



# Financial Stability Report 2014



CENTRAL BANK OF BARBADOS

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## Abbreviations

| <i>Abbreviation</i> | <i>Meaning</i>                        |
|---------------------|---------------------------------------|
| CAR                 | Capital Adequacy Ratio                |
| CARICOM             | Caribbean Community                   |
| CBB                 | Central Bank of Barbados              |
| CIBC                | Canadian Imperial Bank of Commerce    |
| DTI                 | Deposit Taking Institution            |
| FIA                 | Financial Institutions Act            |
| FSAP                | Financial Sector Assessment Programme |
| FSC                 | Financial Services Commission         |
| FSI                 | Financial Stability Indicator         |
| GDP                 | Gross Domestic Product                |
| IMF                 | International Monetary Fund           |
| NPL                 | Non-performing Loan                   |
| ROA                 | Return on Assets                      |
| USA/US              | United States of America              |

## Preface

This is the fourth issue of the Central Bank of Barbados' Financial Stability Report, produced in collaboration with the Financial Services Commission (FSC). The Central Bank and the FSC are jointly responsible for the continuous oversight of the financial system, the assessment of vulnerabilities and the initiation of policies to increase the resilience of the system in the face of possible adverse events. The Central Bank's Financial Stability Unit works with the FSC's staff to ensure a thorough assessment of the risk exposures of banks, insurance companies, credit unions and other depository financial institutions. This report analyses a range of financial stability indicators for financial institutions, as well as balance sheet and income and expenditure trends. For the banking system, macroeconomic forecasts are also used to project expectations for the quality of credit. Progressively intensified stress tests are used to evaluate a range of possible financial risks for both depository financial institutions and the insurance sector.

Like most of the Central Bank's publications, the FSR is published exclusively online. In July of each year, the Central Bank publishes an update on the annual FSR.

## 1. Introduction

The Barbadian financial system continued to demonstrate resilience in spite of challenging economic conditions. Over the course of the twelve months ending September 2014, most deposit-taking entities (banks, trust companies and finance houses) and insurance firms faced low demand for major financial products by the private sector. Consequently, growth was weak and in some instances, entities recorded a contraction on their balance sheets.

For the banks, loan growth was driven by one particular loan to Government, as well as mortgage lending in the personal sector. However, this increased exposure to Government was offset by a reduction in the banking systems' holdings of Government securities, both longer dated debentures and short-term treasury bills. In addition, while several of the larger hotel loans that had proven problematic were resolved, this improvement was more than offset by a notable expansion in loan losses associated with the personal sector. Consequently, bank profitability was down by nearly one-quarter as banks made allowances for losses on a larger proportion of their loan portfolio. Weak profitability also spurred some banks to focus on restructuring in order to meet profitability goals, a strategy which has also been replicated in several of the Canadian parent banks. Like banks, the deposit-taking finance houses and trust companies also struggled to generate growth; while isolated firms recorded some success, loans were marginally lower than a year ago. Furthermore, loss provisions were higher than a year earlier although NPLs showed an improvement over the period. In contrast, credit unions registered significantly higher lending to their membership, even as their client base continued to be impacted by rising unemployment and a sluggish domestic economy. However, the portfolio of non-performing loans held by the credit unions continued to climb, especially those categorized in the most severe "default" category. The FSC has estimated that the insurance sector's assets fell by two percent in 2014. Insurance entities also reduced their holding of Barbados' Government-issued domestic debt up to the end of September 2014.

Financial stability indicators and stress tests performed for the financial system strongly suggest that the system remains stable and able to withstand a wide variety of severe economic shocks<sup>1</sup>. This may be attributed to the simplicity of the business models employed, strong parent companies, the accumulation of robust capital buffers and – in the case of the insurance industry – the presence of substantial reinsurance assets. This approach of focusing on simple banking models and traditional insurance products is currently being promoted by international regulators who have argued that the resilience of international banks needs to be increased by reducing the risk associated with wholesale funding and proprietary trading<sup>2</sup>. Linkages in the financial system also have the potential to be a major source of systemic vulnerability, particularly through intercompany exposures, and these potential contagion effects were also considered. In addition to contagion risk, liquidity risks as well as insurance-related risk were also carefully examined in the report.

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<sup>1</sup> These stress tests now include the domestic insurers, thanks to the efforts of the Financial Services Commission.

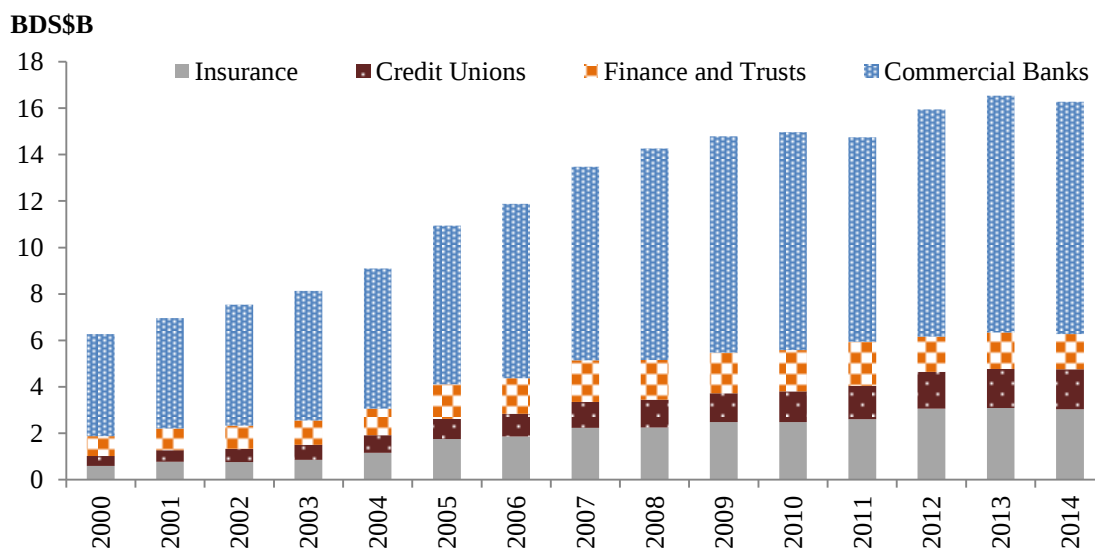
<sup>2</sup> Global Financial Stability Report, Risk Taking, Liquidity and Shadow Banking: Curbing Excess while Promoting Growth, October 2014, IMF, pp. 21.

Following the publication of the IMF's Financial Sector Assessment Program in February 2014, policy makers have continued their efforts to improve the management of the sector, in terms of revisions to guidelines by both the Central Bank and the Financial Services Commission. Among the areas addressed were internal capital adequacy assessment, the standardized approach to credit risk, and the measurement of operational risk.

## 2. Structure of the Financial System

Commercial banks remain the dominant sub-group in the domestic financial space accounting for approximately 61 percent of financial assets, although there was a slight erosion of their share of the total assets. Banks, while maintaining lending to individuals, have recorded a contraction in lending to business over the previous two years. In contrast, the credit unions' focus on individual lending allowed their share of total domestic assets to rise to 11 percent, as loans to members continued to expand over the previous five years. Concentration within the credit union sector remained heavily skewed, as four of the thirty-five credit unions account for more than 85 percent of total assets, membership, loans and deposits. Trust and mortgage finance entities focus on mortgage and consumer financing to private individuals and several of them are affiliated with commercial banks or other conglomerates, while the banks themselves have Canadian, United States or Trinidadian parents. The life insurance industry is dominated by a single company while the non-life market is more competitive. The major insurance companies operate both regionally and internationally although several smaller insurers operate solely in the domestic market.

**Figure 1: Assets of the Domestic Financial System**



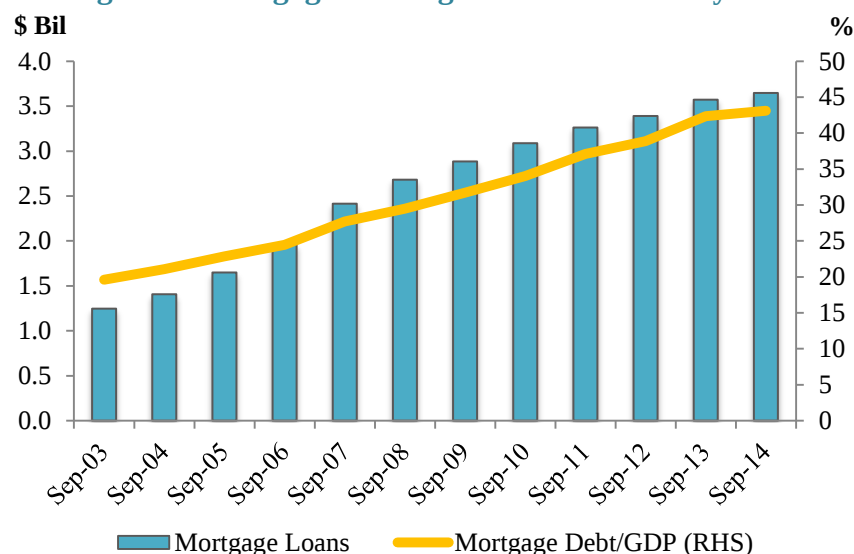
Source: Central Bank of Barbados and Financial Services Commission

Collectively, the total assets of the financial system grew 2.3 percent per year on average since the global recession reaching \$16 billion at September 2014, and equivalent to 185 percent of GDP.<sup>3</sup> The majority of this growth has been driven by an expansion in loans, particularly mortgages, and holdings of government securities. However, during the current year, total assets declined by 2.5 percent reflecting contractions in the asset base of all institutions, with the exception of credit unions.

<sup>3</sup> Other operations within the financial space include the securities market, mutual funds and pension funds; however, data on the latter two are not readily available.

Mortgage exposure as a percentage of GDP grew by only 0.7 of a percentage point during 2014 compared to an average annual rise of two percentage points per year in the preceding decade. Total mortgage exposure by the end of the review period stood at 43 percent (Figure 2).

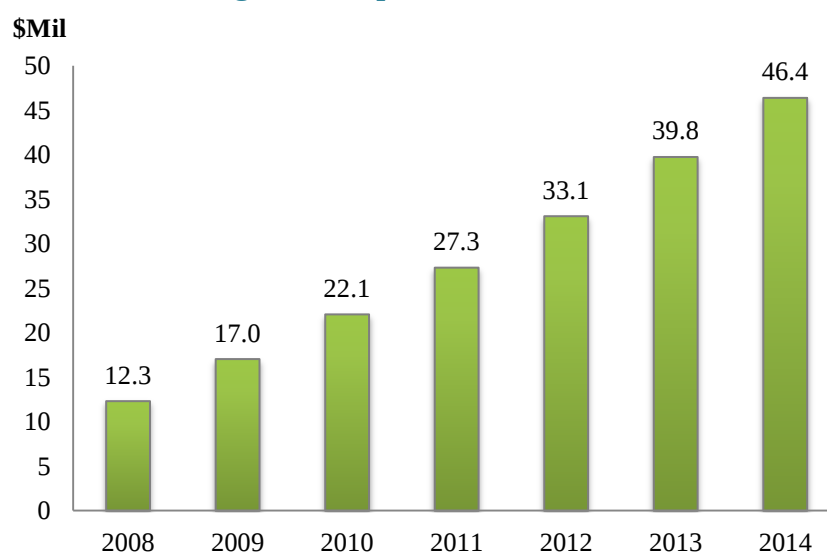
**Figure 2: Mortgage Holdings of the Financial System**



Source: Central Bank of Barbados

Confidence in the financial system is supported by the existence of the Deposit Insurance Corporation, which guarantees each depositor up to \$25,000 on domestic currency accounts. As at year-end 2014, over 90 percent of qualified accounts in the Barbadian banking system are fully covered in the event of an institution's collapse. The fund showed steady growth since its inception in 2007 and is currently valued at \$46 million.

**Figure 3: Deposit Insurance Fund**



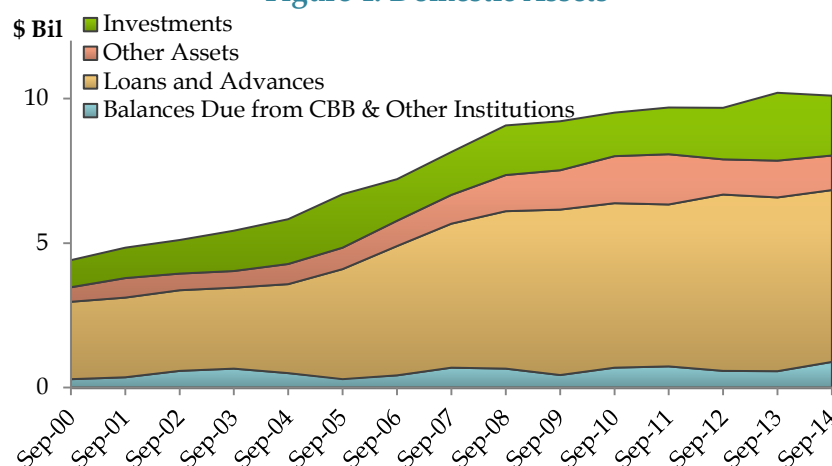
Source: Barbados Deposit Insurance

### 3. Trends in the Financial System

#### 3.1 Commercial Banks

Domestic assets of commercial banks slipped 1 percent (\$98 million), over the year ending September 2014 due primarily to reduced investment in both private and public debt (\$279 million) and loans and advances (\$68 million). Holdings of Government's Treasury bills and Debentures fell \$33 million and \$119 million, respectively, after jointly increasing by \$566 million a year earlier. Similarly, other private investments registered a decline of \$127 million, but coincided with a build-up in foreign investments over the period. These reductions were partially offset by increases in cash reserves at the Central Bank to the tune of \$253 million and balances due from other institutions of \$73 million.

