

# **INVESTIGATING THE PERFORMANCE OF CARIBBEAN COMMERCIAL BANKS IN THEIR MOBILIZATION AND USE OF SAVINGS**

David Tennant

Department of Economics, University of the West Indies, Mona

Abstract: With declining foreign aid flows to the region, Caribbean countries now need to intensify their focus on national and regional means of financing development. Domestic financial institutions are important in this respect, as by intermediating between savers and borrowers, they can mobilize domestic funds and allocate these funds to growth-enhancing investments. This paper examines the mobilization and use of savings by commercial banks in five Caribbean countries, and highlights areas in which commercial banks in some countries have exhibited higher standards of performance relative to the others. This underscores areas in which financial institution managers, policymakers and regulators from different countries within the region can investigate further so as to learn from each other and develop best practices to aid regional development through well-functioning financial sectors.

## **1. Introduction**

With declining foreign aid flows to the region, Caribbean countries now need to intensify their focus on national and regional means of financing development. The Monterrey Consensus (2002) notes that many developing countries increasingly depend on local funds to finance their development needs. Domestic financial institutions are important in this respect, as by intermediating between savers and borrowers, they can mobilize domestic funds and allocate these funds to growth-enhancing investments (Levine 1997). The recent global thrust towards regional integration, and the influx of Caribbean financial institutions with cross-border operations,<sup>1</sup> also highlight the importance of strengthening economic relationships and increasing institutional cooperation to the financing of regional development.

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<sup>1</sup> See Caribbean Trade and Investment Report (2001)

Despite rapid financial sector development and sophistication across many countries in the region,<sup>2</sup> commercial banks remain the dominant financial institutions with the largest market share and the largest volume of savings mobilized (Danns 1996). Much of the responsibility for financing regional development therefore still lies with these institutions. This paper thus examines the mobilization and use of savings by commercial banks in five Caribbean countries – Barbados, Belize, Guyana, Jamaica and Trinidad and Tobago. Using data from each country’s central bank, the performance of commercial banks is examined and compared across countries in four basic tenets of financial intermediation. Through this comparison, the paper highlights areas in which commercial banks in some countries have exhibited higher standards of performance relative to the others, and suggests areas in which financial institution managers, policymakers and regulators from different countries within the region can investigate further so as to learn from each other and develop best practices in effective and efficient financial intermediation.

The paper is divided into five subsequent sections. Section 2 compares the countries being studied. Section 3 briefly surveys the literature on the basic tenets of financial sector intermediation. Section 4 outlines the data and methodology used. Section 5 highlights the results and analysis of the data, and Section 6 presents the conclusions derived.

## **2. A Cursory Comparison of the Countries Studied**

The countries studied share a number of common opportunities and threats by virtue of them all being small developing states in the Caribbean.<sup>3</sup> This section first briefly highlights the similar internal economic conditions, external economic influences, and financial structure that these countries share; followed by a description of some of the critical differences between them. A general introduction to each country is provided in Appendix 1.

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<sup>2</sup> See for example Kirkpatrick and Tennant (2002)

<sup>3</sup> See Streeten (1993), Briguglio (1995) and Ocampo (2002) for an outline of the unique problems facing SIDS.

### Internal Economic Conditions and External Economic Influences

Barbados, Belize, Guyana, Jamaica and Trinidad and Tobago (along with most other Caribbean states) share a common history of 'being settlements of slavery and indentureship and whose *raison d'être* was as suppliers of agricultural commodities and natural resources for the European powers.'<sup>4</sup> This historical background has shaped the basic economic structure of these countries, in that they have open economies and produce a relatively narrow range of products.<sup>5</sup> Girvan (1997:11) notes that this has led to economic vulnerability, due to the extent of trade dependency and the vulnerable nature of the countries' export economies. He asserts that, 'most Caribbean economies depend on the export of one or a small number of resource products, and/or tourism', and further notes that, 'merchandise exports continue to consist largely of primary commodities and other resource products.' This poses serious problems for the countries' future growth, as, 'primary commodities are the most stagnant sector in the growth of world trade... (and) are subject to declining terms of trade with respect to manufactured goods.'

Similarly, tourism, another key foreign exchange earner for the countries, faces a growing number of risk factors which further exposes the countries to economic shocks. Girvan (1997:12) notes that these factors include 'environmental degradation, crime and tourist harassment, adverse media publicity... over-concentration in the US and Western European markets, and intensified competition in the industry worldwide as the relative cost of air travel continues to fall.' The threat of terrorism has also been a recent addition to this list.

Another dimension of the economic vulnerability faced by these countries is the relatively high degree of financial dependence on multilateral and bilateral flows, and on commercial borrowing. This flow of funds has declined in recent times due to the end of the Cold War, and fiscal stringency in the major OECD countries. This reduction in the flow of foreign funds to the countries studied has highlighted the need for greater

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<sup>4</sup> Ramkisson (2002:14)

<sup>5</sup> Hilaire (2001:1)

efficiency in the mobilization of domestic resources.<sup>6</sup> This need is heightened by the vulnerability of all these economies to crippling external shocks in the form of natural disasters, particularly hurricanes.<sup>7</sup>

In light of these challenges it is not surprising that all the countries studied faced severe economic problems in the 1980s and early 1990s, and were forced to seek assistance from the IMF and/or the World Bank.<sup>8</sup> Danns (1996:4) notes that, 'stabilization and structural adjustment programmes are essentially geared... towards the institutionalization of a free market regime and diminishing state economic regulation, ownership and control.' All the five countries therefore adopted similar market-oriented strategies, including, *inter alia*, trade and financial liberalization, privatization, tax reforms, and reductions in public spending.<sup>9</sup> In addition to these reforms, regional integration was seen as another possible solution to the economic problems being faced. As such, all the countries being studied increased their involvement in the regional customs union – the Caribbean Community and Common Market (CARICOM). The trade policy objectives of CARICOM have committed the member countries to establish a common external tariff, foster trade liberalization among themselves, and facilitate the free movement of skilled, professional and contract workers.<sup>10</sup> Hilaire (2001:7) therefore concludes that although each of the countries 'had its own, independent stabilization programme, it was influenced by the experiences of the other... countries, as well as by policy measures attached to multilateral loans and by trade commitments under CARICOM.'

### Financial Structure and Influences

The financial sectors in Barbados, Belize, Guyana, Jamaica and Trinidad and Tobago were also affected by common external influences and therefore had similar structures. Danns (1996:1) notes that the history of the Caribbean region has affected the financial systems in these countries, as in the context of the plantation economies of the Caribbean,

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<sup>6</sup> Girvan (1997:14)

<sup>7</sup> Ramkissoon (2002:14)

<sup>8</sup> Hilaire (2001:1) and <http://countrystudies.us/belize/42.htm>

<sup>9</sup> DaCosta and Cueva (2000:3), Hilaire (2001:1) and <http://countrystudies.us/belize/42.htm>

<sup>10</sup> CARICOM (2000:15-16)

‘early financial institutions functioned to enhance internal and external payment systems, provide trade financing, mobilize savings, facilitate capital transfer and investment abroad as well as lubricate the trade links between the regional and international economies.’ She therefore concludes that, ‘for much of its history the region’s financial sector has been... reactive and accommodating as opposed to proactive to changes in the economy and the wider society.’ In an attempt to correct this, the countries studied sought to nationalize all or parts of their financial sectors in the late 1960s to early 1970s. However, Danns (1996:3) notes that, ‘the heavy hand of state intervention, regulation and ownership functioned to stymie the creative expansion of the financial sector of regional economies.’ Therefore, as stabilization and structural adjustment plans were implemented in the 1980s the financial sectors of the region were liberalized.

Following this period of liberalization, DaCosta and Cueva (2000:5) have noted that the financial sectors in the region have undergone a number of similar changes in the 1990s. These include: the further concentration of banks and other financial institutions through acquisitions and mergers; the increase in cross border activities of financial institutions; the convergence of banking and insurance activities; the growing importance of nonbank financial institutions; and the incorporation into financial groups of companies carrying out non-financial activities. Despite these changes though, commercial banks are still the dominant institutions throughout all the countries studied, with finance companies, mortgage banks, building societies, development banks, national pension schemes, insurance companies and credit unions all having small shares of total financial assets. The regulation and supervision of the domestic financial institutions is carried out primarily by the central banks in each country, and the regulatory and supervisory standards tend to be similar due to the existence of the Caribbean Group of Bank Supervisors, which seeks to introduce minimum regulatory and supervisory standards for banks and other deposit-taking financial institutions (Worrell et al 2001:3&10-11).

