Central Bank of
Trinidad & Tobago

Financial Stability Report 2016

Central Bank of Trinidad and Tobago
P.O. Box 1250
Port of Spain
Republic of Trinidad and Tobago
www.central-bank.org.tt

ISSN 2076-7781 (Print)
ISSN 276-7757 (Online)

Financial
STABILITY REPORT
2016

Central Bank of Trinidad and Tobago

Financial Stability Report

Table of Contents

List of Abbreviations

ABBREVIATION	NAME
AEs	Advanced Economies
ACH	Automated Clearing House
AML/CFT	Anti-Money Laundering and Combating the Financing of Terrorism
ATM	Automated Teller Machine
AUM	Assets Under Management
BCBS	Basel Committee on Banking Supervision
BIR	Board of Inland Revenue
BPSP	Bill Payment Service Provider
CAIR	Caribbean Association of Insurance Regulators
CAR	Capital Adequacy Ratio
CARICOM	Caribbean Community
CariCRIS	Caribbean Information and Credit Rating Services Limited
CARTAC	Caribbean Regional Technical Assistance Centre
CBOE	Chicago Board Options Exchange
CET1	Common Equity Tier 1
CFATF	Caribbean Financial Action Task Force
CGBS	Caribbean Group of Banking Supervisor
CIS	Collective Investment Scheme
CLI	Cross Listed Index
CLICO	Colonial Life Insurance Company (Trinidad) Limited
CPSS-IOSCO	Committee on Payment and Settlement Systems - International Organization of Securities Commissions
CRFP	Caribbean Regional Financial Interconnectedness Project
CRMs	Credit Risk Mitigants
CRS	Common Reporting Standards
Dec	December
Diff	Differential
EMDEs	Emerging Market and Developing Economies
EMV	Europay, Mastercard and Visa
EU	European Union
FATCA	Foreign Account Tax Compliance Act
FATF	Financial Action Task Force
Fed	Federal Reserve
FIA	Financial Institutions Act, 2008
Fintech	Financial Technology
FSI	Financial Soundness Indicator
FSR	Financial Stability Report
FY	Fiscal Year
GDP	Gross Domestic Product
GFC	Global Financial Crisis
GFSR	Global Financial Stability Report
GoRTT	Government of the Republic of Trinidad and Tobago
IA	Insurance Act Chap 84:01
IAIS	International Association of Insurance Supervisors

List of Abbreviations

ABBREVIATION	NAME
ICAAP	Internal Capital Adequacy Assessment Programme
ICPS	Insurance Core Principles
ICRG	International Co-operation Review Group
IMF	International Monetary Fund
JSC	Joint Select Committee of Parliament
LAC	Latin America and the Caribbean
MER	Mutual Evaluation Report
MOODY'S	Moody's Investors Service
NA	North America
NAMLC	National Anti-Money Laundering and Counter Financing of Terrorism Committee
NAVS	Net Asset Values
NON-BANK	Non-Bank Financial Institutions
NPL RATIO	Non-Performing Loans to Gross Loans
NPL	Non-Performing Loan
NRA	National Risk Assessment
OECD	Organisation for Economic Co-operation and Development
PFMIs	Principles for Financial Market Infrastructures
QIS	Quantitative Impact Study
QTRLY	Quarterly
RFSCC	Regional Financial Stability Co-ordinating Council
ROE	Return on Equity
RTGS	Real Time Gross Settlement System
RWA	Risk Weighted Assets
S&P	Standard and Poor's Global Rating
SIFI	Systemically Important Financial Institution
SIPS	Systemically Important Payments Systems
TF	Terrorist Financing
THE CENTRAL BANK	The Central Bank of Trinidad and Tobago
TIEAA	Tax Information Exchange Agreements (United States of America) Act, 2017
TT	Trinidad and Tobago
TTSE	Trinidad and Tobago Stock Exchange
TTSEC	Trinidad and Tobago Securities and Exchange Commission
TYVIX	CBOE/CBOT 10-year US Treasury Note Volatility Index
UK	United Kingdom
US	United States of America
VIX	CBOE Volatility Index
VXEEM	CBOE Emerging Markets ETF Volatility Index
YOY	Year on Year

PREFACE

The Central Bank of Trinidad and Tobago (the Central Bank) plays a vital role in maintaining financial stability and promoting confidence in the domestic financial system. Financial stability has been defined as the resilience of the financial system in the face of adverse shocks so as to enable the continued smooth functioning of financial intermediation and payments settlement. Effective financial intermediation, which involves the ability of households and businesses to channel savings into productive investments with confidence, is essential for sustained economic growth and the welfare of Trinidad and Tobago.

The annual Financial Stability Report (FSR) complements the Central Bank's Monetary Policy Report and Economic Bulletins by providing an overview of developments in the financial sector and insights into vulnerabilities and risks to stability on the domestic, regional and international fronts. While financial system vulnerabilities increase susceptibility to shocks, effective governance and risk management, strong capital buffers and pro-active supervision and regulation help to enhance resilience. The FSR also highlights the on-going efforts of the Central Bank to strengthen these areas and aims to foster informed discussion on financial stability issues.

The FSR is available on the Central Bank's website at www.central-bank.org.tt.

EXECUTIVE SUMMARY

The 2016 FSR is set against a backdrop of challenging domestic macroeconomic circumstances. The report reviews the domestic and external macro-financial setting which sets the tone to assess the performance of the financial sector and determine its resilience. The analysis revealed that the financial system appeared broadly stable in 2016 amidst evolving vulnerabilities. Financial Soundness Indicators have remained favourable, and Central Bank stress tests indicated that commercial banks, in particular, were resilient to extreme but plausible shocks to credit, liquidity and interest rates. Responses to emerging risks have been a mixture of institution-specific measures along with Central Bank actions geared at bolstering financial stability. These efforts spanned the regulatory and supervisory dimensions, complemented by enhanced cooperation at the international and regional levels. Strengthening corporate governance and risk management practises are also advanced as key measures in mitigating systemic risk.

Overview of Global, Regional and Domestic Macro-financial Conditions

Global financial stability conditions improved in 2016 and continue to strengthen into 2017. Overall, marked improvements in macroeconomic, credit, market and liquidity conditions have underpinned renewed optimism in financial markets. However, downside risks remain on account of political and policy uncertainty, including in key advanced economies.

In the United States, possible policy shifts with regard to trade and tax policies and financial market regulation have given rise to financial stability concerns due to the implications for risk premia and capital flows. In Europe, although the French elections yielded a result considered "market favourable", upcoming elections in other core Euro Area countries (Germany and Italy) are fuelling unease given the rise in nationalist overtones. Meanwhile, Britain officially began the process to exit the European Union in March 2017; as implementation proceeds there are likely to be ripple effects on financial markets.

Emerging market and developing countries continue to face challenges surrounding adjustments to lower commodity prices and existing financial vulnerabilities. A faster than anticipated tightening of monetary policy in the United States is likely to put pressure on interest and exchange rates in these economies.

In the Caribbean, fiscal vulnerabilities continue to pose financial stability risks, while the potential extension of loss of correspondent banking relationships (de-risking) already experienced by some countries remains a source of serious concern.

The Trinidad and Tobago economy continues to slowly adjust to the terms of trade shock occasioned by the decline in international energy prices since 2014. This has translated into a reduction in foreign exchange inflows and an erosion of fiscal buffers. The current account of the balance of payments moved into deficit in 2016 from a surplus position the previous year as a result of lower receipts from the country's main exports. The contraction in economic activity has negatively affected private credit demand. At the same time, the Government has increased domestic financing.

Performance and Resilience of the Domestic Financial Services Industry

Against the backdrop of significant macroeconomic challenges, the financial sector remained stable in 2016.

The profitability of the banking sector, as measured by Return on Assets and Return on Equity, was favourable (2.9 per cent and 19.9 per cent respectively) while liquidity conditions were relatively comfortable.

Consumer loan growth slowed in the real estate[1] and motor vehicle segments which saw double digit growth in the past

[1] Includes bridging finance, land and real estate, home improvement or renovation, real estate mortgages and leasing.

few years. Notwithstanding the slowdown, the largest growth in absolute terms remains or continues to be controlled by these segments. There was a marked increase in credit card usage and the pace of debt consolidation has doubled. On the other hand, business lending continued to be flat.

Credit quality remained relatively high, with the overall ratio of nonperforming loans to total loans (NPL) of banks at 3.2 per cent at the end of 2016. This reflected a slight improvement over the ratio (50 basis points) a year earlier due primarily to final settlement of a few large non-performing loans. At the same time there was some increase in past due loans in a few categories of business (notably construction) and consumer loans, prompting banks to strengthen their debt collection efforts.

While there was a decline in the ratio of specific provisions to impaired loans, levels remained conservative and a marked increase in general provisions was recorded. This resulted in an overall increase in the ratio of total provisions to impaired loans, which should mitigate the negative impact on the banking sector if credit risk arising from challenges within the domestic macroeconomic environment materializes. Stress tests of the commercial banks indicated that capital buffers were generally able to withstand extreme but plausible shocks without breaching minimum regulatory capital requirements.

The insurance sector also remained resilient. Asset growth in the life insurance sector, at 10 per cent, was largely on account of the acquisition of the assets and liabilities of a large annuity portfolio by life insurers following the wind up of a pension plan. Reported profits for the period under review increased, largely due to the impact of foreign exchange fluctuations and actuarial adjustments. In the non-life sector profits increased as foreign exchange gains were obtained, similar to the life sector. However net retained premiums declined in 2016. Competition has intensified and the market continued to be soft.

The private occupational pension sector has not been immune to the challenging macroeconomic environment. In such an environment, sponsor companies of pension plans face the risk of not being able to meet both operational costs in addition to the costs of providing pension benefits. This has resulted in a continued evolution of the sector from defined benefit arrangements to defined contribution arrangements. During 2016, the sector experienced the winding up of a large pension plan due to the decision of the Mittal Company to cease operations in Trinidad and Tobago.

Domestically, developments in the payments space are following international trends but are constrained by the legislative framework. Consequently, the Central Bank has been working with national and regional stakeholders to explore strategies for promoting innovations in financial technology (fintech), including determination of an appropriate legislative framework. Despite heightened skimming and phishing activity, the National Payments System continued to operate without interruption.

Promoting Financial Stability

The Central Bank continued to promote financial stability by inter alia: advancing the Insurance Bill, 2016 to close supervisory gaps and implementing Basel II to enhance resilience and risk governance in the banking sector.

Insurance Bill

The Central Bank continued to take action to strengthen the legislative framework pertaining to the Insurance industry. During 2016, the Bank continued to work on refining the draft legislation and the Insurance Bill, 2016 was laid in Parliament on July 1, 2016 in the House of Representatives. Subsequently, a Joint Select Committee of Parliament (JSC) was appointed to review the Bill. Senior members of the Central Bank were invited to appear before the JSC to answer questions pertaining to the Insurance Bill, 2016 in May 2017. The Bill is expected to be debated by the end of 2017.

Basel II Implementation

A significant milestone in the Basel II Implementation project was achieved in July 2016 when the first Quantitative Impact Study (QIS) to test the impact of the proposed new capital adequacy rules was completed. Results show that on the whole the banking sector remained adequately capitalized despite a decline in the capital adequacy ratios (Tier 1 and Tier 2). Notwithstanding, due to observed challenges during

the QIS1 the Central Bank will be conducting a second QIS during the period May to July 2017. The first phase of the Basel II project which establishes the new minimum capital adequacy rules is scheduled to be implemented by mid 2018.

Foreign Account Tax Compliance Act (FATCA)

A new Tax Information Exchange Agreements (United States of America) Act, 2017 (TIEAA) was enacted on March 20, 2017 and is awaiting proclamation. A similar initiative is in train to ensure compliance with the Global Forum's Common Reporting Standards for sharing of tax information. In this regard, consultation on The Mutual Administrative Assistance in Tax Matters Bill which was laid in Parliament on April 21, 2017 is in progress.

Developments in Anti-Money Laundering and Combating the Financing of Terrorism

Following publication of the Caribbean Financial Action Task Force (CFATF) Mutual Evaluation Report (MER) of Trinidad and Tobago in June 2016, the country was placed in an "enhanced follow-up" process as a result of partially compliant and non-compliant ratings in certain of the Core and Key Recommendations in its MER. Remedial actions to address findings have focussed on strengthening the money laundering and terrorist financing investigative and prosecutorial processes and implementing targeted financial sanctions for terrorist financing, particularly with respect to Foreign Terrorist Fighters. The country's first report to advise on actions taken to address the deficiencies was presented at CFATF's May 2017 Plenary.

In the MER, it was noted that Trinidad and Tobago also had low to moderate effectiveness ratings in nine of eleven immediate outcomes. As a consequence, the country is also under review by the FATF's International Cooperation Review Group (ICRG) which will assess the country's progress in rectifying defiencies at the FATF Plenary in June 2017.

Other initiatives include:

- Enhanced coordination with other supervisory agencies covering consolidated supervision, assessing Caribbean regional financial interconnectedness, development of a framework to facilitate credit information sharing in CARICOM and harmonization of minimum standards for loan classification and provisioning.

- Strengthening the Central Bank's technical and analytical capability in supervision and resolution. Efforts have centred on developing a macro-prudential framework and updating the stress testing methodology.

- Modernising the payments system architecture through implementation of the international Principles for Financial Market Infrastructures.

Recognising the important role of good governance in promoting financial stability, the report includes a special chapter which focuses on corporate governance, risk management and advancements on this front in the context of Basel II.

Domestic Financial System Vulnerabilities and Risks to the Stability of the Financial System

Although the domestic financial system is stable at this time, there are a number of vulnerabilities inherent in the financial system. These vulnerabilities have been assessed as: the potential for deterioriation in loan portfolios underwritten during the recent high growth years, (especially in light of heavy concentration in the motor vehicle and real estate sectors), sovereign exposure[2] concentrations, increased linkages with the US financial markets and off balance guarantees such as for fixed net asset value funds. There are various risks that can be caused and amplified by these vulnerabilities such as: (1) increase in non-performing loans; (2) sovereign debt impairment; and (3) investment portfolio losses. This risks may be triggered by inter alia: further deterioration in energy prices, credit rating downgrades and rising interest rates.

It is important to note that this type of assessment is not intended to be a prediction of a future path. Financial Stability monitoring and risk assessment is a continuous process. The purpose of this work is to assess downside risks,

[2] These include loans to and investments in government and government related entities.

raise awareness of key vulnerabilities and to craft policies and promote actions that mitigate these risks. The Central Bank's current view of these risks to financial stability is summarized in the Heat Map below:

Summary Heat Map
Key Vulnerabilities and Risks to Financial Stability in Trinidad and Tobago

VULNERABILITIES	RISKS	RISK RATING
Rapid build-up of consumer lending in a competitive environment, particularly in motor vehicle and real estate segments	Increase in Consumer Non-Performing Loans	
High sovereign concentrations in the financial system	Sovereign Debt Impairment	
Increased linkages with the US financial markets and off balance sheet guarantees	Investment portfolio losses	

Low | Moderate | Elevated | High | Very High

Source: Central Bank of Trinidad and Tobago

CHAPTER 1
THE MACRO-FINANCIAL ENVIRONMENT

CHAPTER 1

THE MACRO-FINANCIAL ENVIRONMENT

In light of an improving global economy, international financial stability risks abated for much of 2016, and have continued to do so into 2017. According to the International Monetary Fund's (IMF) April 2017 Global Financial Stability Report (GFSR), financial stability has improved since the previous assessment in October 2016. Marked improvements to global macroeconomic, credit, market and liquidity conditions have underpinned renewed optimism in financial markets. In particular, the upbeat prospects for global economic growth and its potential spill over effects to the financial system were outlined in the April 2017 World Economic Outlook; this Report projected global economic growth to pick up in 2017 to 3.5 per cent from 3.1 per cent in 2016. Notwithstanding the nascent economic recovery, medium-term risks to financial stability remain tilted to the downside, key among them being political and policy uncertainty.

Policy uncertainty has emerged on three fronts—trade policy, tax reform and financial market deregulation. Since the November 2016 Presidential elections in the United States (US), there has been a moderate pickup in consumer activity, further strengthening of the labour market and increased business confidence. These positive macroeconomic developments allowed the Federal Reserve (Fed) to raise its target policy rate band by 25 basis points to 0.75-1.00 per cent in March 2017 after a similar hike in December 2016. At the same time, there are concerns that the US could implement trade protectionist measures and that the global agenda for financial regulatory reform could be derailed if the US withdraws from multilateral initiatives and rolls back domestic regulations enacted during the post-crisis period. These downside factors could lead to higher risk premia, increased volatility in financial markets and capital dislocation.

In other advanced economies (AEs), credit risk is still a concern. Canada faced high levels of household debt, housing market imbalances and fragile liquidity in fixed-income markets. In 2016, the banking sector in the Euro Area continued to confront legacy issues and structural challenges related to asset quality and capitalisation, but political uncertainties have overshadowed the region as elections in core Euro Area economies are due in 2017. Though the United Kingdom (UK) has so far fared better than anticipated in the aftermath of the Brexit vote, uncertainty surrounding the country's future of trading relations with its European partners has heightened following the triggering of Article 50 in May 2017.

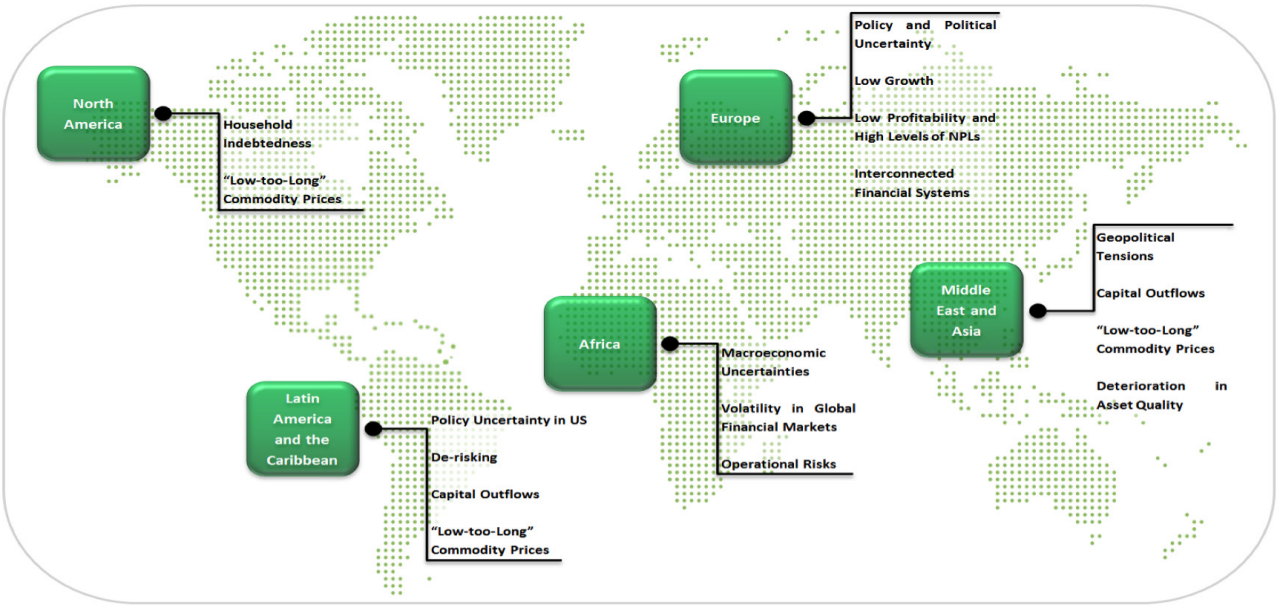
Collectively, AEs face risks associated with low growth and a prolonged period of low interest rates. According to the IMF, despite the recent increases in long-term yields in the US, AE yield curves are likely to flatten further posing challenges for bank profitability, life insurers and pension funds. In the long run as credit demand falters on account of other structural factors such as population ageing, some financial intermediaries may change their business models to remain profitable. Further, as financial intermediaries chase higher yields, they may encounter new financial stability challenges both in their home and host country markets.