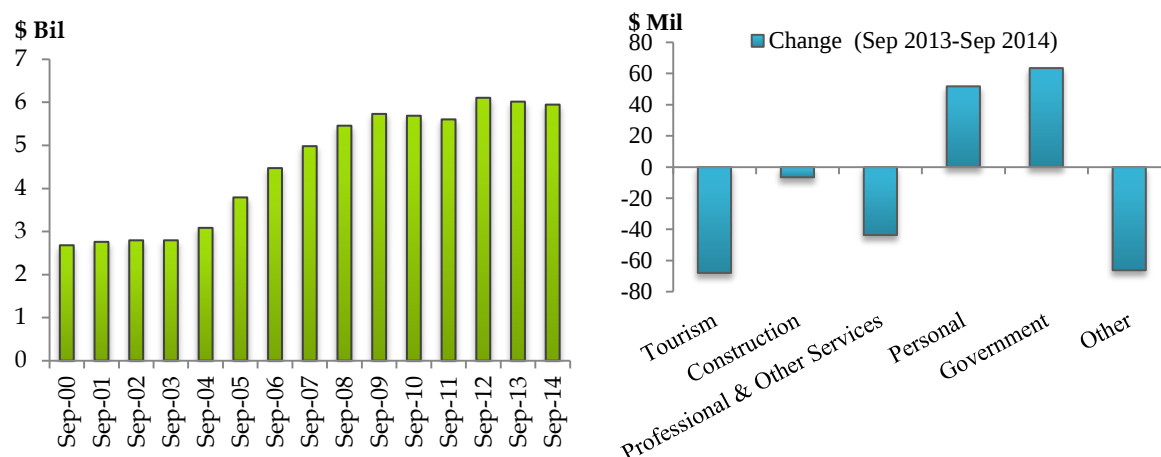
Figure 4: Domestic Assets



Source: Central Bank of Barbados

The fall-off in commercial bank credit witnessed since 2012 slowed to approximately 1.1 percent over the year, as lending to all sectors, with the exception of the personal and government categories, contracted. In particular, declines were registered for tourism (\$68 million), professional and other services (\$43 million), and construction (\$7 million). However, loans to Government increased \$63 million primarily due to a local bank supplying part of the funds for a medium term facility in March 2014, while consumer credit grew \$51 million, driven by growth in mortgages for private dwellings (\$41 million).

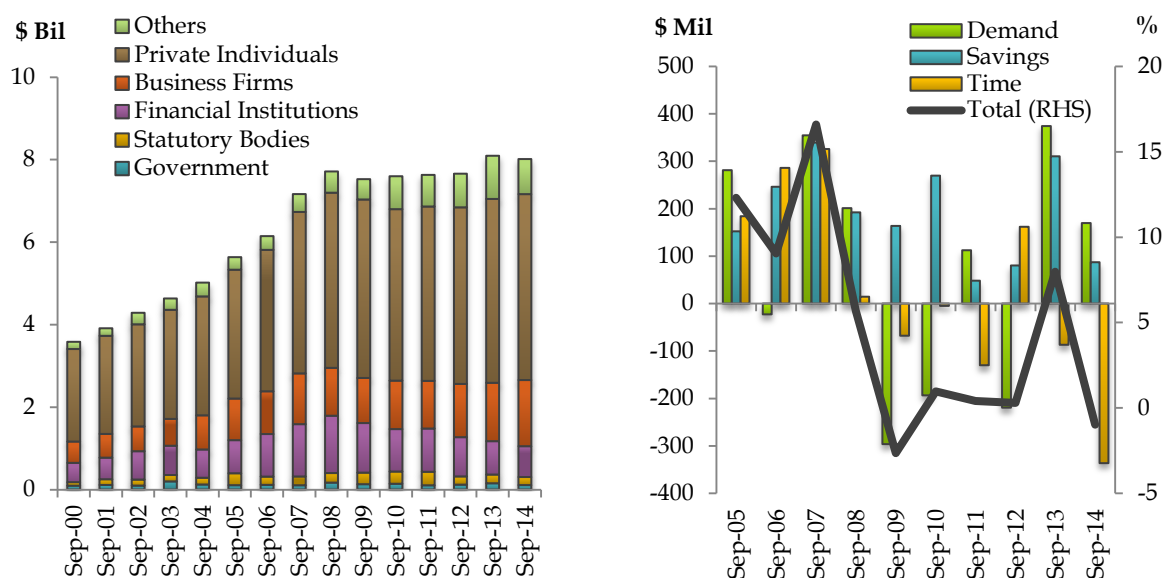
Figure 5: Total Loans and Sectoral Growth



Source: Central Bank of Barbados

Domestic deposits declined 1 percent (\$79M) for the year to September 2014, reflecting reductions in all depositor categories with the exception of business firms and private individuals. The fall-offs were mainly reflected in reduced holdings of time deposits of approximately \$336 million, net of increases in demand and savings deposits of \$170 million and \$87 million, respectively.

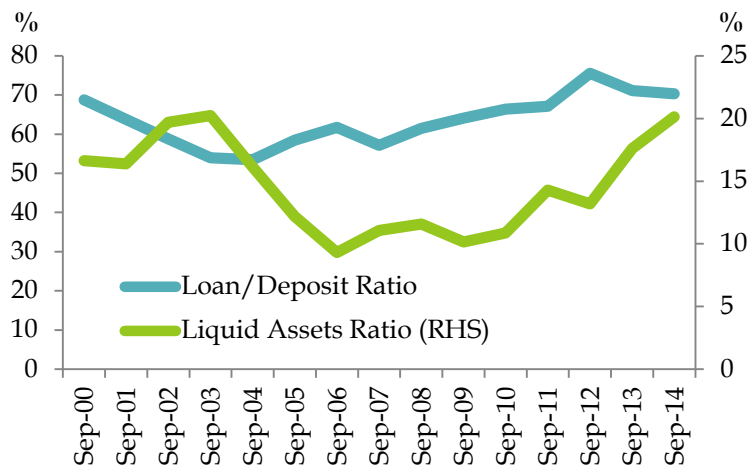
Figure 6: Domestic Deposits



Source: Central Bank of Barbados

Liquidity risk remained minimal, as credit and deposits contracted by similar amounts and the deposit base of the commercial banks continued to be dominated by stable retail depositors, with long established relationships. Consequently, liquidity in the financial system remained high to September 2014. The loan-to-deposit ratio declined slightly from 71 percent to 70 percent, while the liquid assets ratio continued on its climb to reach 20.1 percent, mainly as a result of banks' increased reserves at the Central Bank, coupled with a declining asset base.

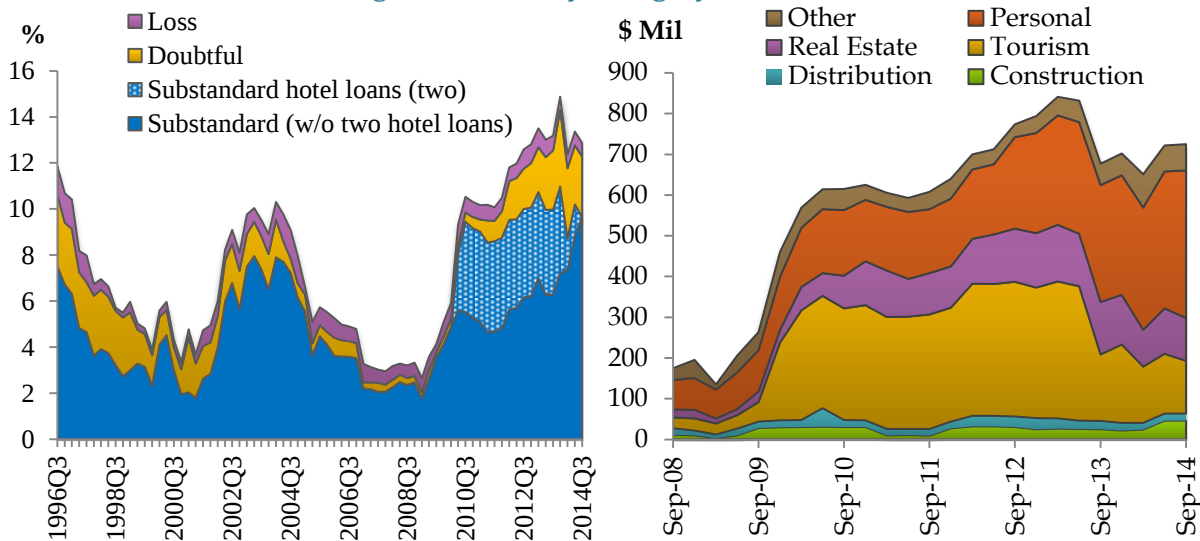
Figure 7: Liquidity



Source: Central Bank of Barbados

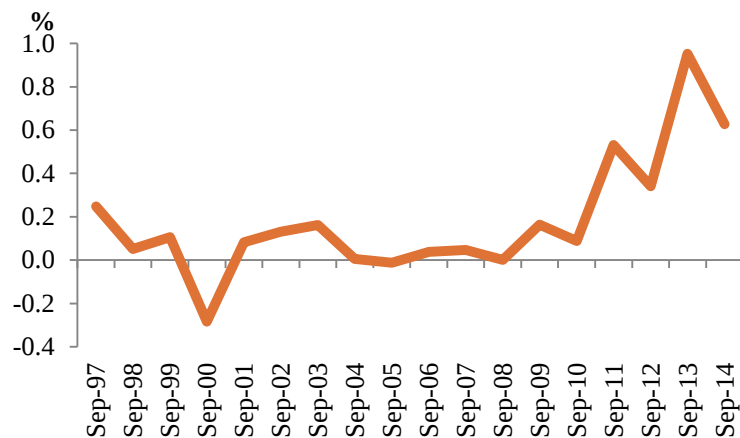
Credit risk within the banks overall portfolio increased slightly; the reduction in loans and advances, along with an increase in banks' gross classified debt of \$47 million, led to an NPL ratio of 12.2 percent at September 2014, compared to 11.3 percent one year earlier. While there was increased delinquency in the personal (\$75 million) and construction (\$20 million) sectors, some improvement was recorded for hotel and restaurants (\$33 million) and real estate (\$23 million) over the period. Most non-performing loans were concentrated in the least severe category (substandard), versus the more problematic doubtful and loss categories. Substandard loans accounted for 71.3 percent of NPLs, while the doubtful and loss category represented 14.8 percent and 13.9 percent, respectively. Despite an increased proportion of loans being reported in the loss category (8 percent in 2013), net write-offs to total loans remained less than one percent per year.

Figure 8: NPLs by Category and Sector



Source: Central Bank of Barbados

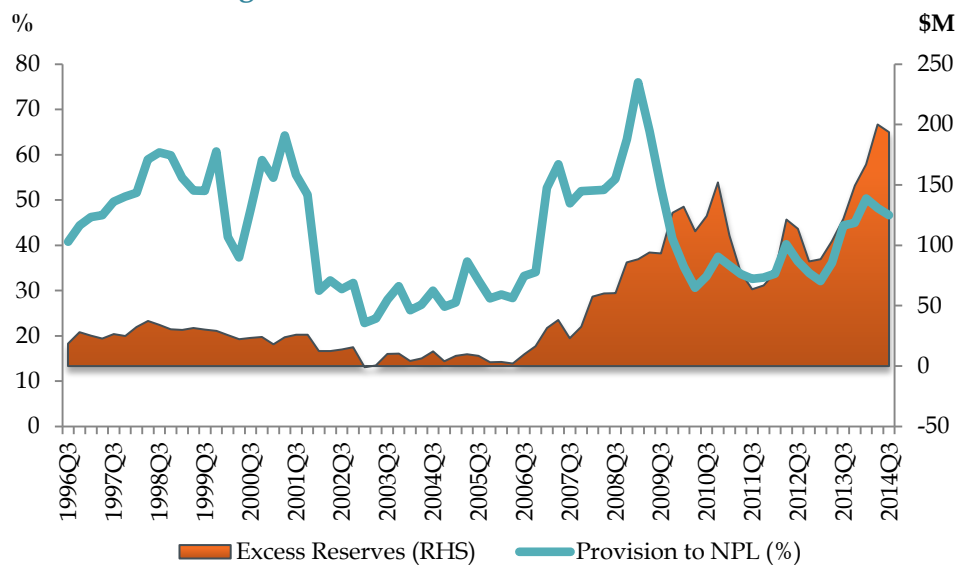
**Figure 9: Net Write-offs to Total Loans**



Source: Central Bank of Barbados

The increased NPLs resulted in a reduction in the provision-to-NPL ratio from 50 percent to 46 percent; however, banks' provisions against losses remained well above the requirement, with excess provisions totaling \$194 million at September 2014.

**Figure 10: Provisions for Classified Debt**

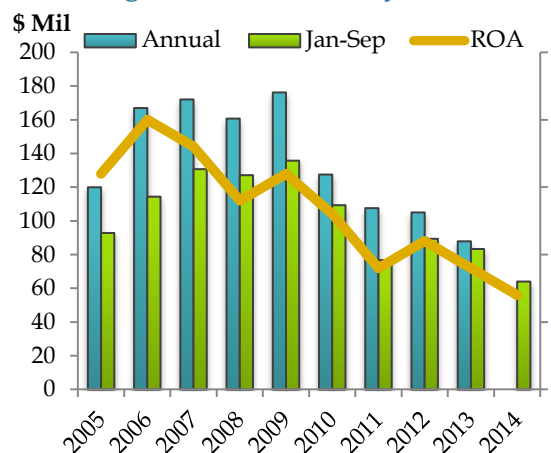


Source: Central Bank of Barbados

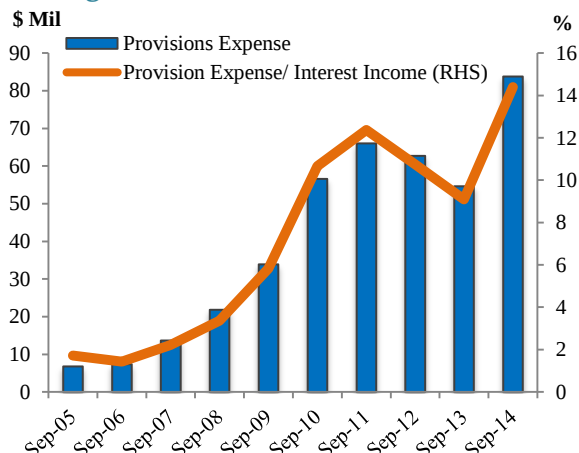
Banks continued to be profitable, with each institution recording positive profits over the January to September 2014 period, though net income was 23 percent below that for the comparable period of 2013, due primarily to increased provisioning (Figure 12). Consequently, the ROA declined from 1 percent to 0.9 percent at September 2014. Banks' CAR remained well above

required levels at 19.1 percent, despite a reduction of 2.6 percentage points<sup>4</sup> when compared to September 2013.