### Critical Differences

Despite the considerable similarities between Barbados, Belize, Guyana, Jamaica and Trinidad and Tobago, important differences do exist. Hilaire (2001:1) notes that the

major differences include ‘the types of products they specialize in, the extent of state involvement in productive activity, and the size of their outstanding debts – which determined their policy options.’ The availability of petroleum obviously sets Trinidad and Tobago apart from the other countries, as does Guyana’s recent history of heavy state involvement and overwhelming debt burden. Girvan (1997:5-7) also highlights the cultural diversity of the people across the region, the difference in population size between countries such as Barbados and Jamaica, and the difference between the per capita income of the countries being studied.

Within the respective financial sectors a major difference is the occurrence of recent financial crises. Whilst the Jamaican financial sector experienced a major financial crisis in the mid to late 1990s, the financial systems in Barbados and Guyana remained fairly stable over the review period, with problems being limited to the state-owned banks in each country.<sup>11</sup> There were also no major failures of financial institutions in Belize,<sup>12</sup> and in Trinidad and Tobago, although a number of financial institutions received liquidity support from the government in the 1980s, there was no systemic instability, as these institutions were restructured, and strengthened prudential standards were adopted.<sup>13</sup>

### **3. The Basic Tenets of Financial Sector Intermediation**

Despite the abovementioned recent liberalization, expansion and sophistication of financial markets in the Caribbean, financial institutions still best serve the economies of the region by fulfilling their fundamental role – the efficient mobilization and use of society’s savings. As Levine (1997) notes, financial markets exist to mitigate the effects of information and transaction costs, and as such, ‘...facilitate the allocation of resources, across space and time, in an uncertain environment.’ This basic intermediation between savers and borrowers involves a number of interrelated activities.

The mobilization of savings is the first and possibly most critical of these activities. As Sir Arthur Lewis (1954) noted, ‘increased savings is the central problem (of economic

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<sup>11</sup> Hilaire (2001: 6)

<sup>12</sup> Worrell et al (2001:4&18)

<sup>13</sup> Hilaire (2001:5)

development) because the central fact about economic development is rapid capital accumulation.’ Goldsmith (1969:393) explains by noting that the creation of liquidity by financial institutions is critical to the process of economic development, due to the indivisibility of many high return investments. Banks create such liquidity by attracting savers through the creation of small denomination instruments, which provide households with the opportunity ‘to hold diversified portfolios, invest in efficient scale firms and increase asset liquidity’ (Levine 1997). By so doing, banks ‘...permit risk averse savers to hold bank deposits rather than liquid (but unproductive) assets’ (Bencivenga and Smith 1991). The banks are able to effectively engage in such intermediation ‘by exploiting the fact that they have large numbers of depositors, and hence predictable withdrawal demand.’<sup>14</sup> This basic role of financial intermediaries in fostering increased investment in productive but illiquid investments through term or maturity intermediation is well established in the literature.<sup>15</sup>

Effective intermediation is, however, not only dependent on the increased mobilization of savings, but also on the efficiency with which those savings are used. Such efficiency has certain crucial elements which have been discussed at length in the literature. The first such element relates to the banks’ cost efficiency in transferring the funds mobilized to the real sectors of the economy. Valverde et al (2004) illustrate by developing a model in which they assume that aggregate output is a function of the productivity of capital and the capital stock, and that the capital stock is a function of, *inter alia*, investment flows. The financial market enters the model as these investment flows are financed by savings, which are channelled through banks. They, however, note that there are intermediation costs associated with this process, and so only a fraction of savings can be finally channelled into investments. These intermediation costs are reflective of the inefficiency of the banks, and as such, their model assumes that an increase in the inefficiency of financial institutions increases the fraction of savings that is ‘lost’ in the process of

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<sup>14</sup> Khan (2000) notes that Bagehot recognized this important role of financial intermediaries from as early as 1873, when he argued that, ‘the distinguishing characteristic of English financial markets was the relative ease with which they were able to mobilize savings to finance a variety of long-term, illiquid investment opportunities.’

<sup>15</sup> See for example Bencivenga and Smith 1991.

intermediation, and so reduces lending, investment and growth.<sup>16</sup> By focusing on the effect of the relatively high efficiency of one type of financial institution on the rest of the financial sector, Berger et al (2003) similarly note that greater efficiency by some banks can facilitate greater overall flows of bank credit. This occurs because more efficient banks may not only ‘provide greater credit flows from their own portfolios, but might also compete more effectively with the rest of the banking industry and reduce the market power of other banks, encouraging them to reduce prices and expand lending’ (Berger et al 2003:7).<sup>17</sup>

The importance of the impact of efficient intermediation on financial sector prices is highlighted by Quaden (2004:2), who argues that a more efficient financial system benefits the real economy by allowing ‘higher expected returns for savers with a financial surplus, and lower borrowing costs for investing in new projects that need external finance.’ Therefore, separate and apart from its impact on the volume of funds transferred to the real sector of the economy, bank intermediation efficiency can also impact on the cost of those funds. Ndung’u and Ngugi (2000:iii) explain by noting that a key indicator of a financial institution’s efficiency is the spread between lending and deposit rates.<sup>18</sup> They assert that if this spread is large, it will work as an impediment to effective financial intermediation. ‘This is because it discourages potential savers due to low returns on deposits and thus limits financing for potential borrowers.’ They therefore conclude that, ‘this has the economy-wide effect of reducing feasible investment opportunities and thus limiting future growth potential.’<sup>19</sup> Chirwa and Mlachila

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<sup>16</sup> This model was tested using data from 17 administrative regions in Spain over the period 1986-2001. One of the conclusions made is that there is a significant and negative effect of the variable that proxies intermediation costs on gross fixed capital formations, ‘showing the negative effect of augmenting transformation costs on investment’ (Valverde et al 2004:18).

<sup>17</sup> Berger et al (2003) tested their hypotheses using data from 1993-2000 on 49 nations. They concluded that ‘data from both developed and developing nations suggest that larger market shares and higher efficiency rankings for small, private, domestically owned banks are associated with better economic performance, and that the marginal benefits of larger shares are greater when the banks are more efficient.

<sup>18</sup> Ngugi (2001:1) illustrates by noting that under perfect competition the interest rate spread is narrower, composed only of the transaction cost, while in an imperfect market, the spread is wider, reflecting inefficiency in market operation.

<sup>19</sup> Quaden (2004:2) further notes that the increased efficiency of financial institutions should ‘facilitate the re-allocation of capital towards new developing sectors and firms that have a high growth potential.’ This is supported by Lucchetti et al (2000:7) who argue that efficient financial institutions tend to use



(2004:98) emphasize this point by noting that in developing countries such interest rate spreads have been persistently high.<sup>20</sup> In the Caribbean, Barnes and Stewart (1996: 18) note that the resultant high cost of loanable funds ‘presented an obstacle to productive investments and is partly responsible for the poor performance of the productive sectors of the Jamaican economy.’

This is an indictment on the performance of banking intermediation in Jamaica, as the literature suggests efficiency in intermediation between savers and borrowers relates not only to cost efficiency, but also to allocative efficiency. With respect to the latter, Schumpeter (1911) argues that ‘banks play a pivotal role in economic development because they choose which firms get to use society’s savings.’<sup>21</sup> In the Schumpeterian view, banks impact on development by fostering productivity growth and technological change, through the efficient allocation of saving. Numerous studies have developed models showing that financial institutions’ contribution to economic development ‘stem from increased efficiency in the allocation of investment rather than from a larger volume of investment.’<sup>22</sup> Greenwood and Jovanovic (1990) explain by noting that, ‘through a research-type process, intermediaries collect and analyse information that allows investors’ resources to flow to their most profitable use.’ As such, intermediaries can invest more productively than individuals because of their better ability to identify investment opportunities.

#### **4. Methodology and Data**

This paper compares the performance of commercial banks in five Caribbean countries in their basic role as intermediaries. This is not an entirely new endeavour, as similar studies were conducted by Barnes and Stewart (1996) and Odle (1998). These studies,

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technologically-driven cost reduction methods, the use of which is a ‘necessary condition for the efficient allocation of resources.’

