories in understanding the stochastic process of the REER, and the key factors, which lead to misalignment.

The remainder of this study is arranged as follows. The next section presents a brief review of the previous Caribbean studies. Section 3 gives the methodological approach and data employed, while Section 4 presents the empirical results. Section 5 concludes with some summary remarks.

2. A Brief Review of the Caribbean Literature

Lewis (1972) provided one of the earliest discussions of the concept of a regional equilibrium exchange rate. The author noted that most regional currencies were misaligned, since the money costs of production, in terms of wages, were too high relative to the average output per man-hour. Lewis argued that this unusual situation arose due to the transmission of high wages from the high productivity sectors to the low productivity sectors by trade unions. He therefore suggested that if regional currencies were to maintain any semblance of stability, an incomes policy would have to be implemented in each state. Such a strategy would ensure that regional exports remain competitive, and avoid balance of payments difficulties common in most developing economies.

Taylor (1974), building on Lewis' (1972) analysis, also addressed the issue of an optimum exchange rate policy for the region. The author noted that, a priori, the supply of foreign exchange, over the long run, is likely to be highly responsive to exchange rate variations given the nature of most regional exports (commodities and light manufactured goods). On the other hand, the low internal resource mobility present in most Caribbean nations, and the inflexibility in the aggregate demand structure, implies that the demand for foreign exchange is likely to be relatively inelastic. Combining these two conclusions, the author argued that shifts in the supply, rather than the demand, for foreign exchange is likely to be more destabilising within the region. However, he posited that to achieve exchange rate stability the opposite would have to be the case; the demand curve should have a greater influence on the exchange rate.

Modeste (1994) employed a more empirical approach to the study of real exchange rates. He attempted to identify the main determinants of the real exchange rate in Barbados using cointegration techniques, and annual data covering the period 1974 to 1989. Modeste found that, based on bilateral real exchange rate indices between Barbados and several of its main trading partners, the United States of America (USA), the United Kingdom (UK) and Trinidad and Tobago (T&T), that the nation's competitive position had declined over the period under investigation. Thus, he estimated a simple long run regression to identify the main reasons for this deterioration, and observed that the nominal exchange rate, relative wages and relative productivity were all important determinants. Modeste did not provide estimates of exchange rate misalignment, but based on the econometric results suggested that such problems could be corrected using an incomes policy, or a nominal exchange rate change.

Harriott and Worrell (1997) provided one of the first studies that attempted to derive equilibrium real exchange rate estimates for Caribbean and Latin American countries. They utilised a panel regression model of the real exchange rate, using the terms of trade, government consumption of non-tradables (a proxy for capital controls over capital inflows) and three macro-economic policy variables: the excess supply of domestic credit, the fiscal deficit as a ratio of lagged money and the rate of growth of credit. The coefficient estimates were obtained using the fixed effects estimator, and annual data over the period 1967 to 1995 for ten Caribbean countries. Harriott and Worrell's results indicated that Barbados' real exchange rate is not significantly different from its equilibrium value. However, no similar conclusions could be derived for T&T and Jamaica. One of the main shortcomings of the paper was that cointegration techniques were not employed to obtain the long run equilibrium values. As a result, the equilibrium exchange rate estimates provided could have been subject to a large degree of error.

More recently, Francis (1998) examined the issue of whether the Jamaican dollar was overvalued in 1995. The paper utilised two approaches to address this question. The first method estimated a net exports function in order to assess whether a depreciation would improve the current account balance. The results supported the hypothesis that a devaluation could improve the country's external position. The second approach calculated an implicit exchange rate as the ratio of GDP (measured in nominal Jamaican dollars), to the purchasing power parity GNP in US dollars. This technique yielded the surprising conclusion that the exchange rate is in fact undervalued in 1995. One of the main shortcomings of the second approach was that it calculated an equilibrium exchange rate, which did not bear any direct relationship to whether the nation is in external or internal balance, but instead produced an estimate of the relative prices between two countries. On the other hand, the first approach does not allow one to conclusively assess whether the exchange rate is over- or under-valued as estimates of the optimal values of the explanatory variables in the export function would still have to be derived.

3. Methodology and Data

3.1 The Behavioural Equilibrium Exchange Rate Approach (BEER)

This paper uses the behavioural equilibrium exchange rate approach of Clark and MacDonald (1998) to provide an econometric analysis of the REER in the Caribbean. The approach begins by estimating a reduced form equation that explains the stochastic process of the REER over the period. The reduced form equation can be specified as:

$$q_t = \beta_1' Z_{1t} + \beta_2' Z_{2t} + \tau' T_t + \varepsilon_t \qquad (1)$$

where q is the REER, β_1', β_2' *and* τ' are vectors of reduced form coefficients, Z_1 is a vector of fundamental variables that influence the real exchange rate in the long run, Z_2 is a vector of fundamental variables that only impact on the real exchange rate in the medium term, T is a vector of variables which only have a transitory impact on the REER, and ε is a disturbance term with normal properties.

Within the BEER framework, the extent to which the REER is misaligned (m) can be expressed by:

$$m_t = \tau' T_t + \varepsilon_t + \left[\beta_1'(Z_{1t} - \overline{Z}_{1t}) + \beta_2'(Z_{2t} - \overline{Z}_{2t})\right] \qquad (2)$$

where a bar above the variable indicates its equilibrium value[2]. Equation (2) shows that exchange rate misalignment may be due to transitory factors, random disturbances, and how far the fundamental variables are away from their equilibrium values. The estimate of the equilibrium exchange rate misalignment is obtained as the residual between the fitted REER, from the long run cointegrating model (referred to as BEER), and the actual REER.

The fundamental variables employed, in this study, are similar to those utilised by Clarke and MacDonald (1988) and include productivity relative to the country's main trading partners, openness, the fiscal balance and net foreign assets[3]. Assuming prices for traded and non-traded goods are linked to wages, which are in turn linked to productivity, and wages are equalised across the two sectors, this would imply that the price of locally produced goods should increase at a slower rate for a nation with high productivity. As a result, the nation's REER should appreciate, even if purchasing power parity is assumed to hold. Thus, the REER is likely to be positively associated with the productivity differentials between the country under investigation and its trading partners.

A proxy to measure the level of trade restrictions in place in the nation, openness, is included in the econometric specification. Trade restrictions raise the prices of non-tradable goods as consumers attempt to substitute away from

[2] It is possible that outliers could affect the coefficient estimates. However, plots of the REER in Figure 1 showed no evidence of outliers.

[3] All the variables examined in previous studies were included in the initial specifications. The desired model was then chosen based on the cointegration test results. The relative real interest rate and the index of commodity export prices were two such variables which proved to be insignificant explanatory factors.

the now higher priced imported good, therefore the relationship between the REER and the index of openness should be positive. However, in some small open economies (SOE) the significance of this substitution effect may be diminished if there does not exist a large number of import substituting industries.

Government's fiscal position is also included in the econometric model, and is proxied by government consumption as a ratio to GDP. In the Mundell-Fleming model, an improvement in government's fiscal position increases national savings, and therefore lowers domestic interest rates and by extension the exchange rate. In contrast, the portfolio balance approach of Branson (1977) and Dornbusch and Fisher (1980) argues that a fiscal improvement should lead to an increase in the net foreign assets (NFA) of the nation, and should cause the real exchange rate of the nation to appreciate. As a result, the coefficient of the fiscal variable is ambiguous. The NFA of the banking system is included in the model as a separate explanatory variable, since greater NFA can result in a rise in domestic expenditure, which then leads to an excess demand for non-tradable goods, and by extension an increase in their price. Therefore, the REER and NFA should be negatively related.

3.2 Econometric Approach

This study uses the Johansen (1995) cointegration approach to derive the equilibrium exchange rate for Barbados, Jamaica and Trinidad and Tobago. The framework begins with a vector autoregressive (VAR) representation of the form:

$$y_t = \eta + \sum_{i=1}^{p} \Pi y_{t-i} + \varepsilon_t \qquad (3)$$

where y is a n x 1 vector of variables consisting of the REER, productivity differentials, openness, fiscal balance and NFA which may be I(1) or I(0), η is a n x 1 vector of deterministic variables, Π is a n x n coefficient matrix and ε is a n x 1 vector of disturbances with normal properties. If there exists a cointegrating relationship among the I(1) variables, Equation (1) may be re-parameterised into a vector error correction mechanism (VECM):

$$\Delta y_t = \eta + \sum_{i=1}^{p-1} \Phi_i \Delta y_{t-i} + \Pi y_{t-1} + \varepsilon_t \qquad (4)$$

where Δ is the first difference operator, and Φ is a n x n coefficient matrix. The rank Π determines the number of cointegrating relationships. If the matrix Π is of full rank, n, then a VAR in levels is appropriate. If the matrix Π is of rank zero, then a VAR in first differences is suitable. However, if the rank of Π is less than n, then there exist n x r matrices α (adjustment matrix) and β (cointegrating vectors) such that $\Pi = \alpha\beta'$, and Equation (4) provides the more appropriate framework. The β vector can be used to derive the long run BEER and therefore allows one to examine how far away from equilibrium is from the actual REER.

The Trace statistic (TR) is utilised to test for the existence of cointegration, amongst the non-stationary variables. The test statistic is derived from:

$$TR = T \sum_{i=r+1}^{N} \ln(1 - \hat{\lambda}_i) \qquad (5)$$

and test the hypothesis that there are at most r cointegrating vectors. The $\hat{\lambda}_{r+1},\ldots,\hat{\lambda}_n$ are the N - r smallest squared canonical correlations between the y_{t-k} and Δy_t series.

3.3 Data Sources and Definitions

The study uses quarterly data over the period 1970Q1 to 2001Q4. The REER is a consumer price index (CPI) based REER of a country's main trading partners relative to that of the domestic currency. The variable is defined as follows:

$$q = \sum_{i=1}^{N} w_i ln(e_i * p_i / p \ ) \qquad (6)$$

where w_i is the trade weight for partner country i, e_i is the

bilateral nominal exchange rate, p_i is a measure of prices in trading partner country i, and p is the domestic price index. Equation (6) therefore implies that a rise in the REER represents an improvement in external price competitiveness. The data on the consumer price indices and nominal exchange rates are obtained from the International Monetary Fund's (IMF) International Financial Statistics (IFS) database. The trade weights for Barbados are obtained from the Central Bank of Barbados' Annual Statistical Digest, for Jamaica the observations are derived from the Bank of Jamaica Statistical Digest, while those for Trinidad and Tobago are taken from the Central Bank of Trinidad and Tobago's Monthly Statistical Digest.