**Figure 11: Profitability**

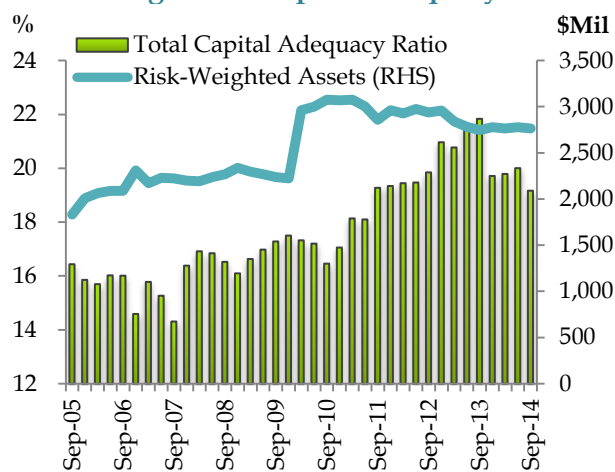


**Figure 12: Provisions/Interest Income**



Source: Central Bank of Barbados

**Figure 13: Capital Adequacy**

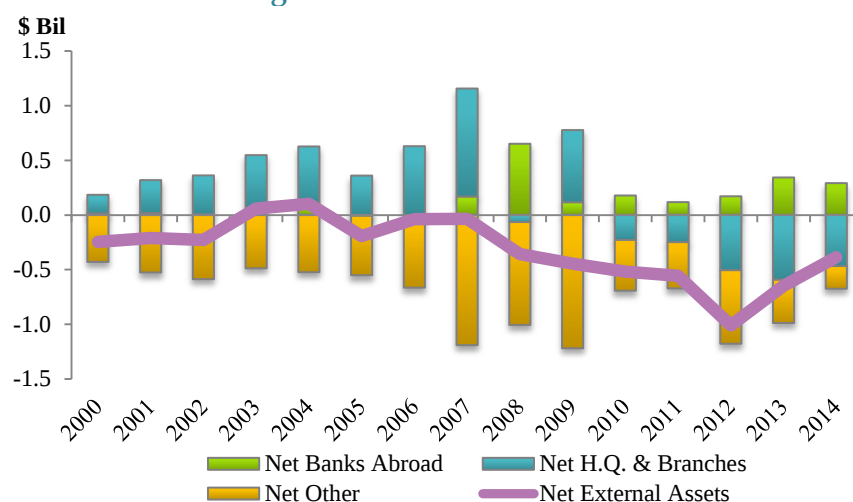


Commercial banks held approximately 64 percent (\$1.46 billion) of total Government Treasury bills issued, but only 8 percent of long-term Debentures and Treasury notes. Treasury bill holdings constituted about 70.3 percent of the banks' total investments at the end of the review period. Consequently, banks had only a modest exposure to interest rate risk arising from changes in the yield curve, due to the short-term nature of the majority of their investments.

The net external position of commercial banks improved by \$262 million over the 12 months ending September 2014 due primarily to a \$125 million expansion in amounts due to banks abroad, and an improvement in other net balances. Net balances held with affiliates (headquarters and branches) abroad fell \$52 million (Figure 14).

<sup>4</sup> This reduction was primarily as a result of one institution transferring funds to a general contingency reserve at December 2013.

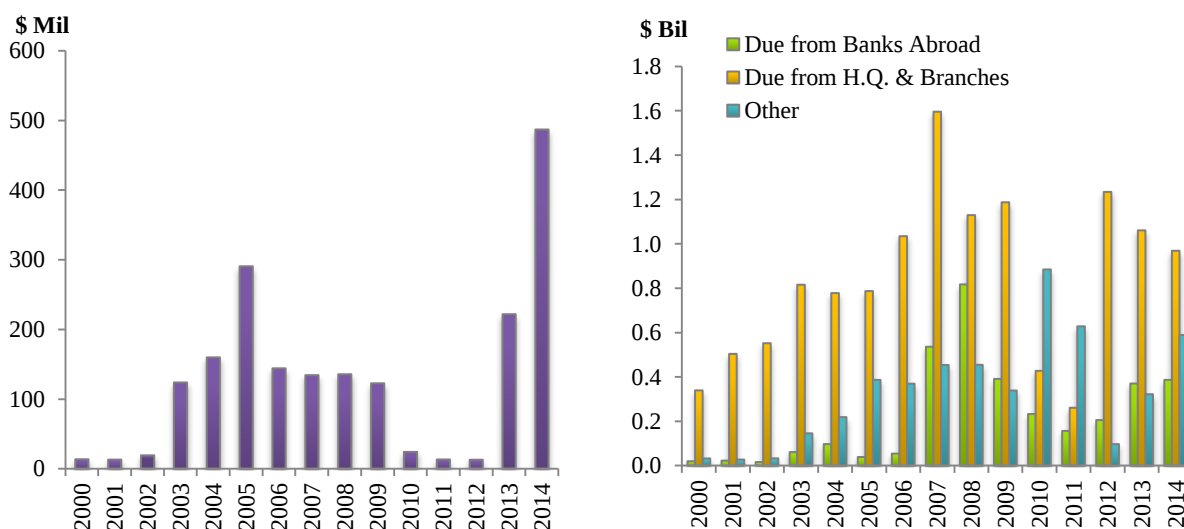
Figure 14: Net External Assets



Source: Central Bank of Barbados

Overall, total external assets increased \$253 million, mainly as a result of increased foreign investments (reflected in the improvement of the net other balance), while total external liabilities fell by \$8 million. This build-up in foreign investments which was evidenced during 2013 continued into the current year. More specifically, holdings of foreign securities grew \$265 million over the past 12 months to reach \$486 million at September 2014. These investments were primarily concentrated in Caribbean sovereign and American corporate bonds.

Figure 15: Foreign Investments & Total External Assets

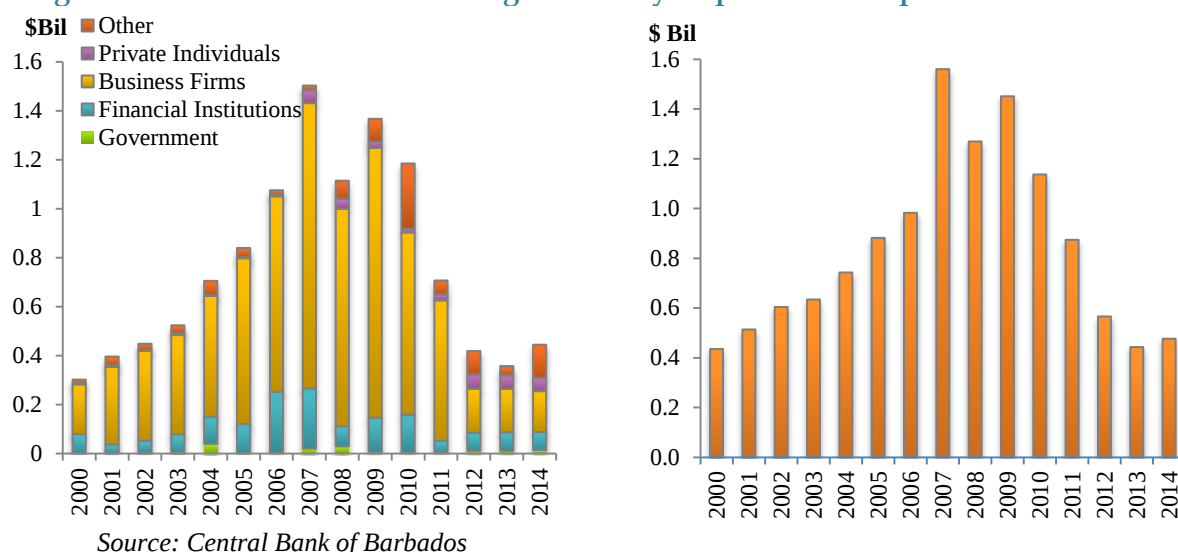


Source: Central Bank of Barbados

The steady fall-off in the deposits of non-residents that was evident since 2008<sup>5</sup>, reversed somewhat by the end of September 2014, increasing by \$34 million since September 2013.

<sup>5</sup> The decline was due to the transfer of funds from a domestic institution to its licensed affiliate in the international financial sector.

**Figure 16: Commercial Banks' Foreign Currency Deposits and Deposits of Non-Residents**



Exposures<sup>6</sup> within the banking system occur principally between the domestic banks and their parents rather than between subsidiaries or branches within the domestic banking system. Consideration must therefore be given to the health of the parent bank due to the potential credit exposure of the domestic subsidiary should the need arise for the parent to lend its reputational or financial capital to the domestic subsidiary. As Table 1 demonstrates, all parent banks continue to be rated as having investment grade bonds with all companies being domiciled in investment grade countries.

**Table 1: Capital Adequacy and Rating of Parent**

| Domestic Bank                          | Majority Shareholder  | Majority Shareholder Capital Adequacy (Tier 1-2014) | Majority Shareholder's Rating (Moody's) | Country Rating (Majority Shareholder) (Standard and Poor's) |
|----------------------------------------|-----------------------|-----------------------------------------------------|-----------------------------------------|-------------------------------------------------------------|
| Republic Bank Barbados Limited         | Republic Bank Limited | 25.8*                                               | Baa1                                    | A/Trinidad and Tobago                                       |
| CIBC FirstCaribbean International Bank | CIBC                  | 12.2**                                              | Aa3                                     | AAA/Canada                                                  |
| Bank of Nova Scotia                    | Bank of Nova Scotia   | 10.8**                                              | Aa2                                     | AAA/Canada                                                  |
| Royal Bank of Canada                   | Royal Bank of Canada  | 11.4**                                              | Aa3                                     | AAA/Canada                                                  |
| First Citizens                         | First Citizens Group  | 64.5#                                               | Baa1                                    | A/Trinidad and Tobago                                       |
| Citibank Ltd                           | Citigroup Inc.        | 13.7#                                               | Baa2                                    | AA+/USA                                                     |

\*Tier I & Tier II Capital Adequacy.

\*\*Based on Basel III capital requirements and definitions

# Data from 2013 Annual Report.

<sup>6</sup> These exposures are usually in the form of deposits, loans or securities held by the local institution

### Box 1: Regulatory and Supervisory Developments

During 2014, the Central Bank of Barbados (the Bank) continued to enhance its regulatory framework in response to emerging developments through various initiatives. Furthermore, projects to address recommendations coming out of the 2013 Financial Sector Assessment Programme (FSAP) exercise such as updates to legislation, existing guidelines and internal guidance are in progress.

The Bank continued its work with domestic, regional and international stakeholders and regulatory bodies on various matters, including the Global Forum on Transparency and Exchange of Information for Tax Purposes Peer Review and Financial Action Task Force initiatives. The Bank also continued its annual visits to Canada to attend meetings with Canadian banks, regulatory authorities and other stakeholders in Toronto and Ottawa. Similarly, the Bank attended regulatory colleges and engaged in quarterly conference calls with regional and international regulators and was represented on regional regulatory Working Groups to discuss matters such as Basel II/III and Loan Classification and Provisioning Standards.

The Bank also remained active in regional and international groupings, such as the Caribbean Financial Action Task Force, the Association of Supervisors of Banks of the Americas and the Group of International Finance Centre Supervisors (formerly Offshore Group of Bank Supervisors)) where issues pertinent to global standards and international financial matters are discussed.

#### *Policy Development*

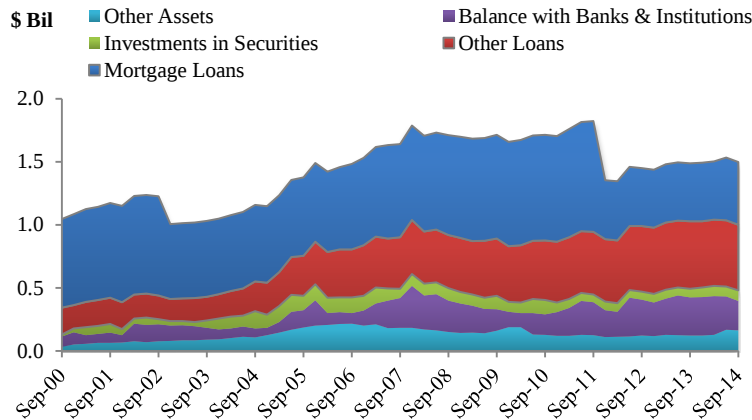
The Bank continued its efforts with the implementation of Basel II/III and during 2014 issued the following draft guidelines to the industry for comments.

- Internal Capital Adequacy Assessment Process (ICAAP) Guideline - The Guideline is meant to provide a general guide to the formulation and implementation of an ICAAP. Through its ICAAP, each bank should assess the total amount of capital necessary to safeguard against all risks inherent in its business, both current and forward looking.
- Capital Adequacy Guideline: Standardised Approach to Credit Risk - The Guideline provides the framework for calculating risk-weighted assets by assigning on-balance sheet assets and off-balance sheet exposures in the banking book to broad categories of credit risk for the purpose of computing a licensee's capital adequacy ratio.
- Capital Adequacy Guideline: Measurement of Operational Risk - The Guideline is based on the Basic Indicator and Standardised Approach options outlined in the Basel Committee on Banking Supervision (Committee) Revised Framework on Capital Measurement and Capital Standards.

### 3.2 Deposit-Taking Finance and Trust Companies

The asset base of finance and trust companies declined 2.6 percent over the year to September 2014, as a significant contraction in balances held with other banks and financial institutions and a reduction in mortgages more than offset a modest expansion in investments. Overall, total loans remained virtually unchanged despite a 1.6 percent increase in non-mortgage-related lending.