<sup>20</sup> Chirwa and Mlachila (2004:98), however, also note that some authors, ‘while not in favour of high spreads, note the positive role of the high interest spreads in developing countries.’ Such authors argue that high spreads ‘can be used by banks to strengthen and solidify the banking system by protecting against an inherently high risk, usually related to high monitoring costs in most developing countries.’

<sup>21</sup> As quoted by Beck et al (2000:1)

<sup>22</sup> Williamson and Mahar (1998:49) cite studies such as those by Greenwood and Jovanovic (1989), Bencivenga and Smith (1991), Levine (1992), and Saint-Paul (1992).

however, adopted a broader approach and sought to explain the linkages between the real and financial sectors of the economy by looking at the effects of financial sector structure and liberalization on the productive sectors of the economies in Jamaica and several other Caribbean countries. With this objective, they focused on a wide variety of variables, but did not specifically address the issue of effectiveness and efficiency in the financial sector's fundamental role of intermediation.<sup>23</sup> Using more recent data, Tennant (2006) sought to build on these papers by narrowing his focus to a comparison of the mobilization and use of savings across types of financial intermediaries in the Jamaican economy. He argued that, 'in a developing country context, regardless of the increased sophistication of a country's financial sector, if its financial institutions are not effectively and efficiently performing the fundamental role of intermediation between savers and borrowers, market failures will exist, which may have adverse effects on the productivity of an economy.'

This paper adopts the methodology and many of the variables used by Tennant (2006) to conduct a cross-country comparison of commercial banks' performance in their mobilization and use of savings. Indicators of effectiveness in financial intermediation are compared across five Caribbean countries with the intention of highlighting areas in which commercial banks in some countries have exhibited higher standards of performance relative to the others. Relevant indicators in the form of easily interpreted ratios have been calculated for each of the facets of intermediation mentioned in Section 3. These indicators facilitate comparison across the countries under consideration. Annual data from the period 1986 to 2002 have been used to focus on the liberalization and post-liberalization eras in the development of each country's financial sector. There were, however, occasions in which the data for different countries were not available for the entire review period. Whenever the absence of such data did not preclude the

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<sup>23</sup> Barnes and Stewart (1996) used variables such as financial sector assets and loans, and banking sector incomes, interest rates, deposits and allocation of loans, and concluded that financial factors were only secondary in explaining the poor growth performance of the Jamaican economy, and that the 'financial variables which impacted most significantly on real sector activities were loan interest rates and credit availability and allocation.' Odle (1998) extended the scope of his study to examine the relationship between financial sector structural performance and economic development in the Caribbean. He focused on similar variables and concluded that, *inter alia*, the financial sector of the Caribbean region suffers from systemic market failures, which tend to have an adverse impact on development in the real sector.

effective analysis of the variables being examined, the study is allowed to proceed with the available data, and a notation made of the revised review period. All data were sourced from annual statistical digests published by the respective countries' central banks and/or statistical offices.

As in Tennant (2006), the average values of the indicators of intermediation effectiveness for the review period are compared. The statistical significance of the difference between paired means is tested using the Wilcoxon Signed Rank Test. This is a non-parametric test which is more appropriate than the traditional paired sample t-test, which may be unreliable because of the relatively small sample used in this study. All nominal figures are deflated using the GDP deflator, and trends over time are analysed by examining average annual growth rates of key indicators. It is, however, not possible to use either parametric or non-parametric methods to test for the statistical significance of the difference between the mean growth rates for the different countries, because average annual growth rates are calculated using the geometric mean. In these instances, attention is drawn to outliers that noticeably affect the averages.

## **5. Results and Analysis**

Data from Barbados, Belize, Guyana, Jamaica and Trinidad and Tobago are used to calculate and compare indicators of commercial bank performance in each of the tenets of effective financial intermediation. Sub-sections 5.1 to 5.4 examine commercial banks' relative effectiveness in maximizing the mobilization of savings, maintaining efficiency in the transferral of savings to the real sector through loans and financial investments,<sup>24</sup> minimizing interest rate spreads, and efficiently allocating funds amongst competing borrowers.

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<sup>24</sup> Financial investments refer to the purchase of various types of securities, including government bonds and notes, corporate bonds and notes, and shares traded on the stock exchange. It should not be confused with the economic meaning of investments, defined as, 'the purchase of real capital assets, such as new buildings and equipment' (Rose and Kolari, 1995).

## 5.1 Savings Mobilization

The indicators of commercial banks' performance in savings mobilization are highlighted in Table 1. Effectiveness in this basic facet of intermediation is first compared across countries by examining the ratios of commercial bank deposits to current GDP for each country. Here it is evident that commercial banks in Guyana and Barbados had the highest deposit to GDP ratios of 83.87% and 75.30%, respectively. The difference between these two means is not statistically significant at the 5% level, suggesting that the performance of Barbadian and Guyanese commercial banks in this respect is just about at the same level. There are, however, statistically significant differences between all the other paired means, with Belizean commercial banks having the next highest deposit to GDP ratio of 54.69%, and Jamaica and Trinidad and Tobago having the smallest ratios of 42.91% and 40.19%, respectively. When the average annual growth rates of the deposit to GDP ratio is compared across countries, Barbados remains the top performer with a relatively high growth rate of 4.49%. Belize also performs relatively well with a growth rate of 2.46%. The figures, however, suggest that Guyana's ability to maintain its high deposit to GDP ratio may be short-lived, as it has the largest average annual rate of decline in this ratio (-1.59%), indicating that growth in commercial bank deposits has not been able to keep pace with the country's growth in GDP. Jamaican and Trinidadian commercial banks continue to perform relatively poorly in this respect with only marginal increases and decreases of 0.30% and -0.80%, respectively, in the deposit to GDP ratio. This trend in relative performances is also evident when the average annual growth of real deposits is compared across countries, as Barbados and Belize (with growth rates of 5.69% and 8.21%, respectively) continue to perform better than Jamaica and Trinidad and Tobago (with growth rates of 2.31% and 1.80%, respectively). Guyana's poor performance in improving on the high levels of savings mobilization achieved early in the review period also continued, as Guyanese commercial banks had the lowest average annual growth of real deposits (0.83%).

These cross-country differences in the levels and growth of the deposit to GDP ratio and in the growth of real deposits may, however, be partially explained by the dominance of each country's commercial banks in the mobilization of savings. This is because a low

deposit to GDP ratio may not necessarily be reflective of poorly performing commercial banks, but rather of a deeper financial sector, where competition for deposits is stiffer and other types of financial institutions mobilize greater shares of deposits. The figures seem to lend support to this view, as the countries with the highest deposit to GDP ratios, Guyana and Barbados, had their commercial banks dominating the financial sector in savings mobilization, with the largest average shares of total deposits (86.76% and 83.71%, respectively). By contrast, Trinidadian and Jamaican commercial banks, which had the lowest deposit to GDP ratios, had smaller shares of total financial sector deposits of 78.35% and 69.46%, respectively. The only paired means which were not statistically different were the average shares of total deposits for Guyanese and Barbadian commercial banks. The large and statistically significant difference between means for Trinidadian and Jamaican commercial banks versus Barbadian and Guyanese commercial banks, both for their deposit to GDP ratios and their share of total deposits, suggests that the structure of the financial sector in each country may have an impact on commercial banks' relative performance in mobilizing savings, as competition from near-banks may affect the volume of savings mobilized by commercial banks.<sup>25</sup>

In an attempt to confirm whether or not different levels of competition from near banks was a major cause of the varying performances of commercial banks in mobilizing savings, the cross-country differences in the deposit to total assets ratio were examined. Here it is expected that if stiff competition from near banks accounts for Jamaican and Trinidadian commercial banks' relatively low deposit to GDP ratio and low growth of real deposits, then their deposit to total assets ratio should be relatively high. This is because it can be reasonably expected that competition would force the banks to operate more efficiently in using their assets to mobilize the maximum amount of savings. The figures show that apart from those of Belize and Guyana, all pairs of ratios were statistically different at the 5% level. In fact, the deposit to total assets ratio for Belize (78.96%) and Guyana (77.84%) were only exceeded by that of Barbados (82.27%).

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<sup>25</sup> A comparison of the structure of the financial sectors in Barbados and Trinidad and Tobago illustrates this point, as in Barbados commercial banks account for 62% of total financial assets and other deposit taking institutions only account for 8% of total financial assets, while in Trinidad the distribution of assets is much more even, with commercial banks and other deposit taking institutions accounting for 46% and 20% of total assets, respectively.