Adjusting to lower commodity revenue and financial vulnerabilities were cited by the IMF as key challenges for emerging market and developing economies (EMDEs). In addition, the political and policy uncertainties in AEs were seen as creating new channels for negative spillovers. Financial fragilities appear most acute in China. Although economic growth forecasts have been revised upwards for 2017 based on the expectation of continued strong fiscal stimulus, China continues to grapple with rapidly rising credit, housing market excesses and increasingly complex channels of interconnectedness involving shadow banks and the interbank markets. For commodity-exporting economies, particularly low income developing countries, the risk of financial sector stress is elevated as exchange rate depreciation can lead to debt servicing difficulties. For commodity importers the prospects are mixed; for example, the Indian economy is expected to benefit from the implementation of key structural reforms, while growth in Turkey in 2017 will be constrained by policy uncertainty, contractions in tourism revenues and tightening of financial conditions.

Economic growth in Latin America and the Caribbean (LAC) region has been weighed down by depressed

commodity prices, sluggish global growth and structural challenges in the region's largest economies for much of 2016. Regional risks continue to be tilted to the downside despite the stabilisation of commodity prices towards the end of 2016. The region's deep trade and financial linkages with AEs are important for the fortunes of the LAC region. The US and the European Union (EU) account for more than half of the region's exports and over four-fifths of remittance inflows. Heightened policy uncertainty in these AEs can affect trade, migration and investments, and exacerbate already weak conditions. Furthermore, additional policy rate hikes in the US could lead to narrowing interest rate differentials giving rise to capital flow reversals. In the Caribbean, fiscal vulnerabilities continue to pose financial stability risks. Low growth coupled with high and rising debt levels have triggered downgrades across the Caribbean region (Table 1). Additionally, the loss of correspondent banking relationships by mainly indigenous commercial banks has garnered much attention throughout the region. This has resulted in the formation of a high level advocacy group chaired by the Prime Minister of Antigua and Barbuda, whose purpose is to lobby international organizations and recommend solutions to halt the trend of de-risking by international banks. Figure 1 identifies some major risks facing some countries over the last year based on analyses in their respective Financial Stability Reports (FSRs).

Figure 1
Summary of Risks in Global FSRs by Region



Source: Various countries' FSRs

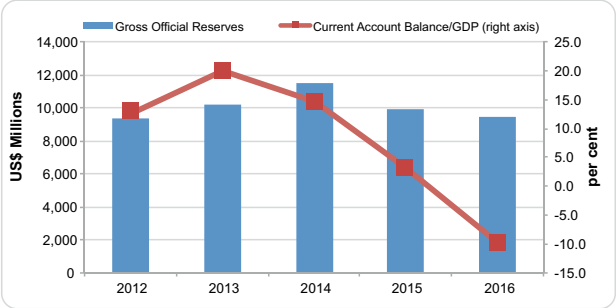
The Domestic Setting

In 2016, the domestic economy continued to adjust slowly to a significant terms of trade shock experienced since 2014 which saw the price of crude oil—a major energy export—decline by more than 50 per cent. Energy commodity prices have since stabilized but have remained relatively low. Prices are expected to remain subdued over the medium term. Earnings from the energy sector have thus declined significantly, not only as a result of the fall in prices, but also due to lower output in the sector. As the shock works its way through the economy, the primary observable channel of adjustment has been through the external accounts. The current account of the balance of payments declined from 2015 to 2016 due to a fall in the value of energy exports. Energy exports account for around 80 per cent of total exports, highlighting the vulnerability of the country's narrow production and export base, the effects of which are manifested in times of downturn.

Lower receipts from Trinidad and Tobago's main exports have translated into a reduction in foreign exchange inflows. Purchases of foreign currency from the public by authorized dealers (mostly commercial banks) declined by 13.2 per cent in 2016. While foreign exchange sales have also fallen by 21.8 per cent from 2015, demand remains robust. Sales of foreign exchange by the Central Bank to the authorized dealers amounted to US$1.8 billion in 2016, and net official foreign reserves declined from US$9.9 billion at the end of 2015 to US$9.5 billion at the end of 2016 (Figure 2).

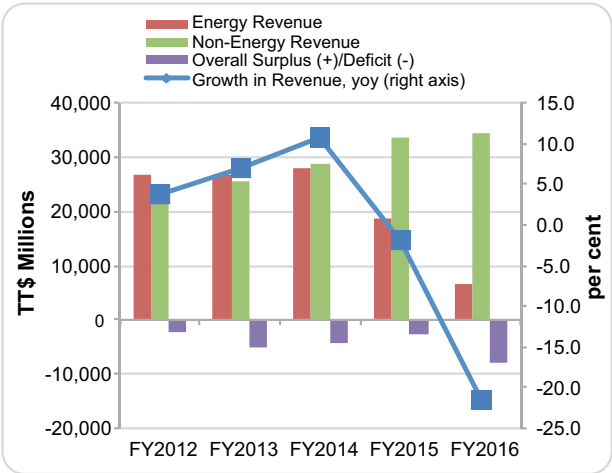
Lower revenue from the energy sector has reduced fiscal buffers, impairing the government's ability to stimulate the domestic economy. In fiscal year (FY)[3] 2016, energy revenues fell by 64.4 per cent to TT$6.64 billion from the previous year. The fiscal deficit as a share of Gross Domestic Product (GDP) rose from 1.8 per cent in FY2015 to 5.4 per cent a year later. To help meet the revenue shortfall, the government has increased borrowing, which has resulted in an increase in the public debt (Figure 3). Borrowing has been mainly domestic, with most of the issuances being taken up by institutional investors (commercial banks, insurance companies and pension funds). In this regard, financial institutions' exposure to sovereign debt continued to grow.

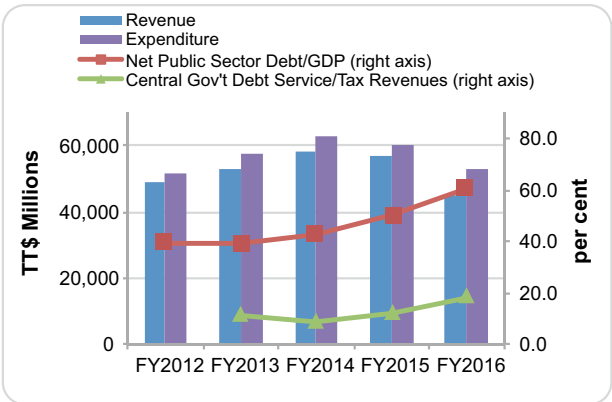
Figure 2
External Sector Dynamics, 2012 – 2016



Source: Central Bank of Trinidad and Tobago

Figure 3
Fiscal Operations - Sovereign Risk Indicators, FY2012 – FY2016





Source: Central Bank of Trinidad and Tobago and Ministry of Finance

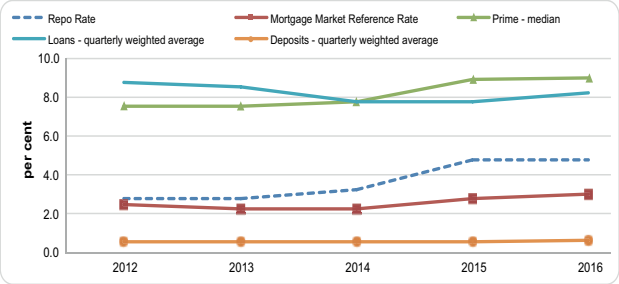
[3] September to October.

Heavy borrowing in the domestic markets by the government has been accompanied by a reduction in lending to businesses and slowdown in growth in other private sector credit. Net domestic financing totaled TT$2.49 billion in FY2016 and has increased to TT$5.83 billion in the first five months of FY2017. Liquidity conditions moderated during 2016, with excess reserves in the banking sector coming down from a high of TT$6.39 billion in April to an average of TT$3.96 billion in December. Although liquidity levels remained relatively ample, growth in private sector credit granted by the consolidated banking sector slowed from 6.4 per cent in January 2016 (year on year(yoy)) to close 2016 at 3.5 per cent. Loans to businesses fell in June 2016 and continued to decline in the remaining months of 2016. Indicators suggest that weak economic activity in the non-energy sectors, particularly construction and distribution, may have accounted for the reduction in business loan demand[4]. Lending to consumers, which was driven by loans for new motor vehicles and real estate mortgages, started to cool during the second half of 2016.

The interest rate environment was relatively benign in 2016 as interest rates remained low by historical trends. The Central Bank kept its policy rate unchanged at 4.75 per cent. Market rates held steady as the prime lending rate stayed at 9.0 per cent and the 91-day Treasury bill rate remained at 1.2 per cent (Figure 4). As rates began to move upwards in the US, the interest rate differential between domestic and US treasury securities narrowed towards the end of 2016 (Figure 5). Significant capital outflows were not observed despite reduced margins, but further monitoring is warranted given additional interest rates hikes by the Fed are anticipated in 2017. Insurers and pension funds could benefit from the rising interest rates since the duration of their assets tend to be shorter than the duration of their liabilities. However, fixed net asset value (NAV) funds could be adversely affected as interest rates increase.

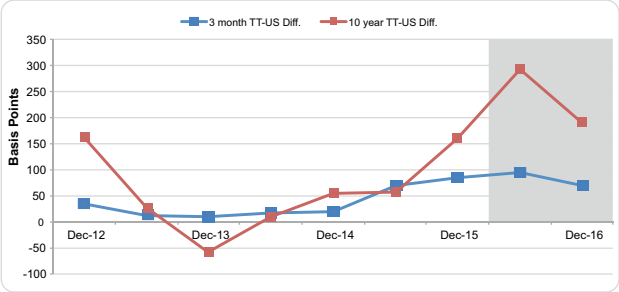
Against the backdrop of challenging macroeconomic developments, financial innovations are emerging and creating opportunities as well as threats. Facilitated by the virtual currency revolution, alternative payments options have been garnering interest. These options present new challenges and supervision will need to adapt in order to deal with their potential risks. Further, the migration of financial activity to the digital space has seen a rise in cyber-attacks globally, making cyber security a top priority for the financial sector going forward.

Figure 4
Selected Interest Rates, 2012 – 2016



Source: Central Bank of Trinidad and Tobago

Figure 5
TT-US Differential, 2012 – 2016



Source: Central Bank of Trinidad and Tobago

Note: The grey highlights the narrowing differential at the end of 2016.

[4] See March 2017 Economic Bulletin for detailed explanations.

Table 1
Credit Ratings and Actions for the CARICOM Region[5] January 2016 – April 2017

Country	S&P		Moody's		CariCRIS	
	Rating Action	Rating Overview	Rating Action	Rating Overview	Rating Action	Rating Overview
Bahamas	BB+ ↓	The downgrade reflected weaker than expected GDP growth, combined with a slower pace of fiscal consolidation.	Baa3 ↓	This rating action was based on the country's "low medium-term growth" prospects and limited fiscal space compared to similar countries.	-	
Barbados	CCC+ ↓	The downgrade reflected the heightened challenges for the sustainability of the peg to the US dollar following a fall in the country's international reserves.	Caa3 ↓	The rating decision was based on rising domestic and external financing pressures that are likely to impair the government's ability to service its debt.	*Car*/BBB ↓	Rating decisions were based on the large fiscal deficits driving high and increasing debt-to-GDP.
Belize	B- ↑	This rating action considered recent restructurings of government's debt.	B3 ↑	Key drivers of the rating decision are the improvement in the government's debt service profile and reduction in the risk of a subsequent credit event.	-	
Dominica	-		-		*Car*/BB+ [redacted]	A heavy dependence on a few sectors and the countrie's high probability of adverse effects from tropical storms and hurricanes continue to expose the sovereign to a significant level of risk.
Genada	NR [redacted]	NR (Not rated) received in 2014 following a selective default rating in 2013.	-		-	
Jamaica	B [redacted]	Creditworthiness remained limited due to high general government debt and interest burden.	B3 ↑	This action was driven by sustained fiscal consolidations and government commitments towards debt reduction.	-	

[5] The region refers to the fifteen full members of the CARICOM group – Antigua and Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, St.Lucia, St.Vincent and the Grenadines, Suriname and Trinidad and Tobago. S&P's cover eight CARICOM countries while Moody's and CariCRIS provide ratings for seven and four sovereigns, respectively.

Table 1 (Continued)

Country	S&P		Moody's		CariCRIS	
	Rating Action	Rating Overview	Rating Action	Rating Overview	Rating Action	Rating Overview
Montserrat	BBB- [redacted]	Continued budgetary and institutional support from the UK and the EU.	-		-	
St.Lucia	-		-		*Car*/BBB [redacted]	Rating actions reflected the constrained but improved fiscal position.
St.Vincent and the Grenadines	-		B3 [redacted]	Modest economic growth should keep the debt metrics consistent with B-rated peers.	-	
Suriname	B ↓	This reflected a worsening of the country's financial profile and economic strength following a significant economic contraction in 2016 that resulted in higher government debt and a substantial currency devaluation.	B1 ↓	This action reflected the substantial weakening of the country's external liquidity stemming from the significant recent increase in current account deficits.	-	
Trinidad and Tobago	BBB+ ↓	The downgrade reflected the further deterioration in the economy's debt burden.	Ba1 ↓	Declining production from maturing energy fields coupled with limited investment prospects, in a context of low energy prices, materially undermined growth prospects.	*Car*/AA+ ↓	Fiscal performance has been severely impacted by low oil and gas prices.

Sources: S&P, Moody's, CariCRIS and Bloomberg

Note: 'S&P' refers to Standard and Poor's Global Rating, 'Moody's' refers to Moody's Investors Service and 'CariCRIS' refers to the Caribbean Information and Credit Rating Services Limited. The direction of the arrow indicates the most recent downgrade ( ) ↓ upgrade ( ) ↑ the credit rating by the respective agency over the period. in [redacted] no change in the credit rating.

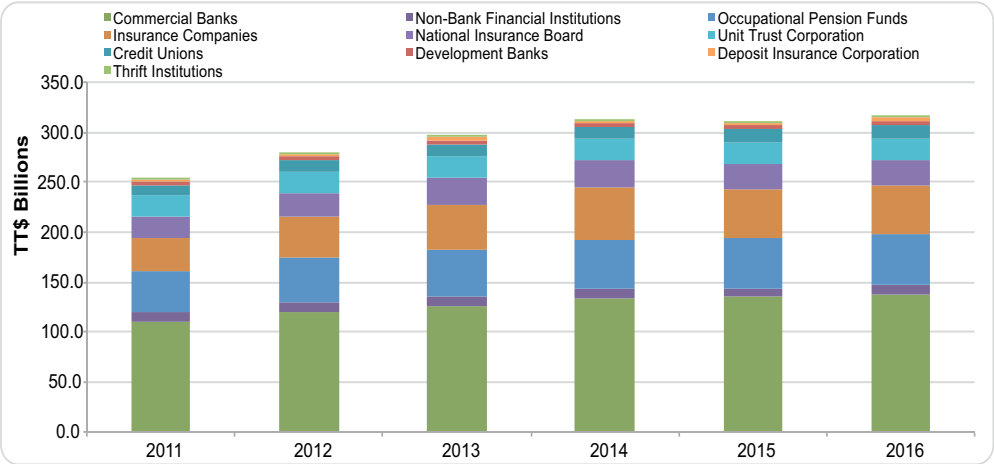
CHAPTER 2
FINANCIAL SECTOR REVIEW

CHAPTER 2

FINANCIAL SECTOR DEVELOPMENTS

Entities regulated and supervised by the Central Bank in the areas of banking, insurance and pensions account for approximately 80 per cent of total domestic financial sector assets as at December 2016 **(Figure 6)**.

Figure 6
Composition of Assets in the Financial Sector, 2011 – 2016



Source: Central Bank of Trinidad and Tobago

By developing country standards, the Trinidad and Tobago financial sector is relatively large and diversified accounting for approximately 13 per cent of GDP. The sector is made up of:

1. eight commercial banks;
2. sixteen non-bank financial institutions (Non-Banks[6]);
3. thirty-four operating insurance companies:
    a. ten life companies,
    b. seventeen general companies and
    c. seven composite companies [including Colonial LIfe Insurance Company (Trinidad) Limited (CLICO) and British American Insurance Company (Trinidad) Limited (BA)];
4. one hundred and twenty-nine active credit unions[7];
5. one hundred and eighty-eight active private occupational pension plans and;
6. the other large players include Unit Trust Corporation and the National Insurance Board.

[6] Finance houses, merchant banks and trust and mortgage companies. The finance houses are involved principally in trade confirming and leasing and the financing of consumer durables, while the merchant banks focus more on loan syndication, bond underwriting and corporate credit.

[7] Twenty-nine large (asset base of over TT$100 million), thirty-six medium (asset base of TT$10-100 million), and sixty-four small (asset base less than TT$10 million) (2014 data).

FINANCIAL SOUNDNESS INDICATORS (FSIs)[8]

Banking Sector[9] Financial Soundness

Selected FSIs for the five years up to December 2016 (**Table 2**) indicate a banking sector that continues to be liquid, has maintained its capital buffers and to date has not seen any material deterioration in the overall quality of loan portfolios. Profitability as measured by return on equity (ROE) has been in the double digits over the past five years, peaking at 19.9 per cent in 2016.

Table 2
Banking Sector: Financial Soundness Indicators(per cent), 2011 – 2016

	Dec-11	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16
Capital Adequacy						
Regulatory capital-to-risk-weighted assets	26.0	25.7	25.0	24.6	24.1	23.8
Regulatory tier I capital to risk-weighted assets	24.3	24.3	23.7	24.3	25.0	23.0
Regulatory capital-to-total assets	13.5	13.3	13.3	12.5	12.6	12.5
Net open position in foreign exchange-to-capital	10.4	10.7	13.9	6.6	9.7	13.8
Asset Composition						
Sectoral distribution of loans-to-total loans						
Households	41.5	43.1	45.0	44.2	44.0	45.7
Financial sector	17.3	16.1	13.5	15.1	13.1	14.7
Oil and gas sector	2.6	2.9	2.9	2.8	2.6	3.5
Construction	10.7	9.1	8.0	9.8	9.5	6.1
Transport and communication	2.2	3.3	4.1	2.9	3.2	2.9
Non-residents	5.3	5.4	4.4	4.0	2.6	2.9
Foreign currency loans-to-total loans	17.8	18.8	16.9	16.6	15.2	15.5
Asset Quality						
Nonperforming loans-to-gross loans	6.2	5.5	4.3	4.4	3.7	3.2
Nonperforming loans (net of provisions)-to-capital	11.9	8.5	7.0	7.3	6.3	6.2
Total provisions-to-impaired loans*	36.7	49.9	49.9	53.0	54.3	61.0
Specific provisions-to-impaired loans	29.5	39.9	37.4	42.3	42.1	38.1
General provisions-to-gross loans*	0.4	0.5	0.5	0.5	0.4	0.7
Specific provisions-to-gross loans	1.8	2.2	1.6	1.9	1.6	1.2
Earnings And Profitability						
Return on assets	2.8	3.0	2.5	2.0	2.9	2.9
Return on equity	17.5	18.3	15.8	12.9	18.2	19.9
Interest margin-to-gross income	61.0	60.6	58.9	55.7	57.8	60.5
Non-interest income-to-gross income	39.0	39.4	41.1	44.3	42.2	39.5
Non-interest expenses-to-gross income	58.0	61.4	62.3	67.6	61.8	58.3
Liquidity						
Liquid assets-to-total assets	26.7	24.7	26.8	25.0	23.1	21.8
Liquid assets-to-total short-term liabilities	37.3	33.1	35.7	32.5	30.6	27.8
Customer deposits-to-total (non-interbank) loans	163.8	176.9	178.3	174.3	159.8	164.7
Foreign currency liabilities-to-total liabilities	27.9	28.6	26.0	23.8	25.4	26.0

Source: Central Bank of Trinidad and Tobago

Note: * These ratios are not the typically used measures of financial soundness, but they are included here for comparison purposes.