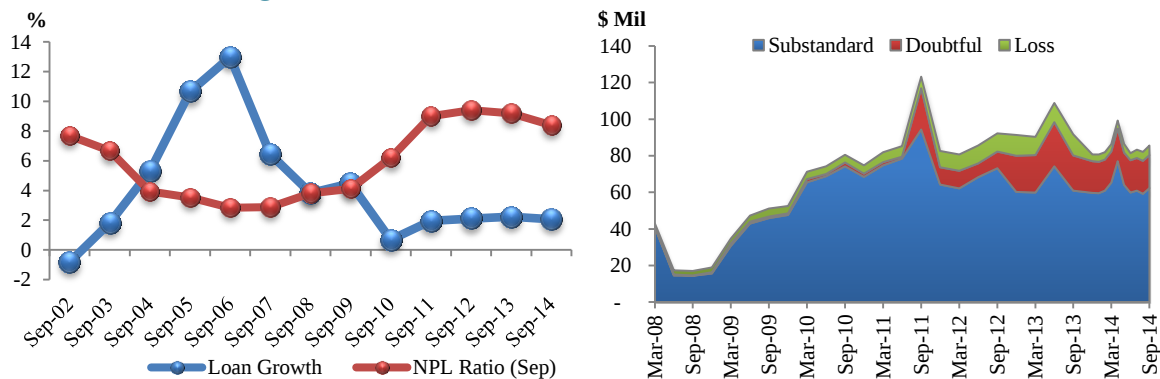
**Figure 17: Total Assets of Non-Bank Financial Institutions by Category**



Source: Central Bank of Barbados

Total impaired loans declined slightly over the period to reach \$85 million, which led to reduction in the NPL ratio of finance and trusts from 9.2 percent to 8.4 percent at September 2014. The distribution of NPLs showed little change over the year and continued to be heavily concentrated in the substandard category.

**Figure 18: Loan Growth, NPL Trends & NPL Classifications**

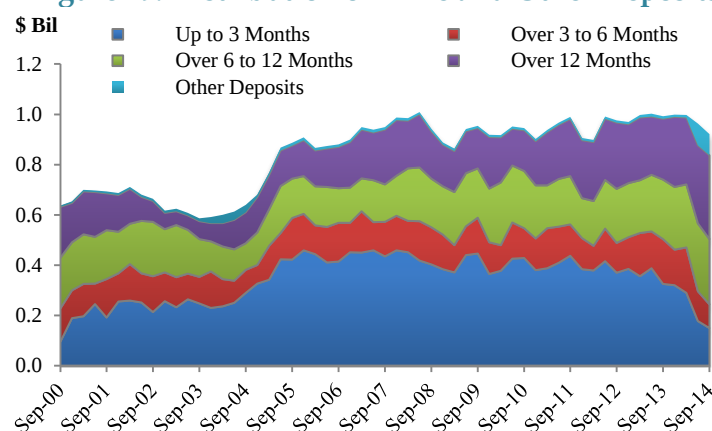


Source: Central Bank of Barbados

The funding structure of finance and trust companies continued to be primarily dominated by time deposits; however, modest shifting was observed amongst maturity categories. While deposits in six-to-twelve months and over-twelve months bands grew \$23 and \$91 million respectively, these increases were insufficient to offset the declines in deposits characterised by

shorter-term maturities. Consequently, total deposits of these institutions contracted 7 percent at September 2014.

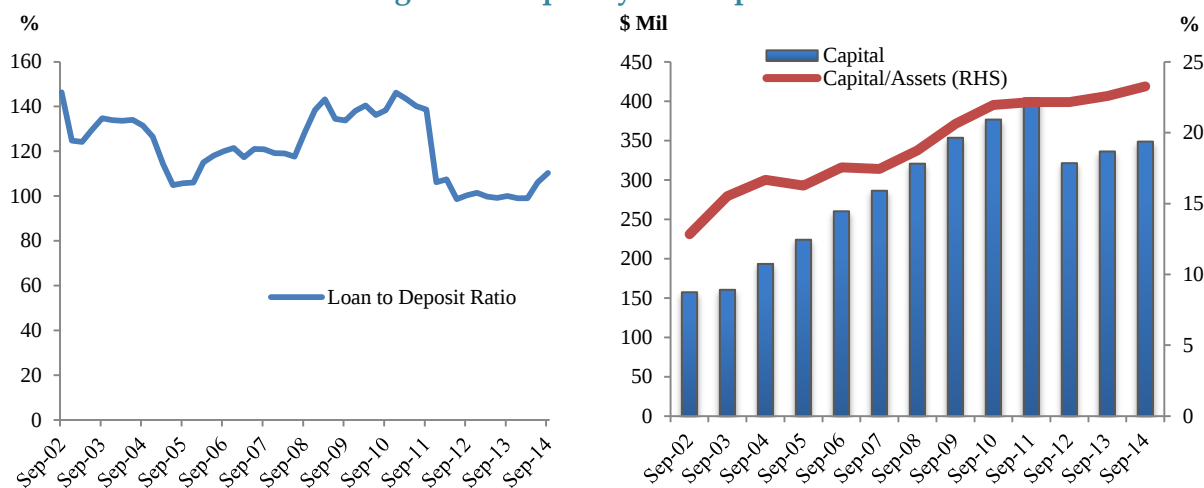
**Figure 19: Distribution of Time and Other Deposits**



Source: Central Bank of Barbados

Liquidity among these institutions increased over the period, as the loan-to-deposit ratio fell to 99.1 percent in September 2014 from 101.1 percent one year earlier. The capitalisation of finance and trusts grew marginally with their total capital covering approximately 23 percent of their total assets at September 2014.

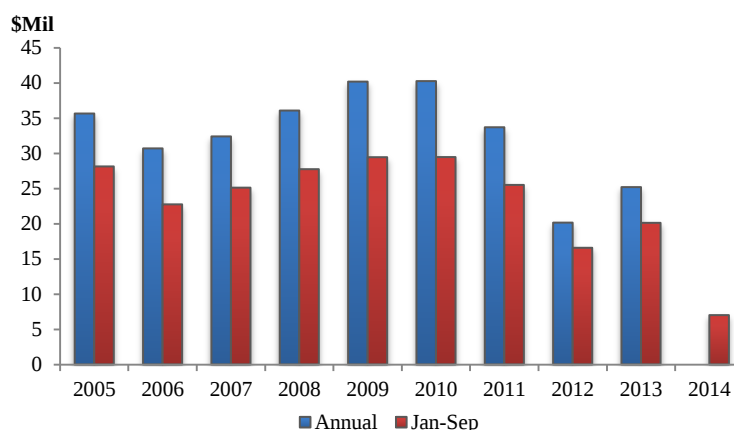
**Figure 20: Liquidity and Capitalisation**



Source: Central Bank of Barbados

Following a small recovery during 2013, finance and trusts recorded a significant decline in their profitability over the first nine months of 2014. Losses were experienced by two institutions in particular, due to more aggressive provisioning policy on delinquent mortgages and an operational risk-related issue, which led to a decline of \$13 million (65 percent) in net income, when compared to a similar period last year.

Figure 21: Net Income

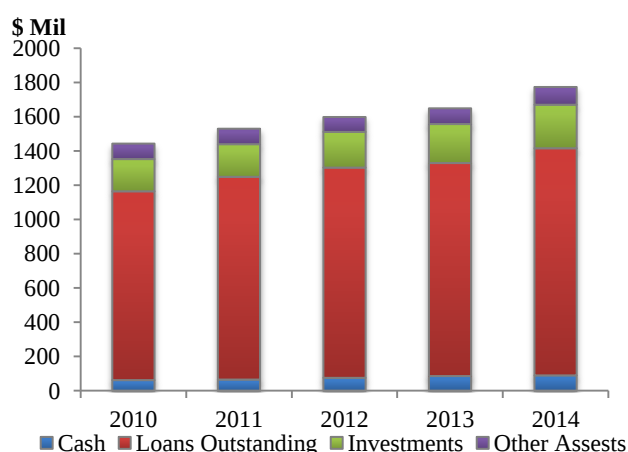


Source: Central Bank of Barbados

### 3.3 Credit Unions<sup>7</sup>

At the end of September 2014, there were 35 registered credit unions operating in Barbados with reported membership of approximately 165,700. This was an increase in membership of 4 percent over the comparable period in the prior year.

Figure 22: Credit Unions Total Assets by Category



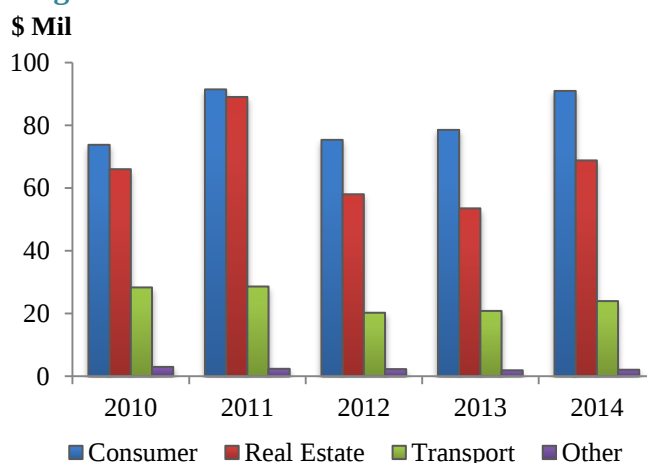
Source: Financial Services Commission

Total assets of the sector grew by 7.4 percent between September 2013 and September 2014 to reach approximately \$1,728 million (Figure 22). The largest contributor to the expansion in assets was an increase in loans to members, which rose by \$77.8 million (6.6 percent). In addition, investments increased by \$26.6 million (11.7 percent) and cash holdings by \$3.7 million (4.0 percent).

<sup>7</sup> All data in this section to September 2014.

As at September 2014, gross loans to members represented the largest asset on the combined balance sheet for the credit union movement. These loans accounted for approximately 76.7 percent of total assets, slightly down from 77.3 percent of total assets for the same period of the prior year.

**Figure 23 – Credit Unions’ New Credit Issued**

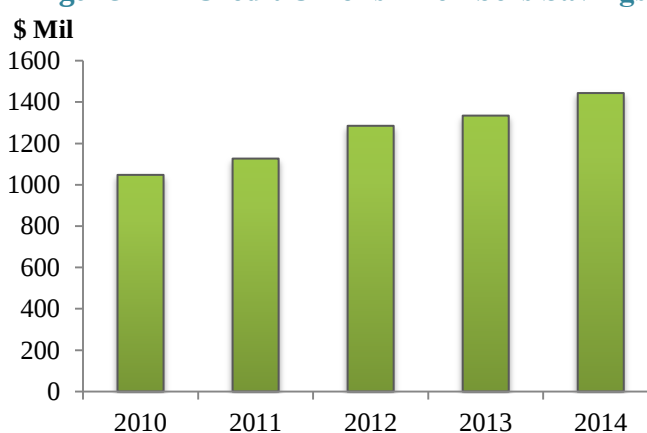


Source: Financial Services Commission

Between September 2013 and September 2014, gross loans to members increased by 6.5 percent to reach \$1,325.6 million. The expansion in credit was driven mainly by lending for real estate which grew 28.6 percent (\$15 million), and consumer credit which increased by 16 percent (\$12 million) over the period. Consumer credit remained the largest category of loans, while real estate loans which previously accounted for 34.6 percent of the loan portfolio in 2013, increased marginally to 37 percent.

Members’ savings, which comprise both members’ deposits and members’ shares, increased by 8.1 percent to \$1,443.4 million at September 2014. This growth resulted primarily from an expansion in members’ deposits.

**Figure 24 – Credit Unions’ Members Savings**

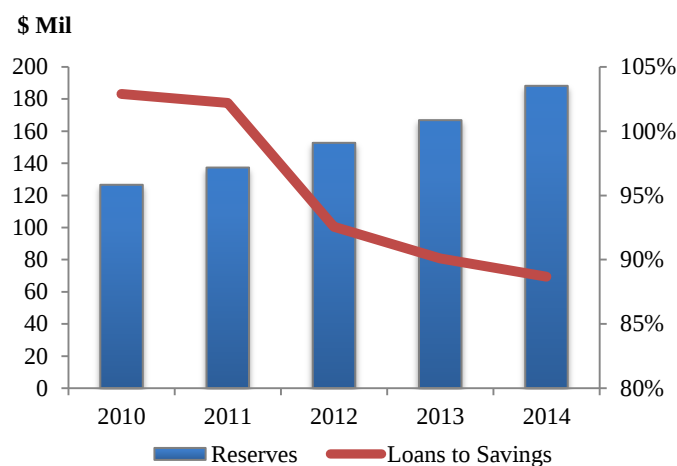


Source: Financial Services Commission

Figure 25 illustrates that the loans-to-deposits and shares ratio declined marginally to 89 percent, reflecting the faster rate of growth in deposits and shares relative to loans.

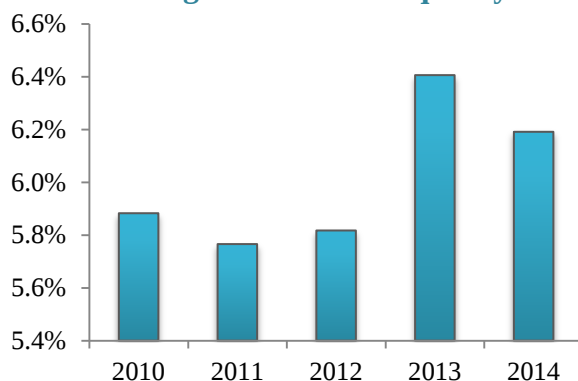
The industry's cash liquidity declined in 2014 but remained above the levels prior to 2013<sup>8</sup>. However, considering the cash and investment holdings ratio, the industry has showed a substantial increase in liquidity since 2012.

**Figure 25: Credit Unions' Reserves and Loans to Deposits and Shares**



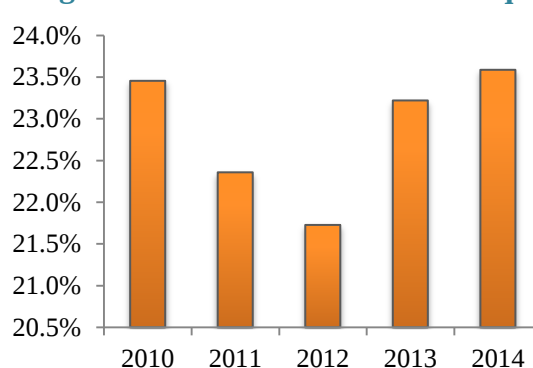
Source: Financial Services Commission

**Figure 26: Cash Liquidity**



Source: Financial Services Commission

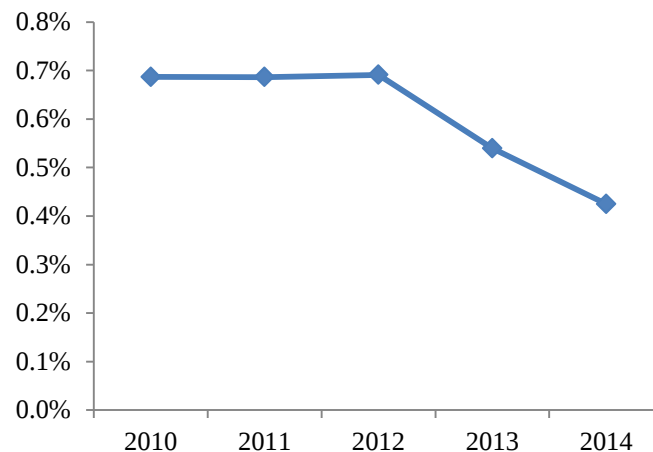
**Figure 27: Cash & Investments Liquidity**



Despite the recovery in credit growth, profitability in the sector, as measured by the annualised return on combined assets (ROA), declined from 0.5 percent to 0.4 percent in 2014.