More interestingly, the ratios for Jamaican and Trinidadian commercial banks (69.85% and 64.16%, respectively) were again considerably lower than those of the other countries. The average annual growth of the deposit to total assets ratios for Jamaica and Trinidad were also both negative (-0.58% and -1.77%, respectively), while the growth rates for Barbados, Belize and Guyana (0.26%, 0.05% and 0.86%, respectively) were all positive. This suggests that the relatively poor performances of Jamaican and Trinidadian commercial banks in mobilizing savings are not necessarily due to competition from near banks, but instead may be caused by relatively lower and diminishing levels of effectiveness in using their resources to mobilize savings.

The figures in Table 1 all indicate that amongst the countries studied, clear distinctions can be made between the relatively weak and strong performers in the mobilization of savings. With one of the highest deposit to GDP ratios, the largest deposit to total assets ratio, and having maintained some of the highest growth rates in these figures, Barbadian commercial banks have distinguished themselves as being the best performers in savings mobilization. Belizean commercial banks were also consistently strong performers in this respect, but the Guyanese commercial banks, while establishing high standards, were not able to inspire confidence in their ability to maintain these standards, due to their below average growth rates. At the other extreme, Jamaican and Trinidadian commercial banks consistently performed relatively poorly in the mobilization of savings. With the lowest deposit to GDP ratio, the smallest deposit to total assets ratio, and the highest average annual rates of decline in these ratios, Trinidad and Tobago were the weakest performers.

## **5.2 Transfer of Funds to the Real Sector**

Success in financial intermediation is not only based on strong performances in mobilizing savings, but is also critically dependent on the effectiveness and efficiency of commercial banks in transferring those funds to borrowers and investors in the real sectors of the economy. Tables 2 and 3 present the indicators of the commercial banks' performance in loan issuance and investments in financial instruments, respectively.

## Loans

The cross-country comparison of the commercial banks' loans to GDP ratio again reflects the high standards of performance set by the Barbadian banks, with the largest ratio of 48.85%. Belize and Guyana are the next best performers, with loans to GDP ratios of 46.09% and 40.31% and having no statistical difference between these means at the 5% level. All the other ratios are statistically different, with Jamaica and Trinidad and Tobago having considerably lower loans to GDP ratios of 21.94% and 32.12%, respectively. These two countries also perform below the standards set by the other countries when the average annual growth rates of the loans to GDP ratio are compared, as they have relatively high annual rates of decline of -2.03% for Jamaica and -2.61% for Trinidad and Tobago. Guyanese commercial banks similarly have a negative growth rate for the review period of -1.65%. By contrast, Barbados and Belize continue their strong performance with average annual growth rates of 3.33% and 3.24%, respectively. As expected, these trends are also reflected in the commercial banks' average annual growth of real loans, with Belize and Barbados having the highest growth rates of 9.03% and 4.01%, respectively, followed by Guyana with a very modest growth rate of 0.77%, and with Jamaica and Trinidad and Tobago both having average annual rates of decline in real loans of -0.07% and -0.06%, respectively.

The commercial banks' share of total loans issued by the financial sectors in each country resembles very closely their share of total deposits, with Guyanese and Barbadian commercial banks having the largest shares of total loans (85.98% and 73.66%, respectively), as opposed to Jamaican and Trinidadian banks which had relatively smaller shares of 66.94% and 70.68%, respectively. It is interesting to note though, that while the difference between the means for the shares of total loans issued by Jamaican and Trinidadian banks is not statistically significant, their ratios of loans to total assets are statistically different, with the Trinidadian banks performing better than the Jamaican banks in this respect. In fact, with a loan to total assets ratio of 51.64%, the performance of the Trinidadian banks in maximizing their issuance of loans with the resources at their disposal was not statistically different from the consistently high performing Barbadian banks (53.63%), and was only exceeded by the Belizean banks, which had a very high

loans to total assets ratio of 66.25%. Jamaican commercial banks on the other hand had the smallest loans to total assets ratio of 36.22%, which was not statistically different from that of the Guyanese banks (37.08%). Guyana, however, along Belize, were the only two countries wherein the commercial banks were able to maintain positive average annual growth rates of this ratio (0.80% and 0.81%, respectively). Trinidadian, Jamaican and Barbadian commercial banks experienced declining rates of growth of their loans to total assets ratio of -3.57%, -2.89% and -1.34%, respectively.

The indicators in Table 2 all suggest that Belize and Barbados are the strongest performers in transferring the funds mobilized from the saving public to the real sectors in the form of loans. Belizean banks, however, are deemed to have outperformed the Barbadian banks, by virtue of having a significantly higher average annual growth of real loans, and a positive growth rate of its loans to total assets ratio. It is also interesting to note that along with a high loan to total assets ratio, Belizean banks were able to achieve marginally higher growth rates in real loans than in real savings, suggesting a high degree of efficiency in the intermediation process. While Jamaican banks had relatively low standards of performance, with the smallest loans to GDP and loans to total assets ratios, and among the largest rates of declines in these ratios, Trinidadian banks performed better in loan issuance than savings mobilization, as they had one of the highest loans to total assets ratios. Notwithstanding this, the Trinidadian commercial banks' loans to GDP ratio was significantly smaller than that of all the other countries other than Jamaica. Of greater concern though, are the low and in most cases negative growth rates for the loans to total assets ratios for all the countries. This can either be interpreted as an increase in the inefficiency of the intermediation process between savers and borrowers, or a change in the primary way in which funds are transferred to the real sectors. The latter issue is examined next, while the former is addressed in Section 5.3.

### Financial Investments

Once commercial banks mobilize savings, these funds are then transferred to the real sectors through either loans or financial investments in instruments such as government



bonds and notes, corporate bonds and notes, and other forms of securities and stocks.<sup>26</sup> If commercial banks use greater proportions of their funds to make such financial investments, then fewer resources will be available for the issuance of loans. Table 3 highlights the indicators of commercial banks' performance in investment in such financial instruments. However, cross-country comparisons of the financial investments to GDP ratio, the average share of total financial investments and the financial investments to total assets ratio shows that it is very difficult to distinguish between the performances of commercial banks in the respective countries, as most of the paired averages are not statistically different at the 5% level. Notwithstanding this, a comparison of the corresponding ratios in Tables 2 and 3 give a useful indication of where the commercial banks in each country have placed their emphasis in the transferral of resources to the real sector. For example, whilst commercial banks in Belize, Barbados, Trinidad and Tobago and Guyana have maintained the traditional emphasis on loan issuance (as exhibited by loans to GDP ratios which are much higher than financial investments to GDP ratios), Jamaican commercial banks seem to be increasingly focusing on financial investments as a means of intermediating between savers and investors, as their loans to GDP ratio (21.94%) is not much higher than their financial investments to GDP ratio (15.09%). The growth of this ratio also seems to confirm this position, as the Jamaican commercial banks' average annual growth of the financial investments to GDP ratio (6.84%) is only exceeded by that of the Trinidadian banks (9.11%).

In fact, a comparison of the average annual growth of the loans to GDP ratio with the financial investments to GDP ratio shows that the countries with the largest average annual rate of decline in the loans to GDP ratio – Jamaica and Trinidad and Tobago - had the largest average annual rate of growth in the financial investments to GDP ratio. This trend is also evident when the average annual growth of real loans is compared with the average annual growth of financial investments, and when the average annual growth of the loans to total assets ratios are compared with the financial investments to total assets ratios. The countries with the highest growth rates in the financial investment indicators are consistently Jamaica and Trinidad and Tobago, suggesting that both of these countries

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<sup>26</sup> Rose (1996)

are focusing more on transferring funds to the real sector through financial investment, while Barbados, Belize and Guyana maintain their traditional emphasis on intermediation through loan issuance.

