FINANCIAL STABILITY REPORT 2017

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FINANCIAL STABILITY COMMITTEE'S STATEMENT

We, the Financial Stability Committee (FSC), have the pleasure of presenting the inaugural Financial Stability Report. The aim of the report is to effectively communicate on financial stability and macro prudential matters in Seychelles whilst touching upon global risks that concern the local jurisdiction. Financial stability involves ensuring that the financial system can continue providing intermediation even in the face of adverse economic shocks – be these of domestic or external origin. Financial stability increased in global prominence after the 2008 Global Financial Crisis, and in Seychelles from 2016 with the creation of a formal framework for monitoring and action. We, the FSC, remain committed to monitoring the stability of the domestic financial sector and mitigating exposure to domestic and global risks.

The FSC acts as a forum for the discussion of key developments, trends and potential action whilst the Central Bank of Seychelles is legally mandated to ensure a sound financial system. These responsibilities and functions are imperative not only for the direct result of financial stability but furthermore to permit for the effective implementation of other financial sector, monetary and macroeconomic policies. As such, the FSC meets on a quarterly basis to assess developments and risk analyses of the financial sector, discuss policy proposals and permit the various financial sector regulators to jointly discuss and formulate collective positions. Inter-agency co-operation is imperative to the maintenance of financial stability, thus the FSC and associated technical staff are critical in achieving such.

This report documents the state of financial sector resilience throughout 2017. Whilst increased focus is afforded to banks, due to their significant role within Seychelles' financial sector, the aim is to increase coverage of other institutions and subsectors over the coming years. The depth of coverage will also broaden such that a comprehensive review is shared with all stakeholders. However, this publication is the first step on a journey to accountability and transparency of financial stability matters, and highlighting the key risks faced by the domestic jurisdiction. Discussion of risks and mitigating actions does not only promote transparency and understanding but permits for due consideration of systemic conditions and concerns when formulating policy and making decisions. The importance of such cannot be stressed enough as Seychelles, a small open island economy, faces threats to systemic stability both domestically and globally. Over the course of 2017, the domestic banking system was largely resilient to shocks

withstanding external and domestic developments. The sector demonstrated sufficient capital adequacy and prudent management of foreign exchange exposure to withstand severe stress testing. Such resilience was notwithstanding the evolving monetary policy framework, global interest rate developments and foreign currency fluctuations. The insurance sector was also largely resilient to shocks, with the largest risks emanating from domestic constraints.

The greatest risk to the banking community over the course of the year, was the potential for loss of correspondent banking relationships. This threatened the ability of banks to effect international transactions, which for an import-dependent small open economy heavily reliant on tourism is particularly concerning. Several actions were undertaken by the FSC collectively, and as well as individual entities to mitigate the threat. These included efforts to improve the perception of the jurisdiction and to strengthen the Anti-Money Laundering and Counter-Financing of Terrorism (AML/CFT) framework, alongside direct engagement with global correspondent banks, foreign regulators and counterparts such as the IMF.

As the domestic financial sector deepens, the FSC remains cognizant of its responsibility in this regard. The analysis of 2017 will act as a foundation for subsequent reports with the aim of developing the entire risk assessment framework for financial stability alongside enhancing transparency. As the financial stability framework is broadened and deepened, the toolkit of available macroprudential measures is anticipated to grow with future annual reports clearly documenting these developments.

Ms Caroline Abel
Chairperson of Financial Stability Committee
Governor of Central Bank of Seychelles

INTRODUCTION

Financial stability is a state in which key financial markets and the core financial institutional system are resistant to economic shocks. Such resistance permits for the continued provision of basic functions: thus, provision of financial intermediation, management of risk and arrangement of payments.

The global prominence and understanding of financial stability has increased since the Global Financial Crisis of 2008/9. In line with such, authorities around the world made adjustments to address the shortcomings in this regard such that the risks facing the financial sector can be better understood, assessed and mitigated. Given these trends and developments, Seychelles began work on the development of a financial stability unit within the Central Bank of Seychelles (CBS). Such was established in January 2016 as a standalone unit reporting to the First Deputy Governor. Subsequent to such, the President created the Financial Stability Committee (FSC) in March 2016. This Committee is chaired by the Governor of CBS, and consists of the Principal Secretary of Finance, the Chief Executive Officer (CEO) of the Financial Services Authority and the Director of the Financial Intelligence Unit as members. The FSC is a consultative forum that allows for information sharing and sector-wide analysis amongst the relevant financial sector stakeholders.