Productivity is proxied by real GDP per capita relative to the country's trading partners. The GDP and population data for all three countries are recovered from the IFS database. Unfortunately, only annual real GDP data is available over the sample period. Therefore, the temporal disaggregation procedure proposed by Boot and Feibes (1967) is employed to obtain mathematical consistent, quarterly GDP values.[5] The productivity variable is a relative one; domestic GDP per capita is expressed as a ratio of the weighted average of the GDP values for the nation's main trading partners. Openness is calculated as the ratio of exports and imports to nominal GDP at market prices, and is obtained from the IFS database. The fiscal balance is proxied by the ratio of government consumption to nominal GDP at market prices, while NFA is the end of period net foreign assets of the banking system as a ratio of GDP. These variables are all obtained from the IFS database.

The calculated REER for Barbados, Jamaica and Trinidad and Tobago are plotted in Figure 1. The chart indicates that both Barbados and Jamaica have made sizable

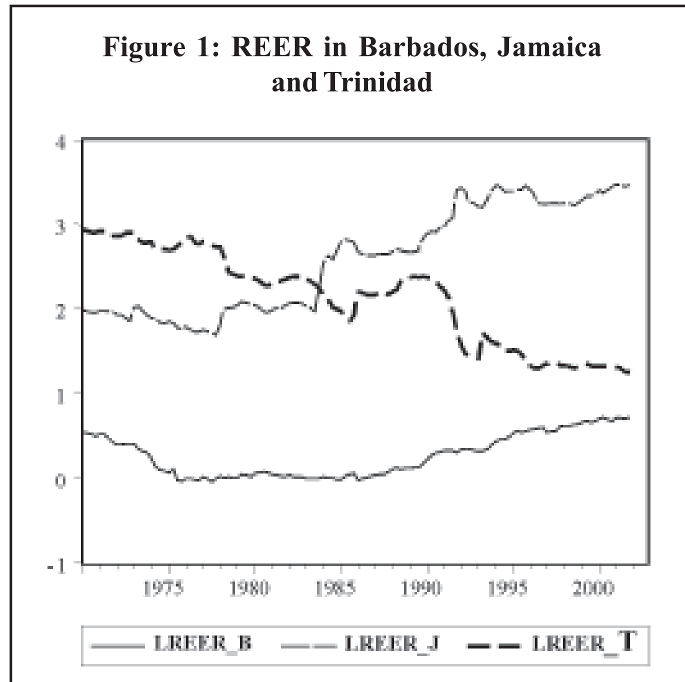


Figure 1: REER in Barbados, Jamaica and Trinidad

Note: REER for each country is defined as $q = \sum_{i=1}^{N} w_i ln(e_i * p_i / p)$, where q is the trade weight for partner country i, e is the bilateral nominal exchange rate, p_i is a measure of prices in trading partner country i, and p is the domestic price index.

competitive gains over the sample period. In Barbados, the REER in 2001 was estimated at 0.715, compared to only 0.224 at the beginning of the sample period. The improvement in Barbados' competitive position, during the latter half of the review period[6], came mainly due to a slowdown in wage growth[7]. For example, between 1973 and 1987 the average annual rate of wage growth was estimated at 17.8%, or almost twice the rate of expansion obtained between 1988-2000. As a result of these excesses, the average rate of inflation between 1973 and 1987 was uncharacteristically high for Barbados, estimated at 11.5% compared to only 3.2% between 1988-2001. Although significant gains have been made in the 1990s in terms of competitiveness in Barbados, since 1999 the rate of increase in the REER has been flat. This outturn seems again to have been due to large increases in wages between 2000 and 2001. It is estimated that in 2000 and 2001 nominal wages grew by 3.8%

[5] Note that disaggregation can introduce data distortions. However, Marcellino (1999) theoretically illustrates (and recently backed up by Haug, 2002, using Monte Carlo techniques) that the local power of cointegration tests may be lowered when one reduces the number of observations in finite samples.

[6] Barbados' main means of adjustment is through labour cost given that its nominal exchange rate is fixed at BDS$2:US$1.

[7] A reduction in real wages causes the price of non-traded goods to expand at a slower rate than those for traded goods and thus an improvement in the REER.

and 3.3%, respectively, while the average rate of inflation over this period was only 1.3%.

Jamaica has also recorded a significant expansion in external competitiveness during the period under investigation. In Jamaica, the REER began the review period at 2.898, and by the end of 2001 it estimated at 3.457. Unlike Barbados, most of this improvement in external competitiveness was obtained through steep nominal exchange rate devaluations and, to a lesser extent, a slow down in real wage growth during the early 1990s. The Jamaican dollar began the review period at JAM$0.83/US$1 and by the 2001 it had depreciated to JAM$47/US$1. The growth in the REER for Jamaica has not been consistent. For example, for most of the 1990s Jamaica's REER stagnated and even declined. Like Barbados, this scenario seems to have been due to unrealistic wage increases during the period. It is estimated that between 1993 and 1999, real wages rose on average by 10.8% per year. Since 1999 the REER has appreciated, indicating an improvement in external competitiveness. However, this adjustment again came through a nominal exchange rate depreciation rather than a slowdown in real wage growth. Jamaica's nominal exchange rate, which for most of the 1990s hovered around the JAM$35/US$1 mark, depreciated to JAM$46/US$1 by 2001.

Unlike the other countries, Trinidad has recorded a consistent decline in its REER over the period[8]. Trinidad and Tobago, which began the period with a REER of 2.372 in 1970, ended the review period with a REER of only 1.256. One of the key reasons for this outturn is that Trinidad and Tobago's relatively high rate of inflation, which averaged 9.7% per year over the sample period, compared to only 5.3% in the USA, which represents 67% of total trade in Trinidad and Tobago.

[8] This statistic may be surprising but accords with the values obtained from the IMF's International Financial Statistics database. It is also probably reflective of the significant competitive advantage Trinidad and Tobago had relative to other Caribbean at the beginning of the sample period, so as to record a decline in external competitiveness but yet still remain one the largest suppliers of goods in the region.

4. Estimation Results

The augmented Dickey-Fuller test statistics for the non-stationarity of the fundamental variables and the REER are given in Table 1. The approach tests the null of non-stationarity against the alternative of stationarity. The results show that all the variables are integrated of order one at classical levels of testing.

Table 1: Unit Root Tests

Country	lreer	lrgdppc	openness	fiscal	nfa
Levels					
Barbados	-2.480	-1.991	-2.277	-2.616	-2.180
Jamaica	-2.879	-2.618	-1.928	-2.652	-2.758
Trinidad and Tobago	-2.848	-1.846	0.607	-0.170	-2.723
First Difference					
Barbados	-2.932**	-5.116**	-4.347**	-6.866**	-6.118**
Jamaica	-7.328**	-3.282**	-5.835**	-2.989**	-5.401**
Trinidad and Tobago	-7.430**	-3.219**	-4.391**	-4.846**	-4.661**

Note: **, * indicates significance at the 1 and 5 percent significance levels, respectively. The ADF statistics were chosen based on the Schwartz criterion.

4.1 *Barbados*

In order to derive the BEER for Barbados, a cointegrating long run relationship between the REER and the fundamental variables must be established. The specification used in this study constrains the constant to lie in the long run relationship, and the lag length is set to two quarters based on the Schwarz criterion. The tests for cointegration among the variables presented earlier in Section 3 is provided in Table 2. This statistic indicates that there exists at most one cointegrating vector.

The cointegrating vector is therefore normalised on the REER, which produces the long run equation with standard errors given in Table 3. All the coefficients have their correct a priori signs, and are of plausible magnitudes. The alpha, or adjustment, matrix associated with this equation is

Table 2: Tests for the Number of Cointegrating Vectors (Trace Statistics)

	Barbados	Jamaica	Trinidad and Tobago
H_0:r	62.420**	106.780**	36.678**
1	30.815	60.517	12.029
2	11.837	38.335	2.274
3	4.476	19.560	0.719
4	n.a.	7.054	n.a.

Note: (a) ** indicates significance at the 1 percent significance level.
(b) n.a. indicates not applicable.
(c) Max-Eigen statistics were also calculated but are not reported since they yielded the same conclusions.

Table 3: Long Run Cointegrating Equations (Normalised on the REER)

	Barbados	Jamaica	Trinidad and Tobago
lrgdppc	2.737	0.270	1.281
	(0.733)	(0.343)	(0.201)
open	1.962	1.188	-9.486
	(0.789)	(0.277)	(2.345)
fiscal	-	-4.538	-
			(0.937)
nfa	-0.396	-0.105	-0.269
	(0.085)	(0.023)	(0.158)
trend	-	-0.014	-
		(0.001)	
c	21.278	0.721	-

Note: standard errors are given in parentheses.

given in Table 4. The alpha is negative and statistically significant in the case of Barbados, and suggests that the REER converges from disequilibrium to equilibrium by approximately 3% per quarter or 12% per year. Thus, the adjustment to a shock to the REER will be offset only after eight years. This relatively slow speed of adjustment in Barbados is primarily reflective of the fixed nominal exchange rate system, and the difficulty of adjusting real wages on account of the bargaining power of local trade unions.

The estimated BEER from the long run cointegrating relationship along with the actual REER in the period 1974

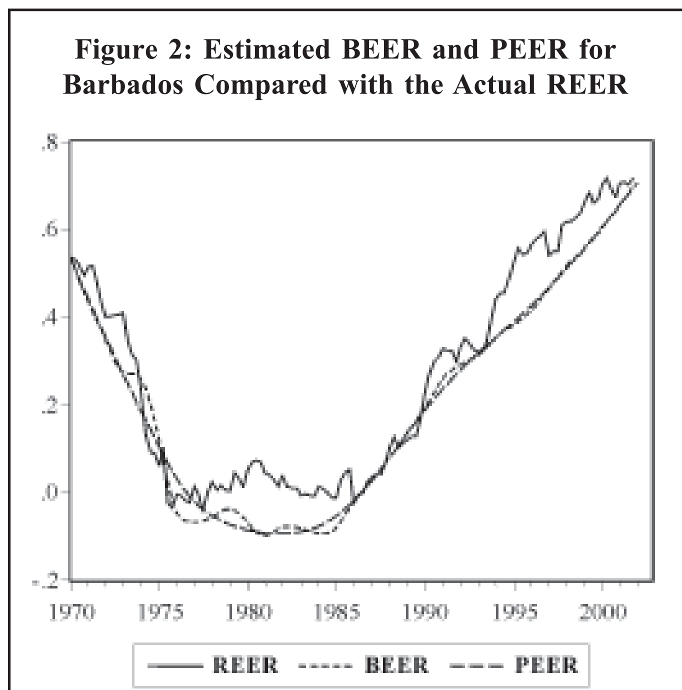
Table 4: Speed of Adjustment from Disequilibria (Alpha Matrix)

	Barbados	Jamaica	Trinidad and Tobago
Δ *lreer*	-0.030	-0.178	-0.009
	(0.006)	(0.042)	(0.005)
Δ *lrgdppc*	0.003	-0.003	0.004
	(0.002)	(0.008)	(0.001)
Δ *open*	-0.000	0.007	-0.002
	(0.003)	(0.011)	(0.001)
Δ *fiscal*	-	0.004	-
		(0.001)	
Δ *nfa*	-0.037	-0.086	-0.032
	(0.023)	(0.124)	(0.012)

Note: standard errors are given in parentheses.

to 2001 is shown in Figure 2. One of the main features of the diagram is that the fundamentals, reflected by the BEER, can account for most of the fluctuations in the REER. The diagram shows that for the period 1978-1986 the real exchange rate was misaligned, with the actual REER significantly exceeding the BEER. The explanation for the level of undervaluation achieved during this period occurred on

Figure 2: Estimated BEER and PEER for Barbados Compared with the Actual REER



account of a decline in NFA and an expansion in productivity relative to the country's main trading partners. Between 1987 and 1990, however, there was some evidence of overvaluation that was subsequently corrected through a structural adjustment programme, which included an 8% pay-cut for public sector employees. This served to restore equilibrium by causing an expansion in the NFA of the banking system and relative productivity. As a result, for much of the 1990s, Barbados' REER was undervalued which was reflected by average current account surpluses of 2% of GDP. However, by the end of the sample period, the actual and equilibrium values converged as a result of a decline in relative productivity.