### **5.3 Interest Rate Spreads**

The explanation given above for the relatively poor performance of Jamaican and Trinidadian commercial banks in transferring funds to the real sector through loans must be supplemented by a more direct examination of the efficiency of the banks' intermediation between savers and borrowers. This is typically achieved in the literature by an examination of the interest rate spreads of the respective institutions. The average interest rate spreads for commercial banks in each country over the review period are presented in Table 4. The figures indicate that the spreads in Barbados, Belize, Guyana and Trinidad and Tobago (7.02%, 8.87%, 8.61% and 7.52%, respectively) are very similar, and are often not statistically different. The average interest rate spread for Jamaican commercial banks is, however, significantly larger (23.73%). This clearly indicates that Jamaica's low loans to GDP and loans to total assets ratios, and the relatively high rates of decline in these ratios, are not simply due to the commercial banks' placing more emphasis on financial investments, but are also caused by more fundamental inefficiencies in the intermediation process in this country. In a recent study Tennant (2006) notes that most financial institution managers in Jamaica strongly argue that the spreads being applied are justified by current economic, regulatory and social conditions, while a few others, along with the regulators and policy-advisors, are insistent that the spreads are being fuelled by inefficiency and greed. This is clearly an area where further comparative studies of the banks in the region, along with the environments within which they operate, would yield valuable results, and should highlight best practices for both managers and policymakers in their efforts to improve the efficiency of intermediation between savers and borrowers.

### **5.4 Allocation of Loans**

Effective financial intermediation is not only dependent on strong performances in mobilizing savings and transferring these funds to the real sectors, but it is also critically

dependent on the efficiency with which commercial banks allocate resources to their most productive uses. This study attempted to examine the allocation of both loans and financial investments in each of the countries being investigated; however, a dearth of data on the allocation of financial investments in most countries precluded the latter. This section therefore compares commercial banks' allocation of loans across countries. It must be noted though that an examination of the distribution of financial investments by banks in the region is a matter for urgent future attention.

As in Barnes and Stewart (1996) and Odle (1998) this paper makes use of the available data on the distribution of commercial banks' loans by sector, and makes the assumption that the productivity of any sector can be determined by examining that sector's share of real GDP in the national accounts. Commercial banks' performance in allocating loans is therefore assessed for each country by comparing each sector's share of GDP over the review period with the proportion of loans allocated to those sectors by the commercial banks. These figures are presented for Barbados, Belize, Guyana, Jamaica and Trinidad and Tobago in Tables 5 to 9, respectively.

In Table 5 it is clear that Barbados has performed well over the review period in the allocation of credit to the sectors with the highest shares of GDP. 'Distribution', 'Other Services, Personal and Miscellaneous', and 'Tourism, Entertainment and Catering' were the sectors with the largest shares of GDP (19.58%, 17.24% and 14.57%, respectively), and they also were allocated the largest shares of Barbadian commercial banks' loans (15.46%, 44.29% and 10.74%, respectively). 'Public Utilities' and 'Mining and Quarrying' were the sectors to which commercial banks in Barbados allocated the least amount of loans over the review period (2.42% and 0.15%, respectively), which coincides with the fact that they were amongst the smallest contributors to GDP (3.42% and 0.79%, respectively). The only area in which Barbadian commercial banks were clearly not guided by a sector's history of being productive in its allocation of resources is with respect to their allocation of 4.54% of total loans to financial institutions, which had a 0.0% share of real GDP. Self-interest and lending within financial sector

conglomerates may have been the dominant factors determining the allocation of loans in this instance.

The figures in Tables 6 indicate that Belize was not as consistent as Barbados in its performance in allocating loans to the sectors with the largest shares of GDP. Of the three sectors which received the largest shares of Belizean commercial banks' loans over the review period ('Trade, Tourism, Restaurants and Hotels' – 27.68%, 'Construction' – 19.88%, and 'Personal, Commerce and Other Services' – 18.39%), only one ('Trade, Tourism, Restaurants and Hotels') was amongst the sectors with the five largest shares of GDP. This, however, is somewhat offset by the fact that the five sectors with the smallest shares of GDP in the Belizean economy ('Finance and Insurance', 'Fishing', 'Forestry and Logging', 'Electricity and Water', and 'Mining'), were also allocated the smallest shares of commercial banks' total loans (with shares ranging from 0.32% to 1.08%).

In Guyana (Table 7), commercial banks allocated their largest share of total loans (32.61%) to the sector classified as 'Other' (comprised mainly of loans to the 'Personal' sector), which contributed the smallest share to the country's GDP (5.25%). To their credit though, the sector with the second largest share of total loans (26.73%) – Manufacturing – also had the third largest share of GDP (11.99%), and the sectors to which they allocated the smallest proportions of total loans ('Drainage, Irrigation and Other Construction' and 'Financial Services' – 0.22% and 0.47%, respectively), were amongst the three smallest contributors to GDP.

The performance of Jamaican commercial banks in allocating credit (Table 8) is similar to that of Guyanese banks, in that the sector with the smallest share of GDP in Jamaica – 'Personal, Professional and Other Services' (0.60%), received the largest share of commercial banks' loans (25.63%). Also, while the sector with the third smallest share of real GDP ('Government Services') received a considerable 12.38% of total loans, the sector with the largest share of GDP ('Distribution') only received 5.92% of total loans. However, on the positive side, the second and third largest contributors to GDP

(‘Manufacturing’ and ‘Construction and Land Development’), received the second and third largest shares of commercial banks’ total loans (13.42% and 13.18%, respectively).

Upon initial inspection of the figures from Trinidad (Table 9), the performance of their banks in allocating loans to the sectors with the largest shares of GDP seems to be the least impressive, as the sector with the third smallest share of GDP (‘Personal Services, Consumption, Leasing and Real Estate Mortgages’) received the largest share of bank loans (42.99%), whilst the sector with the largest share of GDP (‘Petroleum’) received the smallest share of total loans (1.34%). This is, however, easily explained when one considers the importance of the petroleum sector to the Trinidadian economy, and the fact that whilst this sector has the largest share of GDP, it does not require much domestic financing because of the foreign direct investment which it attracts. It must be noted though that other sectors important to the country’s economic performance, such as ‘Distribution’ and ‘Transportation, Storage and Communication’ (with the third and fourth largest shares of GDP), only received 9.81% and 2.65% of total commercial bank loans, respectively.

The first two columns of Table 10 allow for a more concise cross-country comparison of the performance of commercial banks in the allocation of loans, as it highlights for each country, the share of total loans distributed by commercial banks to the three sectors with the largest shares of GDP versus the three sectors with the smallest shares of GDP. The performance in credit allocation is therefore assessed by the degree to which more loans were distributed to the former and less to the latter. For completeness, the last two columns in this table present figures which allow for a cross-country comparison of the allocation of loans based on the growth performance of the sectors. Here it is acknowledged that in allocating credit, commercial banks can also opt to consider the growth of the sector under consideration as an indicator of that sector to be productive in the future. To assess whether banks are indeed allocating credit based on the growth performance of the sectors, for each country, the growth in production of each sector was used to determine the three sectors that had the fastest growth in production and the three with the slowest growth. The real growth of loans given to these sectors by commercial

bank was then calculated, and performance in credit allocation is assessed by the extent to which real loans to the three fastest growing sectors are increasing, and are decreasing for the slowest growing sectors.

The results of the analysis considering the sector's share of GDP show that Barbados (with 70.49% of loans to the largest sectors and 7.11% to the smallest sectors) and Belize (with 48.13% and 2.27% of total loans to the largest and smallest sectors, respectively) were clearly the outstanding performers in the allocation of credit to the sectors with largest shares of GDP. Because there was no statistical difference at the 5% level between the means for Guyana (with 40.20% and 33.29% of total loans to the largest and smallest sectors, respectively) and Jamaica (with corresponding figures of 32.52% and 38.78%), it was impossible to distinguish between their performances. It was, however, very evident that they did not perform as well as Barbados and Belize. When the sectors' growth in production is considered, the countries' ranking in terms of the relative performance of their commercial banks remains the same. Barbados (with average annual growth of real loans to the fastest and slowest growing sectors of 3.06% and -0.21%, respectively) and Belize (with corresponding figures of 10.37% and 8.74%) are still better performers than Guyana (-5.41% and 2.52%) and Jamaica (-1.74% and 1.66%). As noted previously, it is difficult to accurately include the Trinidadian figures in this comparison because of their unique dependence on the largely foreign-funded petroleum industry.