<sup>8</sup> Guideline 5, issued by the FSC requires credit unions to maintain liquidity of at least eight percent of liabilities. Liquidity is evaluated using two methods, *cash as a ratio of the sum of deposits, shares and loans* and *cash and investments as a ratio of the sum of deposits, shares and loans*.

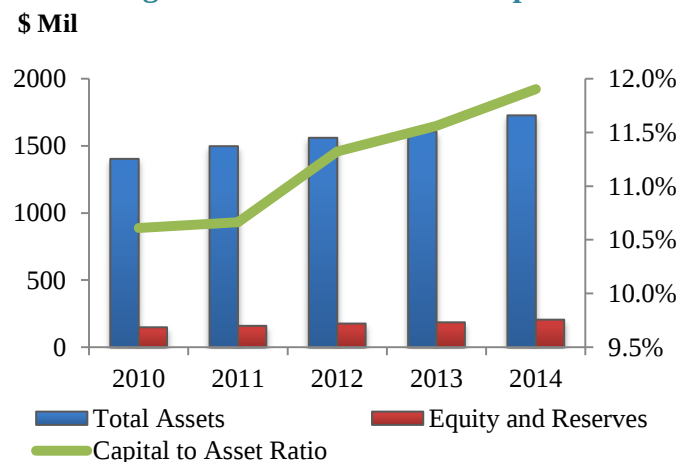
**Figure 28: Credit Unions' Return on Assets**



Source: Financial Services Commission

As at September 2014, the capital to assets ratio<sup>9</sup> for the credit union movement was 11.9 percent, marginally higher than the 11.6 percent reported at the end of September 2013 due to the modest growth in equity and reserves (Figure 29).

**Figure 29: Credit Unions' Capital**

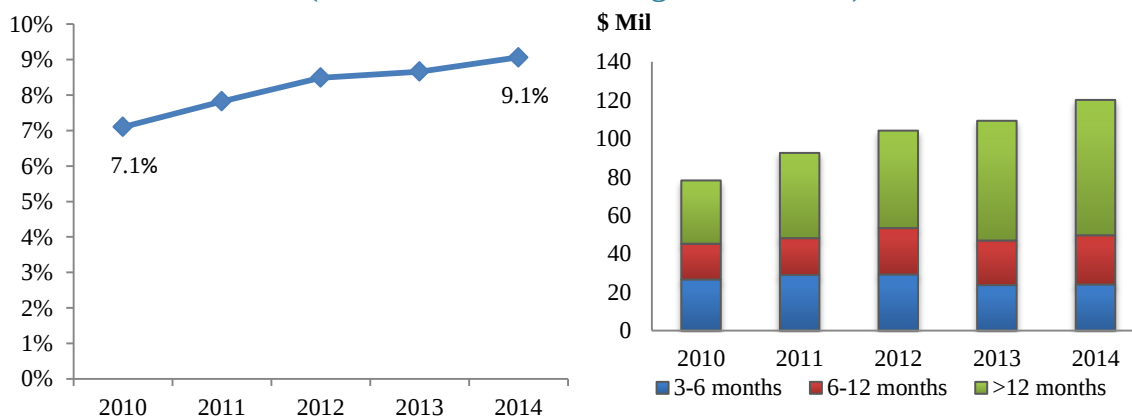


Source: Financial Services Commission

The quality of the loan portfolio for the credit union movement declined slightly (Figure 30), as the gross debt ratio increased from 8.7 percent at September 2013, to 9.1 percent at September 2014. The quality of the loan portfolio varied significantly across the sector, with NPLs among the smaller credit unions being substantially higher than among the larger entities.

<sup>9</sup> The capital used in the capital-to-assets ratio includes statutory reserves, liquidity reserves and undivided surplus.

**Figure 30 - Credit Unions NPLs  
(NPL Ratio and Sub-categories of NPLs)**

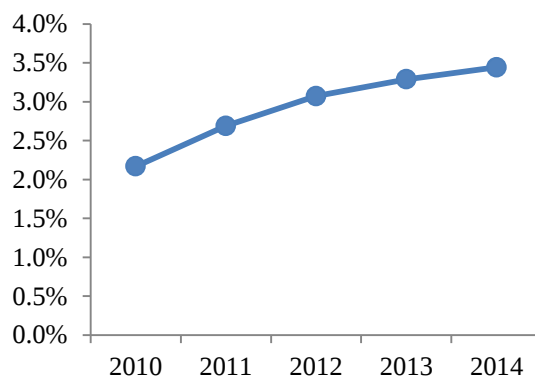


Source: Financial Services Commission

Figure 30 shows a more detailed breakdown of the NPLs by sub-categories. The majority of NPLs in the credit union sector has been classified as being in arrears in excess of twelve months (approximately 58.6 percent). During the period ended September 2014, NPLs in the abovementioned over-twelve months category increased by approximately 13 percent, while the NPLs in the six-to-twelve months and three-to-six months categories increased by less than 6 percent collectively.

The ratio of the loan-loss provisions to gross loans increased from 3.3 percent in September 2013 to 3.4 percent in September 2014 (Figure 31). The increased loan loss provisioning, which resulted from higher NPLs, had a negative impact on the profitability of credit unions.

**Figure 31 - Credit Union's Provisions for Loan Losses/ Gross Loans**



Source: Financial Services Commission

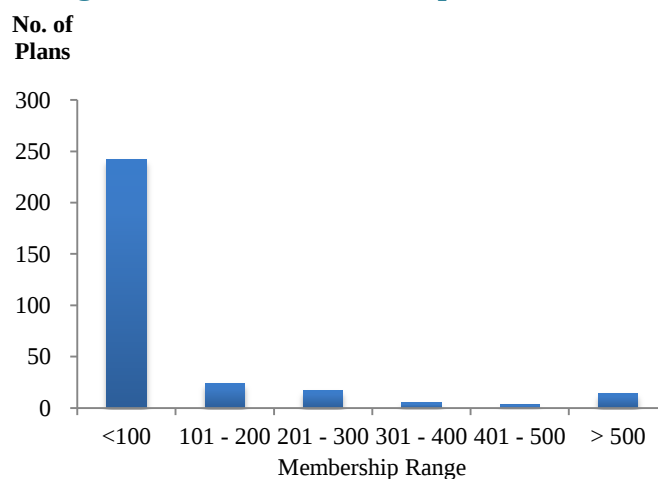
### 3.4 Pensions<sup>10</sup>

The pensions sector continues to be a substantial contributor to the financial system in Barbados and the FSC reviews financial, demographic, and other critical information in accordance with the Occupational Pension Benefits Act, CAP. 350B (OPBA). This legislation provides for the supervision, regulation and registration of occupational pension plans in Barbados. Within the past year, the FSC has made significant strides into the development of the supervisory framework, with the registration of compliant pension plans, and continued dialogue with stakeholders from the pensions sector regarding requirements under the OPBA.

From the inception of the registration process, there have been 305 applications submitted to the pensions division for registration as per the requirements of the OPBA. The division has registered 145 pension plans<sup>11</sup> and has also facilitated the complete wind-up for three pension plans.

Active pension plans now cover approximately 30,000 members, and vary in size from one member to 2831 members. The number of plans consisting of less than 100 plan members each is 246 pension plans. These plans account for approximately 80 percent of the total pension plans submitted for registration, while there are only 15 plans which consist of more than 500 members per plan.

**Figure 32 – Plan Membership Distribution**



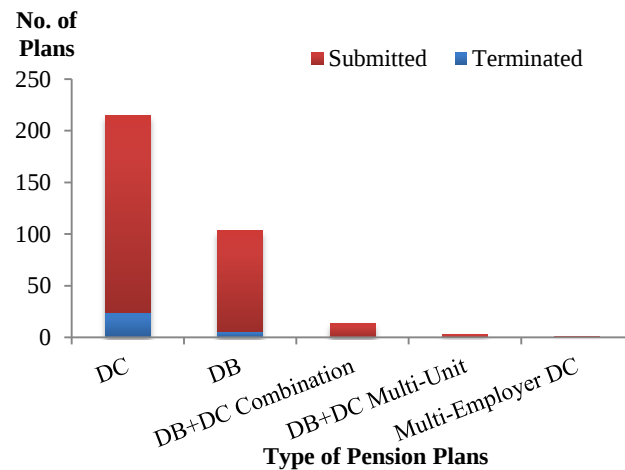
Source: Financial Services Commission

Consistent with international trends, more plan sponsors (63 percent) have been choosing defined contribution (DC) plans over defined benefit (DB) plans. This practice is expected to continue as more employers shift the investment risk away from the plan sponsor to the plan members (Figures 33 and 34).

<sup>10</sup> All data in this section is at March 2014.

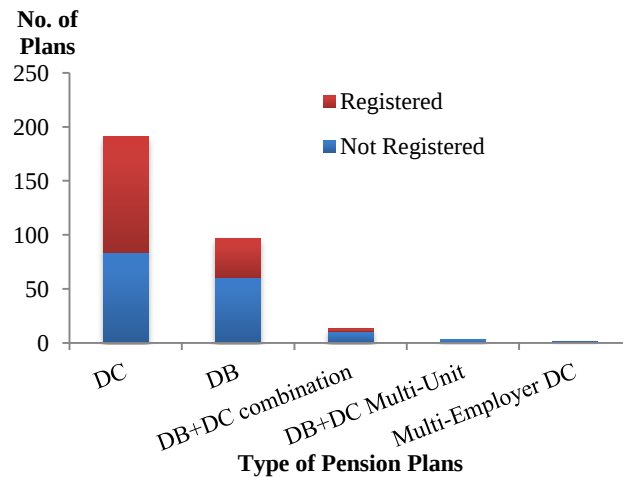
<sup>11</sup> The registration process for pension plans would be a one-time event unless a plan substantially changes or is wound-up.

**Figure 33 – Occupational Pension Plans Applications**



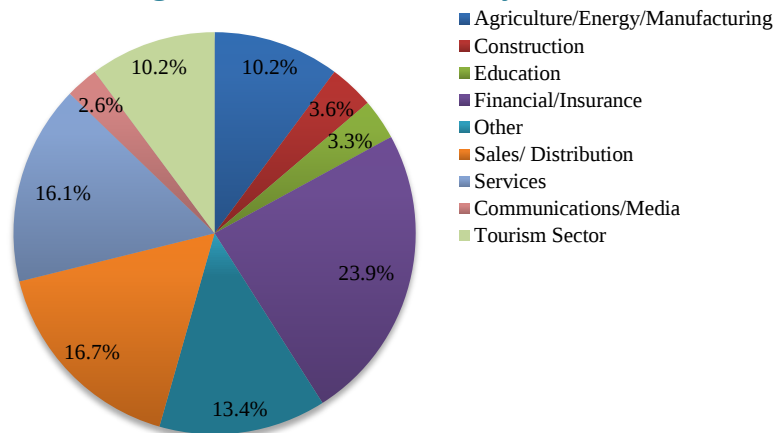
Source: Financial Services Commission

**Figure 34 – Fully Registered Occupational Pension Plans**



Source: Financial Services Commission

**Figure 35 – Pension Plans by Sector**



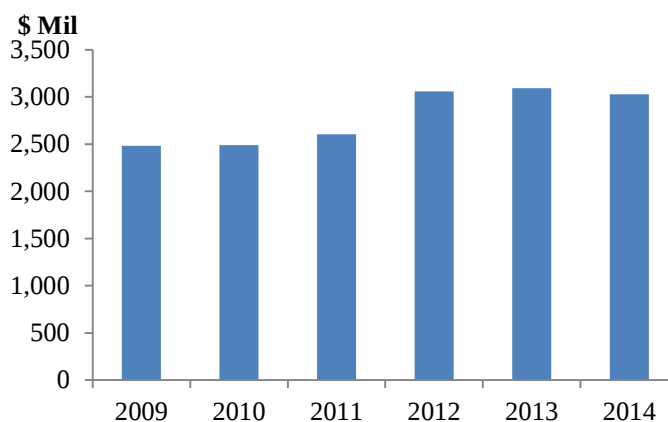
Source: Financial Services Commission

Figure 35 highlights that the sponsors of pension plans originate from various sectors, with the financial/insurance sector continuing to be the leader in the market with a 2 percent growth in pension coverage in comparison with the previous financial year. This sector is followed closely by the sales/distribution and services sectors. There was also a marginal 1 percent growth in pension coverage in the communication/media sector when compared with the previous financial year ending March 2013.

### 3.5 Insurance Companies<sup>12</sup>

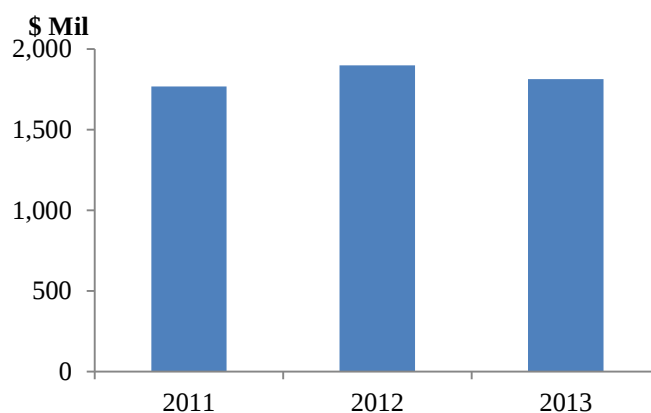
The domestic insurance sector continues to be impacted by the economic slowdown. As at December 2014, projected figures place total assets of the sector at approximately \$3.03 billion which represents a decrease in assets of approximately 2 percent following a 1 percent increase in the previous year. Figure 36 depicts the total assets of the insurance sector over a six-year period.