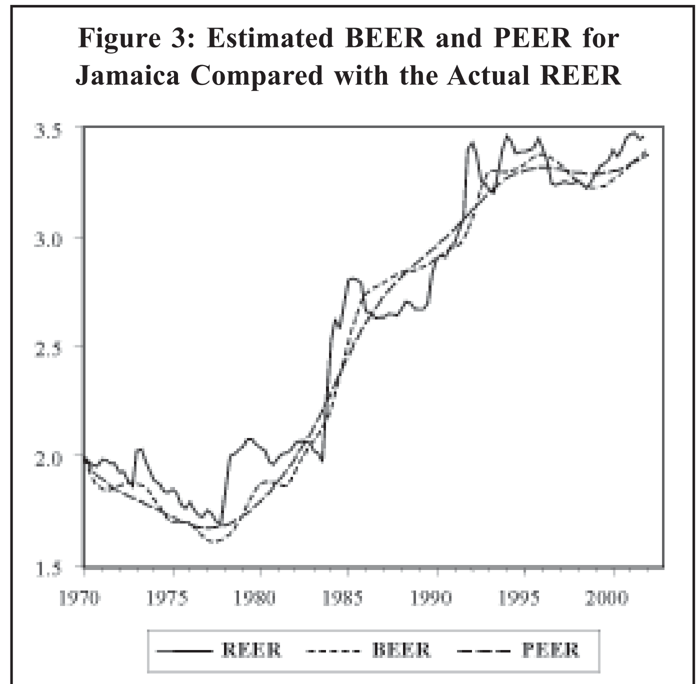
The BEER approach calculates the equilibrium REER based on a behavioural equation. However, some of the explanatory variables may not have been at their equilibrium values. One can therefore use a smoothing technique, for example the Hodrick-Prescott filter, to identify the degree of total exchange rate misalignment and these estimates of the so-called permanent equilibrium exchange rate (PEER) are also provided in Figure 2. The chart shows a similar pattern to the obtained from the analysis of the BEER, with a period of undervaluation in the eighties and late nineties, and a return to equilibrium by the end of the sample period.

4.2 *Jamaica*

The VAR model used for the Jamaican exchange rate is quite similar to that for Barbados, namely, two lags and a restricted constant. However, a trend is also included in the cointegrating space. The model is chosen using the general-to-specific approach, based on the Schwartz criterion. The Trace statistic for Jamaica suggests that there exists at most one cointegrating vector.

The authors therefore normalise the cointegrating relationship on the REER, and the estimated model, along with the coefficient standard errors are provided in Table 3. The signs of the variables agree with a priori reasoning and, except for the productivity variable, are of similar magnitudes to those obtained in the Barbados case. The adjustment matrix attached to this model is reproduced in Table 4. The negative and significant alpha suggest that the REER in Jamaica converges from disequilibrium to equilibrium by approximately 18% per quarter, or 72% per year. This speed of adjustment is much faster than in the Barbadian case and is reflective of the advantage of a floating over a fixed exchange rate, that is, the nominal rate is allowed to adjust to shocks to the system.

Figure 3: Estimated BEER and PEER for Jamaica Compared with the Actual REER



The estimated BEER from the long run cointegrating model over the period 1970 to 2001 is provided in Figure 3. Similar to Barbados, the fundamentals explain most of the variation in the REER for Jamaica. The diagram also shows that for the period 1983 to 1984 the REER was significantly overvalued. However, this misalignment was corrected by a sharp contraction in the nominal exchange rate from JAM\$0.91/US\$1 to JAM\$1.78/US\$1 by 1983. Another period of overvaluation was also observed during 1986 to 1992, which were all corrected by nominal exchange rate depreciations. As at 2001, the REER was therefore only 2% above its equilibrium level. Using the Hodrick-Prescot filter gives rise to conclusions similar to those presented earlier.

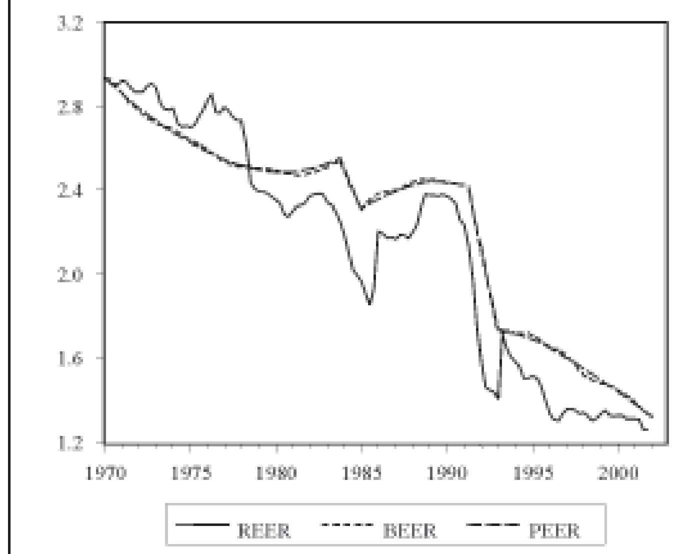
4.3 *Trinidad*

The VAR model for Trinidad and Tobago is somewhat different from that estimated for Barbados and Jamaica. The specification does not include a trend or a constant, however, dummy variables accounting for recessionary periods in the early eighties and early nineties are included as unrestricted variables. Again, the lag length is set to two quarters and the Trace statistic indicates that at most, there exists one cointegrating vector.

Normalising the cointegrating vector on the REER produces the long run equation in Table 3. It shows that all the coefficients, except the openness variable, have their correct a priori signs and indicates that as the economy opens to more trade it may suffer a reduction in its external competitiveness. The adjustment coefficient is negative and significant at the 5% level. However, the magnitude of alpha suggests that the adjustment from disequilibrium to equilibrium is only corrected by 1% each quarter or by 4% in a year. As Worrell (2003) notes, although Trinidad and Tobago effectively maintains a floating rate regime, it also undertakes large exchange rate interventions to prevent significant fluctuations. As a result of this policy stance, the adjustment from equilibrium to disequilibrium, as reflected by the small alpha coefficient, is quite sticky and more similar to that for Barbados rather than Jamaica.

Figure 4 plots the actual REER and the BEER and PEER for the period 1970 to 2001. The figure shows that contrary to the situation in Barbados and Jamaica, Trinidad and Tobago's REER was constantly below the equilibrium exchange rate value. Two periods justify a closer analysis. First, over the period 1971 to 1976 the REER was significantly misaligned. This disequilibrium was corrected by pegging the nominal currency at a level below its value in the previous quarter, an effective nominal exchange rate depreciation. Again in the 1992 to 1993 period the REER was significantly misaligned, and as a result, national policy makers took the decision to float the currency, which immediately resulted in a depreciation of the currency from TT$4.25/US$1 to TT$5.76/$US1 and bought the actual REER closer to its equilibrium value. However, due to significant exchange rate intervention in the latter half of the 1990s, the REER was somewhat misaligned, but by the 2001 it had converged to its equilibrium value, and was therefore only 6% below its equilibrium value.

Figure 4: Estimated BEER and PEER for Trinidad and Tobago Compared with the Actual REER



5. *Conclusions*

Although the idea of an equilibrium exchange rate for the region has been discussed in numerous studies since 1972, little empirical research exists which employs rigorous econometric techniques to identify the equilibrium REER for the Caribbean. This study uses the BEER approach to derive the equilibrium exchange rate for Barbados, Jamaica, and Trinidad and Tobago over the period 1970 to 2001. The BEER approach calculates the degree of REER misalignment as the difference between the actual REER, and that based on the current values of the fundamental variables. The results from undertaking this analysis suggests that at the end of 2001, the REERs for Barbados and Jamaica were slightly above their equilibrium values, while that for Trinidad and Tobago was below its equilibrium value.

In Barbados, given the fixity of the nominal exchange

rate, real exchange rate misalignment is most effectively controlled using real wage changes. This leads to the conclusion that general wage agreements should not only take into account productivity changes, but also the degree of exchange rate misalignment when negotiating salary increases. This policy prescription is, however, limited by the bargaining power, which most local unions have over the market. In contrast, REER misalignment in Jamaica is effectively corrected using nominal exchange rate depreciations or appreciations. Unlike the previous two territories, Trinidad and Tobago's REER seems to be more prone to be below its equilibrium exchange rate value. This unusual situation seems to reflect the intervention undertaken on the part of the monetary authorities in order to maintain a stable exchange rate.

One policy recommendation emanating from these findings is that the REER in each territory should be kept as close as possible to its equilibrium level. In Barbados, this would be achieved through wage adjustments and productivity changes. This policy prescription would avoid the problem of some territories fixing their exchange rates at arbitrary values, which are not consistent with either internal or external equilibrium, and therefore resulting in balance of payments difficulties (see Barbados circa 1991) and/or significant nominal exchange rate depreciations. In order to make this policy recommendation consistent with convergence criteria, one possibility is to keep the exchange rate stability criterion as it is but define stability to be within a band measured around the country's BEER and such that each year the BEERs should converge by a predetermined rate.