Despite this attempt to clearly distinguish between the performances of commercial banks in different countries, it must be noted that there is a glaring similarity in the manner in which banks in all the countries studied allocate credit. Tables 5 to 9 indicate that with the exception of Belize, in all countries banks allocate the largest proportion of their total loans to the personal sector, and in Belize, loans to this sector represent the third largest share of total loans. This is not a surprising result, as Barnes and Stewart (1996) made a similar observation for Jamaica, and interpreted the increase in loans to the personal sector as an allocation of loans to the consumption sector at the expense of the productive sectors. Whilst such an interpretation seems to be correct in the Jamaican

context, where the ‘Personal, Professional and Other Services’ sector has the smallest share of GDP, and may even be extended to Guyana and Trinidad and Tobago, where the corresponding sector makes very small contributions to GDP, it is difficult to classify loans to this sector as being unproductive in countries like Barbados and Belize, where their ‘Personal and Other Services’ sectors have shares of GDP of 17.24% and 7.17%, respectively. In fact, Barbados’ and Belize’s aforementioned superior performance in allocating credit to the most productive sectors is less likely to be due to any major differences in how credit is allocated by commercial banks, but may be predominantly due to the fact that the personal sectors in these countries are considerably more productive than in the others. Therefore, in trying to derive best practices from this cross-country comparison of the allocation of credit, attention must be placed on the characteristics of the Barbadian and Belizean personal sectors that enabled them to be so productive. The figures seem to suggest that it cannot always be assumed that loans allocated by commercial banks to the personal sector are being used simply for household consumption. The productiveness of the personal sectors in Barbados and Belize imply that further investigation needs to be conducted on how loans to the personal sector are being spent, and whether they are being used to support small-scale production in micro-businesses and cottage industries.

## **6. Conclusions**

Declining foreign aid flows to the Caribbean has intensified the search for regional and national means of financing development. This paper argues that the region’s commercial banks are important to this process, as, if they maintain high standards of performance, banks can maximize the mobilization of domestic funds, maintain efficiency in the transferral of savings to the real sector, minimize financial costs and interest rate spreads, and efficiently allocate funds to growth-enhancing investments. A cross-country comparison of the performance of commercial banks in five Caribbean countries has been conducted so as to highlight areas in which commercial banks in some countries have exhibited relatively higher standards of performance in these basic but fundamental tenets of financial intermediation.

In the mobilization of savings, Barbadian commercial banks distinguished themselves, as they achieved one of the highest volume of savings mobilized relative to GDP, maintained the highest standard of efficiency with the largest deposit to total assets ratio, and made great strides in increasing their rate of savings mobilization, having sustained some of the highest growth rates in these figures. Belizean commercial banks were also consistently strong performers in the mobilization of savings. Guyanese banks, however, exhibited mixed performances in this respect, as while they mobilized a high volume of savings relative to GDP and established high standards of efficiency with one of the highest deposits to total assets ratios, they were not able to inspire confidence in their ability to maintain these standards, due to their below average growth rates. At the other extreme, Jamaican and Trinidadian commercial banks consistently did not perform as well as their counterparts in the other countries. In the context of declining foreign aid flows to the region and foreign investment that is highly concentrated in a few industries, Caribbean commercial banks must enhance their ability to mobilize domestic savings if sustainable pro-poor investments are to be financed. Careful attention must therefore be placed on countries like Barbados and Belize which are able to effectively mobilize savings from their populace, and further studies should be conducted to ascertain the factors contributing to their success.

Belizean and Barbadian banks also distinguished themselves in the efficient transferral of funds to the real sectors in the form of loans. In this instance, Belizean banks were the strongest performers, with the largest loans to total assets ratio, the highest growth in this ratio, and the highest average annual growth of real loans. By contrast, Jamaican banks were the weakest performers, with the smallest loans to GDP and loans to total assets ratios. Jamaican and Trinidadian banks also had negative rates of growth for all the loan issuance indicators. These negative growth rates are, however, partially explained by Jamaican and Trinidadian banks' relatively high growth rates in the financial investment indicators, suggesting that both of these countries are focusing more on transferring funds to the real sector through financial investments, while Barbados, Belize and Guyana maintain their traditional emphasis on intermediation through loan issuance. This has important implications for studies which seek to assess financial intermediation in



Caribbean countries, as it indicates that such studies can no longer focus solely on saving and borrowing in the traditional sense, as intermediation in some countries is becoming increasingly sophisticated with investments in diverse financial instruments. Such sophistication is, however, not an excuse for inefficiency in the most basic aspects of intermediation. This was evident in Jamaica, as indicated by commercial bank interest rate spreads approximately three times larger than those of the other countries. This strongly suggests that Jamaica's low loans to GDP and loans to total assets ratios, and the relatively high rates of decline in these ratios, are not simply due to the commercial banks' placing more emphasis on financial investments, but may also be caused by more fundamental inefficiencies in the intermediation process in this country. The huge difference between the Jamaican spreads and those of the other countries suggests that Jamaican bank managers and policymakers could benefit from dialogue with their counterparts in the region to develop a shared approach towards achieving improved operational efficiency in the intermediation process.

The cross-country comparison of the allocation of resources by banks showed that there is a clear predisposition for banks in all the countries studied to allocate large proportions of their loan portfolios to the personal sector. Notwithstanding this, there were significant differences in the relative performances of the banks in allocating credit to the most productive sectors, with Barbados and Belize again being the outstanding performers. This is largely due to the fact that the personal sectors in these countries are considerably more productive than in Guyana, Jamaica and Trinidad and Tobago. Further investigation therefore needs to be conducted on how loans to the personal sectors in Barbados and Belize are being utilized. The productiveness of the personal sectors in these countries suggests that bank loans to households are possibly being used to support small-scale production in micro-businesses and cottage industries. If this is the case, and if Caribbean commercial banks' allocation of loans to the personal sector proves to be intractable, then the governments in the region, rather than trying to direct credit to other sectors, would probably be better served by making attempts to enhance the productivity of their personal sectors, through enabling small and micro-enterprise development.

Strengthening economic relationships and increasing institutional cooperation in the Caribbean are critical to the financing of development in the region. Progress will only be made in these areas when policymakers and managers from different countries in the region begin to learn from each other's experiences. By comparing the performance of commercial banks across five Caribbean countries in the basic tenets of financial intermediation, this paper has highlighted the consistently high standards of performance established by commercial banks in Barbados and Belize. The macroeconomic and regulatory context within which banks operate in these countries, as well as their modalities of operation, should therefore be carefully examined for indications of best practices to be adopted where it is feasible. This, however, does not give license to the prescription of one-size-fits-all policies for the region, as this has already been proven to be disingenuous.

## **APPENDIX 1- BRIEF INTRODUCTION TO THE COUNTRIES CHOSEN**

### **Barbados**

Barbados is a small country with a population of approximately 266,800 people<sup>27</sup> and a real per capita GDP in 2002 of US\$1,801.3.<sup>28</sup> The Barbadian economy had in the past been dependent on sugarcane cultivation and related activities, but production in recent years has diversified into manufacturing and tourism. Other important foreign exchange earners are offshore finance and information services.<sup>29</sup> There are seven commercial banks in Barbados, which account for 62% of total financial assets. Other deposit taking institutions, which include trust companies, mortgage finance companies, finance companies and merchant banks, only account for 8% of total financial assets. Insurance companies and credit unions are the other types of financial institutions operating in Barbados, accounting for 11% and 5% of total financial assets, respectively.<sup>30</sup> Barbados also has a stock exchange, but it remains a marginal institution, with only 24 firms listed.<sup>31</sup>

### **Belize**

Belize has a very small population of approximately 210,000 people, and a real per capita GDP in 2001 of US\$1,883.62.<sup>32</sup> The agricultural sector has always been an important contributor to GDP in the Belizean economy, but recently there has been a continued increase in tourism.<sup>33</sup> The garment industry has been another foreign exchange earner for the economy.<sup>34</sup> There are four commercial banks in Belize, which account for 74% of monetary liabilities. There are also 12 credit unions and a government development bank.

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<sup>27</sup> [http://www.centralbank.org.bb/country\\_info.shtml](http://www.centralbank.org.bb/country_info.shtml)

<sup>28</sup> Calculated from figures provided by Central Bank of Barbados (2003)

<sup>29</sup> <http://www.cia.gov/cia/publications/factbook/geos/bb.html>

<sup>30</sup> So as to facilitate comparison with Jamaica, this study will not focus on the Barbadian offshore financial sector. This is made possible because, as noted by the IMF (2003:6), Barbadian offshore banks, 'are, to a large extent, insulated from the domestic banking system and their deposit taking activities are highly circumscribed, thereby limiting their potential to destabilize the domestic financial system.'