The Financial Stability Unit within the CBS, which is the secretariat to the FSC and is responsible for all related activities, was moved during an internal restructuring. Such occurred in May 2017 and saw the transfer of financial stability to the Financial Surveillance Division. This division is now responsible for micro prudential supervision, financial regulation and financial stability.

The Financial Stability Section[1] (FSS) has developed risk monitoring frameworks over the two years since its inception. The models used are a risk dashboard, 'Miss Muffet Spidergram' (see Focus Box 1) and the more qualitative risk assessment matrix (RAM). Additionally, stress testing is conducted periodically on the banking sector and discussions are ongoing with other FSC members for stress tests on their respective areas of oversight. All the model-results are presented to the FSC and CBS Board on a quarterly basis.

1. The financial stability unit was renamed as Financial Stability Section when moved within the Financial Surveillance Division

Globally, the key financial stability risks over the course of the year were political uncertainty – breeding protectionism and contributing to higher risk premia and volatility – and a chase for yield reminiscent of pre-2008 conditions.

Over the course of 2017, a variety of risks to the Seychelles financial sector were identified. Most of the more pertinent threats were highlighted within the qualitative models, such as cybercrime and de-risking with regards to correspondent banking relationships. However, concerns such as mounting credit growth predominantly driven by the non-productive sectors resulting in higher household indebtedness were also raised. These, and other, risks are discussed in depth within this inaugural Financial Stability Report.

In addition to the assessment of risks facing the domestic financial sector, an overview of global financial stability trends and developments is included. The assessment of the domestic financial sector focuses predominantly on the banking sector, however a small component is included for the insurance sector. The aim is to expand upon such, not only in the report but also in the risk assessment framework, such that a more comprehensive assessment of financial stability risks can occur by including non-bank financial institutions, insurance, capital markets and bureaux de change.

ASSESSMENT OF GLOBAL FINANCIAL STABILITY

The year commenced with an improvement in global financial stability compared to the previous year. The improvements were driven largely by improved economic activity and rising longer-term interest rates. The momentum gained with regards to economic activity was mitigated and at risk due to rising political uncertainty. This uncertainty raised the threat of increased protectionism from advanced economies which could reduce global trade and growth. Furthermore, the political uncertainty was warned to have a potential impact on risk premia and volatility. The key message for the beginning of the year was focused on attaining the right policy mix between encouraging economic growth through economic risk taking whilst guarding against financial risk taking.

As 2017 progressed, the global financial system continued to strengthen in response to policy support, regulatory enhancements and the cyclical upturn in growth[2]. The regulatory enhancements improved the strength of global bank balance sheets due to the improved capital and liquidity buffers. The risk being faced globally however was that the increased regulation alongside continued monetary accommodation result in a continued search for yield. In this instance, whilst reminiscent of pre-2008 conditions, whereby too much money was chasing too few yielding assets, investors were once again being pushed beyond traditional habitats and risk tolerances. Consequently, there was a perception that vulnerabilities and risks could be shifting from the bank to nonbank sectors resulting in larger market risks. As such, the year ended with the need for policymakers to focus on and strengthen the financial and macroeconomic policy mix. It can thus be observed that the core challenge for 2017 presented as finding the correct policy mix to ensure stability whilst encouraging prudent growth.

Assessing specific risks that presented over the course of 2017 draws attention to the deteriorating geopolitical events, enthusiasm in global financial markets and global de-risking efforts. With regards to the deteriorating geopolitical events, uncertainty about BREXIT[3] negotiations and the potential impact on the Euro area and UK were felt to be a risk globally but also directly upon the Seychelles given implications on trade agreements, tourism revenue and development finance. Other developments

2. GFSR October 2017, which can be accessed via http://www.imf.org/en/Publications/GFSR/Issues/2017/09/27/~/media/Files/Publications/GFSR/2017/October/chapter-1/Documents/text.ashx?la=en

3. This is a term used to define the United Kingdom's exit from the European Union, for which negotiations are still underway.

such as Gulf tensions and the strained US political environment created uncertainty in global markets thus pushing investors towards safe haven assets. Enthusiasm was observed in the equity and debt markets, particularly in the US and emerging market economies. Such exuberance was fuelled by the low long-term interest rates and market volatility, yet placed the market at greater risk of sharp corrections should projections change abruptly. Finally, the global de-risking trend continued throughout 2017 as enhanced regulation increased the compliance burden on global banks. Such burden, lead to termination or restriction of correspondent banking relationships (CBR) particularly in cases such as Seychelles and other small economies where the volume of transactions resulted in low returns relative to associated compliance costs. Greater detail on correspondent banking relationships is provided for in Focus box 3.