References

Boot, C.G., Feibes, W. and J.H.C. Lisman (1967). 'Further Comments on the Derivations of Quarterly Figures From Annual Data.' Applied Statistician 16 (1): 65-75.

Branson, W. (1977). 'Asset Markets and Relative Prices in Exchange Rate Determination'. Institute for International Economic Studies, Reprint.

CARIFTA Secretariat. (1972). The Economics of Devaluation Under West Indian Conditions. Georgetown.

Clark, P.B. and R. MacDonald. (1998). 'Exchange Rates and Economic Fundamentals: A Methodological Comparison of BEERs and FEERs.' IMF Working Paper WP/98/67. International Monetary Fund, Washington.

Clark, P.B. and R. MacDonald. (2000). 'Filtering the BEER: A Permanent and Transitory Decomposition.' IMF Working Paper WP/00/144. International Monetary Fund, Washington.

Dornbusch, R. and S. Fischer. (1980). 'Exchange Rates and the Current Account.' American Economic Review 70 (5): 960-971.

Edwards, S. (1987). 'Exchange Rate Misalignment in Developing Countries.' Discussion Paper Nos. 442, World Bank, Washington.

Elbadawi, I. (1994). 'Estimating Long run Equilibrium Real Exchange Rates.' In J. Williamson (ed), Estimating Equilibrium Exchange Rates, Institute for International Economics. Washington.

Farrell, T. and D. Worrell. (1994). Caribbean Monetary Integration. Caribbean Information Systems and Services, Port-of-Spain, Trinidad and Tobago.

Francis, A.A. (1998). 'Is the Jamaican Dollar Overvalued?' Social and Economic Studies 47 (4): 29-45.

Harriott, K.K. and D. Worrell. (1997). 'Estimating Equilibrium Real Exchange Rates: A Menu Approach.' Central Bank of Barbados Working Papers. Bridgetown.

Haug, A.A. (2002). 'Temporal Aggregation and the Power of Cointegration Tests: A Monte Carlo Study.' Oxford Bulletin of Economics and Statistics 64 (4): 399-412.

Johansen, S. (1995). Likelihood-Based Inference in Cointegrated Vector Autoregressive Models. Oxford University Press, Oxford.

Lewis, A. (1972). 'Statement at the Second Annual Meeting of the Board of Governors of the Caribbean Development Bank.'

MacDonald, R. (1997). 'What Determines Real Exchange Rates? The Long and Short of It.' IMF Working Paper WP/97/21. International Monetary Fund, Washington.

Marcellino, M. (1999). 'Some Consequences of Temporal Aggregation in Empirical Analysis.' Journal of Business and Economic Statistics 17 (1): 129-136

Modeste, N. (1994). 'The Determinants of the Real Exchange Rate: The Experience of Barbados.' Social and Economic Studies 43 (4): 183-196.

Taylor, L. (1974). 'Some Thoughts on an Optimum Exchange-Rate Policy for the Caribbean.' Social and Economic Studies 23 (3): 454-464.

Williamson, J. (1994). Estimating Equilibrium Exchange Rates. Institute for International Economics, Washington.

Worrell, D. (2003). 'A Currency Union for the Caribbean.' IMF Working Paper WP/03/35. International Monetary Fund, Washington.

A Review of Sunanda Sen's Global Finance at Risk: On Real Stagnation and Instability

(Palgrave MacMillan 2003)

By Tracy Maynard*

Introduction

International capital flows occur when residents in one country (the capital exporter) extend loans to or purchase the title to assets from the residents of another country (the capital importer). The International Monetary Fund estimates that the total assets managed by market institutional investors are over US$30 trillion, or roughly the same as total world GDP[1]. With such a large portfolio of funds seeking good investment opportunities, there can be a significant source of growth in an economy, if they are put towards productive purposes. At the same time, because total global capital flows are so large, relatively small changes in the allocation of funds can result in large and volatile swings for a particular country or region.

The book "Global Finance at Risk" by Sunanda Sen attempts to add to the understanding of the implications of financial liberalisation and the globalisation of financial markets. It presents the models of international capital lending, a historical analysis of trends in global finance (inclusive of capital account convertibility) and the impact on the real economy and overall economic development. The author uses a mix of case study analysis, and theoretical modeling to elucidate difficult concepts.

The study is geared primarily at graduate students, academics and professional economists working in the field of international finance. Sen's presentation style, although clear and easy to follow for the average economist, might be a bit challenging for those without a good grasp of basic calculus, algebra and economics in their toolkit. The book can be used as an introduction to the field of international finance, as it surveys a number of the key studies and models in the area. It also provides useful policy recommendations regarding how global finance can be used to generate greater economic activity.

* Miss Tracy Maynard is a Research Officer in the Research Department of the Central Bank of Barbados.

[1] Mathieson, D.J. and G.J. Schinansi (2001). International Capital Markets: Developments, Prospects and Key Policy Issues. World Economic and Financial Surveys, International Monetary Fund. Washington, D.C.

International Borrowing Models

The book is divided into four chapters. In the first chapter, Sunanda Sen presents the conceptual background relating to international capital movements. The author first gives a sketch of optimal international borrowing models, pointing out their limitations in terms of their inability to explain many episodes in recent history. One of these limitations is that the optimisation model of foreign borrowing assumes that lenders seek to maximise profits, while borrowing countries attempt to increase the welfare of the citizens in the country. These two groups of agents, through their interaction, determine the flow of credit at its optimum level. The value of international borrowing models is hindered by the assumptions on which they are based. The description of countries as harmonious welfare maximisers, the treatment of uncertainty, the limited applicability of diminishing marginal utility of consumption in developing countries, and the limited analysis of the global influences on savings and investment all hinder the potential usefulness of optimal international borrowing models.

According to the author, international capital flows are characterised by underlying paradoxes, which despite the large body of research in the area, have yet to be adequately addressed. These include lender, borrower and the market-driven path of capital paradox. The lender paradox is typically faced by lending agencies. Since these institutions attempt to maximise both the value of net advances and the returns on their portfolio, the agency's efforts can lead to a circumstance where the inward flow of returns from past investments exceeds the gross outflow of new loans, mainly due to the size of previous loans outstanding. In such a situation, the capital-exporting country is faced with the dilemma of sustaining the rate of new investment (by the use of excess savings or profits) due to the lack of demand for these funds within their own economies. As a result, the capital-exporting country ends up over lending.

The borrower's paradox, on the other hand, occurs when the returns on investment with borrowed funds are lower than the cost of servicing the debt. In this situation,

an increasing proportion of debt will have to be used to pay previous debt charges and debt charges will grow faster than new borrowings. Consequently, growth in these economies can be thwarted if net inflows of foreign exchange are a binding supply constraint for output.

The third paradox of international finance relates to the market-driven path of capital, which arises from the increased use of financial instruments aimed at hedging against volatility in markets. These instruments contribute nothing or quite little to real economic activity as pointed out by the author. The text further states, that uncertainty within financial markets creates increased derivative trading and greater fluctuations in the flows of real investment finance, which in turn reduces the potential contribution to the real economy.

Sen feels that given the role of uncertainty, in relation to capital flows, any theory of global finance must incorporate this phenomenon. Mainstream economics literature often overlooks the effects of uncertainty in capital market decision making, by assuming perfect information on the part of market participants. Limitations of the mainstream economic theory include its inability to determine the effect new and old stocks have on the economy in terms of generating new investment, failure to realise that capital markets are not the only source of finance and that they do not act as an informational or signaling agent in the economy. In a more realistic model, (New Keynesian Economics), one assumes that incomplete information prevails in the credit market, and because of this, lenders resort to credit rationing, thus keeping out a section of borrowers from markets.

In the stylised model of capital flows under uncertainty presented in the book, the economy is characterised by three key phases: real and financial upswing, real deceleration and financial upswing and real and financial downswing. During the first phase, positive investor expectations allow easy access to borrowed funds, which leads to a piling up of debts, and therefore an increase in debt servicing. When the real sector boom ends, interest rates rise and new credit declines, as a result of greater perceived investor risk. As real investments come to a standstill, (phase 2), the profitability of these investments drops over time and credit expands in the direction of speculative activities. During phase 3, both the real and financial sector experience downswings on account of the lack of replacement investment in previous years, and financial institutions put in place even tighter controls on credit advanced, in order to maintain prudent liquidity levels. The process then returns to the first phase, real and financial upswing, which can also commence at a point where real assets depreciate beyond the stage of restoration. Hence, with the addition of uncertainty, one can therefore explain why economies are likely to experience increased volatility if they are dependent on international finance to fund domestic projects.

Trends in International Capital and the Real Economy

The above phases of capital flows under uncertainty are clearly recognised in the trends in international capital and the real economy. Sen segments the trends in world finance into three distinct phases: (1) 1973-1981 (expansion in bank credit); (2) 1982-1988 (debt-led restructuring of finance) and; (3) 1989-2003 (widely practised securitisation). The author points out that the expansion of international bank credit, a result of the oil-boom of the 1970s, was accompanied by deregulation within the financial markets. Financial deregulation within the United States of America, United Kingdom and Japan led to credit expansions and the relaxation of restrictions on capital flows. During this period a vast amount of credit was advanced to LDCs as the industrialised countries sought both investment outlets for domestic savings and overseas export outlets for surplus stocks of output in the domestic economy. However, the expansion in credit or loans was accompanied by high interest rates and repayment terms. The text argued that credit obtained by the LDCs during this period had little impact on real economic activity in these economies, as the majority of funds went towards escalating oil import-bills during the 1970s and debt-related liabilities.

Sen attributed the LDCs' sub-par performance to their inability to stimulate growth within their economies (increase

demand, output and employment) as small amounts of capital inflows were used for investment purposes, weak economic policies, corrupt governments and a lack of financial transparency. The text pays particular attention to the experience of the Brazilian economy, where foreign borrowings had little impact on growth. Capital inflows to Brazil were mainly used to meet debt servicing and bridge supplier's credit, as returns from loans previously borrowed were insufficient to service debt payments.

During 1974-1979, Brazil borrowed a sum of US$74 billion, of this amount US$11 billion was used to finance investments, US$56 billion for debt servicing and US$7 billion left the country due to capital flight. Brazil's borrowing during this period was seen as unnecessary and unproductive, since the majority of domestic investments within the economy were financed from domestic sources.

The accumulation of debt in other developing countries resulted in defaults and finally the debt crisis. The latter led to the collapse of some transnational banks (TNBs), and resulted in the implementation of prudential regulatory norms, then commonly called the Basel Concordance of 1975. The author noted that during the period 1982-1988, TNBs were adversely affected by defaults and quickly restructured their assets by engaging in loan provisioning, debt sales at discounts and the refinancing of loans. Consequently, the level of credit, which was previously advanced to the developing countries fell drastically, as the majority of bank flows went towards investments in securities, real estate transactions and mergers and acquisitions for the corporate sector. These financial transactions had little impact on industrial activity as policies implemented by industrialised economies were geared towards the liberalistion of financial markets, in an attempt to achieve higher growth rates of output by means of efficiency gains and price stability.