<sup>31</sup> Worrell et al (2001:17-18)

<sup>32</sup> Calculated from figures provided by Central Bank of Belize (2002)

<sup>33</sup> Maxwell and Norton (2003:57)

<sup>34</sup> <http://www.cia.gov/cia/publications/factbook/geos/bh.html>

## Guyana

Guyana has a population of approximately 775,000 and a real per capita GDP in 2002 of US\$37.40.<sup>35</sup> The country has been plagued by a huge foreign debt burden since the late 1980s, but recent economic progress has been fostered by debt cancellations and rescheduling and substantial new aid funding, facilitated by an Economic Recovery Programme encouraged by the IMF and World Bank. This programme fundamentally shifted the economy toward a market-oriented system.<sup>36</sup> The key sectors of the economy have been mining, agriculture and manufacturing. Efforts are also being made to develop the tourism industry.<sup>37</sup> There are seven commercial banks in Guyana, which account for 71% of all financial assets. The remaining assets are evenly distributed among insurance companies, trust companies, pension funds, a building society, and a development bank.<sup>38</sup>

## Jamaica

Jamaica has a population of approximately 2.6 million people, and a real per capita GDP in 2002 of US\$157.90. The mainstays of the economy are primary agricultural exports (including sugar and bananas), bauxite mining, and tourism. Remittances from North America and the United Kingdom have also played an increasingly significant role in the economy.<sup>39</sup> The cost of servicing the expanding public debt (132.8% of GDP in 2002), however, poses significant fiscal challenges for the government, which has resorted to expenditure cuts and strong revenue measures to reduce the large fiscal deficit.<sup>40</sup> These fiscal measures, along with tight monetary policies, have impacted on the general economic performance of the country over the review period. There are six commercial banks in Jamaica (which account for 71.81% of total assets for deposit-taking institutions), four building societies, 51 credit unions, five FIA Institutions (that is merchant banks, trust companies and finance houses),<sup>41</sup> seven life insurance companies,

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<sup>35</sup> Calculated from figures provided by Central Bank of Guyana (2003)

<sup>36</sup> [http://www.state.gov/www/background\\_notes/guyana\\_398\\_bgn.html](http://www.state.gov/www/background_notes/guyana_398_bgn.html) and IMF (1999:5)

<sup>37</sup> Maxwell and Norton (2003:119)

<sup>38</sup> Worrell et al (2001:19) and IMF (1999:8)

<sup>39</sup> World Bank (2002)

<sup>40</sup> World Bank (2002)

<sup>41</sup> The numbers of commercial banks, building societies, credit unions and FIA Institutions are as at March 31, 2004 (Bank of Jamaica 2004).

13 general insurance companies, 55 licensed securities dealers,<sup>42</sup> and one stock exchange (the largest in the Caribbean). The publicly-owned financial institutions include: a development bank; an investment bank; a provider of unit trust services; and an export-import bank.

#### Trinidad and Tobago (T&T)

Trinidad and Tobago is a twin-island state with a population of approximately 1.3 million people, and a real per capita GDP of US\$2,949.91 in 2002.<sup>43</sup> The economy has traditionally been dominated by petroleum and petroleum-related industries, but other important sectors are the natural gas industry, manufacturing, and construction. Tourism is also a growing foreign exchange earner.<sup>44</sup> Commercial banks account for the largest share of the Trinidad and Tobago financial sector, with 46% of total assets. Finance companies, mortgage companies, investment banks and other near banks account for 20% of total assets, and insurance companies and credit unions account for 15% and 5%, respectively. Trinidad and Tobago also has a stock exchange, but it is very small and new issues are rare.<sup>45</sup>

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<sup>42</sup> The numbers of life insurance companies, general insurance companies, licensed securities dealers are as at March 31, 2004 (Financial Services Commission 2004)

<sup>43</sup> Calculated from figures provided by Central Bank of Trinidad and Tobago (2003)

<sup>44</sup> Worrell et al (2001:173-174)

<sup>45</sup> Worrell et al (2001:4&21)

**APPENDIX 2- TABLES USED IN THE ANALYSES**

| <b>Table 1 - Indicators of Commercial Banks' Performance in Savings Mobilization (1986-2002)</b> |                    |                    |                    |         |       |
|--|--------------------|--------------------|--------------------|---------|-------|
| <b>Indicators</b>  | <b>Country (%)</b> |                    |                    |         |       |
|  | Barbados           | Belize             | Guyana             | Jamaica | T & T |
| Deposits/Current GDP   | 75.30 <sup>a</sup> | 54.69              | 83.87 <sup>a</sup> | 42.91   | 40.19 |
| Average Annual Growth of Deposits/Current GDP  | 4.49               | 2.46               | -1.59              | 0.30    | -0.80 |
| Average Annual Growth of Real Deposits*  | 5.69               | 8.21               | 0.83               | 2.31    | 1.80  |
| Average Share of Total Deposits  | 83.71 <sup>b</sup> | n.a.               | 86.76 <sup>b</sup> | 69.46   | 78.35 |
| Deposits as a % of Total Assets  | 82.27              | 78.96 <sup>c</sup> | 77.84 <sup>c</sup> | 69.85   | 64.16 |
| Average Annual Growth of Deposits/Total Assets*  | 0.26               | 0.05               | 0.86               | -0.58   | -1.77 |

Unless otherwise noted, all pairs of averages are statistically different at the 0.05 level

<sup>a, b, c</sup> Paired averages not statistically different at the 0.05 level

\* Calculated using geometric means thus precluding the statistical testing of difference of means

Sources - All Tables were computed by the author from data in:  
 Bank of Jamaica Statistical Digest,  
 Central Bank of Trinidad and Tobago Statistical Digest,  
 Trinidad and Tobago Annual Statistical Digest,  
 Central Bank of Barbados Economic and Financial Statistics,  
 Central Bank of Barbados Annual Statistical Digest,  
 Central Bank of Belize Statistical Digest,  
 Bank of Guyana Statistical Bulletin

| <b>Table 2 - Indicators of Commercial Banks' Performance in Loan Issuance (1986-2002)</b> |                    |                    |                    |                    |                    |
|---|--------------------|--------------------|--------------------|--------------------|--------------------|
| <b>Indicators</b>   | <b>Country (%)</b> |                    |                    |                    |                    |
|   | Barbados           | Belize             | Guyana             | Jamaica            | T & T              |
| Loans/Current GDP   | 48.85              | 46.09 <sup>a</sup> | 40.31 <sup>a</sup> | 21.94              | 32.12              |
| Average Annual Growth of Loans/Current GDP  | 3.33               | 3.24               | -1.65              | -2.03              | -2.61              |
| Average Annual Growth of Real Loans*  | 4.01               | 9.03               | 0.77               | -0.07              | -0.06              |
| Average Share of Total Loans  | 73.66              | n.a.               | 85.98              | 66.94 <sup>b</sup> | 70.68 <sup>b</sup> |
| Loans as a % of Total Assets  | 53.63 <sup>c</sup> | 66.25              | 37.08 <sup>d</sup> | 36.22 <sup>d</sup> | 51.64 <sup>c</sup> |
| Average Annual Growth of Loans/Total Assets*  | -1.34              | 0.81               | 0.80               | -2.89              | -3.57              |

Unless otherwise noted, all pairs of averages are statistically different at the 0.05 level

<sup>a, b, c, d</sup> Paired averages not statistically different at the 0.05 level

\* Calculated using geometric means thus precluding the statistical testing of difference of means

**Table 3 - Indicators of Commercial Banks' Performance in Investments in Financial Instruments (1986-2002)**

| Indicators  | Country (%)         |                   |                      |                        |                      |
|---|---------------------|-------------------|----------------------|------------------------|----------------------|
|   | Barbados            | Belize            | Guyana               | Jamaica <sup>1</sup>   | T & T                |
| Financial Invs/Current GDP                          | 19.40 <sup>a</sup>  | 6.52 <sup>b</sup> | 24.34 <sup>ad</sup>  | 15.09 <sup>cd</sup>    | 9.17 <sup>bc</sup>   |
| Average Annual Growth of Financial Invs/Current GDP | 4.07                | -1.94             | -6.07                | 6.84                   | 9.11                 |
| Average Annual Growth of Real Financial Invs*       | 5.10                | 3.56              | -3.76                | 8.53                   | 11.97                |
| Average Share of Total Financial Invs               | 97.44 <sup>e</sup>  | n.a.              | 72.43 <sup>fg</sup>  | 73.74 <sup>eh(2)</sup> | 65.96 <sup>gh</sup>  |
| Financial Invs as a % of Total Assets               | 21.12 <sup>ij</sup> | 9.65 <sup>l</sup> | 23.39 <sup>ikn</sup> | 23.40 <sup>ikm</sup>   | 14.09 <sup>lmn</sup> |
| Average Annual Growth of Financial Invs/Tot Assets* | -0.30               | -4.25             | -3.73                | 6.49                   | 8.04                 |