[8] Trinidad and Tobago is an FSI Reporting Country to the IMF's Statistical Department: https://www.imf.org/external/np/sta/fsi/eng/fsi.htm.

[9] The banking sector includes the licensed commercial banks and non-bank financial institutions (non-banks) in Trinidad and Tobago.

Table 3
Life Insurance Sector: Financial Soundness Indicators[10] (per cent), 2011 – 2016

	Dec-11	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16
Capital Adequacy						
Capital-to-total assets	22.1	22.0	21.2	21.3	20.7	20.3
Capital-to-technical reserves	30.5	30.1	28.6	29.5	28.6	27.7
Asset Quality						
(Real estate + unquoted equities + debtors)-to-total assets	13.5	9.3	10.5	7.4	7.8	8.0
Earnings and Profitability						
Expense ratio = expense (incl. commissions)-to-net premium	38.6	37.8	35.1	33.6	33.1	28.9
Investment yield = investment income-to- investment assets	5.7	5.4	5.1	4.8	4.5	4.7
Return on equity = pre-tax profits to shareholders funds	10.3	14.1	15.1	10.6	11.3	15.4
Liquidity						
Liquid assets-to-current liabilities	33.5	33.6	32.6	34.2	37.7	27.4

Source: Central Bank of Trinidad and Tobago

Table 4
Non-Life Insurance Sector: Financial Soundness Indicators (per cent), 2011 – 2016

	Dec-11	Dec-12	Dec-13	Dec-14	Dec-15	Dec-16
Asset Quality						
(Real estate +unquoted equities + accounts receivables)-to-total assets	16.2	14.0	13.5	13.8	16.4	18.1
Debtors-to-(gross premiums + reinsurance recoveries)	11.6	11.2	11.2	11.0	14.1	16.4
Reinsurance and Actuarial Issues						
Risk retention ratio = net premiums written-to- total gross premiums	44.4	42.6	43.0	42.5	43.0	45.8
Net technical reserves-to-average of net claims paid in the last three years	154.8	164.1	168.3	171.1	176.1	166.7
Earnings and Profitability						
Combined Ratio	100.2	97.1	96.4	95.7	100.8	102.9
Expense ratio = expense (incl. commissions)-to-net premiums	49.8	49.5	51.1	51.4	52.2	55.8
Loss ratio = net claims-to-net earned premiums	50.3	47.6	45.3	44.3	48.6	47.1
Investment income-to-net premium	8.8	8.2	10.3	5.8	5.8	6.2
Return on equity = pre-tax profits-to-shareholders funds	15.5	17.5	20.0	14.2	10.1	12.5
Return on assets	6.4	7.6	8.9	6.4	4.8	5.7
Liquidity						
Liquid assets-to-current liabilities	42.9	56.5	60.5	61.2	58.9	49.0

Source: Central Bank of Trinidad and Tobago

Life Insurance Sector Financial Soundness

Selected FSIs for the five years up to December 2016 **(Table 3)** indicate continued stability. Overall, reported capital ratios are of the order of 20 per cent. ROE has been volatile partly due to the impact on reported results of accounting policies relating to insurers' classification of investments, treatment of foreign exchange gains, gains and losses on investments and recognition of experience changes in actuarial liabilities. A large one-off premium of TT$800 million due to the assumption of a large annuity portfolio following the wind up of the ArcelorMittal pension plan resulted in a reduction in the expense ratio in 2016.

Non-Life Insurance Sector Financial Soundness

Non-life insurance sector's FSIs for the five years up to December 2016 **(Table 4)** indicate that there was a marginal improvement in the underwriting experience[11] while expense ratios deteriorated. Profitability as measured by ROE and return on assets continues to be adversely affected by the low interest rate environment and pricing pressures in an increasingly competitive market environment.

[10] Figures exclude data from CLICO and BA.

[11] As measured by the claims loss ratio.

BANKING SECTOR (COMMERCIAL BANKS AND NON-BANKS)

Assets

The banking sector experienced marginal growth overall in 2016 ending the year with assets of TT$149.4 billion (**Figure 7**). Liquidity remained high as evidenced by the ratio of liquid assets[12] to total assets, which stood at 21.8 per cent at December 2016, down from 23.1 per cent one year earlier.

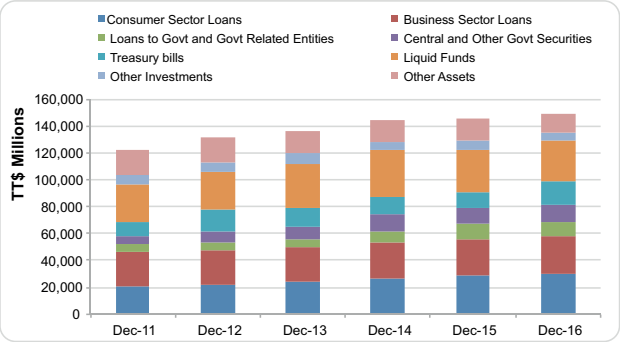
Total loan growth slowed to 1.8 per cent in 2016 from 8.4 per cent the previous year. Loans to consumers grew by 5.7 per cent, down from 8.3 per cent in 2015 (**Figure 8**). Loans to businesses grew by 2.4 per cent compared to 1.4 per cent in 2015 due to a slight uptick in the manufacturing, finance, insurance and real estate sectors in the fourth quarter of 2016. Loans to the government sector fell by 10 per cent, from TT$11.1 billion at the end of 2015 to TT$10.0 billion at the end of 2016. Details are provided in **Appendix A**.

Consumer Sector Loans

Consumer loans stood at TT$30.6 billion, up from TT$29.0 billion at the end of 2015. The largest segments are in real estate and motor vehicle lending (**Table 5 and Appendix A**).

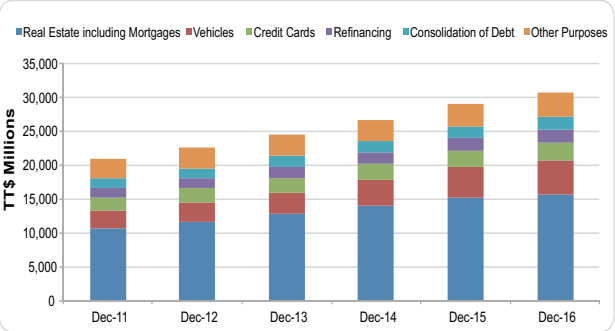
In 2016, consumer loan growth slowed in the real estate[14] and motor vehicle segments, after seeing double digit growth in the past few years. Notwithstanding the slowdown, the largest growth in absolute terms remains or continues to be controlled by these segments. There was a marked increase in credit card usage and the pace of debt consolidation has doubled.

Figure 7
Asset Composition, 2011 – 2016



Source: Central Bank of Trinidad and Tobago

Figure 8
Consumer Loans by Purpose, 2011 – 2016



Source: Central Bank of Trinidad and Tobago

Table 5
Growth in Consumer Loans by Purpose[13], 2011 – 2016

CATEGORIES (per cent)	Dec -12	Dec -13	Dec -14	Dec -15	Dec -16
Real Estate including mortgages	10.7	8.9	10.2	7.5	4.1
Vehicles	6.7	11.8	18.7	21.8	7.5
Credit Cards	5.0	8.0	7.8	3.9	13.7
Refinancing	2.5	8.1	5.7	5.3	5.2
Consolidation of debt	0.1	16.2	2.0	4.5	10.1
Other Purposes	2.1	5.5	0.3	2.9	2.7
TOTAL GROWTH IN CONSUMER LOANS, yoy	**7.2**	**9.1**	**8.9**	**8.3**	**5.7**

Source: Central Bank of Trinidad and Tobago

[12] Liquid Funds: Cash; Deposits at Central Bank (Primary Deposits and Special Deposits); Due from Banks; Cash items in process of collection; Inter-bank funds sold and Time Deposits.
[13] Absolute values are shown in Appendix A.
[14] Includes bridging finance, land and real estate, home improvement or renovation, real estate mortgages and leasing.

Business Sector Loans

There was little growth in business sector loans during the past five years **(Figure 9 and Appendix A)**. There was an overall reduction in loans to construction, petroleum, hotel and guest houses, transport, storage and communication sectors in the past five years. The growth in commercial real estate mortgages in the banking sector slowed to 4.9 per cent in 2016 down from 12.9 per cent and 11.4 per cent in 2014 and 2015 respectively. These trends are not surprising given the contraction in economic activity.

Sovereign Exposure

Sovereign exposures, which include loans to and investments in government and government related entities and Treasury bills totalled TT$40.5 billion or 27.1 per cent of banking sector assets **(Figure 7)**. Of this, 6.7 per cent related to loans, 11.9 per cent to treasury bills and 8.5 per cent to investments.

Exposure to the GoRTT and state owned entities stood at TT$32.4 billion (79.9 per cent of total sovereign exposure) while TT$6.6 billion (16.3 per cent) represented exposure to the US Government (mostly US treasuries) and TT$119 billion to Barbados.

Equity in Subsidiaries and Affiliates

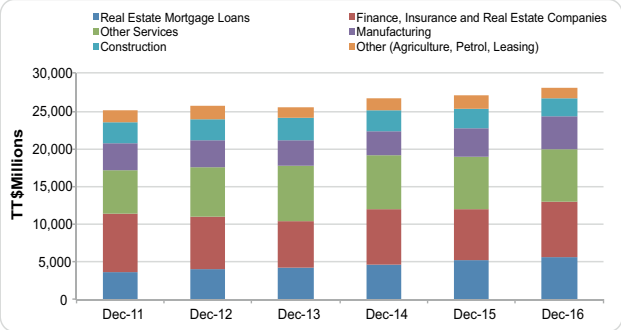
Equity in subsidiaries and affiliates totalled TT$2.7 billion, of which 56.3 per cent was in respect of entities domiciled in Trinidad and Tobago, 30.8 per cent in St. Lucia and 11.0 per cent in Barbados. These amounts do not include overseas banking subsidiaries held by the holding companies of certain commercial banks of the order of TT$6 billion.

Performance of the Loan Portfolio

The overall declining trend in the banking sector's ratio of NPLs to gross loans (NPL ratio) for all sectors combined continued into 2016 **(Figure 10)**. Total NPLs in the banking sector declined by TT$313.7 million in 2016 to TT$2.2 billion, due in large part to workout strategies and write-offs of a few large and long standing non-performing commercial facilities. This led to a reduction in the overall NPL ratio from 3.7 per cent at the end of 2015 to 3.2[15] per cent at the end of 2016.

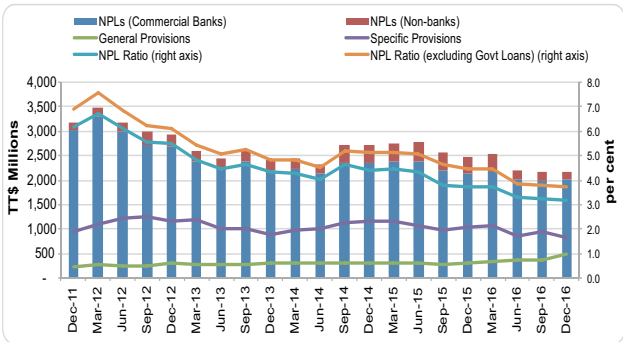
There was an overall reduction in specific provisions. The ratio of specific provisions to impaired loans in December 2016 was 38.1 per cent down from 42.1 per cent in 2015. This was accompanied by an increase in the general provisions.

Figure 9
Business Loans by Activity, 2011 – 2016



Source: Central Bank of Trinidad and Tobago

Figure 10
Banking Sector NPLs, 2011 – 2016



Source: Central Bank of Trinidad and Tobago

[15] Notably, this ratio increases to 3.7 per cent when government loans are excluded from the gross loans figure.

Although the overall NPL ratio for all sectors combined is low at 3.2 per cent, certain sectors are markedly higher (**Figure 11**). At the end of December 2016:

- The NPL ratio for "Business - real estate including real estate mortgages" in the commercial banks stood at 9.0 per cent down from a high of 16.5 per cent in 2012. There are a few large legacy non-performing commercial real estate loans in workout remaining on the balance sheets of certain commercial banks.
- NPL ratio for "Other Business Loans" was 4.3 per cent.

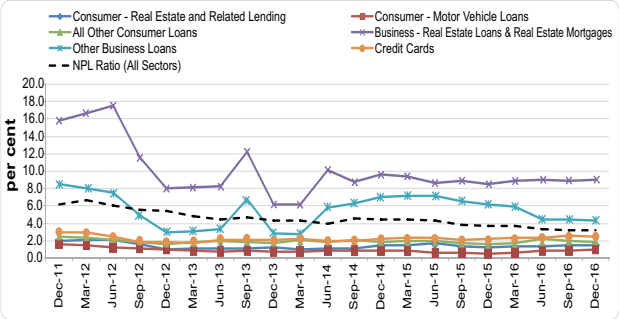
These ratios are significantly higher than the consumer sector which was 1.9 per cent. Over the past five years, overall consumer sector NPL ratios have been relatively flat, however during the latest quarter ending December 2016, there was an uptick in the following sectors:

- Non-performing real estate and related lending loans increased from 1.3 per cent to 1.5 per cent;
- Delinquent motor vehicle loans increased from 0.5 per cent to 0.9 per cent; and
- The non-performing ratio for all other consumer loans increased from 1.6 per cent to 1.9 per cent;
- Credit card delinquency increased from 2.2 per cent to 2.5 per cent.

The level of past due loans is, by its very nature, quite volatile, particularly in the 1 day to 30 day category. However any sustained uptick is a leading indicator of the potential for migration to the non-performing category (past due by 90 days or more). **Figure 12** showed a discernable increase in the overall level of past due loans beginning in December 2013.

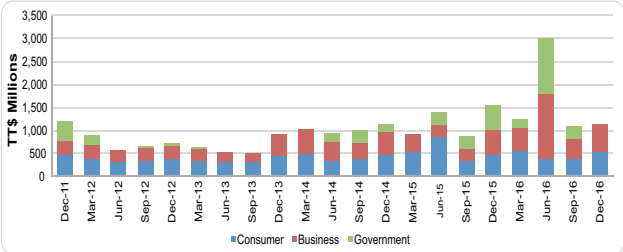
In the current environment, banking institutions have instituted closer monitoring of 'at-risk' sectors and clients and the Central Bank has embarked on thematic on-site reviews of credit and concentration risk at major institutions. An assessment of the banking sector's vulnerability to credit risk is discussed in more detail in **Chapter 3**.

Figure 11
Sector Specific NPL Ratios in the Commercial Banking Sector[16], 2011 – 2016



Source: Central Bank of Trinidad and Tobago

Figure 12
Loans Past Due Over 30 days – 89 days, 2011 – 2016



Source: Central Bank of Trinidad and Tobago

[16] Data source: Quarterly Stress testing submissions by domestic commercial banks.

Liability Profile and Funding

Savings and demand deposits continued to be the major source of funding **(Figure 13)**. The most significant growth was recorded in business sector deposits which increased by 12.6 per cent over the year.

Sources of Earnings and Profitability

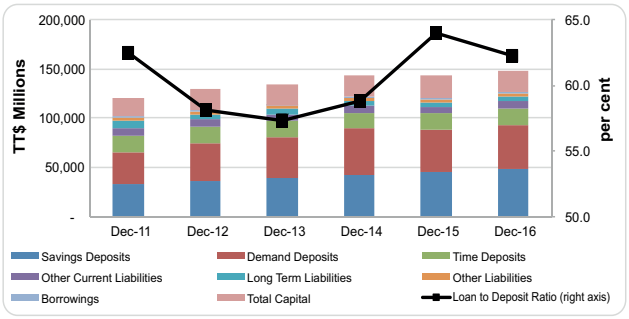
The Banking Sector generated TT$4.2 billion in profit before tax in 2016, up from TT$4.1 billion in 2015. **Table 6** gives a breakdown of these amounts by source:

As shown in **Table 6** below, net interest margin increased significantly by 16.7 per cent (TT$763 million). Net interest margin as a percentage of total interest bearing assets increased from 4.2 per cent in 2015 to 4.7 per cent in 2016. This is reflective of the general increase in interest rates and spreads.

Notably, the increase in net interest margin was off-set by:

- A significant reduction[17] in the level of dividends received from subsidiaries and affiliates;
- A decline in 'Other Income'; and
- An increase in non-interest expenses.

Figure 13
Deposits, Other Liabilities and Capital, 2011 – 2016



Source: Central Bank of Trinidad and Tobago

Table 6
Contribution to Profit and Expenses by Source
TT$ Millions

	2015	2016	Increase/ (Decrease)
Net Interest Margin	4,565	5,328	763
Fee Income	1,722	1,876	154
Dividends from Subsidiaries and Affiliates	1,088	765	-323
Foreign Exchange Profits	926	890	-35
Trustee Services	185	201	16
Other Income	499	293	-206
TOTAL CONTRIBUTION TO PROFIT AND EXPENSES	**8,986**	**9,355**	**369**
Non-Interest Expense	-4,883	-5,156	-273
BEFORE TAX PROFIT	**4,102**	**4,199**	**97**
Tax	-758	-922	-164
AFTER TAX PROFIT	**3,344**	**3,277**	**-67**

Source: Central Bank of Trinidad and Tobago

[17] In 2015 one of the larger commercial banks received exceptional dividends from its subsidiaries.

Figure 14 shows the five year trend in contribution to profit and expenses, by source, for the commercial banking sector while **Figure 15** shows the five year trend for the non-bank sector.

Net interest margin in the non-bank sector also increased significantly within the last year, and is now back up to 2011 levels. Generally, non-banks engage in trustee business, asset management and merchant banking and hence derive a larger share of their profits from fees than is the norm in the commercial banking sector.

Capital

Capital buffers as measured by regulatory capital to risk-weighted assets (CAR) under Basel I requirements exceeded 20 per cent over the past five years. The Central Bank's initiative to implement the Basel II standard to improve the risk sensitivity of the capital requirements is discussed in Chapter 5. The results of stress tests (Appendix B) to assess the adequacy of capital and resilience of the sector to credit and other risks are discussed in Chapter 3.

Foreign Currency Balance Sheet

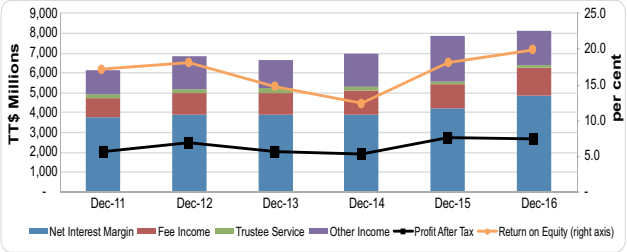
Figure 16 shows trends in the foreign currency balance sheet of the banking sector. Total foreign currency assets stood at TT$36.3 billion, while foreign currency liabilities stood at TT$32.9 billion (of which foreign currency deposits totalled TT$26.5 billion or 24.1 per cent of total deposits). Gross foreign assets was 24.3 per cent of gross assets.

Foreign currency loans at TT$10.6 billion were 15.6 per cent of gross loans. The majority of the loans are business sector loans, followed by the government sector. Foreign currency loans have been on a slight upward trajectory, particularly within the last two years.