From the year 1989 onwards, banks switched from Third World loans to assets held as securities. Securities were in the form of debt sales, swaps and a wide range of financial derivatives. The World Bank estimates that the magnitude of debt trade including swaps ranged between US$60 and 80 billion for the years 1988 and 1989. Securitisation of banks assets generated prudential legislation problems because securities were less homogeneous and prone to both credit and market risks as compared to bank loans.

Derivatives were used by financial agents to provide a better allocation of economic risks. The author, however, points out that derivatives generate systemic disruptions and instability in markets. In addition derivative trading destabilises the cash market by increasing volatility of its fundamentals such as interest rates and exchange rates. Within deregulated financial environment, there is the potential that an increasing amount of credit flows can be geared towards short-term speculative activities which contribute little or nothing to real sector activities. Moreover, the channeling of financial flows in the wrong direction can inevitably result in downswings, which contract real sector activities resulting in depreciating exchange rates, capital flight and liquidity crunches.

Foreign Direct Investments

The fall-off in credit to LDCs was, however, supplemented by moderate flows of portfolio and foreign direct investments (FDI) following partial or complete liberalisation of their financial markets. The text, presents two distinct views on FDI flows. First, FDI flows act as a channel for generating global growth by stimulating increased output and demand in LDCs in terms of the trade creating effect. Second, FDI flows are seen as disruptive and responsible for deindustrialisation as well as inflicting losses in terms of jobs, output and export market within the industrialised country. Moreover, FDI flows displace domestic firms by foreign firms, resulting in a substantial rise in imports and an increase in the repatriation of profits abroad, in the form of royalties and other fees, which can result in an unfavorable balance of payments for host countries.

Wood and Preusch (1984)[2] argued that FDI flows to the Caribbean, especially by Multinational Corporations, exploited the economic surplus out of the Caribbean States and blocked any transition to a condition of internally propelled growth.

Capital Account Convertibility

In the final chapter of the text, Sen discusses the benefits and costs of capital account convertibility (CAC), that is, the free movement of capital across countries. The benefits are deemed to include growth and stability within economies, efficiency among borrowers and lenders, the expansion in investment in developing countries and a reduction in capital flights. The above, however, fails to recognise the costs associated with the free movement of capital which prevails within the credit markets, the difficulties associated with the implementation of monetary policies (in terms of maintaining a fixed or adjustable exchange rate peg), and swings in the current account resulting from the reduction in net capital inflows. CAC can also lead to mismatches in the borrowing economy, as short term borrowing abroad by local banks may be used to finance long-term projects in the domestic country, hence placing a strain on the economy. Furthermore, in the absence of sequencing and proper regulatory measures, capital account convertibility can lead to greater degrees of uncertainty which causes volatility in asset prices, exchange rates and capital flows resulting from abrupt changes in flows of short-term capital and portfolio investments.

Studies on capital account convertibility, referred to in the text, found that countries (East Asia, Latin America, etc.) which implemented such measures did not obtain significant benefits. Instead these economies suffered from currency and banking crises, as well as the failure to realise lower inflation, higher per capita GDP growth and greater investment (as a share of GDP).

Given the cost and benefits of CAC, the author argues that any country attempting to implement CAC should use a gradual and sequential approach that would allow the efficient implementation of reforms and legislation within this area. High quality banking regulations and supervision within an economy are also very critical in order to ensure early detection of inadequacies within banking and financial institutions.

In the text, capital account controls are portrayed to be more effective than capital account convertibility. This is based on the positive results achieved by both Chile (1990-1998) and Malaysia (1997-1998). Controls implemented by these economies included unremunerative reserve requirements on all foreign borrowings (excluding trade credits, FDI, long-term portfolio investments) to avert excessive capital inflows of a short-term nature, a minimum stay requirement for both portfolio and direct investments and a minimum regulatory requirement for all corporate borrowings. Additionally, the reporting of capital transactions by private banks was made mandatory by the monetary authorities.

Conclusion

This book addresses the underlying paradoxes of international capital flows as well as the effects of uncertainty associated with such flows. The experience of many countries, as suggested in the book, have shown that international financial flows to developing countries have failed to have a significant impact on growth within these economies. However, within the text, international capital flows in the form of foreign direct investment are viewed as the most efficient way for generating and stimulating global growth, primarily in terms of the trade effect, that is, the change in the trade balance for either country.

Economies that choose to implement capital account convertibility (the free movement of capital across countries without any capital controls), did not reap significant growth prospects in terms of increased economic activity, greater investments or a lower level of inflation. Capital controls are portrayed to be more effective and successful in stimulating growth within an economy, as such restrictions ensure that only the desirable types of capital are allowed to enter and leave the economy.

It is gathered from the text that a developing economy (such as Barbados) should continue to utilise capital account controls, as the use of capital account convertibility does not

[2] Wood, B. and Preusch D. 1984 “The Other Side of Paradise: Foreign Control in the Caribbean”.

significantly impact on growth prospects in developing countries. Capital controls will avoid situations that can lead to a speculative run on the currency of an economy as well as capital flights, which are prevalent with the use of capital account convertibility. However, any developing economy that chooses to implement capital account convertibility should employ a gradual and sequential approach that would allow the efficient implementation of reforms and legislation within this area. Bank regulators will also need to improve their monitoring practices, as there is the need to detect and avoid the occurrence of any irregularities that may become present within the financial system.

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1. ALLEYNE, KERRY-ANN. *How Countries Manage Reserve Assets.* Economic Review. June 2004, Vol. XXXI No.1 p. 34 - 38.

2. ANYADIKE-DANES, MICHAEL K. *What Cannot Be Learnt About Unemployment From The Barbados Labour Force Survey.* Economic Review. June 1994, Vol. XXI No. 1 pp. 12 - 16.

3. ANYADIKE-DANES, MICHAEL K. *Response To The Statistical Service.* Economic Review. June 1994 Vol. XXI No. 1 pp. 17.

4. BABB, JANNETTE. *Income Tax Comparisons Among CARICOM Countries In 1988.* Economic Review. December 1990, Vol. XVII No. 3 pp. 18-26.

5. BARBADOS STATISTICAL SERVICE. *Comment On What Can Be Learnt About Unemployment From The Barbados Labour Force Survey.* Economic Review. June 1994, Vol. XXI No. 1 pp. 17.

6. BELGRAVE, ANTON. *Macro-Economic Policy Modelling For Developing Countries :* A Review of Victor Murinde*, Macro-Economic Policy Modelling For Developing Countries.* Avebury, 1993. Economic Review. December 1995, Vol. XXII No. 3 pp. 15 - 16.

7. BLACKMAN, COURTNEY N., and COX, WINSTON A. *Factors In The Development of a Migration Policy For The Caribbean.* Economic Review. December 1986, Vol. XIII No. 3 pp. 12-23.

8. BLACKMAN, COURTNEY N., *Information, Management and Economic Development.* Address to The Library Association of Barbados At The University Of The West Indies, Cave Hill, May 9, 1983. Economic Review. June 1983, Vol. X No. 1 pp. 9-11.

9. ————. *Coming To Terms With The Computer.* Economic Review. December 1983, Vol. X No. 3 pp. 14-16.

10. ————. *Some Critical Issues In Caribbean Economic Development.* Paper Delivered at the University of the Netherlands Antilles, Curacao. Economic Review. December 1982, Vol. IX No. 3 pp. 9-14.

11. ————. *Address To The Barbados Employers' Confederation.* Economic Review. June 1982, Vol. IX No. 1 pp. 9-12.

12. ————. *Prospects For 1981.* Speech Delivered to The Life Underwriters Association of Barbados at Norman Centre, Bridgetown, January 16, 1981. Quarterly Report (Now Entitled Economic Review). March 1981, Vol. VIII No. 1 pp. 22-29.

13. ————. *Role of The Central Bank in the Formulation and Implementation of Economic Policy In Small Developing Countries.* Quarterly Report (Now Entitled Economic Review). June 1980, Vol. VII No. 2 pp. 35-60.

14. ————. *Remarks Delivered, at the Formal Opening of the Barbados National Bank on Monday, April 3, 1978* at The Fairchild Street of The Commercial Division. Quarterly Report (Now Entitled Economic Review). June 1978, Vol. V No. 2 pp. 34-42.

15. ————. *Remarks, to The Symposium On Finance Sponsored by The Barbados Manufacturers Association On March 15, 1978*

at The Barbados Hilton Hotel. Quarterly Report (Now Entitled Economic Review). March 1978, Vol. V No. 1 pp. 22-32.

16. ——————. *Address at the Official Opening of the Export Promotion Training Programme at the AMCEM Room, Plantations Building, Bridgetown Thursday August 25, 1977.* Quarterly Report (Now Entitled Economic Review). September 1977, Vol. IV No. 3 pp. 28-36.

17. ——————. *Remarks on the Occasion of the launching of SYSTEMS on Wednesday, October 19, 1977.* Quarterly Report (Now Entitled Economic Review). December 1977, Vol. IV No. 4 pp. 58-63.

18. ——————. *Price Control Within The Context of a Developing Country.* Address delivered at the Official Opening of the Price Control Officers/ Inspectors' Course, Ministry of Trade, Industry and Commerce on Monday, August 9, 1976. Quarterly Report (Now Entitled Economic Review). September 1976, Vol. III No. 3 pp. 27-35.

19. ——————. *Remarks on the Occasion of the Opening of the Bank of Nova Scotia Office at Wildey by Dr. Courtney N. Blackman, Governor, Central Bank of Barbados on Saturday, August 2, 1975.* Quarterly Report (Now Entitled Economic Review). September 1975, Vol. II No. 3 pp. 27-32.

20. BOAMAH, DANIEL O. *Savings and Investment In The Barbados Economy. (1965 - 1990).* Economic Review. June 1996, Vol. XXIII No. 1 pp. 46-52.

21. —————— *External Debt Management Strategies : Some Issues and Evidence For The Caribbean.* Economic Review. June 1989, Vol. XVI, No. 1, pp. 12-19.

22. —————— *Stock of Fixed Capital in Barbados 1958-1981 : Some Exploratory Estimates.* Economic Review. December 1984, Vol. XI, No. 3 pp. 8-20.

23. BRATHWAITHE, CARLOS. *Construction Industry on The Economy of Barbados.* Economic Review. September 1982, Vol. IX No. 3, pp. 10-29.