Assessment of risk to the Seychelles financial sector

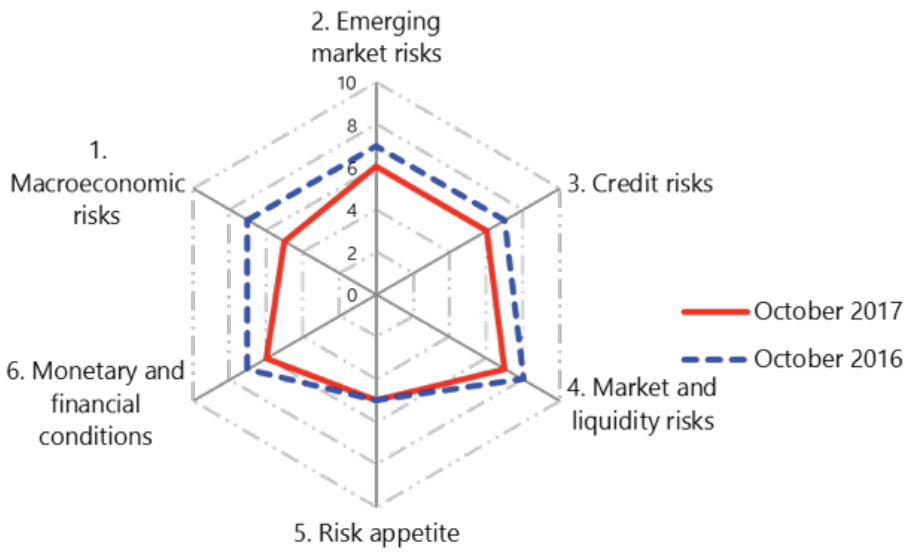
Over the course of 2017, the Seychelles financial system was exposed to a variety of risks albeit the system remained resilient to these threats. Many of these risks are interlinked and will carry over into next year due to their continuous nature.

Key risks to the financial sector during 2017 included de-risking and correspondent banking, cybercrime and cybersecurity, as well as political uncertainty. Alongside these topical threats, the assessment included recurring risks such as, risk of natural disasters or fatal accidents impacting key areas (such as the airport), risk to the payments system of a financial institution being unable to settle, and risk of failure of a systemically important financial institution to name a few.

The risk exposure of the financial system as whole, and more broadly of the Seychelles economy is captured within the 'Miss Muffet' spidergram model, that is the country-specific version of the framework used by the International Monetary Fund (IMF) in the Global Financial Stability Report. Charts 1 and 2 below depict the change in the risks and financial conditions at a global level from October 2016 and October 2017 as well as Seychelles' exposures from December 2016 to December 2017. Such permits for the assessment of the changes in risk exposures of Seychelles over the course of the year, in addition to an analysis of contrasts against global risk trends for a similar period.

Chart 1

Global Financial Stability Map (data sourced from the Global Financial Stability reports which are published by the IMF on a bi-annual basis)



Note: Away from center signifies higher risks, easier monetary and financial conditions, or higher risk appetite.

Chart 2

Seychelles Financial Stability Map

Note: Away from center signifies higher risks, easier monetary and financial conditions, or higher risk appetite.

Focus box 1: Ms Muffet spidergram

The 'Miss Muffet' is a model designed by the IMF to assess changes in four risk categories (macroeconomic, inward spillover, credit, and market & liquidity) and two condition elements (monetary & financial, and risk appetite). Ms Muffet itself is an acronym derived from: 'MCM Spidergram: a Macro-Financial Environment Tool'

The model can be used to gauge how these components have evolved over two periods of time subject to the availability of the necessary datasets. This model has been designed to allow for a great range of flexibility and allow for the fact that not all jurisdictions will have the entire range of data which this model can make use of. In doing so, it provides for the flexibility for the use of additional information, including the ability to control how this additional data is treated in the model and how it affects other datasets, where relevant and applicable.

The outputs obtained from the models are illustrated in Chart 1 and Chart 2, from both an international and local perspective, respectively. It is worth noting that the data from Chart 1 is essentially that published in the bi-annual IMF GFSR publication.