Other foreign currency ratios were:

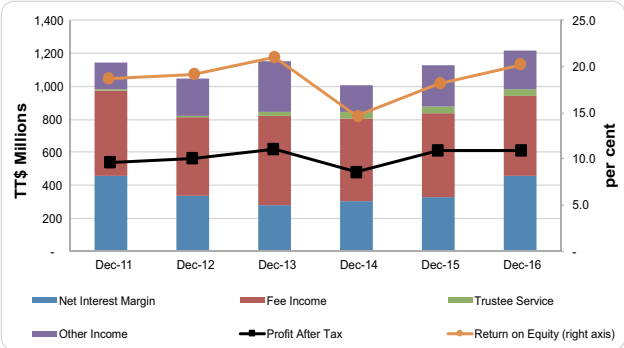
- Loan to deposit ratio – 40.2 per cent
- Liquid funds to total assets – 27.0 per cent

Figure 14
Commercial Banks' Contribution to Profit and Expenses by Source, 2011 – 2016



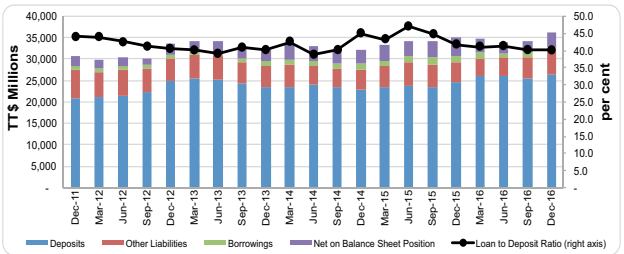
Source: Central Bank of Trinidad and Tobago

Figure 15
Non-Banks' Contribution to Profit and Expenses by Source, 2011 – 2016



Source: Central Bank of Trinidad and Tobago

Figure 16
Foreign Currency Assets and Liabilities, 2011 – 2016



Source: Central Bank of Trinidad and Tobago

LIFE INSURANCE SECTOR

Asset Base

Total assets of the life insurance sector grew to TT$23.8 billion at the end of 2016, a 10 per cent increase from TT$21.6 billion at the end of 2015 **(Figure 17)**. Forty (40) per cent of the growth was due to the acquisition by life insurers of the assets and liabilities of the ArcelorMittal pension plan.

The sector is highly concentrated. Two systemically important regional market players account for 60.2 per cent of the sector's assets and 64.7 per cent of premium income.

There is a high and growing concentration of assets in debt securities, with around 82 per cent of these debt securities being in respect of government and government guaranteed securities. Debt securities increased from 43.5 per cent of total assets in 2011 to 52.5 per cent in 2016 primarily on account of long-term government securities. Government securities including Treasury bills represent 43.1 per cent of the total assets of the sector of which 90.2 per cent represents exposure to the GoRTT and 5.0 per cent to the Government of Barbados.

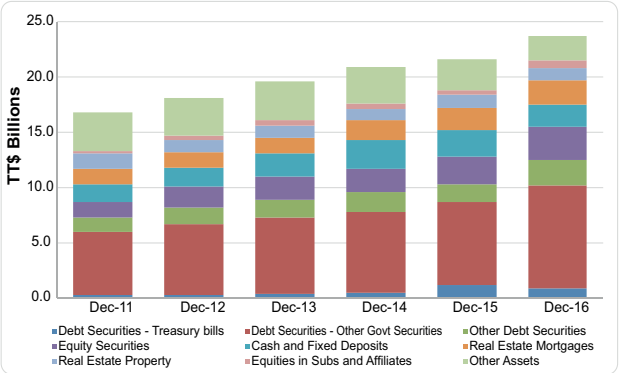
Lines of Business

The main lines of business are life insurance (ordinary, universal and unit linked), annuity (interest sensitive, unit linked and payout) and group insurance (health and life) **(Figure 18)**. Gross premium income grew by 19 per cent in 2016 to TT$4.9 billion. The growth in the annuity business stemmed from the annuity portfolio acquisition of the pension plan. It is important to note that a large percentage (at least 50 per cent) of the unit linked funds is in respect of unit linked annuities (as distinct from unit linked life insurance).

Reported Profits

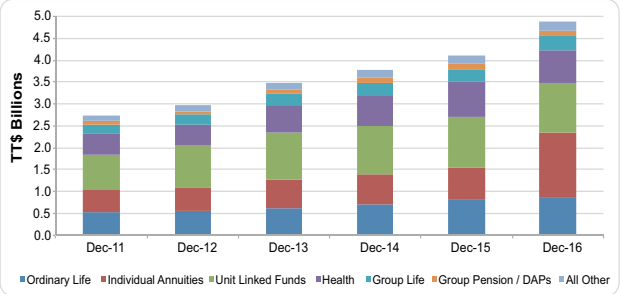
After many years of decline, portfolio yields increased marginally in 2016 from 4.5 per cent to 4.6 per cent. Profits before taxes increased from $334.6 million in 2009 to $666.2 million in 2016 **(Figure 19)**. Reported profits have been volatile due to the impact of foreign exchange fluctuations, unrealized fair value gains and losses on investments and the impact of changes in assumptions on actuarial liabilities. In 2016, the large increase in profits was due to foreign exchange gains and actuarial basis changes in one insurer.

Figure 17
Assets: Life Insurance Sector, 2011 – 2016



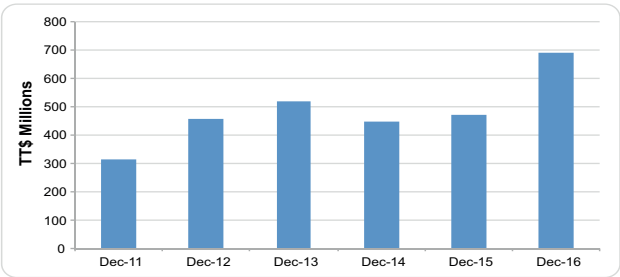
Source: Central Bank of Trinidad and Tobago

Figure 18
Gross Premium Income: Life Insurers, 2011 – 2016



Source: Central Bank of Trinidad and Tobago

Figure 19
Profits Before Taxes: Life Insurers, 2011 – 2016



Source: Central Bank of Trinidad and Tobago

Expenses

The total expense ratios[18] (management expenses plus commission and other acquisition expenses as a percentage of premium income) have increased in 2016. This increase is primarily on account of increasing commission expenses. The management expense ratio has also increased over the last year (**Figure 20**).

NON-LIFE INSURANCE SECTOR

Like the life insurance sector, the non-life insurance sector is highly concentrated with 52.9 per cent of the market share based on premium income controlled by three institutions. The asset base of the sector grew at an average annual rate of 3.7 per cent. Net retained premiums declined by 2.4 per cent in 2016. Competition has intensified and the market continued to be soft.

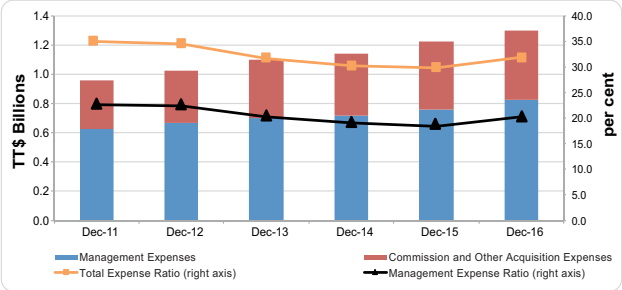
Lines of Business

On a gross premium basis, the motor line accounts for 41.2 per cent of general insurers' business. Property insurance premium accounts for another 41 per cent of the business. A large proportion of the property line is reinsured whereas most of the motor premium and risk is retained by the local insurers. Therefore, on a net premium basis, motor insurance lines represent 73.7 per cent of total net premium income, and property accounts for 7.4 per cent (**Figure 21**).

Investments Yield

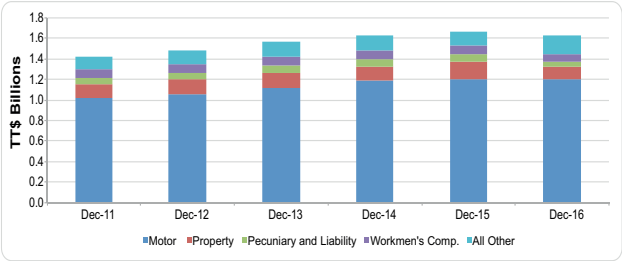
Due to the short term nature of the sector's insurance liabilities, companies maintain highly liquid asset portfolios. Treasury bills, cash and fixed deposits made up 20 per cent of total assets as at December, 2016. Government bonds made up the next largest security class at 22 per cent of total assets. Net interest income as a per cent of premiums increased from 5.8 per cent in 2015 to 6.2 per cent in 2016.

Figure 20
Expenses and Expense Ratios: Life Insurers, 2011 – 2016



Source: Central Bank of Trinidad and Tobago

Figure 21
Net Retained Annual Premiums Income: Non Life Insurers, 2011 – 2016



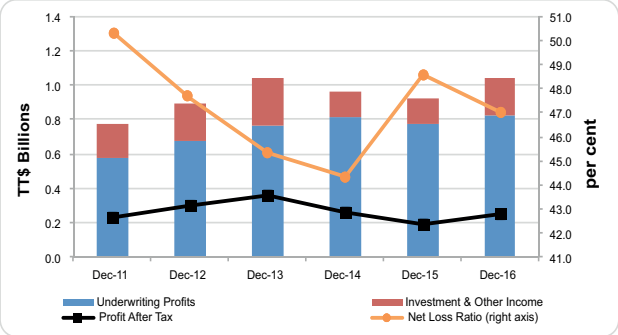
Source: Central Bank of Trinidad and Tobago

[18] The one time premium in 2016 for the acquisition of the annuity business has been excluded in computing the ratios.

Loss Ratios and Profitability

Underwriting profits as measured by the ratio of claims to net earned premiums (the net loss ratio) showed a small improvement from 48.7 per cent in 2015 to 47.5 per cent in 2016. Insurers also benefitted from gains on foreign exchange investments. Pre-tax profits increased by TT$61.3 million to TT$323.6 million **(Figure 22)**. However this included a one-off extraordinary item of TT$20.0 million in one company.

Figure 22
Contribution to Profit and Expenses: Non-Life Insurers, 2011 – 2016



Source: Central Bank of Trinidad and Tobago

OCCUPATIONAL PENSION PLANS

As at December 2016, there were one hundred and eighty-eight active registered occupational pension plans and a total membership of approximately ninety-five thousand persons[19] with another ninety nine plans in the process of being wound up. Total occupational pension plan assets reduced marginally over the year and stood at TT$47.7 billion as at December 31, 2016[20]. Corporate Trustees licensed to do trust business under the Financial Institutions Act, 2008 (FIA), managed approximately 79 per cent of all pension plan assets (TT$37.7 billion).

Notably, of the one hundred and eighty-eight plans, forty-one are sponsored by government related entities **(Table 7)**. These plans account for:

- 60 per cent of the total assets in the pensions sector (i.e. TT$29 billion); and
- 48 per cent of total membership (i.e. 46,000 persons)

Table 7
Pension Plan by Type, 2016

	Sponsored by Government or Government Related Entities		Private Company Sponsored	
	Defined Benefit	Defined Contribution or Hybrid	Defined Benefit	Defined Contribution or Hybrid
Number of Plans	35	6	83	64
Total Assets (TT$ Billion)	29	0.25	12	6.74

Source: Central Bank of Trinidad and Tobago

[19] Membership information is based on each Plan's latest actuarial valuation.
[20] Source: Audited Financial Submitted to December 31, 2016.

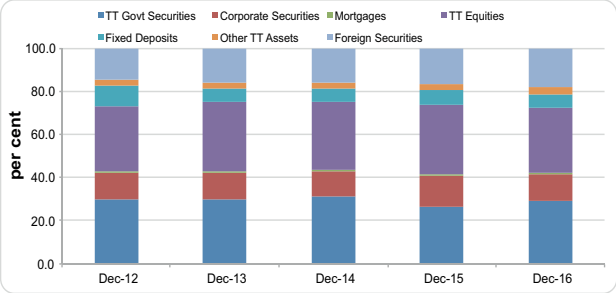
Of the forty-one "Government Employer Sponsored" plans, 85 per cent are defined benefit. Of the one hundred and forty-seven plans sponsored by the private sector, 57 per cent are defined benefit plans.

The asset mix has remained relatively stable. Eighteen (18) per cent of pension fund assets are invested in foreign assets and 29 per cent are invested in securities of the GoRTT (**Figure 23**).

In 2016, occupational pension plans continued to experience depressed investment returns. Of the ninety nine actuarial valuation reports received for defined benefit plans in the last three years[21], sixty three include recommendations for contribution rate increases to ensure that promised benefits are fully funded[22] over a reasonable timeframe. The Central Bank continues to actively engage trustees and plan sponsors to ensure effective and timely implementation of the actuary's recommendations. The challenging macroeconomic environment increases the risk that sponsors will be unable to meet the cost to provide promised benefits. On the other hand, increases in interest rates and foreign exchange gains will improve plans' funding positions. Over the past few years, sponsors have been addressing this funding risk through closure of defined benefit plans to new employees who are now covered under defined contribution arrangements.

In April 2016, the sector experienced the winding up of a large pension plan due to the closure of ArcelorMittal. Benefits for the members of this plan were secured by the purchase of immediate and deferred annuities from two life insurers.

Figure 23
Assets as a Proportion of Funds – Pension Plans Asset Mix



Source: Central Bank of Trinidad and Tobago

[21] Section 185 of the Insurance Act requires defined benefit and hybrid plans to submit actuarial valuation reports at least once every three years.

[22] Assets and contributions are adequate to provide promised benefits.

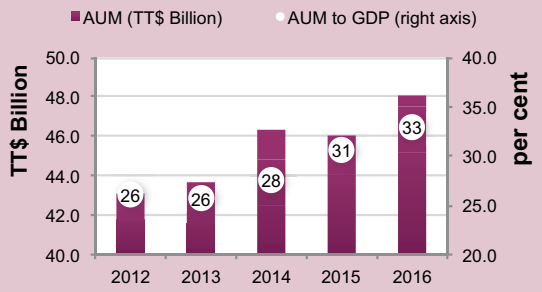
BOX 1: TRINIDAD AND TOBAGO CAPITAL MARKETS DEVELOPMENTS

Mutual Fund Activity

According to Trinidad and Tobago Securities Exchange Commission (TTSEC), Collective Investment Schemes[23] (CIS) assets amounted to around TT$48.1 billion at the end of December 2016 **(Figure 1)**[24] however, mutual fund growth remained subdued increasing only by 3.7 per cent over the year. New mutual fund sales totalled TT$15.0 billion, while repurchases for the year stood at TT$14.6 billion.

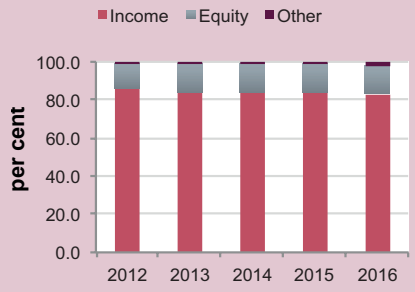
Within the financial system, there are five major providers which account for over 94 per cent of the mutual fund industry[25]. A 2014 study on mutual funds found that this type of security is more favoured by retail investors as they account for around 28 per cent of the industry by investment and approximately 3 per cent of investors. Fixed income assets, especially long-term tenors, make up the largest share of investment portfolios **(Figure 2)** and this can exacerbate vulnerability to investment risk. The sector is heavily invested in domestic sovereign fixed income securities recording 37.9 per cent of assets as at December 2016. Non-domestic debt issues comprised a smaller allocation of the portfolio at 7.5 per cent of total assets for the same period. Notably, because of the connection between US and TT interest rates as described in Chapter 3, long duration of fixed income investments, and fixed NAV product designs, prudent asset-liability management and liquidity management is important.

Figure 1:
CIS Industry Assets Under Management (AUM), 2012 – 2016



Source: Trinidad and Tobago Securities and Exchange Commission

Figure 2:
CIS Portfolio Investment Structure, 2012 – 2016



Source: Trinidad and Tobago Securities and Exchange Commission

At least 60 per cent of mutual funds within the domestic sector are also fixed net asset value[26] (NAV) funds and a significant portion is also open-ended. In general, there is a daily calculation of the NAV for all funds and this is the price that would be used to purchase or redeem units or stock on the following business day. In the case of a floating NAV, fund valuations are representative of the actual price of the fund. In the case of a fixed NAV, the fund incurs a built-in liability if the fixed NAV falls

[23] CISs are defined as investment products which allow many different investors to pool their money into a portfolio and which is overseen by an asset management department or company (Financial Services Board – South Africa). Mutual Funds are an 'open-ended' form of CIS which means that the 'unit' or sub-divided ownership in the pool of securities is redeemed by the asset manager based on supply and demand.

[24] This data covers the sixty-five CISs under the oversight of the Trinidad and Tobago Securities and Exchange Commission.

[25] Trinidad and Tobago Securities and Exchange Commission, 2016 Annual Report.

[26] Price per share of the fund calculated at the current market value of the fund's net assets divided by the shares outstanding.

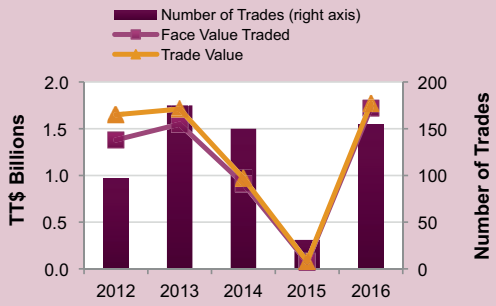
BOX 1: Continued

below the daily calculated price of the fund. Fund managers are therefore required to ensure that fund valuations are closely monitored and that adequate liquidity arrangements are in place to deal with any undue shortfalls.

Fixed Income and Equity Market Activity

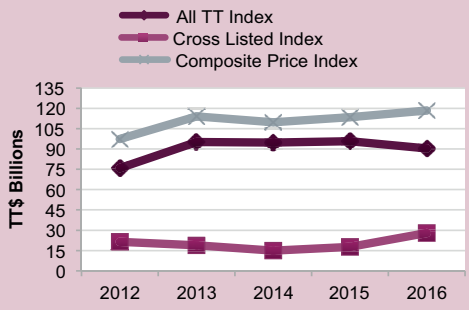
In 2016, there was evidence of greater trading activity on the primary and secondary fixed income securities markets. In the twelve month period to December 2016, out of a total of eighteen issues, there were fourteen TT dollar denominated fixed income securities on the primary bond market valued at TT$6.5 billion dollars (TT$5.4 billion in 2015), and four US dollar denominated issues valued at US$1.75 billion dollars (US$173 million in 2015), two of which were attributable to the CARICOM region. The significant increase in US dollar bond issues is attributable to financing raised by government and government related agencies. While activity in the primary bond market was mainly through private placements[27], most of the issues were related to government and state enterprises. Further, there was a significant increase in secondary government bond market activity of over TT$1.7 billion in 2016 compared to TT$81 million in 2015, **(Figure 3)**, signalling a possible return to increased market activity as in 2012.

Figure 3:
Secondary Market Government Bond Trading, 2012-2016



Source: Central Bank of Trinidad and Tobago

Figure 4:
Stock Price Index Market Capitalization, 2012-2016



Source: Central Bank of Trinidad and Tobago

While there were no major stock issues on the domestic equities market, there was a significant increase in market capitalization of the Cross Listed Index (CLI)[28] on the Trinidad and Tobago Stock Exchange (TTSE). For the year ending December 2016, the market capitalization of the CLI on the TTSE increased by more than 58 per cent to TT$27.9 billion. The TTSE has cited that the increase was as a result of greater regional integration, with the significant presence of cross-listed companies which saw a major stock split and additional increases in equity capital for company expansion endeavours **(Figure 4)**.