24. BRATHWAITHE, ERIC. *Offshore Banking Centres.* Quarterly Report (Now Entitled Economic Review). September. 1978, Vol. V, No. 3, pp. 52-77.

25. BYNOE-MAYERS, NOLA. *Measuring the Real Exchange Rate Using GDP Deflators.* Economic Review. June 1997, Vol. XXXIV, No. 1 pp. 57-67.

26. CAMPBELL, TREVOR and SEALY, NATASHA. *A Study of Motor Car Imports in Barbados.* Economic Review. June 2000, Vol. XXVII No. 1 pp. 31 - 38.

27. CAMPBELL, TREVOR. *Macroeconomics For Developing Countries :* A Review of Cork, Paul and Kirk Patrick, Colin, *Macroeconomics For Developing Countries,* St. Martin's Press, New York, 1990. Economic Review. June 1992, Vol. XIX, No. 1,

28. CARTER, ADRIAN and WHITEHALL, PETER H. *Estimating Real Value Added in The Construction Sector of Barbados.* Economic Review. December 1999, Vol. XXVI No. 3, pp. 29-43.

29. CARTER, ADRIAN. *Economic Size, Openness and Export Diversification : A Statistical*

Analysis. Economic Review. December 1997, Vol. XXIV No.3 pp. 15 - 21.

30. CENTRAL BANK OF BARBADOS. *Financial Liberalisation and the Likely Impact on Businesses in Barbados.* Economic Review. June 2004, Vol. XXXI No.1 p. 27-33.

31. CENTRAL BANK OF BARBADOS. *Update On The Caribbean Single Market and Economy (CSME).* Economic Review. September 2003, Vol. XXX No. 2 pp. 27-29

32. CENTRAL BANK OF BARBADOS. *The WTO Ruling and Implications for Some Caribbean Economies : [A Note].* Economic Review. June 1998, Vol. XXV No. 1, pp. 14.

33. CENTRAL BANK OF BARBADOS. *Barbados : Structure of The Financial System.* Economic Review. September 1994, Vol. XXI No. 2 pp. 21-25.

34. CENTRAL BANK OF BARBADOS. *Barbados Stand-By Arrangement with the International Monetary Fund.* Economic Review. December 1982, Vol. IX No. 3 pp. 17-18.

35. CENTRAL BANK OF BARBADOS. *Bank Debits and Deposits Turnover .* Quarterly Report (Now Entitled Economic Review). March 1975, Vol. II No. 1 pp. 23-29.

36. CHANDLER, GWENOCIA. *Forecasting For Business Decision Making.* Economic Review. June 1998, Vol. XXV, No. 1 pp. 57-63.

37. CLARKE, CARL, WOOD, CELESTE and WORRELL, DELISLE. *Prices, Incomes and The Growth of Tourism in Barbados, 1956-83.* Economic Review. June 1986, Vol. XIII No. 1 pp. 10-45.

38. CLARKE, HEATHER. *Insight Into The Calculation of the Wages Index.* Economic Review. December 1991, Vol. XVIII, No. 3, pp. 23-27.

39. CODRINGTON, HAROLD. Review of Sylvia Charles, *The Services Sector In Caribbean Economies: Some Development and Management Issues.* Institute of Social & Economic Research, UWI, Cave Hill, 1994. Economic Review. June 1995, Vol. XXII No. 1 pp. 24 - 25.

40. —————. *Common Currency Decisions : Some Implications for Barbados.* Economic Review. December 1995, Vol. XXII No. 3 pp. 17-21.

41. —————. *Measurement of Foreign Reserves in Barbados.* Economic Review. September 1994, Vol. XXI No. 2 pp. 13-16.

42. —————. *Foreign Investment in the Private Sector of Barbados 1956-1985.* Economic Review. June 1987, Vol. XIV, No. 1, pp. 19-29.

43. CODRINGTON, HAROLD And HOLDER, CARLOS. *Terms of Trade Experience of Barbados and Trinidad & Tobago 1955-1980.* Economic Review. une 1984, Vol. XI, No. 1, pp. 15-23.

44. *Compendium of Working Papers Contents 1984-1992.* Economic Reviews. June 1993, Vol. XIX No. 2, (sic) [should read] Vol. XX No. 1, pp. 18 - 28.

45. COPPIN, ADDINGTON. *Analysis of Earnings in Barbados by Age and Sex .* Economic Review. December 1996, Vol. XXIII No. 3 pp. 14-21.

46. ————. *Female Participation in The Barbados Labour Market : A Post-Independence Perspective.* Economic Review. June 1995, Vol. XXII No. 1, pp. 15-23.

47. COPPIN, KIM. *Caribbean Survival and the Global Challenge As Edited By Ramesh Ramseran : A Review.* Economic Review. September 2002, Vol. XXIX No.2 pp. 23 - 26.

48. COX, WINSTON A. *Address to The Rotary Club of Barbados November 27, 1997 "Value of the Dollar".* Economic Review. June 1998, Vol. XXV, No. 1 pp. 64-65.

49. ————. *Address On Globalisation and International Banking and Finance Delivered on Behalf of the Prime Minister, The Rt Hon. Owen Arthur at The Congress Of Political Economist (COPE) at The Sherbourne Conference Centre, July 17, 1998.* Economic Review. September 1998, Vol. XXV No. 2 pp. 29-30.

50. ————. *Address to The 2nd Annual Conference and Exhibition of the Human Resources Management Association.* Economic Review. December 1998, Vol. XXV No. 3 pp. 41-43.

51. ————-. *Address to The Rotary Club of Barbados "Making The Social Partnership Work".* Economic Review. December 1997, Vol. XXIV No.3 pp. 22 -24.

52. ————. *Address to The US Business Association of Barbados, November 12, 1997, "The Importance of Foreign Exchange For Small Open Economies".* Economic Review. December 1997, Vol. XXIV No. 3 pp. 25 - 26.

53. ————. *Address to The National Awards Ceremony of the Barbados Investment and Development Corporation - October 9, 1997, "Meeting The Challenges of a Rapidly Changing International Environment For Industrial Development".* Economic Review. December 1997, Vol. XXIV No. 3 pp. 27-29.

54. ————. *Address to the Barbados Association of Professional Engineers- July 16, 1980.* Quarterly Report (Now Entitled Economic Review). September 1980, Vol. VII No. 3 pp. 26-36.

55. ————-. *Energy Consumption and Economic Growth : A Study of the Barbados Experience, 1960-1977.* Quarterly Report (Now Entitled Economic Review). Sept 1978, Vol. V, No. 3, pp. 23-51.

56. ————-. *Agricultural Credit In Barbados.* Quarterly Report (Now Entitled Economic Review). June 1977, Vol. IV, No. 2, pp. 32-41.

57. ————-. *Volume Index of Agricultural Production – Correction.* Quarterly Report (Now Entitled Economic Review). March 1977, Vol. IV, No. 1, pp. 23-26.

58. ————. *Volume Index of Agricultural Production.* Quarterly Report (Now Entitled Economic Review). June 1976, Vol. III, No. 2, pp. 28-35.

59. —————. *The Manufacturing Sector in the Economy of Barbados* . Quarterly Report (Now Entitled Economic Review). March 1976, Vol. III No. 1 pp. 26 - 45.

60. CRAIGWELL, ROLAND C, GREENIDGE, KEVIN, GAINES, NIGEL and WARNER, ANN-MARIE. *Forecasting Aggregate Employment in Barbados.* Economic Review. September 2000, Vol. XXVII No. 2, pp. 18 - 27.

61. CRAIGWELL, ROLAND C and DOWNES, DARRIN. on *The Manufacturing Sector in Less Developed Countries.* Economic Review. September 2000, Vol. XXVII No. 2, pp. 38 - 42.

62. CRAIGWELL, ROLAND C and DOWNES, DARRIN. A Review of A.H.J. Helmsing *Competitive Response, Innovation and Creating an Innovative Milieu :The Case of the Manufacturing Industry In Bulawayo, Zimbabwe and J.Tybout Manufacturing Firms in Developing : How Well They Do And Why.* Economic Review. Vol. XXVII No. 2, September 2000 pp. 38 - 42.

63. CRAIGWELL, ROLAND C, DOWNES, ANDREW S, ODLE, CYRILENE, PETER, SHERYL A and WORRELL, DELISLE. *Business Forecasting in The Caribbean : An Empirical Assessment.* Economic Review. June 1998, Vol. XXV No. 1 pp. 15-48.

64. CRAIGWELL, ROLAND C. *Poverty and Inequality* A Review of Samuel A. Morely, *Poverty and Inequality in Latin America : The Impact of Adjustment and Poverty in the 1980's, John Hopkins, 1995.* Economic Review. December 1996, Vol. XXIII No. 3 pp. 45 - 46.

65. —————. *Conceptual and Empirical Issues in the Specification of a Poverty Line.* Economic Review. September 1991, Vol. XVIII, No. 2 pp. 11-13.

66. —————. *Summary of the United Nations Development Programme's Human Development Report 1990,* Oxford University Press, 1990. Economic Review. June 1991, Vol. XVIII, No. 1, pp. 16-17.

67. —————. Review of Hawthorn, G., (Ed) *Standard of Living,* Cambridge University Press, 1987. Economic Review. September 1990, Vol. XVII, No. 2, pp. 24.

68. —————. Review of Whiting, Edwin. *A Guide to Unemployment Reduction Measures,* Macmillan Press, 1987. Economic Review. September 1990, Vol. XVII, No. 2, pp. 24-26.

69. CROWE, CHRISTOPHER. *Male Under-Performance in the Barbados Educational System : An Empirical Note.* Economic Review. June 2002, Vol. XXIX No.1 pp. 19 - 29.

70. CUMBERBATCH, CHERYL-ANN. *Social Security In Latin America : The Way Forward :* A Review of Carmelo Mesa-Lago *Changing Social Costs of Economic Reform* (Lynne Reinner - Boulder & London, 1994). Economic Review. December 1994, Vol. XXI No. 3, pp. 10 - 12.

71. DALRYMPLE, KELVIN. *Managing Public Finances in a Small Developing Economy :* A Review of Marion Williams' *Managing Public*

Finances in a Small Developing Economy, Praeger 2001. Economic Review. June 2001, Vol. XXVIII No. 1 p. 21- 25.

72. ——————. *Public Finance in the Caribbean* a Review of Michael Howard's *Public Finance in Small Open Economies: The Caribbean Experience,* Praeger, 1992. Economic Review. September 1993, Vol. XX No. 2, pp. 10 - 11.