**Figure 36 - Total Assets of the Insurance Sector**



Source: Financial Services Commission

**Figure 37 - Total Capital of the Insurance Sector**



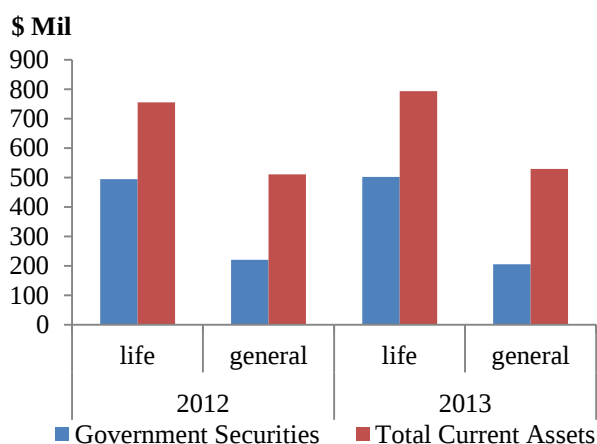
Source: Financial Services Commission

<sup>12</sup> The data used in this section of the report is at December 2013 unless otherwise stated.

Total industry capital has remained relatively stable over the past three years with the variation in the industry's capital levels largely affected by new company entrants in 2012. (Figure 37).

Two domestic insurance companies are traded on the Barbados Stock Exchange (BSE). For the remaining domestic companies the main source of capital is derived from their retained earnings or through raising private equity outside of the BSE or funding from other private sources. Given the low profitability levels in the industry over the past three years, the industry has not seen large capital increases.

**Figure 38 - Total Current Assets vs Government Securities**

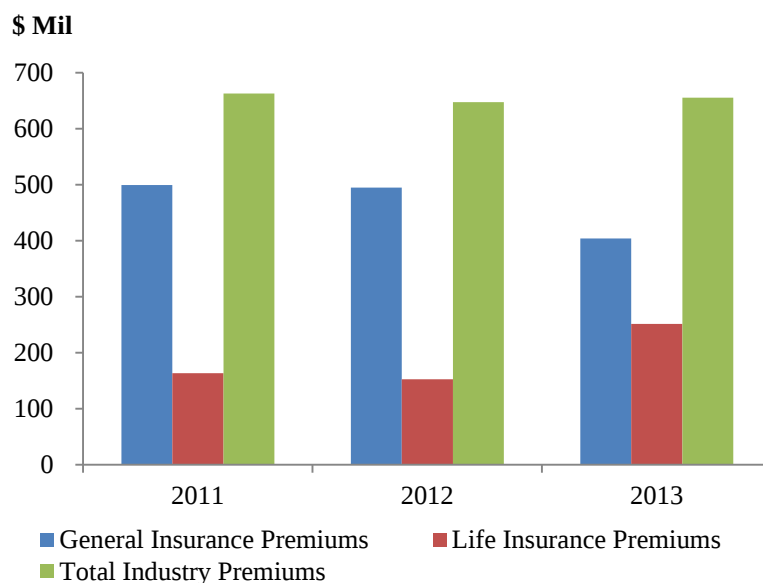


Source: Financial Services Commission

As at December 2013 total current assets increased in both the life and general categories of insurance by \$38.7 million and \$18.0 million dollars, respectively as companies replaced maturing long-term investments with short-term investments. Figure 38 shows that in excess of 60 percent of total current assets held by insurance companies are invested in Government securities. This investment strategy is partly driven by legislation and partly by the sector's general strategy of holding liquid investments given the nature of the insurance industry, where cash can be required at short notice to pay claims. Based on the criteria set out in the second schedule of the Insurance Act Cap 310, statutory fund requirements provide for investment in government paper as an investment alternative. At the end of December 2013, approximately \$1,340.5 million were held in statutory funds in support of policy holders' liabilities.

With total annual insurance premiums (life and general) averaging approximately \$655.3 million in 2013, the insurance industry maintains a capital to premium ratio of 3:1. The capital to premium ratio is supplemented by the heavy use of reinsurance, particularly in the general insurance sector, which provides excess funds in the event that actual claims exceed expected claims. The gross premium written in 2013 was approximately \$7.6 million higher than the 2012 figure of \$647.7 million as shown in Table 2. As seen in Figure 39 at the end of 2013, general insurance premiums, which were approximately \$404 million, accounted for the bulk of domestic market premiums, with the remaining (\$251.3 million) in premiums attributed to the life insurance sector. To date, the projected 2014 year-end gross premiums are trending in line with the 2013 figures with no significant growth expected.

**Figure 39- Gross Premiums Written**



Source: Financial Services Commission

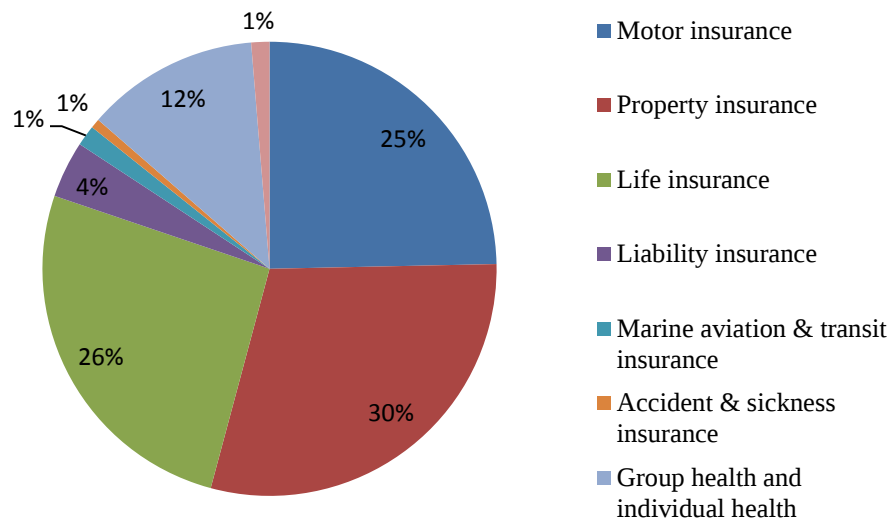
**Table 2 - Gross Premiums Written**

|                            | 2012                           | 2013                           |
|----------------------------|--------------------------------|--------------------------------|
| Type of Insurance          | Gross Premium Written<br>BDS\$ | Gross Premium Written<br>BDS\$ |
| General insurance premiums | 495,198,169                    | 403,996,938                    |
| Life insurance premiums    | 152,513,462                    | 251,295,335                    |
| Total industry premiums    | 647,711,631                    | 655,292,273                    |

Source: Financial Services Commission

Motor and property insurance policies were the key components of the general insurance market. In the life insurance market, the key products sold were whole life, term life and universal life. Table 3 and Figure 40 highlight that Property, Life and Motor insurance account for 81 percent of the gross premiums written in 2013.

**Figure 40 - Gross Premiums Written by Policy Type**



Source: Financial Services Commission

**Table 3 - Gross Premiums Written**

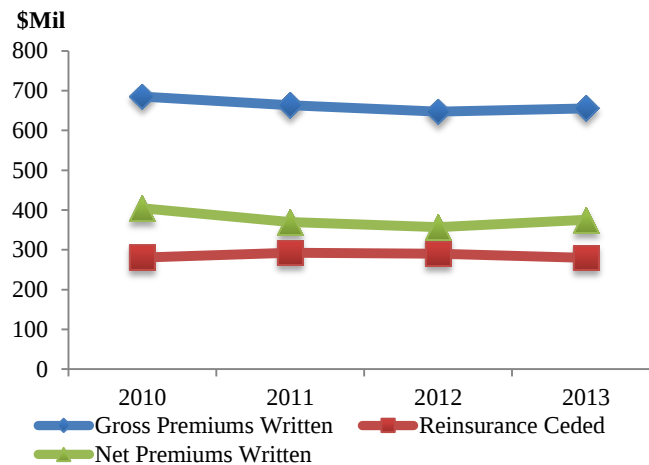
| Premiums by Policy Type             | Gross Premiums Written BDS\$ |
|-------------------------------------|------------------------------|
| Motor insurance                     | 161,654,716                  |
| Property insurance                  | 193,330,391                  |
| Life insurance                      | 170,589,659                  |
| Liability insurance                 | 26,463,020                   |
| Marine aviation & transit insurance | 9,662,774                    |
| Accident & sickness insurance       | 4,399,403                    |
| Group health and individual health  | 80,705,676                   |
| Other insurance                     | 8,486,634                    |

Source: Financial Services Commission

Given the stability in the premium figures, there is evidence that consumers continue to use insurance as a method of personal and commercial risk management by shifting the risk of loss or damage to their person and properties over to insurance companies.

The amount of reinsurance ceded by insurance companies in 2013 was \$279.6 million, with net premiums written in the industry standing at \$375.7 million. The comparative amount ceded in 2012 was \$290.6 million with net premiums written for the prior year of \$357 million.

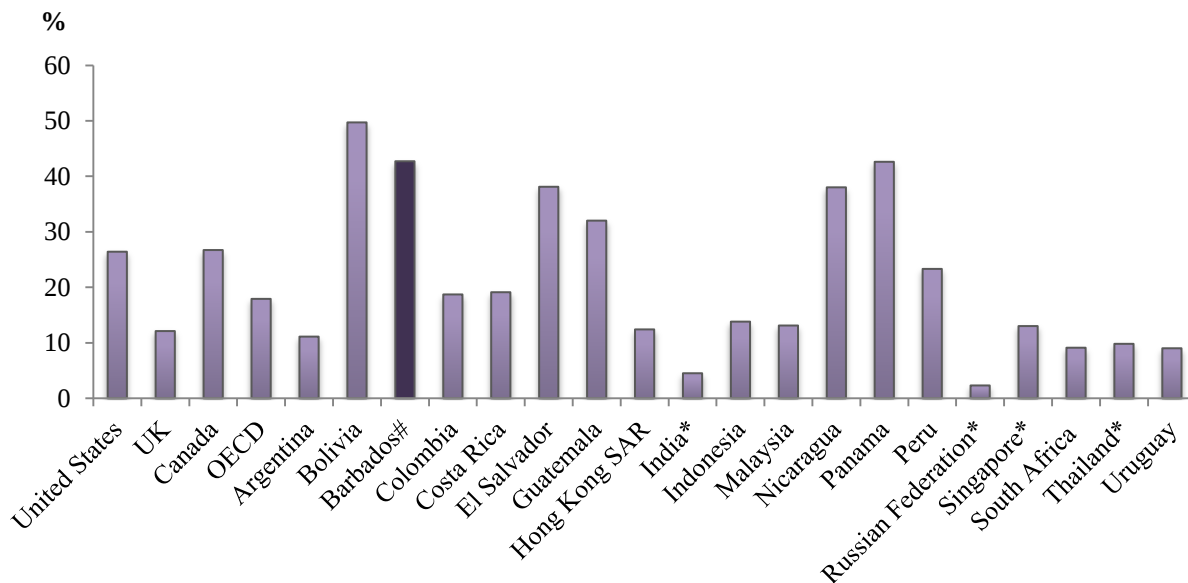
**Figure 41: Gross Premiums, Net Premiums and Reinsurance Ceded**



Source: Financial Services Commission

The insurance industry does not have the total capital base necessary to comfortably support the insured amounts on the balance sheets of domestic insurers. Reinsurance is therefore heavily used by the insurance sector as a risk diversification tool and as a viable alternative to capital. The use of reinsurance is a standard operating practice in insurance but the quantum of reinsurance purchased in the Barbados market is above average due to the relatively lower amounts of available capital.

**Figure 41: Reinsurance Ceded/Insurance Written**



Source: OECD, CBB Estimates

\* - Data for 2012, # -data for Barbados estimated based on data from FSC

Reinsurance is used more heavily by the general insurance sub-sector where on average over the last five years 42.2 percent of the total gross premium collected is used to purchase reinsurance. The reinsurance collectable therefore represents a material asset to insurance companies which is used to support the payment of claims in Barbados.

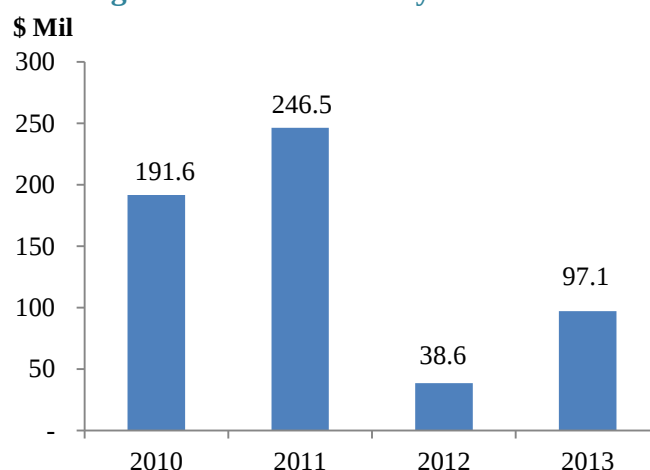
- On average 89 percent of property insurance premiums collected are ceded to reinsurers
- On average 38 percent of motor insurance premiums collected are ceded to reinsurers
- On average 4 percent of life insurance premiums collected are ceded to reinsurers

The higher level of ceding percentages on the property insurance is a function of the higher property values relative to the capital levels in the industry. The value exposures in the motor insurance subsector are comparatively lower and hence the local insurance companies assume more of the risk for their net account and purchase less reinsurance.

Comparatively, the capital base in the life insurance sub-sector is higher than the general insurance sub-sector. In addition, with the greater predictability of the claims pay-out for the life insurance subsector, they are better able to manage their claim payments with existing liquidity levels and therefore purchase less reinsurance. Hence the life insurance sector purchases comparatively lower amounts of reinsurance.

The practice of purchasing reinsurance adds to the stability of the insurance sector by diversifying the risk of higher than expected claim payments off of the balance sheets of domestic insurance companies and placing it onto the balance sheet of reinsurers. The use of reinsurance coupled with the holding of adequate statutory funds represents the main asset buffer against paying higher than expected claims in the insurance industry. Given that the reinsurance premium is an expense, it also reduces the level of profitability per premium dollar collected by insurance companies.

**Figure 42: Total Industry Net Income**



Source: Financial Services Commission

The insurance industry remains profitable; however, the profitability levels remain well below the 2010 and 2011 amounts due mainly to the low interest rate environment. The current environment has reduced the amount of investment income the insurance companies have been able to generate and has caused a drag on the total net income of the sector. The current soft

market cycle- characterised by substantial competition between firms - as well as the availability of excess reinsurance access, has meant that premium rates remain low. Consequently, underwriting profits have been harder to generate although the sector has not suffered from higher-than-expected claims, due to natural catastrophes in recent history.