[27] The sale of stocks, bonds or securities directly to a private investor, rather than as part of a public offering.

[28] This index only captures external activity.

PAYMENTS SYSTEMS

Payments System Activity (Local currency payments)

Following several years of consecutive growth, the value of transactions processed via the Real Time Gross Settlement system (RTGS) declined by 11 per cent in 2016 to TT$525.6 billion **(Figure 24)**. As a per cent of GDP, the value of RTGS transactions (local currency payments) moved from 395 per cent in 2015 to 360 per cent in 2016. Notably however, the volumes administered via the RTGS increased by 2 per cent **(Figure 24)**.

Domestic retail payments have been growing over the last several years and in 2016 stood at approximately 135 per cent of GDP **(Figure 25)**.

Debit card transactions dominated the total volume of retail payments at 58 per cent at the end of 2016. This was followed by credit cards (21 per cent), retail cheques (13 per cent) and Automated Clearing House (ACH) transactions (7 per cent). However in value terms, payments made by retail cheques accounted for the largest portion of retail payments (66 per cent) followed by ACH (18 per cent). It should be noted that retail cheque values have decline in 2016 while electronic transactions via ACH, debit card and credit card increased **(Figure 25)**.

In keeping with the banking sector's strategy to increase electronic payments and decrease teller services, the number of Automated Teller Machines (ATMs) grew by thirteen to four hundred and fifty-five over the period 2015 to 2016. Certain areas such as Tobago, San Fernando, Chaguanas and St. Augustine have benefitted from additional ATMs. However, the number of point of sale machines decreased by one thousand one hundred and thirty-four over the last year to nineteen thousand nine hundred and thirty-one as some merchants returned their machines citing cost as the reason for their action.

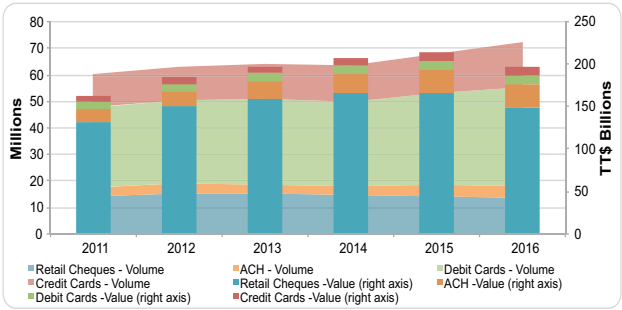
Bill Payment Service Providers

Bill payments can be made directly to utility companies (over the counter or through their online services). Alternatively, bill payments may be done using either the commercial banks or Bill Payment Service Providers (BPSPs). The BPSPs are defined as third party agents that

Figure 24
Domestic Annual Payments – Wholesale, 2011 – 2016

Source: Central Bank of Trinidad and Tobago

Figure 25
Domestic Annual Payments – Retail, 2011 – 2016

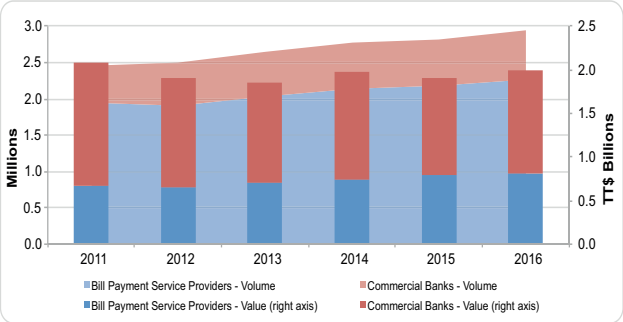


Source: Central Bank of Trinidad and Tobago

collect, process and remit bill payments to their clients or service providers for a fee. There are currently, three BPSPs processing utility and other bills registered with the Central Bank namely VIA, SurePay and Bill Express.

As in previous years, the volume of transactions made via BPSPs was three times that of the volume processed by commercial banks. However, in value terms, the commercial banks accounted for the larger amount. In 2016, these three BPSPs processed a total of 2.3 million transactions valued at TT$811.1 million. Meanwhile, commercial banks processed 0.6 million transactions valued at TT$1.2 billion **(Figure 26)**.

Figure 26
Bill Payments Processed by Third Party Agents, 2011 – 2016



Source: Central Bank of Trinidad and Tobago

CHAPTER 3
VULNERABILITIES AND RISKS

CHAPTER 3

VULNERABILITIES AND RISKS

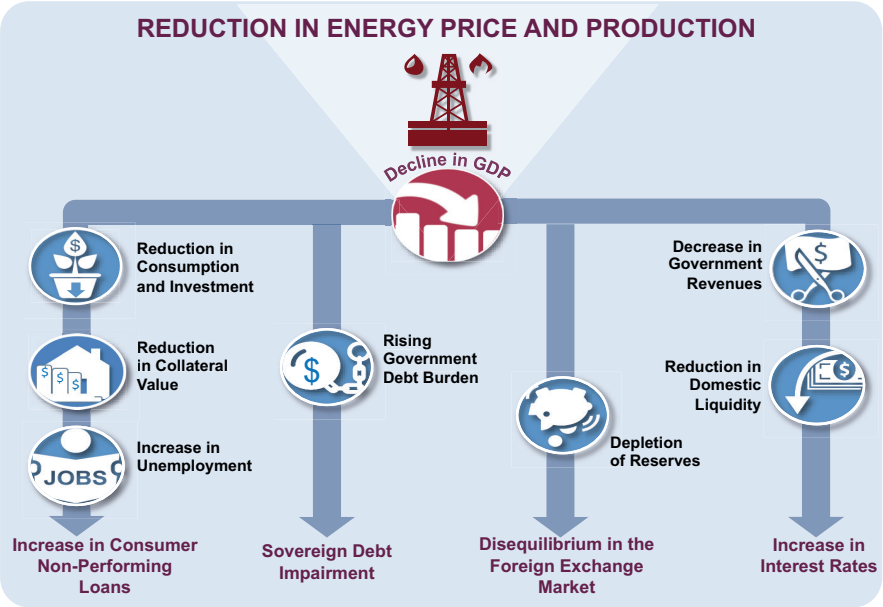
In the 2015 FSR, the following key risks to financial stability were discussed:

1. Persistent low energy prices;
2. Household financial stress and the correction in house prices;
3. A spike in long-term US interest rates; and
4. Sovereign debt restructuring in the Caribbean.

Other than continued low energy prices, these risks did not materialize in any significant way in 2016. However the probabilities of occurrence have increased due to the prolonged slowdown in economic activity which has worsened fiscal positions, contributed to a lackluster investment climate, and has trickled down to the consumer and business sectors **(Figure 27)**.

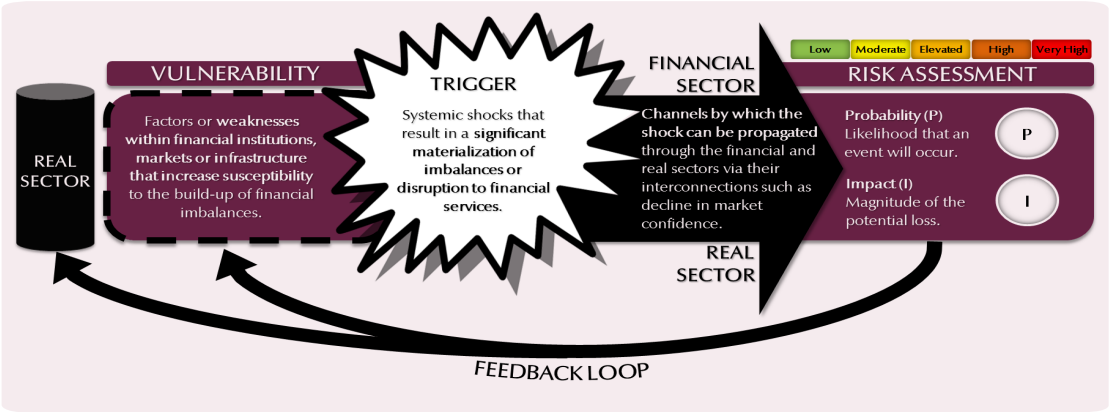
The evolution of these risks (and triggers), alongside vulnerabilities inherent within our financial system has the potential to create systemic impacts.

Figure 27
Transmission of Risks from Energy Price and Production Declines



Source: Central Bank of Trinidad and Tobago

Figure 28
FSR 2016 Vulnerabilities and Risks Assessment Framework



Source: Central Bank of Trinidad and Tobago

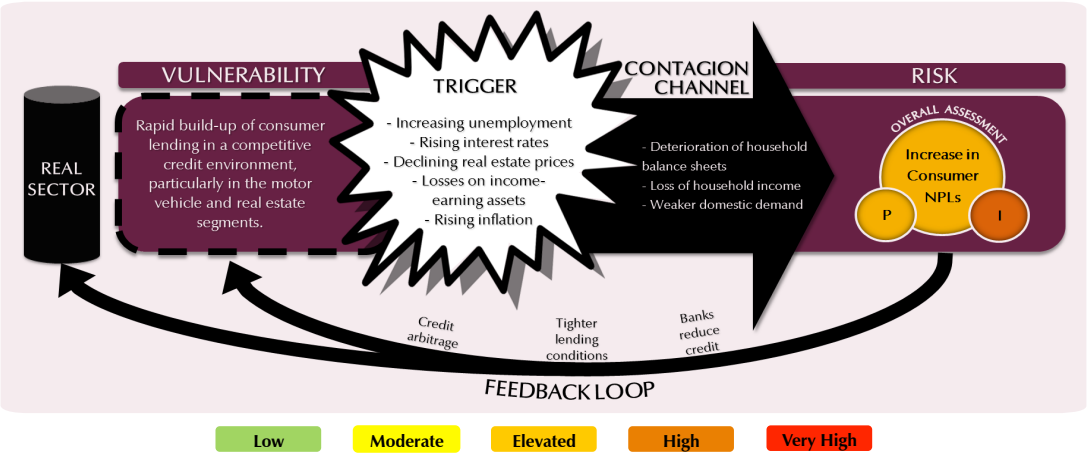
Using the framework depicted above[29] (**Figure 28**), the following sections will describe the interaction between three key vulnerabilities within the financial system along with associated triggers and assess the potential (probability and impact) for disruption to the stability of the financial sector.

It is important to note that this type of assessment is not intended to be a prediction of a future path. Financial Stability monitoring and risk assessment is a continuous process. The purpose of this work is to assess downside risks, raise awareness of key vulnerabilities and to craft policies and promote actions that mitigate these risks. Financial system vulnerabilities increase susceptibility to shocks, and interconnectedness, excessive concentration and spill-over effects such as fire sales can amplify the effect. However strong capital buffers, effective governance and risk management and pro-active supervision and regulation help to strengthen resilience by reducing the likelihood of the risk materializing or the impact if it does occur.

[29] This framework has been adapted from the approach used by the Bank of Canada and is based on work undertaken by Adrian, T, D Covitz, and N Liang. "Financial Stability Monitoring." Federal Reserve Board Finance and Economics Discussion Paper, 2013 and the 2013 Annual Reports of the US Department of the Treasury and the Office of Financial Research.

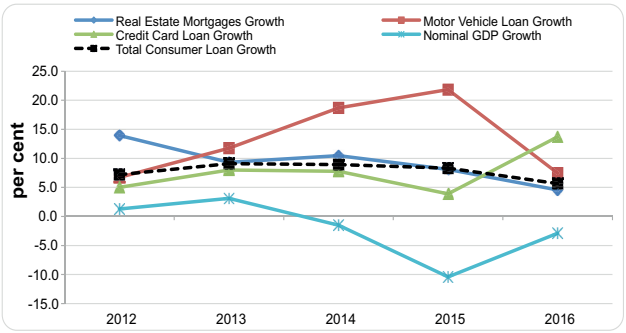
INCREASE IN CONSUMER NON-PERFORMING LOANS

The potential for deterioriation in loan portfolios underwritten during the recent high growth years, (especially in light of heavy concentration in the motor vehicle and real estate sectors) remains a relevant vulnerability for the financial system. Due to the prolonged slowdown in economic activity brought on by challenges in the energy sector, the likelihood of an increase in consumer NPLs materializing in the system has increased in 2016.



Consumer loans accounted for approximately 45 per cent of total loans (TT$30.6 billion) in the banking sector at the end of 2016. Notably, the growth of consumer credit extended by the banking sector has outpaced the growth in GDP over the last five years (**Figure 29**). Rapid credit growth has been associated with the build-up of systemic risk. Favourable conditions reduce the need for provisioning and allows for excessive risk taking through less stringent lending standards. In Trinidad and Tobago, while overall consumer credit growth has been slowing, there has been strong growth within recent years, particularly in real estate, motor vehicles and credit card business due to increased competition among banks.

Figure 29
Banking Sector Consumer Credit Growth (yoy), 2012 – 2016



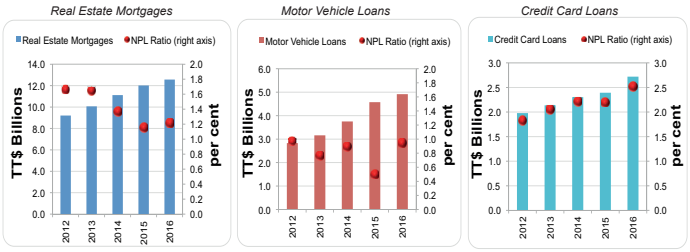
Sources: Central Bank of Trinidad and Tobago and Ministry of Finance

The banking sector's exposure to consumer loans was 20.7 per cent of the asset base of the sector and 141.8 per cent of capital. Residential real estate mortgages have continued to grow, accounting for the largest share of consumer loans (41 per cent). Over 90 per cent of residential mortgages outstanding are variable-rate, exposing consumers to interest rate risk as a rise in the cost of borrowing could result in higher debt repayment burdens. Further, while there has been a fall in the number of new private cars registered over the last year[31], total motor vehicle loans grew rapidly from 2012 to 2015, and increased from 13 per cent of consumer loans in 2012 to 16 per cent at the end of 2016 **(Figure 31)**. Meanwhile, credit card loans have contributed on average 9 per cent of the consumer loan portfolio over the last five years **(Figure 32)**. Notably, growth surged in 2016 by 13.7 per cent, reflecting not only higher credit card penetration due to the increased competition amongst banks, but also increased use for foreign payments. Despite the weak economic environment, the NPL ratio has remained relatively low for real estate, motor vehicle and credit card loans **(Chapter 2 and Figure 30)**.

The banking sector's significant exposure to consumer credit has repercussions for bank asset quality, profitability and capital adequacy should consumers face distress. The Credit Risk stress test of Central Bank's current Stress Testing Framework is designed to simulate the impact of risk triggers on commercial bank capital adequacy by assuming a negative shock results in repayment difficulties, leading to an increase in NPLs. Notably, stress tests revealed that the commercial banking sector will reach a "breaking point[32]" if 40 per cent of the aggregate outstanding consumer loan portfolio were written off. Meanwhile, 100 per cent of real estate mortgages (the largest share of consumer loans), needed to be written off for the banking sector to reach the breaking point.

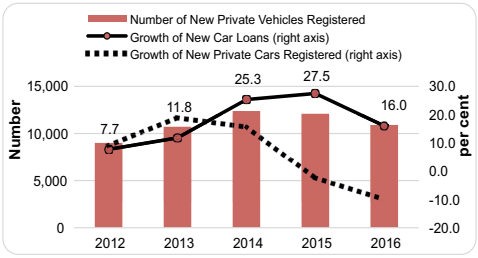
It should be noted that the stress test methodology assesses instantaneous shocks to the commercial banking sector and does not cater for the second round effects arising from the institutions' response to the shocks. High NPLs ultimately reduce capital buffers and increase susceptibility of the banking sector to negative shocks. If faced with falling profits amidst rising NPLs, institutions may choose to tighten credit supply to fund higher provisions. This can potentially create a migration to unregulated retail credit intermediaries which can impair the assessment of consumer debt burden. The Central Bank recognizes the need to refine the local Stress Testing Framework to consider these knock-on effects in order to improve macro-prudential decision-making.

Figure 30
Selected Loan Categories and NPL Ratios[30], 2012 – 2016



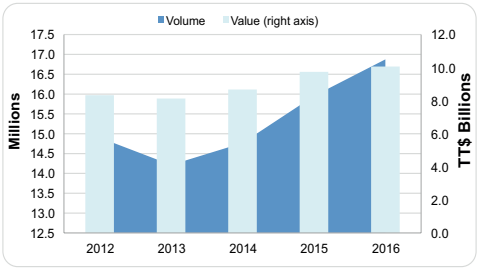
Source: Central Bank of Trinidad and Tobago

Figure 31
New Private Vehicles Registered and Loan Growth, 2012 – 2016



Source: Central Bank of Trinidad and Tobago

Figure 32
Credit Card Point of Sale Transactions, 2012 – 2016



Source: Central Bank of Trinidad and Tobago

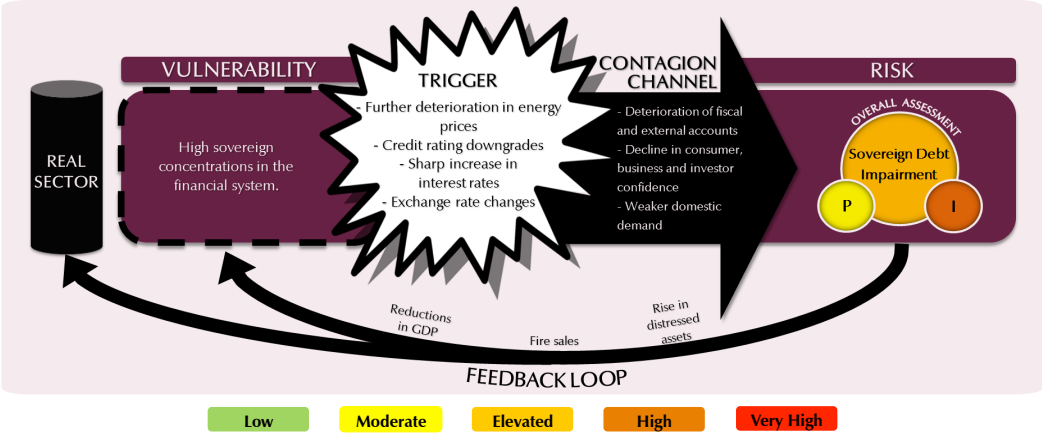
[30] The NPL Ratio for residential mortgages and motor vehicle loans considers only commercial banking loans, which account for 95 per cent of banking system residential real estate mortgages and motor vehicle loans, respectively. The NPL Ratio for credit card loans refers to consumer and corporate loans of which consumer credit card loans account for over 90 per cent.

[31] This may have been a result of the increased taxation on private motor vehicles with engine sizes exceeding 1999cc imposed in 2016.

[32] The breaking point refers to the point at which the system reaches the regulatory minimum CAR of 8 per cent.

SOVEREIGN DEBT IMPAIRMENT

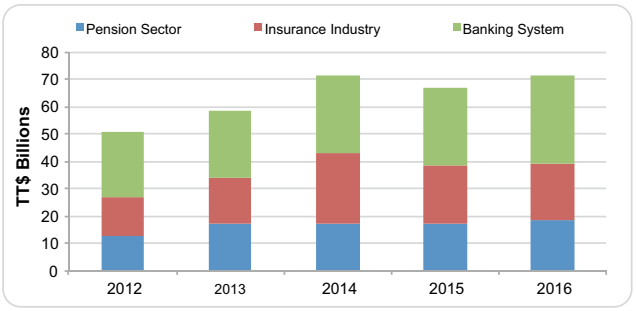
Financial sector exposure to regional sovereigns has declined. Accordingly, despite increased regional credit downgrades, this risk has become less of a concern for financial stability. However, domestic macroeconomic challenges have highlighted the need to examine sovereign exposure concentrations. Further downgrade of the domestic sovereign or other difficulties with exposures to government related entities can have knock-on effects on the credit and liquidity positions within the financial system.