73. ————————. *Economic Crisis and Policy Choice:* A Review Of Nelson, Joan M. (Ed) *Economics Crisis And Policy Choice - The Politics of Adjustment in The Third World,* Princeton University Press, 1990. Economic Review. September 1991, Vol. XVII, No. 2, pp. 14-16.

74. DEANE, JUANITA. *Foreign Trade and Development* A Review of Jean-Marc Fontaine (Ed) *Foreign Trade Reforms and Development Strategy* Routledge, London 1992. Economic Review. June 1993, Vol. XIX No. 2 (Sic) [, Should Read Be June 1993, Vol. XX No. 1,] pp 15 - 17.

75. DOWNES, ANDREW and ALLEYNE, VALDA. *Evaluation of Gainsharing Schemes in Barbados.* Economic Review. December 1998, Vol. XXV No. 3 pp. 18-40.

76. DOWNES, DARRIN. *Incentives and Investment* A Review of the United Nations Publication, *Incentives and Foreign Direct Investment,* UNCTAD, 1999. Economic Review. December 1996, Vol. XXIII No. 3, pp 47 - 50.

77. DOYLE, MICHELLE. *Growth Promoting Policies* a Review of Andre' Lana Resende*, Polices for Growth : The Latin American Experience,* International Monetary Fund – 1995. Economic Review. September 1996, Vol. XXIII No. 2 pp. 23 - 25.

78. FRANCIS, GLORIA. *Price Trends In Barbados, 1968-73.* Quarterly Report (Now Entitled Economic Review). December 1975, Vol. II, No. 4, pp. 25-44.

79. GIBBS, ARLENE. A Review of *Improving Tax Administration in Developing Countries* By Richard M. Bird And Milka Casengra De Jantscher. Economic Review. September 1994, Vol. XXI No. 2 pp. 17-18.

80. GOODING, GRAHAM. *Feeding Barbados.* Quarterly Report (Now Entitled Economic Review). June 1979, Vol. VI, No. 2 pp. 25-28.

81. GREENIDGE, KEVIN, MOORE, WINSTON and SKEETE, RYAN. *Estimates of the Long Term Equilibrium Exchange Rate In Selected Caribbean Countries.* Economic Review. December 2004, Vol. XXXI, No. 3 pp. 28-38.

82. GREENIDGE, KEVIN C. *Forecasting Domestic Credit : A Note.* Economic Review. June 1996, Vol. XXII, No. 1 pp 33 - 45.

83. ——————. *Island Tourism A Review of Island Tourism : Management Principles and Practice.* Edited By Michael Corbin And Tom Baum, John Wiley & Sons, *1995.* Economic Review. June 1996, Vol. XXIII No. 1, pp. 57-59.

84. GRIFFITH, E. H. C. *Financial Growth and the Small Business : Speech Delivered to the Graduating Small Business Class of BIMAP on*

Thursday August 31, 1981. Quarterly Report (Now Entitled Economic Review). December 1981, Vol. VIII, No. 4, pp. 41-52.

85. ————. *Remarks Delivered at the Bridgetown Kiwanis Club's Annual Installation on Saturday October 6, 1979* at Paradise Beach Hotel. Quarterly Report (Now Entitled Economic Review). March 1980, Vol. VII, No. 1 pp. 50-66.

86. GRIFFITH, JENNIFER S. *Report on the Human Development Index.* Economic Review. Vol. XXVI No. 3 December 1999 pp. 44-48.

87. ————. *Investment In The Tradeable Sectors of the Caribbean : Derivation And Trends.* Economic Review. September 1998, Vol. XXV No. 2 pp. 16-28.

88. ————. *Road to Economic Reform* A Review of *Rocky Road to Reform ; Adjustment, Income Distribution and Growth in The Developing World* Edited By Lance Taylor, The MIT Press, Cambridge, Massachusetts. Economic Review. December 1997 Vol. XXIV No. 3 Pp.34-37.

89. HAGELBERG, GERRY B. *Some Current Questions on Sugar Policy and Implementation in Barbados.* Economic Review. Vol. XII No. 1 June 1985 Pp 23 - 30.

90. HINDS, DENISE. *Trade Policy Reform* A Review of Vinod Thomas, John Nash and Associates, *Best Practices In Trade Policy Reform, 1991.* Oxford University Press. Economic Review. December 1993 Vol. XX No. 3 pp 10 - 12.

91. HOLDER, CARLOS and GREENIDGE, KEVIN. *Savings, Investment, Growth and the Impact of International Financial Liberalisation in the Caribbean.* Economic Review. Vol. XXXI No. 2 September 2004 pp. 25 - 34.

92. HOLDER, CARLOS. *An Analysis of the Housing Market in Barbados.* Economic Review. June 1985 Vol. XII No. 1 pp. 13 - 18.

93. HOWARD, MICHAEL. *Tax Reform in Jamaica :* A Review of Bahl, Roy. (Ed) *Jamaican Tax Reform, Cambridge Massachusetts ; Lincoln Institute of Land Policy, 1991.* Economic Review. September 1992, Vol. XIX, No. 2, pp. 10-11.

94. ————. *Interest Rate Behaviour in an Open Developing Economy : The Barbados Experience, 1965-1976.* Quarterly Report (Now Entitled Economic Review). December 1976, Vol. III, No. 4, pp. 24-50.

95. HOWARD, MICHAEL and WAPENSKY, BASIL A. *Behaviour of Liquid Assets.* Quarterly Report (Now Entitled Economic Review). December 1974, Vol. 1, No. 3, pp. 31-38.

96. HUDSON, COLIN. *Diversification Story.* Economic Review. June 1988, Vol. XV, No. 1, Pp. 13-22.

97. JOHNSON, CLYDE And SPRINGER, DESIREE. *Commercial Bank Supervision in Barbados.* Quarterly Report (Now Entitled Economic Review). December 1978, Vol. V, No. 4, pp. 68-88.

98. JORDAN, ALWYN. *Impact of Changing Demographics on the Economy :* A Review of Jose Alvarado and John Creedy *Population, Ageing, Migration and Social Expenditure.* Edward Elgar Publishing Ltd., 1998. Economic

Review. December 1998, Vol. XXV No. 3 pp 44 - 49.

99. KING, DAVID. *Foreign Sales Corporation and Its Relevance to Barbados.* Economic Review. June 1985, Vol. XII No. 1 pp. 20-22.

100. LEON, HYGINUS. *Economic Theory, Empirical Estimation and Inference : Some Caveats.* Economic Review. June 1989, Vol. XVI, No. 1, pp. 20-24.

101. LEWIS, DENNY, GRIFFITH, JENNIFER S, MOORE, WINSTON and RAWLINS, GREGG C. E. *Impact of Trade Liberalisation on Specific Sectors of the Barbados Economy and Consumers.* Economic Review. June 2000, Vol. XXVII, No. 1, pp. 21-30.

102. LEWIS, DENNY. *Note on the Measurement of Construction Activity in Barbados.* Economic Review. December 1999, Vol. XXVI No. 3, pp. 21-28.

103. —————. *Quarterly Real GDP Series for Barbados, 1974-1995 : A Sectoral Approach.* Economic Review. June 1997, Vol. XXIV, No. 1, pp. 17-56.

104. —————. *Sustainable Tourism Development* A Review of Hiroshi Kakazu *Sustainable Development of Small Island Economies.* Western Press, 1994. Economic Review. September 1996, Vol. XXIII No. 2 pp. 19-22.

105. —————. Sustainable Tourism *Development* A Review of Harry Coccossis and Peter Nijkamp, Editors, *Sustainable Tourism Development.* Avery , 1995. Economic Review. December 1996, Vol. XXIII No. 3 pp. 56-60.

106. —————. A Review of Michael M. Papageopiou D. and Choski, M. A. (Eds) *Liberalising Foreign Trade: Lessons of Experience in the Developing World.* Economic Review. December 1991, Vol. XVIII No. 3 pp. 28 - 33.

107. LYNCH, DOUGLAS. *Speech Delivered at a Farewell Dinner Given by Central Bank of Barbados in Honour of Messrs. Douglas Lynch and Robert Morris, July 2, 1984.* Economic Review. July 1984, Vol. XI, No. 2 pp. 28-29.

108. MARSHALL, IONE. *Provisional Estimates of Gross Domestic Product, Barbados, 1974-1976.* Quarterly Report (Now Entitled Economic Review). June 1977, Vol. IV, No. 2 pp. 42-49.

109. MASCOLL, CLYDE A. *Trends in Effective Tax Rates of Representative Individuals in Barbados During the 1980s.* Economic Review. December 1991, Vol. XVIII, No. 3 pp. 16-22.

110. —————. *Wages, Productivity and Employment in Barbados 1949-82.* Economic Review. December 1985, Vol. XII, No. 3 pp. 10-23.

111. MAXWELL, CHANELLE. *Emigration in Developing Countries :* A Review of *Emigration Dynamics in Developing Countries.* Edited By Reginald Appleyard, Ashgate Publishing Ltd., 1999. Economic Review. September 2001, Vol. XXVIII No. 2 p 16 - 19.

112. MAYNARD, TRACY. A Review of *Sunanda Sen's Global Finance at Risk: On Real Stagnation and Instability.* Economic Review. December 2004, Vol. XXXI, No. 3 pp. 39-43.

113. MCINTYRE, ARNO.LD M. *Trade Strategy, Structural Adjustment and the Balance of Payments: A Survey.* Economic Review. December 1990, Vol. XVII No. 3 pp. 11 - 17.

114. MOORE, WINSTON, CRAIGWELL, ROLAND and COPPIN, KIM. *ATM Usage and Productivity in the Barbadian Banking Industr.* Economic Review (Also In Working Papers 2003). June 2003, Vol. XXX No.1 Pp 17 - 21 (WP pp. 117 -122).

115. MOORE, WINSTON and WHITEHALL, PETER. *Financing The Small and Micro Business Sector in Barbados.* Economic Review. December 2000, Vol. XVII No. 3pp. 21-33.

116. MOORE, WINSTON. *Implementing Technical and Vocational Programmes in Developing Countries :* A Review of Marcus Powell. Economic Review. December 1999, Vol. XXVI No. 3 pp. 49-53.

117. PARRIS, YVONNE. *State Of Electronic Banking In Barbados.* Economic Review. December 2002, Vol. XXVII No. 3 pp. 17-23.

118. PETER, SHERYL A. *Human Development : As It Relates to the Caribbean.* Economic Review. December 1996, Vol. XXIII No. 3 pp 22-44.

119. PHILLIPS, EDSIL. *Financial Aspects of the Barbados Sugar Industry.* Quarterly Report (Now Entitled Economic Review). December 1977, Vol. IV, No. 4, pp. 27-57.