## Box 2: Supervisory Colleges

### Definition of Supervisory Colleges

Supervisory colleges are an important regulatory tool which allow for more effective and efficient supervision of insurance groups or insurance conglomerates. According to the IAIS Glossary *“a supervisory college is a forum for cooperation and communication between the involved supervisors established for the fundamental purpose of facilitating the effectiveness of supervision of entities which belong to an insurance group; facilitating both the supervision of the group as a whole on a group-wide basis and improving the solo supervision of the entities within the insurance group.”* An effective supervisory college allows for the supervisors to acquire a better understanding of the insurance group with respect to:

- Risk exposures and inherent risks,
- Financial position and soundness,
- Capital adequacy, business activities, and,
- Risk management and governance systems.

The need for the establishment of these supervisory colleges is driven by the wide networks of regional insurance companies. Group-wide supervision and supervisory cooperation and coordination are defined in the International Association of Insurance Supervisors (IAIS) Insurance Core Principles (ICP) 23 and 25.

To improve application of the ICPs, it is recommended that insurance regulation should:

- Proactively manage the supervisory colleges for those groups for which it would be the group-wide supervisor and utilise that forum to develop group supervisory activities for those groups;
- Enhance the role of the supervisory college for the Insurance Groups and maintain an active engagement with the colleges for other entities where it is a host supervisor, and;
- Develop a understanding of the entities and group structure, including insurance and non-insurance entities, ensure communication protocols between supervisors are effective, and examine how the group assesses group-wide solvency, governance, risk management and internal control.

### FSC's Risk-Based Supervisory Framework

Where the parent of the group is regulated by the FSC, the FSC will take the lead in dealing with other relevant supervisory authorities to ensure the group is subject to effective consolidated supervision. The manual further states that the FSC intends to coordinate with other supervisory authorities to achieve effective “entity-level plus” consolidated supervision. This form of consolidated supervision comprises:

- Entity-level supervision for each regulated entity by the relevant supervisory authority

- Information exchange to allow each supervisor to understand the group-wide risks.

#### **Purpose of a Supervisory College**

- To facilitate group supervision
- To improve solo supervision
- As a permanent forum for cooperation
- To facilitate improved understanding of supervisory practices and effectiveness of supervision which occurs across border
- To improve the understanding of how a group's non-insurance risk can impact the overall company.

#### **The FSC's Plan**

1. The first step in the process is an evaluation of the current legislation to ensure that it contains provisions which support information sharing and the other requirements necessary to support group-wide or consolidated supervision. If there are deficiencies these should be addressed through amendments to the legislation. This is a very crucial step which must be completed with regard to the establishment of a supervisory college.
2. Following this, an identification of the insurance companies/groups for which the FSC is the group-wide (home) supervisor. If the FSC adopt the assumption of group-wide supervisor for an insurance group, then all entities which fall within the scope of the insurance group should be identified. All the information necessary to gain a comprehensive overview of the group, its entities and their business activities should be gathered by the FSC.
3. The next step is to identify the regulatory authorities responsible for the supervision of the entities which comprise the insurance group, as well as the relevant frameworks that may be applicable to the supervisory activities of the group. The relevant framework would include the laws and regulations of the various jurisdictions of the supervisors involved and the IAIS insurance core principles.

*Source: Financial Services Commission*

## 4. Stress Test Analysis – Insurance Companies

The FSC has added a ‘top-down’ stress test model to the regulatory tools used to supervise the insurance sector. The initial simulations in this stress testing section assess the resilience of the insurance sector to a series of imposed shocks created by different scenarios. In any one period the scenarios were applied singularly and not simultaneously.

In each scenario, the impact of the shock is shown to impact the industry’s assets available to pay claims as well as the capital amounts available. The ensuing analyses then examines whether the existing capital and buffer amounts are sufficient to allow the industry to respond to the claims incurred and avoid default.

The test scenarios were as follows:

- A haircut to the value of the sovereign bonds held as assets {(i) 20 percent, (ii) 30 percent, (iii) 40 percent}
- An increase in the amount of incurred claims {(i) 75 percent, (ii) 100 percent; (iii) 150 percent}
- An increase in the technical provisions and reserves required due to a change in the discount rate or actuarial assumptions { (i) 80 percent, (ii) 100 percent, (iii) 120 percent}
- A default by reinsurance companies on the amount of claims recoverable by insurance companies { (i) 30 percent, (ii) 40 percent, (iii) 50 percent}

Overall, the results suggest that the industry could withstand an unexpected increase in claims in any one year and maintain its level of solvency to fund claims and avoid default. The industry could also maintain an adequate level of assets to fund claims if the value of the sovereign bonds being held endured a haircut of up to 40 percent, but all profitability from the industry would be eroded in the financial year the value of the loss was recognised. The life insurance sub-sector in particular, proved to be resilient in the face of the most extreme test performed on the increase in technical provisions, but the solvency buffer was minimal at the high-end of the test.

The shocks to the general insurance sub-sector for all scenarios with a default on the reinsurance recoverable indicated that the sub-sector would fall below the solvency requirements, and would therefore have difficulty settling all claims. This is indicative of the heavy use and reliance on reinsurance by the general insurance sub-sector and this area will continue to be closely monitored by the FSC.

### Box 3: Stress Testing of Insurance Companies

Stress tests are forward-looking technical tools used to predict a financial systems’ sensitivity to a particular shock. The FSC is seeking to implement insurance stress testing to improve the robustness of its regulatory framework. Stress testing is defined as “*an analysis, conducted under unfavourable economic scenarios, which is designed to determine whether a financial entity has enough capital to withstand the impact of adverse developments*”. It is an essential element for measuring vulnerability in the financial system. These tests have historically been used on banks primarily, but the FSC is being proactive in applying the stress testing to the insurance companies given the material size of the country’s domestic insurance industry. The nature of the

activities undertaken by banks and insurance companies is significantly different. As such bank oriented stress test would provide only limited information for the insurance sector. Hence the FSC has developed its own model to assess the effects of insurance related shocks.

### **Sensitivity Testing on the Insurance Industry**

The stress testing process is not meant to replace the process of risk assessment currently being performed by the analysts in the respective regulatory units. A risk assessment can be considered as a “snapshot” of an entity’s fiscal health. The Commission can therefore use the risk assessments as a guide to which financial indicators are likely to undergo the most stress in adverse conditions.

The Commission’s stress testing model to date has incorporated the following parameters.

- Sovereign Bond haircuts
- An Increase in claims
- Technical provisions revaluation
- Reinsurance default

However, the risks that can be addressed by stress testing this sector include (but are not limited to) the following:

1. Underwriting risk: This should include the risks associated with the rapid portfolio growth or decline, adverse claims experience, dependence on intermediaries, effect of geography on portfolios, expenses, etc.
2. Catastrophe Risk: This will reflect the insurer’s ability to withstand catastrophic events like losses from hurricanes, increases in unexpected exposures or exhaustion of reinsurance arrangements.
3. Deterioration of Technical Provisions.
4. Market risk: This will represent any adverse movement in markets which affect the value of the insurer’s assets/liabilities. One consideration for modelling this risk is the VAR (Value at Risk) approach.
5. Credit Risk: This will involve modelling the failure of the counterparties to deliver on obligation owed to the insurance company. Obligors include the debtors, brokers, policyholders, reinsurers, guarantors, etc.)
6. Liquidity Risk: This will relate to the possibility that the company cannot meet its obligations as they fall due. This will be of greater importance for General Insurance companies as the nature of their business tends to be short tail, rather than the longer terms of Life Insurance.
7. Foreign Exchange/Sovereign Risk: Some insurance companies have investment activity outside of the country.

This stress testing exercise is a necessity as the FSC not only needs tools to assess the current financial health but also need to employ the use of a predictive tool to enhance its decision making processes and regulatory framework. The long-term plan of the FSC is to build a robust framework which will include a stress testing process capable of giving usable results about a company’s expected outlook and what corrective measures should be taken, if any. It is hoped that with time, methodical research and some external input from entities such as the Central Bank, the FSC can achieve its aim.

*Source: Financial Services Commission*

## 5. Stress Test Analysis – Commercial Banks, Finance and Trusts (Non-Banks) & Credit Unions

The stress tests reported in this section assess the resilience of the financial system to imposed macroeconomic and other negative exogenous shocks. The impact of the shocks is directly transmitted to the institution's capital, and the effect is assessed both individually and on a system-wide basis. The analysis therefore examined whether existing capital buffers are sufficient to absorb potential losses and is focused particularly on credit, large exposure, interest rate, liquidity risk and contagion risk. At September 2014, the capital adequacy ratios (CARs) for the major lending sectors in the financial system ranged between 16 and 34 percent.<sup>13</sup> Overall, the results of the stress tests suggest that domestic banks, deposit taking finance and trust and the credit union system are able to withstand a range of shocks, although specific vulnerabilities could emerge under severe stress.

### 5.1 Credit Risk

The existing standard for provisions for loans in arrears for institutions licensed under the Financial Institutions Act (FIA) in Barbados is a 10 percent charge for 'substandard loans', 50 percent for 'doubtful loans' and 100 percent for the lowest category, 'loss loans'. Loans classified as 'pass' and 'special mention' have no provision requirements. The first simulation assesses the capital adequacy based on adjustments to the provisioning criteria. Table 4 details the provision rates under the various scenarios and Figure 43 illustrates how the capital adequacy levels changes under each scenario.

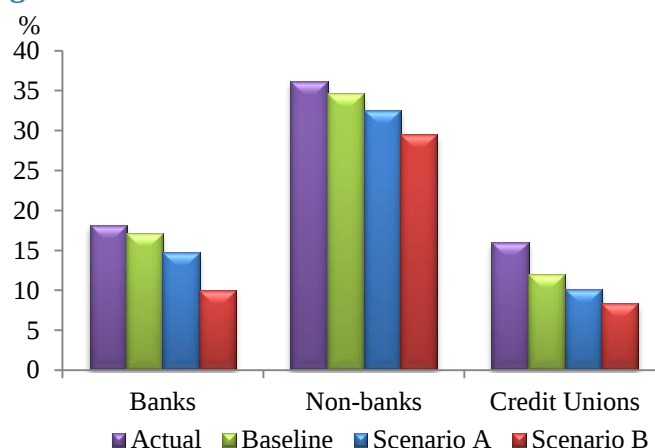
**Table 4: Provisioning Rates for Scenarios**

|            | <b>Pass</b> | <b>Special<br/>Mention</b> | <b>Substandard</b> | <b>Doubtful</b> | <b>Loss</b> |
|------------|-------------|----------------------------|--------------------|-----------------|-------------|
| Actual     | 0           | 0                          | 10                 | 50              | 100         |
| Baseline   | 1           | 5                          | 20                 | 50              | 100         |
| Scenario A | 1           | 10                         | 50                 | 100             | 100         |
| Scenario B | 1           | 20                         | 100                | 100             | 100         |

The actual CAR is the position as at September 2014, while the baseline CAR as well as Scenarios A and B follows the provisioning assumptions outlined in Table 4. The general results indicate that capital adequacy levels of institutions are sufficient to accommodate instantaneous increases in various provisioning requirements. Only under the very extreme scenario of 100 percent provisioning for all non-performing loans, will two banks and four non-banks require additional capital.

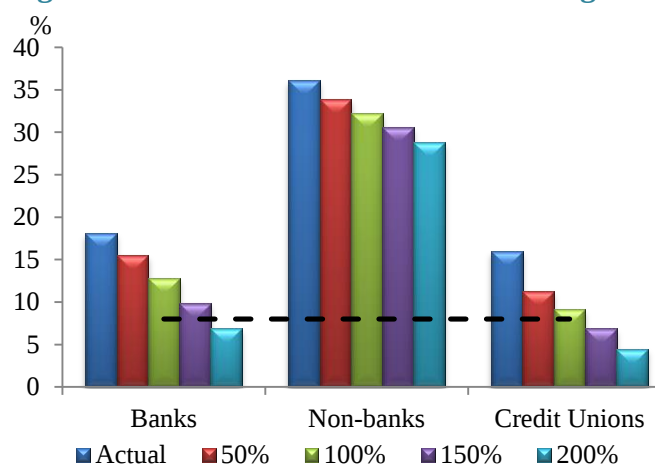
<sup>13</sup> Regulatory capital was derived from the balance sheet of branch institutions since they do not report capital positions. This facilitated the calculation of capital adequacy ratios for the banking system. Furthermore, capital ratios for credit unions were obtained using the methodology used for the banks.

**Figure 43: CAR Outcomes from Loan Loss Provision**



Simulation two assumes direct shocks to the NPL ratio to determine the capacity of the institutions to absorb losses associated with an extensive growth in nonperforming loans. The results ( Figure 44) suggest that all institutions are able to remain solvent even after a doubling of their current NPL ratio. However, some institutions become vulnerable as NPLs grow by over 120 percent. At 200 percent growth in NPLs two banks, three nonbanks and the credit union sector are technically insolvent.

**Figure 44: CAR Outcomes from increasing NPLs**

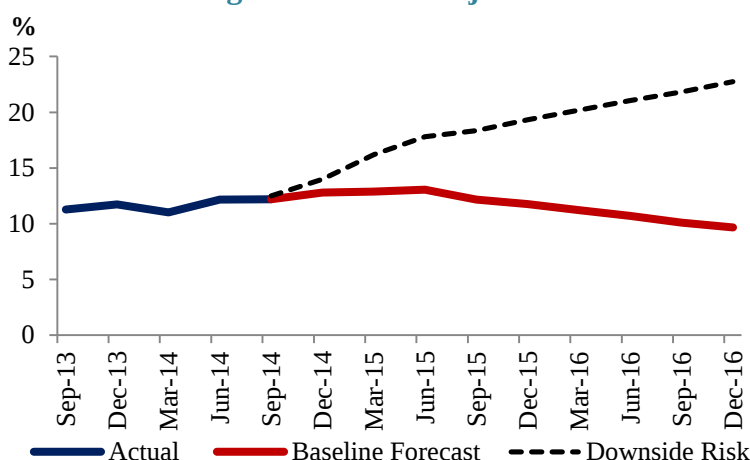


Given the current outlook for the economy, the NPL ratio over the medium-term is expected to decline somewhat, as outlined by the baseline estimates of Figure 45. At the same time, a trajectory for further downside risk has been estimated in the event that conditions turn out to be worse than anticipated. Even if the downside risk simulations were to be adopted, NPLs over the sample period are not likely to be more than 25 percent of total loans. Based on the previous simulation, if institutions maintain their current capital levels, they should be able to absorb potential losses associated with the projected growth in NPLs.