The banking, insurance and pension sectors accounted for 78 per cent of total financial system assets as at December 2016. Domestic sovereign exposures in these sectors comprise of credit exposures from the central government and corresponding state owned enterprises, institutions and/or bodies. Over the period 2012-2016, there have been notable increases in domestic sovereign exposure, namely loans, Treasury bills and other investments to the GoRTT and state owned enterprises and statutory authorities (**Figure 33**). As at December 2016, total domestic sovereign exposures for these sectors were approximately TT$70 billion with an average increase of 7 per cent over the last five years and with more than 50 per cent attributable to central government.

The banking sector's exposure to the domestic sovereign was 21.9 per cent of total assets and four times the capital as at December 2016. The insurance sector's exposure[33] to the domestic sovereign was 43.4 per cent of the asset base of the sector and a little over four times the capital as at December 2016.

Figure 33
Domestic Sovereign Exposures, 2012 – 2016



Source: Central Bank of Trinidad and Tobago

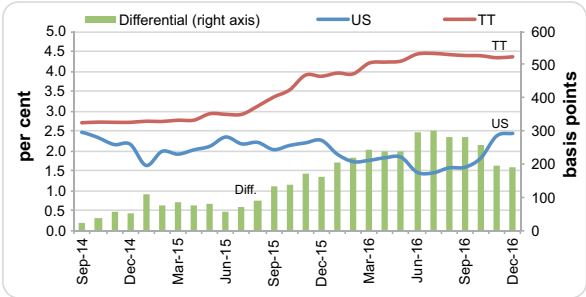
At the end of April 2017, Trinidad and Tobago's credit rating was downgraded by two international rating agencies. In particular, the downgrade by Moody's put the sovereign issuer rating below investment grade status. Such actions can give rise to valuation risks as yields on sovereign paper generally increase after a downgrade. Although there are no concentration limits placed on government or government guaranteed exposures and currently a zero risk rating is

[33] Exclude data from CLICO and BA.

applied to sovereign assets held by the banking sector for capital adequacy purposes, excessive sovereign exposure can present financial stability challenges. With reduced energy prices and revenues translating into limited foreign exchange supplies, sovereign loan payments can become delayed, giving rise to liquidity and credit risks in the banking sector.

The stress tests indicated that the commercial banking sector will reach a minimum capital of 8.0 per cent, if 43 per cent of all domestic sovereign exposures were written off (**Appendix B**).

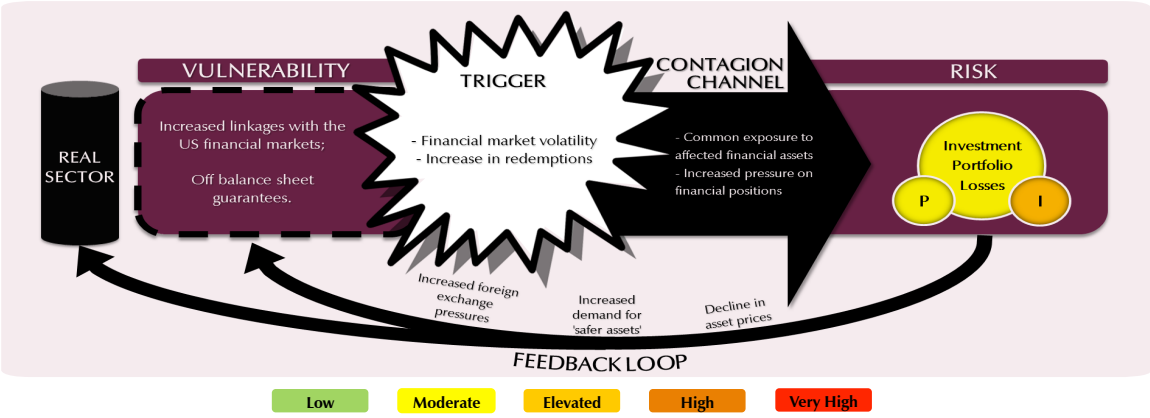
Figure 34
Sovereign Bond Yields (10-year) and Differentials, Sep 2014 – Dec 2016



Source: Bloomberg

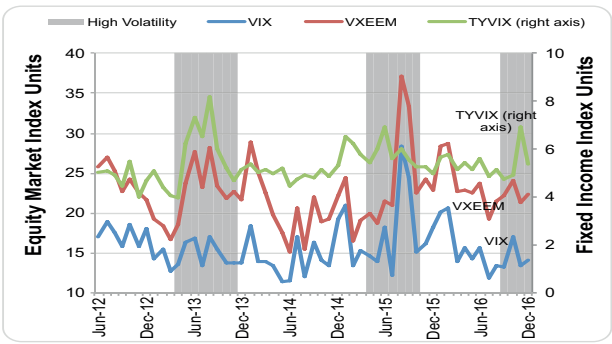
INVESTMENT PORTFOLIO LOSSES

Increased uncertainty in US financial markets and recent credit rating downgrades of regional sovereigns coupled with domestic economic difficulties have intensified investment portfolio vulnerabilities. Sharp declines in asset prices or further deterioration in economic conditions have the potential to severely affect financial institutions' balance sheets. As the pool of appropriate investment opportunities shrink further, common exposures among institutions are likely to expand. This can magnify the adverse effects of increases in long term US interest rates.



The Fed has been scaling back monetary policy support by increasing policy rates. Recent declines in the TT-US interest rate differential (**Figure 34**), especially in the context of economic deterioration, can spur increased demand for US denominated investments. While the Fed has been judicious with regard to the size and timing of adjustments, policy uncertainty is still high and there is the potential for adverse effects on the asset prices. Volatility indices have exhibited more frequent bouts of instability in response to this uncertainty[34] (**Figure 35**). If institutions opt for greater portfolio concentrations of US investments in search of higher returns, domestic portfolios may become more vulnerable to swings in US financial markets.

Figure 35
Chicago Board Options Exchange (CBOE) Volatility Indices, Jun 2012 – Dec 2016



Source: Central Bank of Trinidad and Tobago

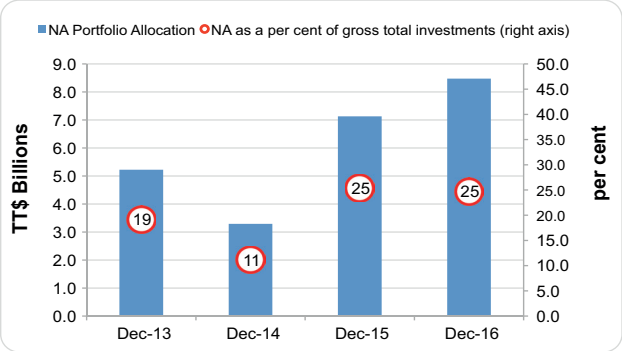
[34] The Chicago Board Options Exchange (CBOE) publishes volatility measures of various financial markets.

On the domestic banking sector side, there has been evidence of an uptick in the proportion of North American (NA) investments in their portfolios since September 2015 **(Figure 36)**. The insurance and pension sectors are not as heavily exposed to external investment risk when compared to the banking sector, but there has been a minor increase in the proportion of external investment activity in the sector over the last year. Deteriorating economic conditions domestically and the potential for further sovereign credit downgrades can increase vulnerability to interest rate risk, as yields rise and portfolio values decline.

Interest rate risk is also a concern for financial intermediaries such as mutual funds, when easy redemptions and fixed NAVs are offered **(Box 1)**. Should domestic long-term yields increase, these funds are susceptible to increased redemption pressures and declining asset values, particularly in long duration portfolios. This also has the potential for contagion risk to other sectors with similar exposures. It is imperative that adequate risk management policies are adopted to mitigate the risk associated with redemptions and revaluations.

Table 8 shows that the commercial banking sector has improved resilience to interest rate risk, when compared to 2015, with an increase in post-shock CAR to 10.5 per cent as at December 2016 **(Appendix B)**. However, the range has widened which implies that while larger institutions have improved the duration of their portfolios, the progress has not been consistent across the system. This can be attributed the heterogeneous structure of commercial banks' balance sheets with respect to interest rate sensitive assets. Institutions which have greater long duration assets than liabilities are more affected than those with very short-term asset and liability positions.

Figure 36
Trinidad and Tobago:
Banking Sector Investment Allocation, 2013 – 2016



Source: Central Bank of Trinidad and Tobago

Table 8
Interest Rate Risk: Commercial Banking Sector
Post-Shock CAR and Institutional Range, 2015 – 2016

Interest Rate Risk: Post-Shock Capital Adequacy Ratios (per cent)			
Dec-15	Sector	Maximum	Minimum
	8.2	33.1	1.4
Dec-16	Sector	Maximum	Minimum
	10.5	34.3	-4.1

Source: Central Bank of Trinidad and Tobago

However, it should be noted that limited data on the duration of all investment portfolios for other financial institutions can hinder efforts at risk assessment. Closer monitoring by the Central Bank can assist with closing these gaps, thereby reducing the exposure to the financial sector to this risk.

The heat map below (**Figure 37**) summarizes the key vulnerabilities and associated risks with an overall risk assessment based on the Central Bank's judgment:

Figure 37
Summary Heat Map – Key Vulnerabilities and Risks to Financial Stability in Trinidad and Tobago

VULNERABILITIES	KEY TRIGGERS	RISKS	OVERRALL
Rapid build-up of consumer lending in a competitive environment, particularly in motor vehicle and real estate segments	- Increasing unemployment - Rising interest rates	Increase in Consumer Non-Performing Loans	
High sovereign concentrations in the financial system	- Credit rating downgrades - Further deterioration in energy prices	Sovereign Debt Impairment	
Increased linkages with the US financial markets and off balance sheet guarantees	- Financial market volatility - Increase in redemptions	Investment portfolio losses	

Source: Central Bank of Trinidad and Tobago

CHAPTER 4
PROMOTING FINANCIAL STABILITY

CHAPTER 4

PROMOTING FINANCIAL STABILITY

The Central Bank has established certain Strategic Objectives[35] toward the promotion of financial stability based on the on-going assessment of key vulnerabilities, risks and developments in the economic, regulatory and financial landscape domestically and abroad. This chapter provides an overview of some of the strides made in 2016[36] toward meeting the Strategic Objectives.

ADVANCE THE LEGISLATION FOR SUPERVISION

Insurance Bill, 2016

The Insurance Bill, 2016 was laid in Parliament on July 1, 2016 and is a product of the previous Parliament's work including that of the JSC. This Bill requires a three-fifths majority to be duly passed in both Houses of Parliament and is currently before another JSC for consideration.

The Central Bank has been championing work on the Bill for many years. New legislation to regulate and supervise the insurance industry is long overdue as the current Insurance Act Chapter 84:01 (IA) is fundamentally unchanged from the 1966 Act. Well before the 2008 Global Financial Crisis (GFC) and the 2009 CLICO/CL Financial bailout, the IMF/World Bank Financial Sector Assessment Program mission in 2005[37] forewarned about the risks posed by the rapid structural changes in Trinidad and Tobago's financial system. The IMF concluded that "critical gaps remain in the overall legal, regulatory and supervisory structure". Twelve years later, these legislative gaps remain.

Provisions in the Insurance Bill, 2016 equip the Central Bank with the powers required to effectively supervise and regulate the sector and protect the interests of policyholders. In particular, there are six critical aspects of this Bill that are intended to:

1. Promote good governance and risk and capital management practices, as well as stem excessive risk taking;
2. Promote financial soundness, including requirements for adequate capital buffers to cater for unanticipated losses. Current regulation only requires TT$ 3 million in capital irrespective of business size;
3. Enhance insurers' market conduct practices and strengthen the Central Bank's power to revoke an insurer's registration for unfair claims practices or unreasonable delays in settlement; and
4. Expand the range of tools for preventative and prompt corrective action and triggers for intervention by the Central Bank, including issuance of administrative fines.

In order to address the risks that are posed by financial or mixed conglomerates, there are several provisions in the Bill that have been harmonized with that of the FIA such as:

1. Power to approve both direct and indirect (beneficial) controllers on 'fit and proper' grounds;
2. Power to require mixed or complex groups to establish a financial holding company in order to separate the financial from the non-financial entities in the conglomerate structure and to protect licensees from group risk and contagion to separate the financial from the non-financial entities in the conglomerate structure;
3. Placing limits on related party transactions;
4. Requiring that mergers and acquisitions be first approved by the Central Bank;
5. Oversight over external subsidiaries; and
6. Providing for minimum capital at the level of the holding company in addition to that of the insurance subsidiary.

The Bill has incorporated international principles, standards and guidance of the Insurance Core Principles (ICPs)[38] developed by the International Association of Insurance Supervisors (IAIS)[39]. The Bill compares favorably with newer legislation

[35] Central Bank of Trinidad and Tobago. Strategic Plan 2016/17 - 2020/21.

[36] Some updates are given up to April 2017.

[37] International Monetary Fund. Trinidad and Tobago: Financial System Stability Assessment, including Reports on the Observance of Standards and Codes on the following topics, Banking Supervision, and Payment Systems. 2006.

[38] International Association of Insurance Supervisors. *Insurance Core Principles*. 2015.

[39] International Association of Insurance Supervisors website.

in the region, such as in Jamaica, and current legislation in developed countries with well-respected regulatory regimes, such as Canada. The Insurance Bill, 2016 can be accessed on the Trinidad and Tobago Parliament's website using the following link: www.ttparliament.org/legislations/b2016h09.pdf.

Transparency and Exchange of Information for Tax Purposes

Trinidad and Tobago made further progress on compliance with the Foreign Account Tax Compliance Act (FATCA). In the 2015 FSR the Central Bank reported that the deadline to comply with the FATCA was fast approaching and that Trinidad and Tobago did not yet have the legislation in place. A new TIEAA was eventually enacted on March 20, 2017 but is awaiting proclamation. Under the terms of the TIEAA, reporting financial institutions must provide the Competent Authority of Trinidad and Tobago, namely the Board of Inland Revenue (BIR), with the required information on an annual basis commencing September 30, 2017. The BIR will in turn electronically transmit the information to the Competent Authority in the US, namely the Internal Revenue Service.

The TIEAA requires the Central Bank and the TTSEC to issue guidelines to regulated financial institutions and enforce compliance with those guidelines. The Central Bank collaborated with the TTSEC and the BIR in the development of a draft guideline which was issued to the industry for consultation on May 5, 2017.

Trinidad and Tobago is also required to comply with the Global Forum's[40] Common Reporting Standards (CRS), which have similar obligations to those outlined in the FATCA. In 2016, Trinidad and Tobago was identified as one of three countries (the others were Guatemala and Micronesia) which was non-compliant with the CRS. To this end, the Mutual Administrative Assistance in Tax Matters Bill, 2017 was laid in Parliament on April 21, 2017 and consultation is in progress with all relevant stakeholders.

IMPROVING RISK BASED SUPERVISION AND GOVERNANCE IN FINANCIAL INSTITUTIONS

Basel II/III Implementation

The project for implementation of Basel II/III international risk-based capital standards for institutions licensed under the FIA, launched in November 2014, is one of the key strategic priorities of the Central Bank. The implementation of Basel II/III is a two-phase project with Phase 1 addressing generally quantitative capital measures. Phase 2 will focus on institutions' internal capital and risk management processes inclusive of stress testing, supervisory review of the internal capital management processes and enhancing market discipline through adequate disclosure by licensees[41].

Central Bank's Basel II/III implementation is discussed in Chapter 5 and more information can be found at the following link http://www.central-bank.org.tt/basel_Implementation.

4th Round Mutual Evaluation & National Risk Assessment

Following publication of the Caribbean Financial Action Task Force (CFATF) Mutual Evaluation Report (MER) of Trinidad and Tobago in June 2016, the country was placed in CFATF's enhanced follow-up process. The country's first follow-up report to advise on actions taken to address the deficiencies was presented at CFATF's May 2017 Plenary.

Furthermore, the country is being monitored by the FATF's ICRG, since Trinidad and Tobago was rated as low to moderately effective in nine of the eleven immediate outcomes under the 2013 revised FATF methodology. The country's progress will be considered at FATF's ICRG/Plenary in October 2017.

Trinidad and Tobago's National Anti-Money Laundering and Counter Financing of Terrorism Committee (NAMLC)

[40] The Global Forum made up of one hundred and forty-two member jurisdictions is the premier international body for ensuring the implementation of the internationally agreed standards of transparency and exchange of information in the tax area.

[41] Refers to commercial banks and non-banks licensed under the FIA.

progressed actions to address the identified deficiencies in its MER. This included the finalizing of the National Risk Assessment (NRA) report as well as an Action Plan for the rectification of the MER and NRA gaps. Both the NRA and the Action Plan will be submitted to Cabinet for approval.

Concomitantly, remedial actions to address MER and NRA findings have been occurring and have focused on strengthening the Money Laundering and Terrorist Financing (TF) investigative and prosecutorial processes , as well as implementing targeted financial sanctions for TF, particularly with respect to foreign terrorist fighters. Legislative amendments are also being made to strengthen the Companies Act particularly with respect to beneficial ownership and non-profit organizations. The Central Bank, as the Chair of the Supervisory Working Group of the NAMLC, is co-ordinating work to address deficiencies identified in the Financial Obligations Regulations .

The Central Bank's Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT) guideline is also being revised, to focus on the application of a risk-based approach and sector specific guidance. In this regard, the guideline will provide more thorough direction on conducting risk assessments which are an important pillar of an effective AML/CFT compliance programme. As part of the Cental Bank's Strategic Plan, work is also underway to develop a regulatory framework for the remittance sector.

Draft Code of Practice for Central Bank's Engagement with External Auditors of Financial Institutions

The ability of regulators to rely on the audited information furnished by financial institutions is an integral part of the supervisory process. In March 2014, the BCBS issued guidance internationally on the external audits of banks. This advocated the improvement in the quality of banks' audit processes to enhance the effectiveness of prudential supervision and consequently financial stability. In line with aspects of the BCBS' guidance, a Code of Practice for Central Bank's Engagement with External Auditors of Financial Institutions has been drafted and issued to key players in the industry for comment.

The Code of Practice complements the legislative provisions in the FIA relating to the duties of external auditors. It is based on the principle that regulators and external auditors have a mutual interest in building and maintaining an effective relationship, which fosters regular exchange of useful information. Enhanced communication is expected to enrich supervisory assessments of financial institutions' soundness and also contribute to high quality external audits. The draft Code of Practice can be found at the following link http://www.central-bank.org.tt/content/draft-and-consultation-papers-1.

CO-ORDINATION WITH OTHER SUPERVISORY AGENCIES

The 2007/2008 GFC and the CLICO/CL financial crisis has highlighted the importance of understanding group-wide risks particularly within large financial conglomerates and the need for effective coordination among home and host supervisors and regulators. There is a growing presence of complex financial groups with operations throughout the region controlled by holding companies. Some of these institutions have extended their footprint beyond the region. Accordingly, in recent years, the Central Bank has been intensifying its focus on consolidated supervision and on areas of collaboration with other supervisory agencies.

Consolidated Supervision

The Central Bank has adopted the Consolidated Supervision Framework which was developed by a working committee of the Caribbean Group of Banking Supervisors (CGBS) and approved by CGBS in November 2016. Pursuant to this Framework the Central Bank of Trinidad and Tobago and the Central Bank of Barbados are in collaboration to develop minimum reporting requirements for financial groups.