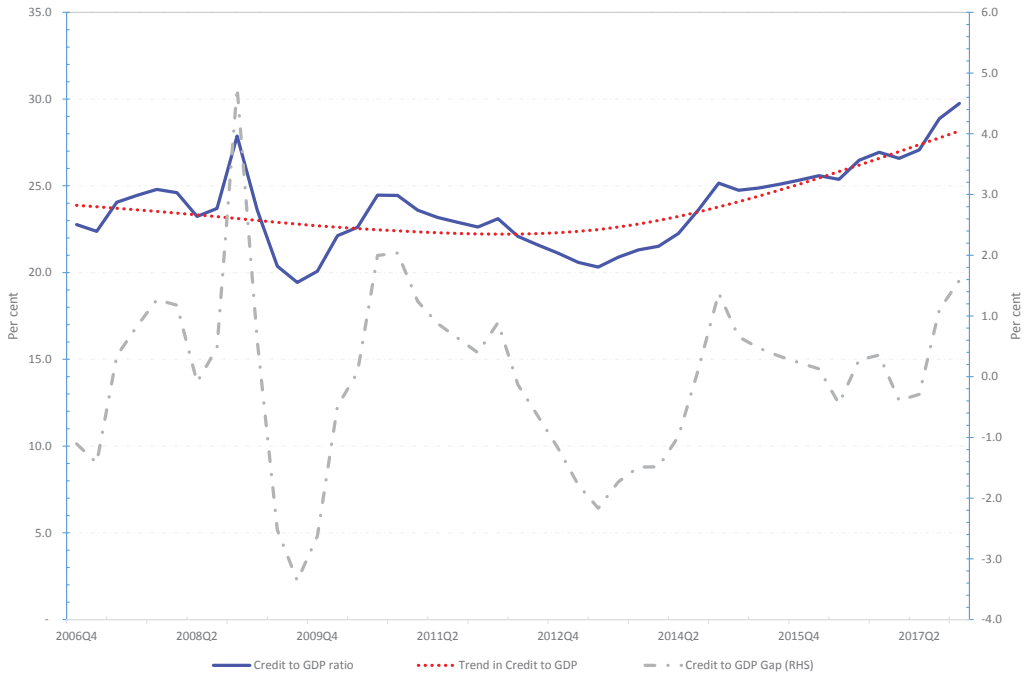
Another quantitative model used to monitor various metrics within the financial sector is known internally as the risk dashboard. As the name suggests, this model provides a snapshot of the various key metrics, thereby allowing trends to be monitored. Owing to the broad range of the metrics it covers, these will be touched upon during the course of this report, both as broader domestic risks and as those focusing on the banking sector. In regards to the broader economy, a key metric relates to the credit to Gross Domestic Product (GDP) dynamics. As can be observed in Chart 3, the credit to GDP ratio has been steadily rising during the course of 2017. For illustrative purposes, a trend line has been added using the Hoddrick-Prescott (HP) filter[4].

The gradual rise of the credit to GDP ratio throughout the course of 2017 echoes CBS' call[5] for more credit to be directed towards the productive sectors of the economy, as compared to consumption purposes, which is further discussed in the 2017 edition of the CBS Annual Report.

4. Given the use of the HP filter, the dataset shown has had to be for a generally longer period than that to be used for the rest of this Financial Stability review.

5. CBS has in March 2018 tightened monetary policy with the aim of curtailing demand for these consumption driven credit, which has been exerting additional pressure on the exchange rate, given Seychelles export-driven nature.

Chart 3: *Credit to GDP dynamics and trend derived using the Hoddrick-Prescott filter*



By evaluating the risk assessment matrix (RAM) (see Focus box 2), which collates the risks identified by all members of the FSC, a qualitative overview of risk exposure to the financial system can be observed. Such risks are classified within the matrix by assessing likelihood and impact alongside potential mitigating measures. This method allows for an overview of greatest exposure, or highest risk.

The year began with the ever-present threat of de-risking resulting in a loss of correspondent banking facilities to some of the banks operating within the country. This risk remains following the prior loss of CBR by Bank Muscat International (BMI) in late 2014, and the move by global banks to de-risk their customer base and cease operations with respondent banks that pose too high compliance costs against low returns. Seychelles-banks fall within this classification due to the perception of the country being high risk as a result of the international financial services sector against the low transaction volume that is the result of being a small economy. In order to mitigate this risk exposure, work has been undertaken by the Central Bank and other regulators to address the perception and for the former the work has also resulted in discussions and negotiation with global correspondent banks. Further detail is provided for in the Focus box 3. By year-end, whilst the risk retained its prominent focus the mitigating measures were underway.

Focus box 2: RAM

The RAM is a simple in-house model that provides a summarized perspective of the various risks which are considered as part of the review which is conducted on a quarterly basis by the Financial Stability section for presentation to the FSC. Its aim is to illustrate the various risks to the domestic financial sector in terms of their probability of occurrence and their potential impact. Its formulation is done following in–depth discussions between technical staff from each FSC member entity, as these are the staff that better understand these sectoral risks from their organisation's perspective. A summary of some of the risks covered throughout the course of 2017 is illustrated in Figure 1.