Outcomes from the forecasting framework over the last two years have turned out to be very good proxies for the actual outcomes. In the 2013 FSR, some decline in the ratio was expected for a short while (due to the resolution the large hotel loans) but the ratio was expected to edge

upwards. The standard deviation in the forecast error over the four quarters from September 2013 to September 2014 was less than 5 percent.

**Figure 45: NPL Projections**



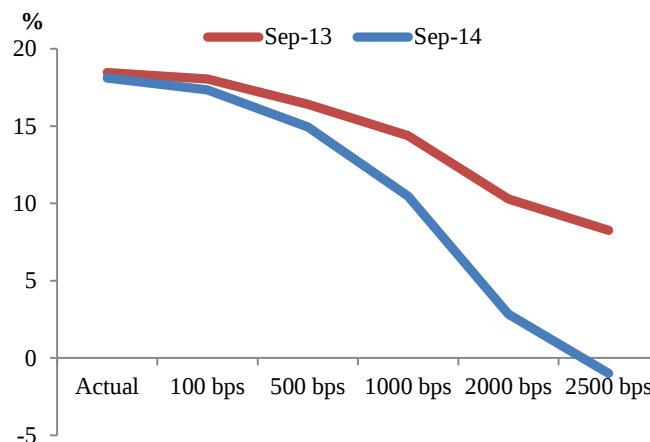
## 5.2 Large Exposure Risk

This simulation assumes that adverse shocks affect the five largest borrowers of each institution and examines the impact on institutions' capital. It was assumed that in each round, an additional large exposure defaulted (for up to five rounds) and the impact on capital was assessed under different provisioning requirements of 10 percent, 20 percent, 50 percent and 100 percent. Only banks and nonbanks were assessed in this simulation. In summary, all institutions are sufficiently capitalised to cover losses of the largest five exposures, where only 10 percent provisioning is required. If 20 percent provisioning is required, only one institution would require more capital. After adjusting for total exposures to government and related-party exposures the institution remains adequately capitalised. At higher provisioning rates, the default of the largest five exposures would result in significant destabilisation among the financial institutions.

## 5.3 Interest Rate Risk

This scenario assesses banks' ability to absorb losses that might be associated with significant increases in interest rates. The test stresses the impact of rising deposit rates on commercial banks' funding costs and ultimately their profitability.

**Figure 46: Interest Rate Impact on CAR**



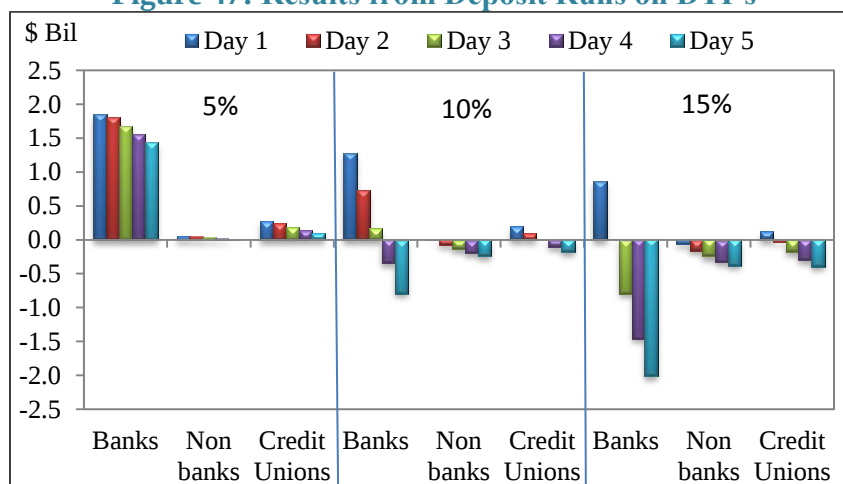
Only under the severe assumption of an increase of 1000 basis points (10 percentage points) in the banks' deposit rates, would one bank and one finance and trust institution become insolvent. The results are in line with the March 2014 analysis, but are worse than the September 2013 evaluation. This has reflected the widening negative gap between entities' assets and liabilities under twelve months.

#### **5.4 Liquidity Risk**

This exercise examined the strength of liquidity positions held by DTIs by assuming simple deposit runs over a five-day period. To set the context, 95 percent of all liquid assets were assumed to be available in a given day, while one percent was assumed for all other assets. The simulation investigated the impact of 5 percent, 10 percent and 15 percent runs per day on all deposits, given the previous assumptions.

The results in Figure 47 suggest that banks are generally able to withstand five percent runs on deposits over the five-day period. However, one finance and trust institution would require a cash injection to meet all of its obligations after day two. Three finance and trust institutions and one bank would require more liquidity by day five. Under the 10 percent shock, all banks would have liquidity problems after day three, while finance and trust institutions would need support after day one. With a 15 percent run per day, all banks and the credit union sector would become vulnerable after day two, but the non-banks require more cash after the first day.

**Figure 47: Results from Deposit Runs on DTI's**



### 5.5 Contagion Risk

Liquidity among domestic banks remained high over the period. Consequently, the domestic inter-bank market was relatively subdued. Given the small size of the few exposures, the potential downside risks through direct domestic interbank contagion appeared negligible. On the other hand, bank exposures to other regions especially the US, Canada and the wider Caribbean pose greater risks.

This test examines the first round impact of the losses from the respective regions on the capital of each bank. The results are presented in Table 5, which simulates the after-shock capital for the banking system and identifies the number of banks whose capital fell below the 8 percent benchmark.

Overall the results suggest that the banking system is sensitive to its exposures in the US, Canada and the Caribbean region. Most of the sensitivity relates to head office exposures and other related-party flows. Losses to all other geographic regions were insufficient to erode capital levels below the 8 percent threshold. While the output indicates that some institutions may become vulnerable, the sector as a whole remained well capitalised.

**Table 5: Results of Default of Individual Banking Sectors and Groups**

| Shocks*                         | After Shock CAR (%) | Banks with CAR < 8% |
|---------------------------------|---------------------|---------------------|
| <b>Baseline*</b>                | 18.1                | 0                   |
| <b>Europe</b>                   | 17.96               | 0                   |
| <b>Canada</b>                   | 16.01               | 1                   |
| <b>USA</b>                      | 14.22               | 1                   |
| <b>Local Affiliates</b>         | 15.2                | 1                   |
| <b>Caribbean Affiliates</b>     | 15.7                | 1                   |
| <b>Caribbean Non-Affiliates</b> | 18.1                | 0                   |

## Appendices

**Table 1: Selected Financial Indicators – Commercial Banks**

|                                                           | 2009 | 2010 | 2011 | 2012  | 2013 | 2013Q3 | 2014Q3 |
|-----------------------------------------------------------|------|------|------|-------|------|--------|--------|
| <b>Solvency Indicators</b>                                |      |      |      |       |      |        |        |
| Capital Adequacy Ratio (CAR)                              | 17.5 | 17.1 | 19.3 | 21.0  | 19.7 | 21.8   | 19.1   |
| <b>Liquidity Indicators<sup>#</sup></b>                   |      |      |      |       |      |        |        |
| Loan to deposit ratio ( percent)                          | 65.5 | 67.2 | 70.9 | 73.6  | 70.0 | 71.2   | 70.3   |
| Demand deposits to total deposits ( percent)              | 36.6 | 35.2 | 32.1 | 29.3  | 32.3 | 30.5   | 33.7   |
| Domestic demand deposits to total domestic deposits       | 27.9 | 27.1 | 27.6 | 26.8  | 29.3 | 27.9   | 30.4   |
| Liquid assets, percent of total assets                    | 10.8 | 11.5 | 12.0 | 14.6  | 18.0 | 17.6   | 20.1   |
| <b>Credit Risk Indicators</b>                             |      |      |      |       |      |        |        |
| Total assets (growth rate, percent)                       | -5.6 | -1.5 | -4.7 | 11.5* | 2.8  | 3.9    | -0.6   |
| Domestic assets (growth rate, percent)                    | 2.3  | 0.6  | -6.1 | 6.1*  | 6.5  | 5.1    | -1.0   |
| Loans and advances (growth rate, percent)                 | 0.9  | 0.6  | -0.5 | -1.1* | -2.6 | -1.5   | -1.1   |
| Non-performing loans ratio ( percent)                     | 7.9  | 10.8 | 11.1 | 12.9  | 11.7 | 11.3   | 12.2   |
| Substandard loans/ Total loans ( percent)                 | 6.7  | 9.1  | 8.7  | 9.9   | 8.6  | 7.5    | 8.7    |
| Doubtful loans/ Total loans ( percent)                    | 0.4  | 1.0  | 1.8  | 2.3   | 2.5  | 2.9    | 1.8    |
| Loss Loans / Total loans                                  | 0.9  | 0.7  | 0.6  | 0.8   | 0.6  | 0.9    | 1.7    |
| Provisions to non-performing loans ( percent)             | 41.5 | 37.4 | 32.9 | 33.9  | 44.9 | 44.4   | 48.1   |
| <b>Foreign Exchange Risk Indicators</b>                   |      |      |      |       |      |        |        |
| Deposits in Foreign Exchange ( percent of total deposits) | 13.3 | 12.9 | 6.6  | 4.9   | 4.4  | 4.0    | 5.3    |
| <b>Profitability Indicators</b>                           |      |      |      |       |      |        |        |
| Return on Assets (ROA)                                    | 1.6  | 1.1  | 1.0  | 1.1   | 0.8  | 0.9    | 0.7    |

Source: Central Bank of Barbados

\* Reflects removal of financial consolidation; <sup>#</sup> Includes foreign components unless otherwise stated

**Table 2: Selected Financial Indicators – Non-bank Financial Institutions**

|                                            | 2009  | 2010  | 2011  | 2012  | 2013 | 2013Q3 | 2014Q3 |
|--------------------------------------------|-------|-------|-------|-------|------|--------|--------|
| <b>Solvency indicator</b>                  |       |       |       |       |      |        |        |
| Capital/ Assets ( percent)                 | 22.6  | 23.5  | 23.8  | 23.6  | 24.3 | 22.6   | 23.3   |
| <b>Liquidity indicators</b>                |       |       |       |       |      |        |        |
| Loan to deposit ratio ( percent)           | 138.1 | 146.3 | 106.3 | 101.5 | 99.0 | 101.1  | 99.1   |
| Liquid assets, percent of total assets     | 9.1   | 12.2  | 16.8  | 19.4  | 21.1 | 20.9   | 16.9   |
| <b>Credit risk indicators</b>              |       |       |       |       |      |        |        |
| Asset Growth                               | -2.4  | 2.8   | 4.7*  | 6.2   | 3.8  | 2.6    | 0.7    |
| Nonperforming loans ratio ( percent)       | 4.1   | 5.7   | 8.6   | 9.3   | 8.2  | 9.2    | 8.4    |
| Substandard loans/Total loans ( percent)   | 3.8   | 5.2   | 6.7   | 6.1   | 6.0  | 6.1    | 6.1    |
| Doubtful loans/Total loans ( percent)      | 0.1   | 0.1   | 1.0   | 2.0   | 1.8  | 1.9    | 1.8    |
| Loss loans/Total loans ( percent)          | 0.3   | 0.3   | 0.9   | 1.2   | 0.4  | 1.2    | 0.0    |
| Reserves to nonperforming loans ( percent) | 13.5  | 11.6  | 24.8  | 36.8  | 34.9 | 39.8   | 22.9   |
| <b>Profitability indicators</b>            |       |       |       |       |      |        |        |
| Net Income/Capital ( percent)              | 11.2  | 10.6  | 10.8  | 6.3   | 10.4 | 8.1    | 3.5    |
| Return on Assets (ROA)                     | 2.4   | 2.5   | 1.9   | 1.2   | 2.3  | 2.1    | 0.8    |

Source: Central Bank of Barbados

\* Reflects the underlying growth in assets.

DTIs only

**Table 3: Selected Financial Indicators – Credit Unions**

|                                               | 2009  | 2010  | 2011  | 2012  | 2013  | 2013Q3 | 2014Q3 |
|-----------------------------------------------|-------|-------|-------|-------|-------|--------|--------|
| <b>Solvency Indicator</b>                     |       |       |       |       |       |        |        |
| Reserves to Total Liabilities ( percent)      | 10.5  | 10.4  | 10.7  | 11.4  | 12.9  | 13.3   | 11.9   |
| <b>Liquidity Indicators</b>                   |       |       |       |       |       |        |        |
| Loan to deposit ratio ( percent)              | 102.6 | 114.8 | 113.6 | 117.1 | 116.5 | 111.5  | 91.8   |
| <b>Credit risk Indicators</b>                 |       |       |       |       |       |        |        |
| Total assets, annual growth rate ( percent)   | 9.1   | 9.7   | 5.1   | 4.4   | 4.2   | 5.8    | 7.4    |
| Loans, annual growth rate ( percent)          | 8.0   | 8.6   | 6.5   | 3.2   | 3.7   | 2.9    | 6.6    |
| Nonperforming loans ratio ( percent)          | 6.5   | 7.2   | 6.9   | 8.2   | 8.5   | 8.7    | 9.1    |
| Arrears 3-6 months/ Total Loans               | 2.1   | 2.1   | 2.0   | 1.9   | 2.4   | 1.9    | 1.8    |
| Arrears 6 – 12 months/Total Loans ( percent)  | 1.8   | 1.9   | 1.6   | 1.9   | 2.0   | 1.8    | 1.9    |
| Arrears over 12 months/Total Loans ( percent) | 2.7   | 3.2   | 3.5   | 4.4   | 4.1   | 4.9    | 5.4    |
| Provisions to Total loans ( percent)          | 1.9   | 2.2   | 2.8   | 3.2   | 3.1   | 3.3    | 3.4    |
| <b>Profitability Indicator</b>                |       |       |       |       |       |        |        |
| Return on Assets (ROA)                        | 1.6   | 1.2   | 1.2   | 1.3   | 1.4   | 0.5    | 0.4    |

*Source: Financial Services Commission*