In March 2017, a technical assistance mission from the IMF/CARTAC provided advice on the following issues which will be incorporated into the Central Bank's supervisory processes:

- Supervisory strategies concerning mergers and intra-regional financial conglomerates; and
- Strategic options and tools to strengthen the supervisory approach and enhance efficiency of group supervision.

Additionally, the Central Bank has chaired a committee of the Caribbean Group of Insurance Regulators (CAIR) to develop a multilateral Memorandum of Understanding among regional insurance regulators and to formalize protocols for Insurance Colleges. Additionally, the Central Bank continued to participate in Supervisory Colleges of home and host supervisors of regional banking and insurance groups. Regular teleconferences geared towards the co-ordination and exchange of information and supervisory planning for the cross-border supervision of regional banking and insurance groups and conglomerates were held.

Harmonization of Minimum Standards for Loan Classification and Provisioning

Trinidad and Tobago chaired a CGBS working group which comprised representatives from Bahamas, Barbados, Cayman Islands, Guyana and Haiti to develop a Regional Loan Loss Classification and Provisioning Policy. Consolidated supervision requires supervisors to assess the asset quality of the group holistically. This Policy is intended to promote harmonization of regulatory provisioning practices across the region and contribute to enhanced consolidated supervision of cross-border groups.

The Policy is expected to be tabled for adoption at the CGBS Annual Conference in July 2017. This includes guidance on asset classification, the identification of impaired facilities and the levels of general and specific provisions. As International Financial Reporting Standards 9 did not form a part of the initial terms of reference of the working group, adopting jurisdictions would adapt the guidance as appropriate.

Caribbean Regional Financial-Interconnectedness Project (CRFP)

The Caribbean Regional Financial Interconnectedness Project (CRFP) aims to assess financial interconnectedness and the potential for financial contagion in the region, with particular focus on regional SIFIs. This Project is being led by the Regional Financial Stability Co-ordinating Council (RFSCC)[42].

The Central Bank worked with the RFSCC and IMF/CARTAC to conceptualize an approach to a second Regional Financial interconnectedness Study. The approach drew on learnings and shortcomings from the first study carried out in 2013. The second study is expected to be launched in 2017 with technical support from IMF/CARTAC[43].

Development of a Legal and Regulatory Framework to Facilitate Credit Information Sharing Among CARICOM Member States

The Central Bank participates in a Technical Working Group chaired by the CARICOM Secretariat established in August 2016 to progress development of the legal framework to facilitate Credit Information Sharing among CARICOM Member States. The Working Group is currently preparingthe CARICOM Draft Model Law and the Policy Document for Credit Reporting. The Policy Document will be presented to the CARICOM Council for Finance and Planning in 2017.

STRENGTHEN TECHNICAL AND ANALYTICAL CAPABILITY IN SUPERVISION AND RESOLUTION

Macro-Prudential View

The Central Bank formalized a series of regular internal strategic discussions on all supervised entities, including those which were deemed as SIFIs. The discussions focused on institutions' business models and strategy, key risks, vulnerabilities and interconnectedness. This will form the basis for development of multi-year supervisory plans. Moreover an enhanced supervisory planning process was launched to focus supervisory attention. This was based on judgements derived from inter alia:

1. Collaboration among micro- and macro- prudential teams to identify sources of financial sector vulnerabilities and risk;
2. On-going assessment of business models, sources of profitability, the key risks faced by supervised entities,

[42] The RFSCC was created to buttress the work of the Committee of CARICOM Central Bank Governors. This Council was created to oversee the preparation of this first Regional Financial Stability Report and is responsible for overseeing the definition and compilation of data and the preparation of future reports. This Council is comprised of Deputy Governors and senior Central Bank officials throughout the region.

[43] A Technical Workshop on Financial Sector Interconnectedness and Regional SIFI Assessment is scheduled for June 2017. The workshop is intended to include the technical experts assigned by the IMF to support the study as well as other international consultants. Technical personnel from regional central banks, specifically assigned to deliver the interconnected analysis will be invited to participate in the Workshop.

risk mitigants and the robustness of the control environment and corporate governance;

3. Regular discussions with the fiscal authorities, as well as interactions with other regional and domestic regulatory authorities. This included bodies such as the CGBS and the CAIR; and
4. Engagement with key stakeholders and decision makers in the sector.

Current supervisory plans emphasize credit and concentration risk, risk governance, fitness and propriety assessments, capital adequacy and actuarial reserving.

The Central Bank has broad powers to implement macro-prudential policy as warranted and to communicate expectations to regulated entities.

Stress Testing

Since 2005, the Central Bank has used a top-down stress testing methodology to assess certain vulnerabilities and risks in the commercial banking sector. The Central Bank intends to improve the technical aspects of the stress testing methodology. Important aspects to be considered are contagion and second round effects and a focus on SIFIs. The first phase of this initiative involved technical assistance to the Central Bank from the IMF's CARTAC. The technical assistance mission was geared toward:

1. Building in-house capacity for on-going scenario development and modelling;
2. Collaboration with the TTSEC in the development of stress tests to understand the potential for contagion and systemic risks posed by the securities sector.

The Central Bank also co-hosted a "Financial Stability and Stress Testing Seminar" with the Association of Banking Supervisors of the Americas, the CGBS and the Financial Stability Institute.

REVIEW OF RECENT DEVELOPMENTS IN PAYMENT SYSTEMS

Modern technological advancements and innovations, including blockchain and digital currencies are rapidly transforming the payments space. Over the period examined by the FSR, the number of requests and enquiries for issuance of digital money products has multiplied. Under current legislation, only entities licensed under the FIA may issue e-money. The Central Bank is finalizing a policy to allow persons other than licensees to issue e-money in order to encourage innovation and facilitate greater access to financial services for consumers. This will be submitted to the Minister for approval as required by the FIA.

Additional initiatives included the establishment of a Project Review Committee comprising representatives of the Central Bank and commercial banks to determine strategies to improve the efficiency of the cheque clearing arrangements. The increased use of technology in the delivery of financial services has heightened banks' susceptibility to cyber risks. Banks' ATMs and data have been compromised due to skimming and phishing. As such, banks are exploring digitization and other strategies such as the EMV or 'chip and pin' technology on payment cards to counter such attacks. They also continue to improve their product offerings to customers with enhancements to online banking and mobile banking products.

Implementation of the Principles for Financial Market Infrastructures

The Central Bank has adopted the CPSS-IOSCO Principles for Financial Market Infrastructures (PFMIs) which replaced the Bank of International Settlements ten Core Principles for Systemically Important Payments Systems (SIPS) previously used to conduct oversight assessments of the domestic payment systems. The PFMIs were applied to the RTGS - the only SIPS and a modified version was used for the retail payments systems (Cheque Clearings, the debit card switch and the ACH) which are considered Significant Retail Payment Systems.

The Central Bank is in the process of conducting baseline assessments on each of these payment systems and has issued self-assessment questionnaires for their completion. Preliminary reviews of the responses have highlighted shortcomings in the following areas:

1. *Governance Arrangements*: The PFMIs require, among other things, that governance arrangements should be clear, transparent[44], promote safety and efficiency, and support the stability of the broader financial system. It also calls for independent directors to be on the board.

2. *Risk Management*: Payment system operators should have a sound and comprehensive risk-management framework for effectively managing legal, credit, liquidity, operational, and other risks. It should also allow the operator to identify, measure, monitor and manage risks in line with the PFMI requirements. This includes:

    a. The establishment of a collateral fund in place for participants in the event of default, which includes the development of default management procedures;
    b. The conduct of stress tests among participants and operators of the payments system to better understand and manage the potential liquidity risks;
    c. Mechanisms which reduce operational risks such as cyber risk or operational mishaps. Regularly tested business plans are important for the recovery of operations and fulfilment of the obligations after an event or major disruption. Also, cyber resilience calls for robust IT security plans and regular penetration testing; and
    d. Transparency via the disclosure of pertinent information on operator rules, procedures and performance to the public.

Upon completion of the baseline assessment, the Central Bank will work with the operators of the payments system to institute action plans to address gaps in their governance arrangements and risk management frameworks.

[44] This principle requires the operators to have documented governance arrangements that specify clearly the direct lines of responsibility and accountability and these should be disclosed to all the relevant stakeholders as well as the public.

BOX 2: CYBER RISK

Despite a general strengthening of defences against cyber or technology enabled threats, financial institutions across the globe remain vulnerable to cyber risk. Increased reliance on technology combined with on-going technological evolution has resulted in more persistent and potent cyber threats with varying motivations. These have moved beyond the theft of sensitive information to service disruptions and impairment. Unlike other forms of risks, capital and liquidity buffers are inadequate to protect financial institutions from cyber-attacks. These require other types of defence and recovery mechanisms. The interconnectivity within the financial sector further amplifies this risk and makes cyber security a shared challenge and responsibility for all institutions forming part of the sector. Globally, subject matter experts and regulators agree on the following:

- Cyber risk is not a technology or a compliance issue. Rather, it is a business issue that must be handled at the board level;
- Many of the attacks can be avoided through the deployment of basic controls;
- Investment in protecting the perimeter with external defences is not enough. Greater focus is required in developing the capability and capacity to limit the impact of attacks; and
- Mitigation of cyber risk requires a mix of technological solutions, deeper user awareness and collaboration across institutions, authorities and geographies.

Strengthening cyber resilience and information security is a key strategic priority for the Central Bank. In this regard, some initiatives have been implemented and more work is underway. In addition to hardening its infrastructure and securing its physical and logical perimeter, the Central Bank has increased its focus on two key areas: user awareness and collaboration. Published statistics show that many of the attacks can be traced back to a lack of awareness leading to limited ability to detect fraudulent emails, impersonated websites and fake network connections. The Central Bank considers the lack of awareness and understanding as a poor excuse for data breaches or losses and has recently embarked on an internal awareness campaign supported by a comprehensive training programme for all its employees. An interconnected ecosystem is only as strong as its weakest link. Institutions need to co-operate and adhere to minimum standards of security, improve their collective threat intelligence and adjust defences accordingly to ensure system-wide resilience, information and data sharing among participants is important. In addition, they need to collaborate on containment of the impact of any attack by providing business continuity and recovery support.

To this end, a regional information sharing group has been established for the central banking community. The Central Bank is also in the process of establishing a local cyber information sharing group for the banking sector. In due course this will be extended to other financial institutions. To improve our understanding of individual organisations' commitment to addressing cyber security concerns, the Central Bank conducted a Cyber Governance Health Check in August 2016. This will be followed by a technical self-assessment in 2018 to baseline the preparedness of the institutions to withstand cyber-attacks. The Central Bank intends to issue guidance and minimum standards for its licensees to keep pace with the scale, complexity and risk profile of the sector.

CHAPTER 5
SPECIAL TOPIC: CORPORATE GOVERNANCE, RISK MANAGEMENT AND BASEL II

CHAPTER 5

SPECIAL TOPIC: CORPORATE GOVERNANCE, RISK MANAGEMENT AND BASEL II

INTRODUCTION

Sound corporate governance is a cornerstone of financial stability. The BCBS in its 2015 Corporate Governance Principles for Banks[45] defined corporate governance as *"A set of relationships between a company's management, its board, its shareholders and other stakeholders which provides the structure through which the objectives of the company are set, and the means of attaining those objectives and monitoring performance. It helps define the way authority and responsibility are allocated and how corporate decisions are made."*

Effective corporate governance would provide proper incentives for the board and management to pursue objectives which are in the best interest of the company and its shareholders and facilitate effective monitoring.

The intrinsic nature of financial institutions set them apart from other firms. Financial institutions such as banks have many more stakeholders than non-financial entities. Stakeholders include debt or bondholders, depositors, policyholders, holders of subordinated debt, and depositor insurance. The regulator and government are also stakeholders, since the insolvency of a bank or insurer could have negative consequences for the financial system as a whole. Additionally, the opaque and complex structure of banks and other financial institutions can obscure problems and risks. As a result, boards of directors and management play a critical role in the governance of financial institutions.

The experiences of past financial crises, including the recent 2007/2008 GFC have highlighted significant gaps in corporate governance. It is a widely held view that compensation practices that promoted excessive risk-taking were a significant contributing factor to the financial crisis. Other factors included inadequate understanding of risks, non-transparent group structures, rapid expansion without commensurate controls, and weak risk and capital management practices.

The primary objective of corporate governance should be safeguarding stakeholders' interest. An effective corporate governance framework should therefore comprise of appropriate legislative requirements which specify inter alia roles and responsibilities for the board, senior management and external auditors. In addition, legislation should include disclosure requirements, prudential limits for connected party transactions; and powers for supervisors to enforce adherence. The financial institution should also establish policies and procedures that foster integrity and a sound culture since it is not always possible to legislate good behaviour. Such policies should encompass codes of conduct, conflicts of interest, related party transactions, remuneration, nomination and whistle-blowing.

THE SUPERVISORY PERSPECTIVE ON CORPORATE GOVERNANCE

Supervisors recognize that governance practices are often weak before a crisis. However, while regulatory standard setters such as the BCBS and the OECD have issued guidance to strengthen corporate governance practices, a big challenge is identifying and promoting best practices while being mindful that a 'one size fits all' approach may not be appropriate in all circumstances. As a result supervisors constantly grapple with questions like: What should the appropriate composition of a board for a complex firm look like? Does the board have a sufficient number of independent persons? Does it include the right people with the appropriate mix of skills? How many directorships should a board member hold?

One of the most cited components of effective corporate governance is the ability and willingness of boards to

[45] Basel Committee on Banking Supervision. "Corporate governance principles for banks." Bank for International Settlements. 2015. http://www.bis.org/bcbs/publ/d328.pdf.

challenge management and ensure that a company's decisions and actions take into account the wide range of factors that could affect stakeholders. In this regard, it is important that boards include the right people with appropriate independence to challenge management sufficiently. It is for this reason that best corporate governance practices generally require the chairman of the board of financial institutions to be independent. Board members must also possess the necessary experience and expertise to grasp the complexity of the business and its associated risks. While the board should comprise persons with backgrounds in banking, finance and related disciplines, it should also include persons of varied backgrounds in order to bring a variety of perspectives to board discussions and decision making.

Against this backdrop, a key role of supervisors, like the Central Bank, is to ensure that persons appointed to serve on boards and management of financial institutions are 'fit and proper'. 'Fit and proper' tests include assessments of a person's qualifications, expertise, character, financial soundness, and employment history to determine suitability for their position. While the institution is primarily responsible for having policies in place to ensure that they appoint 'fit and proper' persons for key positions, the Central Bank must also indicate there is 'no objection' to those persons. Most legislation for financial institutions requires not only directors and officers but also shareholders and controllers of financial institutions to be 'fit and proper' persons.

Additionally as regulator, the Central Bank is required to provide guidance to its supervised entities on what constitutes sound corporate governance practices, as well as, assess the effectiveness of corporate governance structures in place at those institutions. The latter is achieved through evaluations of the performance of the board, board committees and senior management to determine whether they are acting in the best interest of the stakeholders of the financial institution and in accordance with appropriate policies, procedures, legislation and guidelines. In assessing performance, quarterly, Central Bank's supervisors examine the minutes, reports and papers of meetings of the board, board committees and senior management to determine the adequacy of information provided to the board and identify any issues of concern. The Central Bank also meets quarterly with members of senior management to discuss the institution's financial performance, emerging risks, and follow up on any actions arising from on-site examination reports. Moreover, the Central Bank is in the process of finalizing a *Code of Practice for the Engagement of the External Auditors of Financial Institutions* which will include the Central Bank having annual meetings with the audit committee and external auditors of regulated financial institutions.

Provisions in the FIA promote sound corporate governance by *inter alia* requiring the establishment of audit committees with an independent chairman; holding its directors and officers accountable for the institution's financial soundness, risk management and internal controls; and requiring the board to submit annually to the Central Bank the results of compliance reviews on connected party transactions. Similar amendments have been incorporated in the Insurance Bill, 2016 which is currently before a JSC. The Central Bank has also established some minimum expectations around good corporate governance practices and outcomes through its Corporate Governance Guideline[46]. The Guideline applies to institutions licensed under the FIA and the IA.

THE ROLE OF THE BOARD AND SENIOR MANAGEMENT

A financial institution's board is the first line of defense in governance, and board effectiveness is a precondition for governance effectiveness. The board is responsible for setting the financial institution's strategic direction and overseeing management. The board is also accountable to the institution and its shareholders and should act in their best interests. As such, the board must promote transparency and ensure that conflicts of interests are appropriately monitored and managed. Boards should behave in an ethical manner and should ensure that the institution of policies and procedures that encourage strong values and culture, such as codes of conduct and conflicts of interest policies. They should also conduct periodic self-

[46] Central Bank's Corporate Governance Guideline was first issued in 2005 and revised in May 2007. It can be found on the Central Bank's website at http://www.central-bank.org.tt/sites/default/files/Corporate%20Governance.pdf.

assessments, including staff surveys to ensure that they are conducting their duties to a high standard of probity and independence. Senior management's primary role is to manage the day to day operations of the financial institution in accordance with the objectives and policies set out by the board. Senior management should also provide the board with comprehensive, relevant, timely and accurate information on the financial institution's performance, operations, risks and risk management to facilitate informed decision making.

CORPORATE GOVERNANCE, RISK MANAGEMENT AND BASEL II[47]

Following the GFC, the BCBS underscored the critical role of boards of directors and senior management in strengthening a financial institution's risk governance framework. Each financial institution should have a risk management process which appropriately manages and mitigates the risks inherent in the types of business conducted, given the size and complexity of its operations. Boards should ensure that the financial institution's risk management framework is commensurate with its size, complexity and risk profile and comprises elements of the "three lines of defense" model[48]. Boards and senior management of financial institutions are expected to *inter alia*:

- Clearly understand the firm or group wide risk profile;
- Define the financial institution's or group's risk appetite and set clear incentives across the firm to control risk exposures in line with the stated risk appetite;
- Ensure that accountability and lines of authority are clear;
- Embed risk management in the culture of the bank; and
- Focus on effective and efficient capital planning, include forward looking stress testing, and provide adequate capital buffers for crisis situations.

Management is responsible for understanding the nature and level of risk taken by the bank and how these risks relate to adequate capital levels. They are also responsible for ensuring that the formality and sophistication of the risk management processes are appropriate in light of the risk profile and business plan. Boards should ensure that they are receiving sufficient information to assess the financial institution's capital needs in line with its risk profile and organizational strategy. Capital adequacy is the ultimate risk management tool and therefore must form an integral part of an effective corporate governance framework. It should be noted that the Central Bank's Corporate Governance Guideline requires boards to understand the significant risks to which the financial institution is exposed and ensure that there is an effective risk management system in place. They are required to ensure that management has a process for determining capital adequacy, given the risks assumed, and for ensuring that capital planning and management strategies are in place[49].