Unless otherwise noted, all pairs of averages are statistically different at the 0.05 level

a, b, c, d, e, f, g, h, i, j, k, l, m, n Paired averages not statistically different at the 0.05 level

\* Calculated using geometric means thus precluding the statistical testing of difference of means

<sup>1</sup> Avg. 1988-2002 <sup>2</sup> Avg. 1999-2002

**Table 4 – Commercial Banks' Interest Rate Spread (1986-2002)**

| Country            | Average Interest Rate Spread (%) |
|--------------------|----------------------------------|
| Barbados           | 7.02 <sup>a</sup>                |
| Belize             | 8.87 <sup>b</sup>                |
| Guyana (1988-2002) | 8.61 <sup>bc</sup>               |
| Jamaica            | 23.73                            |
| T&T                | 7.52 <sup>ac</sup>               |

Unless otherwise noted, all pairs of averages are statistically different at the 0.05 level

a, b, c Paired averages not statistically different at the 0.05 level

| <b>Table 5 – Barbados: Sectoral Share of GDP vs. Commercial Banks' Distribution of Loans</b> |                                      |                                       |
|--|--------------------------------------|---------------------------------------|
| Sectors  | Share of Real GDP (%)<br>Avg 1986-01 | Share of Tot Loans (%)<br>Avg 1986-01 |
| Distri (Whsle & R'tl Tr)   | 19.58                                | 15.46                                 |
| Other Servs (Prof, Bus & Gen), Personal & Misc.  | 17.24                                | 44.29                                 |
| Tourism, Ent & Catering  | 14.57                                | 10.74                                 |
| Govt & Stat. Bodies  | 13.34                                | 2.65                                  |
| Manufacturing  | 9.65                                 | 8.98                                  |
| Trans, Stor & Comm   | 8.04                                 | 3.12                                  |
| Agri & Fisheries   | 6.98                                 | 2.53                                  |
| Construction   | 6.39                                 | 5.12                                  |
| Pub. Utilities (Elec, Gas & Wtr)   | 3.42                                 | 2.42                                  |
| Mining & Quarrying   | 0.79                                 | 0.15                                  |
| Financial Institutions   | 0.00                                 | 4.54                                  |

| <b>Table 6 – Belize: Sectoral Share of GDP vs. Commercial Banks' Distribution of Loans</b> |                                      |                                       |
|--|--------------------------------------|---------------------------------------|
| Sectors  | Share of Real GDP (%)<br>Avg 1986-01 | Share of Tot Loans (%)<br>Avg 1986-01 |
| Trade, Tourism, Restrnts & Hotels  | 17.49                                | 27.68                                 |
| Manufacturing  | 16.40                                | 7.63                                  |
| Agriculture  | 13.91                                | 12.82                                 |
| Transportation & Communication   | 12.81                                | 3.36                                  |
| Public Administration  | 8.05                                 | 1.33                                  |
| Personal, Commerce & Other Serv  | 7.17                                 | 18.39                                 |
| Construction   | 6.27                                 | 19.88                                 |
| Real Estate & Business Services  | 5.13                                 | 4.94                                  |
| Finance & Insurance  | 4.75                                 | 0.62                                  |
| Fishing  | 3.39                                 | 1.08                                  |
| Forestry & Logging   | 2.13                                 | 0.32                                  |
| Electricity & Water  | 1.84                                 | 1.00                                  |
| Mining   | 0.64                                 | 0.95                                  |



| <b>Table 7 – Guyana: Sectoral Share of GDP vs. Commercial Banks' Distribution of Loans</b> |                                      |                                       |
|--|--------------------------------------|---------------------------------------|
| Sectors  | Share of Real GDP (%)<br>Avg 1986-01 | Share of Tot Loans (%)<br>Avg 1986-02 |
| Agriculture, Forestry & Fishing  | 28.03                                | 12.78                                 |
| Government   | 14.98                                | 0.69                                  |
| Manufacturing  | 11.99                                | 26.73                                 |
| Mining & Quarrying   | 10.68                                | 5.60                                  |
| Transportation & Communication   | 8.21                                 | 2.66                                  |
| Distribution   | 7.99                                 | 18.25                                 |
| Drainage, Irrigation & Other Constr  | 7.46                                 | 0.22                                  |
| Financial Services   | 5.40                                 | 0.47                                  |
| Other  | 5.25                                 | 32.61                                 |

| <b>Table 8 – Jamaica: Sectoral Share of GDP vs. Commercial Banks' Distribution of Loans (1986-2002)</b> |                       |                        |
|---|-----------------------|------------------------|
| Sectors   | Share of Real GDP (%) | Share of Tot Loans (%) |
| Distribution  | 19.36                 | 5.92                   |
| Manufacturing   | 17.43                 | 13.42                  |
| Construction & Land Development   | 16.95                 | 13.18                  |
| Transportation, Storage & Com.  | 11.66                 | 8.98                   |
| Financial Institutions  | 11.46                 | 3.64                   |
| Tourism & Entertainment   | 9.14                  | 9.30                   |
| Mining  | 8.03                  | 0.42                   |
| Agriculture   | 7.82                  | 6.51                   |
| Government Services   | 7.21                  | 12.38                  |
| Electricity, Gas & Water  | 4.25                  | 0.77                   |
| Pers, Prof. & Other Servs   | 0.60                  | 25.63                  |

| <b>Table 9 – Trinidad and Tobago: Sectoral Share of GDP vs. Commercial Banks' Distribution of Loans</b> |                                      |                                       |
|---|--------------------------------------|---------------------------------------|
| Sectors   | Share of Real GDP (%)<br>Avg 1986-01 | Share of Tot Loans (%)<br>Avg 1986-01 |
| Petroleum   | 24.67                                | 1.34                                  |
| Public Sect   | 14.53                                | 11.76                                 |
| Distribution  | 11.45                                | 9.81                                  |
| Transportation, Storage & Comm  | 10.88                                | 2.65                                  |
| Finance, Insurance & Real Estate  | 9.45                                 | 11.84                                 |
| Construction  | 8.84                                 | 3.91                                  |
| Manufacturing   | 8.31                                 | 13.03                                 |
| Education, Culture & Comm Serv  | 4.65                                 | 0.16                                  |
| Agriculture   | 3.16                                 | 1.30                                  |
| Pers Servs + Cons + Leasing & Real Est Mort   | 2.40                                 | 42.99                                 |
| Electricity & Water   | 1.40                                 | 0.20                                  |
| Hotels & Guest Houses   | 0.26                                 | 1.00                                  |

| <b>Table 10 – Indicators of Commercial Banks' Performance in the Allocation of Loans: Share of Total Loans and Growth of Real Loans (1986-2002)</b> |                        |                    |                           |                 |
|---|------------------------|--------------------|---------------------------|-----------------|
| Countries   | Share of Tot Loans (%) |                    | Growth of Real Loans (%)* |                 |
|   | Largest Sectors        | Smallest Sectors   | Fastest Sectors           | Slowest Sectors |
| B'dos   | 70.49                  | 7.11               | 3.06                      | -0.21           |
| Belize  | 48.13                  | 2.27               | 10.37                     | 8.74            |
| Guyana  | 40.20 <sup>a</sup>     | 33.29 <sup>b</sup> | -5.41                     | 2.52            |
| Jamaica   | 32.52 <sup>a</sup>     | 38.78 <sup>b</sup> | -1.74                     | 1.66            |
| T&T   | 22.92                  | 44.19              | 5.24                      | -1.30           |

Unless otherwise noted, all pairs of averages are statistically different at the 0.05 level

<sup>a, b</sup> Paired averages not statistically different at the 0.05 level

\* Calculated using geometric means thus precluding the statistical testing of difference of means

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