120. RODRIGUEZ, FLAVIA. *Comments on 'Taxation and Investment Incentives'.* Economic Review. December 1989, Vol. XVI, No. 3 pp. 19-21.

121. SAUNDERS, MURIEL and WORRELL, DELISLE. *Government Expenditure in Barbados, 1946-1979.* Quarterly Report (Now Entitled Economic Review). June 1981, Vol. VIII, No. 2, pp. 30-79.

122. SAUNDERS, MURIEL. *Chronicle of Central Bank [of Barbados] Policies 1973-1979.* Quarterly Report (Now Entitled Economic Review). March 1980, Vol. 8, No. 1, pp. 27-49.

123. SAUNDERS, MURIEL and WORRELL, DELISLE. *Commercial Bank Credit In Barbados 1946-77.* Quarterly Report (Now Entitled Economic Review). December 1978, Vol. V, No. 4, pp. 27-68.

124. SKEETE, RYAN. *Macroeconomic Management Programmes and Policies.* Editors Mohsin S. Khan, Salch M. Nsouli and Chorng-Huey Wong : A Book Review. Economic Review. September 2002, Vol. XXIX No.2 pp 19 - 21.

125. SPRINGER, BASIL G. *Important Issues of Agricultural Diversification and its Implementation in Barbados.* Economic Review. December 1985, Vol. XII No. 3 pp. 24-30.

126. STIGLITZ, JOSEPH. *Building Robust Financial System.* Economic Review. June 1998, Vol. XXV, No. 1 pp 49 - 56.

127. STRAUGHN, RYAN. A Review of *Africa: Adjusting to the Challenges of Globalisation. International Monetary Fund, Ministry of Finance, Japan.* Economic Review. December 2000, Vol. XXVII No. 3 pp. 34-39.

128. STUMP, SUZANNE and CRAIGWELL, ROLAND C. *Overview of Current Labour Market Programmes In Barbados.* Economic Review. June 1999, Vol. XXVI, No. 1. pp. 17 - 34.

129. WALKER, AUDRA. *Structural Adjustment In South East Asia :* A Review of Aziz, Ungku, (Ed), *Strategies For Structural Adjustment: The Experience of South East Asia.* Washington DC, IMF Publication Services, 1990 . Economic Review. December 1992, Vol. XIX, No. 3 pp. 10-12.

130. WARD, WARRICK. *E-Commerce - Possibilities and Challenges.* Economic Review. September 2000, Vol. XXVII, No. 2, pp.28-37.

131. —————. *Water - Is It Really All Around Us? :* A Review Of James Winpenny. *Managing Water As An Economic Resource.* Routledge, 1994. Economic Review. December 1997, Vol. XXIV No. 3 pp. 30 - 33.

132. —————. *Role Of The Small Firm* A Review of A. Acs., B. Carlsson And R. Thurik*, Small Business In The Modern Economy: De Vries Lectures In Economics.* Basil Blackwell, 1996. Economic Review. December 1996, Vol. XXIII No. 3 pp 51 - 55.

133. WARNER, ANN-MARIE. *Caribbean Banking System :* A Review Of Marion V. Williams*, Liberalising A Regulated Banking System: The Caribbean Case.* Economic Review. June 1998, Vol. XXV, No. 1 pp. 66-69.

134. WHITEHALL, PETER H. *Protectionism In The Manufacturing Sector of Barbados 1960-80.* Economic Review. September 1984, Vol. XI, No. 2 pp. 9-27.

135. WILLIAMS, MARION. *Pension Reform in The English-Speaking Caribbean.* Economic Review. September 2003, Vol. XXX No. 2 pp 35 - 39.

136. —————-. *Financial Services and The CSME : Opportunities, Threats and Challenges.* Economic Review. September 2003, Vol. XXX, No. 2 pp. 29-32.

137. —————. *Address on Challenges Facing The Caribbean Relating to Global Financial Developments.* Economic Review. June 2001, Vol. XXVIII No. 1 pp. 17-20.

138. —————-. *Address at the E-Commerce Seminar [Held At] Sherbourne Conference Centre, November 23, 2000.* Economic Review. December 2000, Vol. XVII No. 3 pp. 40-46.

139. —————. *Financial Regulation In The Barbados Economy.* Economic Review. December 1988, Vol. XV No. 3 11 - 16.

140. —————. *Financial Aspects Of Development Strategies In The Caribbean.* Economic Review. June 1987, Vol. XIV, No. 1 pp. 14-18.

141. WORRELL, DELISLE. *Avoiding Financial Instability :* A Review of Andrew Crockett *The Theory and Practice of Financial Instability: Essays in International Finance.* Economic Review. June 1998, Vol. XXV, No. 1 p 70.

142. —————. *Economics for Developing Countries* A Review of Pierre-Richard Agenor and Peter Monties*, Development Macro-Economics,* Princetown University Press, 1996. Economic Review. June 1997, Vol. XXIV No. 1 pp. 68 - 72.

143. —————, BOAMAH, DANIEL O and CAMPBELL, TREVOR. *Price Competitiveness of Barbados Exports.* Economic Review. June 1996, Vol. XXIII No. 1 pp. 12 - 32.

144. ——————. *Monetary Policy In Small Open Economies.* Economic Review. Sept. 1996, Vol. XXIII No. 2 Pp 13 - 18.

145. ——————-. *En Route to Modern Growth : Latin America in the 1990* A Review of Gustav Rannis Ed. *Essays in Honour of Carlos Diaz-Alejandro.* Inter-American Development Bank, 1994. Economic Review. June 1996, Vol. XXIII No. 1 pp. 53 - 54.

146. ——————. *Exports and Growth* A Review of Arnold Mcintyre's *Trade and Economic Development in Small Open Economies: The Case of the Caribbean Countries,* Praeger Publishers, 1995. Economic Review. June 1996, Vol. XIII No. 1 pp. 55-56.

147. ——————. *Heterodox Economies* A Review of Warren Samuels *New Horizons In Economic Thought: Appraisals of Lending Economists,* Edward Elgar, 1992. Economic Review. June 1995, Vol. XXII No. 1 pp. 26 - 29.

148. —————. *Caribbean In The Era Of Free Trade.* Economic Review. September 1995, Vol. XXII No. 2 pp. 12 - 13.

149. ——————. *Human Development Report 1995 :* A Review of *The Human Development Report, 1995.*New York , Oxford University Press, 1995. Economic Review. September 1995, Vol. XXII No. 2 pp. 14.

150. —————. *Down-To-Earth Look at Competitiveness* A Review of Donald Dollar and Edward N. Wilff, *Competitiveness, Convergence and International Specialisation,* MIT Press, 1993. Economic Review. December 1995, Vol. XXII No. 3 pp. 13 - 14.

151. ——————. *Does Regional Integration Promote Global Trade :* A Review of *Regional Integration and the Global Trading System.* Economic Review. September 1994, Vol. XXI No. 2 pp. 19-20.

152. ——————. *Monetary Integration in Europe and the Caribbean* A Review of Paul Degrauwe. *The Economics of Monetary Integration.* Oxford University Press, 1992 Economic Review. June 1994, Vol. XXI No. 1 pp. 10 - 11.

153. ——————. *Establishing a Regional Central Bank* A Review of Matthew Canzoneri, Vittori Grilli and Paul Masson. *Establishing a Central Bank: Issues In Europe and Lessons from the US.* Cambridge University Press, 1992. Economic Review. June 1993, Vol. XIX No. 2 (Sic) [Should Read] June 1993, Vol. XX No. 1,] pp. 12 - 14.

154. ——————. *Privatisation in the Developing World :* A Review of Adam, Christopher Et Al (Eds)*, Adjusting Privatisation: Case Studies from Developing Countries,* Kingston, Jamaica, Ian Randle Publisher, 1992. Economic Review. December 1992, Vol. XIX, No. 3 pp. 13-14.

155. —————. *Government Financial Management:* A Review of Premchand A., (Ed.) *Government Financial Management : Issues and Country Studies.* IMF, 1990. Economic Review. June 1991, Vol. XVIII, No. 1 pp. 13-15.

156. ————. *Finance and Investment in Barbados ".* Economic Review. September 1990, Vol. XVIII, No. 2, pp. 13-23.

157. —————. *More on Exchange Rate Policies for Small Countries:* A Review of Argy, Victor and Degrauwe, Paul(Eds). *Choosing an Exchange Rate Regime : The Challenge for Smaller Industrial Countries.* IMF, 1990. Economic Review. December 1991, Vol. XVIII, No. 3, Pp. 32-33.

158. ————. *Unauthordox Perspective on Economic Stabilization :* A Review of Taylor, L. *Varieties of Stabilization Experience Toward Sensible Macroeconomics in the Third World.* Economic Review. June 1990, Vol. XVII, No. 1 pp. 10-11.

159. ————. *Taxation and Investment Incentives.* Economic Review. December 1989, Vol. XVI No. 3 pp. 13-19.

160. —————. *Using Information for Economics Analysis : Address to the Conference on Economics and Information, Sponsored by the Library Association of Barbados and the Barbados Economics Society, April 22, 1985.* Economic Review. Vol. XII No. 1 June 1985 pp. 31 - 33.

161. ————- and PRESCOD, RONALD. *Development of the Financial Sector in Barbados 1946-1980.* Economic Review. September 1983, Vol. X No. pp. 2 9 - 26.

162. —————. *Is There a Bright Future for Small Island Economies?:* A Review of Bimal Jalan (Ed), *Problems and Policies in Small Economies,* St Martin Press, 1982. Economic Review. June 1983, Vol. X No. 1 pp. 12 - 14.

163. —————. *Inflation, Growth and the Balance of Payments* A Review of Cline, William R. and Weintruab, Sydney (Editors)*: Economic Stabilization in Developing Countries,* Brookings Institute 1981. Economic Review. December 1982, Vol. IX No. 3 pp. 15 - 16.

164. —————. *The Determinants of Changes in Commercial Bank Deposits.* Quarterly Report (Now Entitled Economic Review). September 1974, Vol. I No. 2 pp. 38 - 65.

165. —————. *Quality and Professionalism in the Development of the Tourism Sector.* Economic Review. June 1984, Vol. XI No. 1 pp. 24-26.

166. ZEPHIRIN, MARY G. A Review of WILLIAMSON, JOHN (Ed), *IMF Conditionality, Institute for International Economics, Washington, D C, 1983.* Economic Review. December 1983, Vol. X No. 3 pp. 17 - 18.

167. ————. *External Debt of Barbados.* Quarterly Report (Now Entitled Economic Review). December 1980, Vol. VII, No. 4, pp. 24-67.

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Sir Courtney Blackman	–	10131 Crestberry Place, Bethesda M.D. 20817, U.S.A.
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