INTERNATIONAL REFORM INITIATIVES - BASEL II/III

The Basel II standard was released by the BCBS in 2004 and had as its objective enhancing the risk sensitivity of the Basel I approach (**Figure 38**). For example, the Standardized approach to credit risk under Pillar 1 enhances risk sensitivity by using credit ratings to determine the appropriate risk factors to be used for determining capital needed for exposures to sovereigns, banks and corporates[50]. The operational risk capital charge while quantitatively calculated as a percentage of gross income

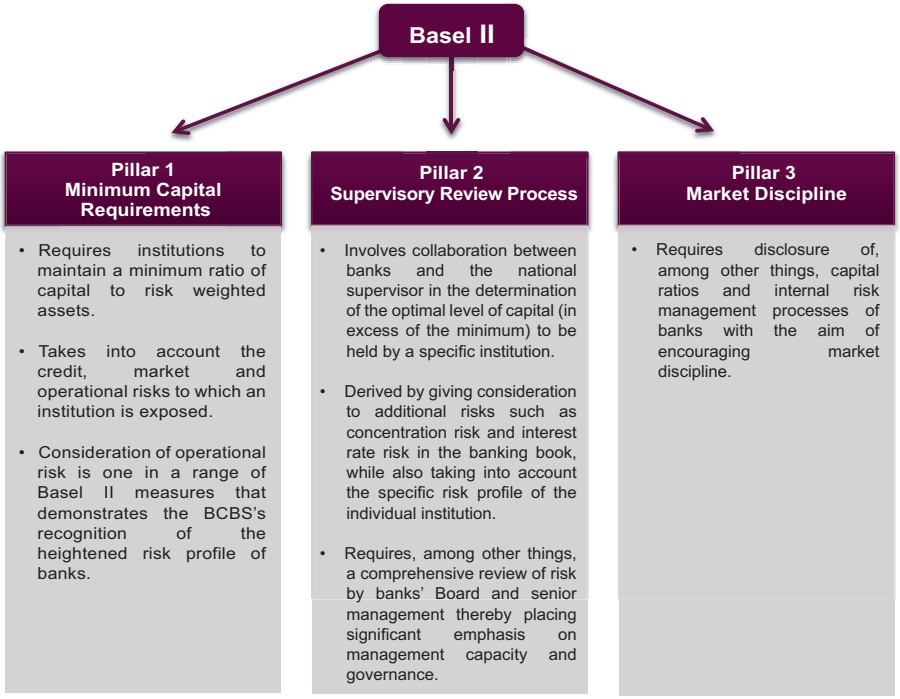
[47] While this section focuses primarily on capital requirements for banking institutions, it should be noted that the Central Bank also proposes to introduce a capital adequacy regime for insurance companies. This will be implemented upon enactment of the Insurance Bill, 2016.

[48] The business line considered the first line of defense, should have "ownership" of risk, whereby it acknowledges and manages the risk that it incurs in conducting its activities. The risk management function is the second line of defense and is responsible for further identifying, measuring, monitoring and reporting risk on an enterprise-wide basis as part of the second line of defense, independently from the first line of defense. The compliance function is also deemed part of the second line of defense. The internal audit function is charged with the third line of defense. Internal audit should conduct risk-based and general audits and reviews to provide assurance to the board that the overall governance framework, including the risk governance framework, is effective and that policies and processes are in place and consistently applied.

[49] Refer to sections 7.2.9 and 12.1.1 of the Central Bank's Corporate Governance Guideline, May 2007.

[50] Given that the risk weight determines the capital to be set aside, at a minimum banks are to monitor and where appropriate update the risk rating of individual exposures. In addition, while credit risk mitigants (CRM) such as collateral and guarantees allow for a reduction in capital charges, to benefit banks must have systems in place not only to assign CRM to individual exposures but to monitor the credit quality of CRM instruments on a consistent basis.

Figure 38
Depiction of the Three Pillars of the Basel II Capital Adequacy Framework



Source: Central Bank of Trinidad and Tobago

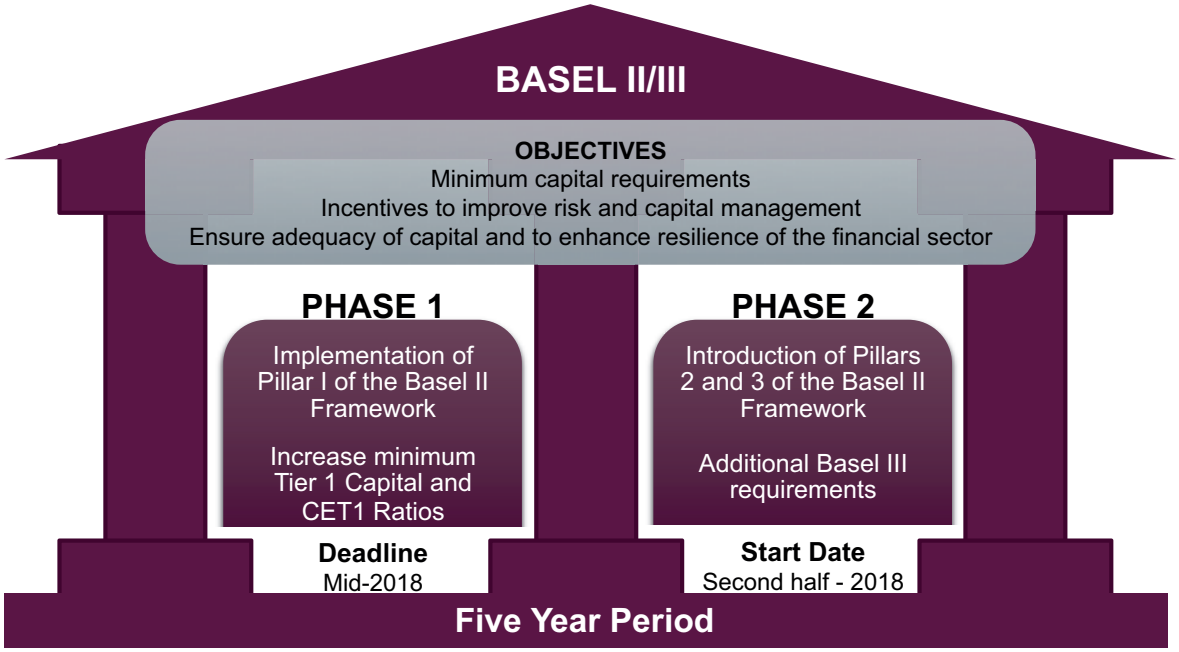
also requires minimum governance standards to be put in place. Pillar 1 of Basel II quantifies the minimum amount of capital that an institution needs for credit, market and operational risks only.

Pillar 2 or the risk management pillar, requires a bank to examine all its risks including those not quantified under Pillar 1 and determine the optimal amount of capital that the institution requires especially under extreme but plausible stress scenarios. Forward looking stress testing is a key aspect of Pillar 2. The financial institution is required to document its Internal Capital Adequacy Assessment Programme (ICAAP) and submit it to the supervisor for review. Pillar 3 focusses on necessary market disclosures that permit an assessment of the bank by a wide range of stakeholders including investors, analysts, customers, other banks and rating agencies. Such disclosures pertain to the quality and quantity of the bank's risk exposures and capital adequacy.

Post financial crisis, in 2011 the BCBS issued enhancements to the Basel II framework, which is now commonly referred to as Basel III. Basel III is a comprehensive set of reform measures aimed at further strengthening the regulation, supervision, risk management and ensuring adequacy of capital of the global banking sector. Basel III was intended to ensure adequacy of banks' capital by increasing bank liquidity and decreasing bank leverage.

BASEL II/III IMPLEMENTATION IN TRINIDAD AND TOBAGO[51]

Figure 39
Basel II/III Implementation Project



As reported in the 2015 FSR, the Central Bank launched Phase 1 of its multi-phased Basel II/III Implementation project for institutions licensed under the FIA in November 2014. The implementation of the Basel II/III framework is a key strategic project and priority of the Central Bank over the five year period to 2021 and has the following objectives:

1. To establish minimum capital adequacy requirements and quantitative triggers for prompt corrective action.
2. To provide incentives for banks to improve risk and capital management. By enhancing the risk sensitivity of capital requirements, banks must add more capital as they take on more risk.
3. To ensure that banks continue to maintain adequate high quality capital in excess of the regulatory minimum requirements and the capacity to absorb significant unforeseen losses. It is the norm in properly run financial institutions to maintain target capital well in excess of minimum regulatory capital, to maintain ratings and to ensure resilience under stress.

Phase 1 of the Plan is scheduled to be concluded by mid-2018 and focuses on the implementation of Pillar 1 of the Basel II framework and Objectives 1 and 2. Pillar 1 allows the use of either standardized or model based approaches for quantifying a bank's capital required to cover its credit, market and operational risks. Similar to regional regulators and having regards to supervisory resources and the complexity of the model based approaches, the Central Bank opted to implement the simpler standardized approaches under the Basel II accord, which also had the additional benefit of providing for greater comparability among regional banks. Accordingly, the Central Bank will be implementing the standardized approaches to credit and operational risk under Pillar 1 of the Basel II Accord but will be maintaining the Standardized Approach to Market risk based on the 1996 Basel Accord amendment which was introduced in 2008. Two Basel III measures will also be introduced under Phase 1, namely, the **increase in the minimum Tier 1 capital adequacy ratio to 7 per cent and the common equity Tier 1 (CET1) ratio to 4.5 per cent**. These were considered in light of the existing

[51] The Cental Bank's Basel II Implementation plans are also in keeping with a regional initiative spearheaded by the CGBS to adopt Basel II.

capital structure of banks which currently comprise mostly Tier 1 capital and therefore could be easily implemented.

Phase II which emphasizes Objectives 2 and 3, will commence in the second half of 2018. During this phase, the Central Bank will introduce Pillars 2 and 3 of Basel II. Pillar 2 or the Supervisory Review Process requires the licensee to develop an internal capital adequacy assessment process or ICAAP for review by the supervisor. Pillar 3 specifies required disclosures by banks to promote market discipline. Additionally, the Bank will be incorporating Basel III elements in both phases of the project. The Basel II framework differs significantly from the current capital adequacy regime. As a result, the Central Bank retained external subject matter experts to assist with its implementation. Further, the Central Bank secured technical assistance from the CARTAC, the IMF's regional training body, to evaluate the effectiveness of implementation to date and make recommendations for Phase II of the project.

The Quantitative Impact Study (QIS)

The Central Bank achieved a significant milestone in the Basel II project in July 2016 with the completion of the first QIS which tested the impact of the new policy proposals on the licensees' CARs. All licensees participated in the exercise and despite a decrease in the CARs for the banking sector, all institutions were able to meet the minimum ratios proposed by the Central Bank. Licensees received individual feedback and the Central Bank also met with the senior management of certain larger banks to discuss the results as well as future risk and capital management strategies. Table 9provides some key system results from the QIS1.

Notwithstanding the overall result, some challenges were observed particularly in respect of data reconciliation and the submission of consolidated capital adequacy returns. As a consequence, a second QIS will be conducted during the period May-July 2017. Upon conclusion of the QIS2, the Central Bank will finalize its policy proposals for the implementation of Basel II, Pillar 1 and draft the requisite capital adequacy regulations to enact the proposals into law.

Table 9
QIS1 Results for the Banking System

Metric	Basel I	Basel II/III	Change	Proposed Minimum Ratios
RWA (TT$'000)	75,744,764	93,699,426	23.7 per cent	NA
Qualifying Capital (TT$'000)	18,244,035	19,938,452	9.3 per cent	NA
CET 1 Ratio (per cent)	NA	20.2	-	4.5
Tier 1 Capital Ratio (per cent)	25.1	22.2	(2.9)	7.0
CAR (per cent)	24.1	21.3	(2.8)	10.0

Source: Central Bank of Trinidad and Tobago

CONCLUSION

The Central Bank is keenly aware of the impact of poor corporate governance and risk management practices on financial soundness and stability. Strong boards of directors will ensure that senior management implements robust risk management and internal controls and adhere to required regulatory standards. The Central Bank as regulator also has a duty to ensure that its regulated financial institutions operate prudently and adopt best international practices commensurate with their complexity and risks. It is for this reason the Central Bank has identified several projects in its strategic plan aimed at improving governance and risk management at financial institutions and thereby promotes resilience of the financial system as a whole. Such initiatives include updating the Corporate Governance Guideline and 'Fit and Proper' Guideline to reflect new international guidance; implementation of enhanced and risk based capital standards for banks and insurance companies; and implementation of a consolidated reporting regime for domestic and cross-border financial groups.

REFERENCES

Bank for International Settlements, A report by a Study Group. *"Central Bank Governance and Financial Stability"* Basel, Switzerland, May 2011.

Bank for International Settlements, BCBS on Banking Supervision. *"Corporate governance principles for banks"* Basel, Switzerland, July 2015.

Central Bank of Trinidad and Tobago. Corporate Governance Guideline, May 2007.

Central Bank of Trinidad and Tobago. 'Fit and Proper' Guideline, May 2005.

Federal Reserve Bank of New York Staff Reports, *"Corporate Governance and Banks: What Have We Learned from the Financial Crisis?"*, June 2011.

Financial Institutions Act, 2008.

International Monetary Fund. *"Global Financial Stability Report: Fostering Stability in a Low-Growth, Low-Rate Era"* Washington, October 2016.

APPENDIX

APPENDIX A
Banking Sector Loans by Sector, 2011 – 2016

	TT$ Millions (Absolute values)						TT$ Millions (Change)					Percentage Change (per cent)				
PUBLIC SECTOR CREDIT ACTIVITIES	**Dec2011**	**Dec2012**	**Dec2013**	**Dec2014**	**Dec2015**	**Dec2016**	**Dec2011 Dec2012**	**Dec2012 Dec2013**	**Dec2013 Dec2014**	**Dec2014 Dec2015**	**Dec2015 Dec2016**	**Dec2011 Dec2012**	**Dec2012 Dec2013**	**Dec2013 Dec2014**	**Dec2014 Dec2015**	**Dec2015 Dec2016**
Petroleum	370	541	723	790	660	1,545	171	182	67	(130)	885	46.3	33.6	9.2	-16.4	134.1
Construction	2,554	1,940	1,463	3,130	3,630	1,593	(614)	(477)	1,667	501	(2,037)	-24.0	-24.6	113.9	16.0	-56.1
Transport, Storage and Communication	100	538	999	738	1,223	1,120	438	461	(261)	485	(103)	436.7	85.8	-26.1	65.7	-8.4
Finance, Insurance and Real Estate	1,142	1,337	1,105	1,872	2,026	2,555	196	(232)	767	153	530	17.1	-17.3	69.4	8.2	26.1
Electricity and Water	817	693	1,059	1,128	3,069	2,555	(123)	366	69	1,941	(514)	-15.1	52.8	6.5	172.0	-16.7
Other	526	484	628	830	456	615	(42)	144	201	(373)	159	-8.0	29.8	32.1	-45.0	34.9
PUBLIC SECTOR TOTAL	**5,508**	**5,534**	**5,978**	**8,488**	**11,065**	**9,985**	**26**	**444**	**2,510**	**2,577**	**(1,080)**	**0.5**	**8.0**	**42.0**	**30.4**	**-9.8**
BUSINESS CREDIT ACTIVITIES	**Dec2011**	**Dec2012**	**Dec2013**	**Dec2014**	**Dec2015**	**Dec2016**	**Dec2011 Dec2012**	**Dec2012 Dec2013**	**Dec2013 Dec2014**	**Dec2014 Dec2015**	**Dec2015 Dec2016**	**Dec2011 Dec2012**	**Dec2012 Dec2013**	**Dec2013 Dec2014**	**Dec2014 Dec2015**	**Dec2015 Dec2016**
Real Estate Mortgage Loans	3,741	3,989	4,206	4,748	5,290	5,552	248	217	542	542	262	6.6	5.5	12.9	11.4	4.9
Finance, Insurance and Real Estate Companies	7,594	7,057	6,249	7,243	6,622	7,580	(538)	(808)	994	(621)	958	-7.1	-11.4	15.9	-8.6	14.5
Services	5,831	6,489	7,260	7,268	6,982	6,936	658	771	8	(287)	(45)	11.3	11.9	0.1	-3.9	-0.6
Manufacturing	3,539	3,648	3,416	3,150	3,869	4,328	109	(232)	(266)	719	460	3.1	-6.4	-7.8	22.8	11.9
Construction	2,852	2,817	2,915	2,796	2,605	2,475	(35)	98	(120)	(191)	(130)	-1.2	3.5	-4.1	-6.8	-5.0
Other (Agri, Petrol, Lease)	1,676	1,600	1,160	1,540	1,762	913	(76)	(440)	380	222	(850)	-4.6	-27.5	32.8	14.4	-48.2
BUSINESS TOTAL	**25,233**	**25,599**	**25,206**	**26,745**	**27,130**	**27,785**	**366**	**(393)**	**1,539**	**384**	**655**	**1.4**	**-1.5**	**6.1**	**1.4**	**2.4**
CONSUMER LOAN BY PURPOSE	**Dec2011**	**Dec2012**	**Dec2013**	**Dec2014**	**Dec2015**	**Dec2016**	**Dec2011 Dec2012**	**Dec2012 Dec2013**	**Dec2013 Dec2014**	**Dec2014 Dec2015**	**Dec2015 Dec2016**	**Dec2011 Dec2012**	**Dec2012 Dec2013**	**Dec2013 Dec2014**	**Dec2014 Dec2015**	**Dec2015 Dec2016**
Real Estate including Mortgages	10,608	11,746	12,790	14,091	15,151	15,775	1,137	1,045	1,301	1,060	624	10.7	8.9	10.2	7.5	4.1
Vehicles	2,651	2,829	3,162	3,754	4,573	4,914	178	333	591	819	341	6.7	11.8	18.7	21.8	7.5
Credit Cards	1,884	1,978	2,137	2,303	2,392	2,720	94	158	166	90	328	5.0	8.0	7.8	3.9	13.7
Refinancing	1,492	1,530	1,653	1,748	1,842	1,938	38	124	95	93	96	2.5	8.1	5.7	5.3	5.2
Consolidation of Debt	1,352	1,353	1,572	1,603	1,675	1,844	1	219	31	72	169	0.1	16.2	2.0	4.5	10.1
Other Purposes	3,024	3,008	3,255	3,274	3,356	3,446	(16)	247	19	82	90	-0.5	8.2	0.6	2.5	2.7
CONSUMER TOTAL	**21,012**	**22,444**	**24,570**	**26,772**	**28,989**	**30,638**	**1,433**	**2,125**	**2,203**	**2,217**	**1,649**	**6.8**	**9.5**	**9.0**	**8.3**	**5.7**
TOTAL BANKING SECTOR LOANS	**51,753**	**53,577**	**55,753**	**62,006**	**67,184**	**68,407**	**1,824**	**2,176**	**6,253**	**5,178**	**1,224**	**3.5**	**4.1**	**11.2**	**8.4**	**1.8**

Source: Central Bank of Trinidad and Tobago

APPENDIX B
Commercial Banking Sector Stress Testing Results, 2015 – 2016

		Dec-15	Mar-16	Jun-16	Sep-16	Dec-16	
Pre-Shock CAR		22.1	21.0	21.8	22.4	21.9	
Pre-Shock CAR Adjusted for Provisions		20.4	19.3	20.4	21.1	20.5	
Single Factor Tests							
						Post-Shock CAR	Change from Pre-Shock Adjusted CAR
Interest Rate Risk	Interest Rate ↑ 700 basis points	8.2	8.2	8.2	9.8	10.5	-10.1
	Interest Rate ↓ 100 basis points	22.0	20.8	22.0	22.6	21.9	1.3
Foreign Exchange Risk	TT Dollar depreciates 40 per cent	21.2	20.4	21.3	22.0	22.0	1.4
Credit Risk	Credit Portfolio worsens on account of 20 per cent decline in GDP	18.4	17.3	18.4	19.1	18.5	-2.0
Credit Risk - Property Prices	Property Prices ↓ 30 per cent	18.2	17.2	18.3	19.0	18.5	-2.1
Scenario Tests							
						Post-Shock CAR	Change from Pre-Shock Adjusted CAR
Energy Price Shock	Price ↓ 50 per cent - No Policy Response	10.3	10.1	10.3	11.6	12.2	-8.3
	Price ↓ 50 per cent - Policy Response	20.9	19.9	20.9	21.5	21.5	0.9
Regional Disaster Scenario	Regional Natural Disaster	19.0	18.3	19.4	20.3	19.7	-0.9
Days Until Illiquid							
Liquidity Risk	Bank Run	68	68	70	71	72	

Source: Central Bank of Trinidad and Tobago

Central Bank of
Trinidad & Tobago

FINANCIAL STABILITY REPORT 2016