In compiling the RAM, the team also tries to better understand potential mitigating measures (including whether they are being deployed or plans are being formulated for their deployment) and how effective these would be. By better understanding the risks, the FSC members therefore gain a better understanding of the threat landscape, which may encompass threats from one sector spreading or impacting upon others. This thus empowers them to act in such a manner as to ideally complement efforts to achieve a common ultimate aim of preserving financial stability.

With regards to cybersecurity and cybercrime, the Seychelles banking sector fell prey to cases of card skimming over the course of the year. However, the banking sector remained vigilant and increased security measures. The risk remains however as the move towards greater automation and reliance on technology means greater risk of cyber-attacks on the systems. Of note, 2017 was a year of considerable cyber risks globally, with events such as 'NotPetya' and 'WannaCry 2.0' grabbing headlines across the globe and impacting a vast number of users. Consequently, the risk facing the domestic financial sector was high, particularly due to the impact that a large scale cyber-attack could have on the financial sector and the broader economy. Moreover, the lack of a dedicated legal framework to deal with offenders also leaves the jurisdiction exposed to threats as lack of recourse means minimal deterrent. Accordingly, work is underway to formulate the necessary legislative framework (such as the formulation of a cybersecurity law) that will better deal with such threats. CBS also launched its national effort to deploy a set of cybersecurity guidelines for the banking sector. The intention was that this would provide an initial set of minimum standards that at least all banks in Seychelles would have to adhere to, but other financial sector players would also be able to voluntarily abide to these guidelines, thereby reducing the residual risk levels.

Focus box 3: Correspondent Banking relationships and Global de-risking trends

Correspondent banks are major international banks through which domestic banks route their international transactions. They are thus a critical component in the global banking system. However, these institutions have increasingly been closing off their relationships with several banks across the globe, thus rendering the latter unable to effect their international transactions. This trend stems from the increasing costs being incurred by these correspondent banks in undertaking the required investigations (commonly referred to as 'due diligence') prior to processing transactions. In the past, failure on the part of correspondent banks to undertake the appropriate due diligence has resulted in the imposition of numerous fines from various regulators across the globe. Accordingly, these institutions have been taking a more proactive stance by reducing their correspondent banking exposures from banks that do not yield a significant volume of transactions under said relationship, and thus do not generate a significant revenue for them.

The issue of de-risking is compounded for smaller banks, from which correspondent banks derive a very small portion of their revenue in relation to the extent of due diligence required. Such distancing is being made on the perception of the risk-return trade-off which the relationship has. Accordingly, smaller institutions from jurisdictions that have an international financial center, and do not have large banking entities, are the ones who are most vulnerable to lose such relationships. Without these relationships, they would be unable to transact with the rest of the world, regardless of how much resources or how financially sound said institution was. Such moves would hinder bank's abilities to actually act as the intermediaries for financial transactions, thereby forcing entities to find other avenues outside the official channels to transact and these bear higher risks.

Accordingly, local stakeholders in Seychelles have established a Committee to consider the jurisdiction's current reputation and the drivers behind such. This is aimed at better understanding where the country currently stands to allow for the formulation of a strategy to ensure that the country is at all times aligned with or tending to international best practices. Moreover, more effort has been dedicated to ensure that action being taken in regards to anti-money laundering and the combat against terrorist financing are publicised such that the external parties can see proof of what is being done, rather than assume that the country has a laid-back approach.

Alongside cybersecurity, is the risk that may arise from development in the area of financial technology (FinTech). The current regulatory framework in Seychelles has not yet developed adequately in the domain of FinTech, however review of such is to be undertaken over the course of 2018. Consequently, the threat to the financial system as a direct or indirect result of the application of technological innovation to financial services is high – in large part due to the lack of certainty about what the risks entail, and in smaller proportion due to the limited regulatory scope at present.

Figure 1 below illustrates some of the more prominent risks identified as part of the RAM. The RAM is formulated by assessing the financial sector as a whole with input from all members of the Financial Stability Committee (FSC). Risks are placed within the matrix based on likelihood and impact were the event to occur. Additionally, heed is paid to mitigating measures that are currently in place that aim to either reduce the likelihood or potential impact of the identified risk. The recurring risks such as natural disasters and threat to the national carrier, or failure on the part of CBS to operate are viewed as ever-present and thus are included in all RAM iterations.

Figure 1: *2017 Risk Assessment Matrix summary*

LIKELIHOOD \ IMPACT	L	M	H
H		Domestic impact of rise in international commodity prices. Impact of domestic exchange rate movements. Rise in international interest rates.	CBR & derisking. Cybercrime. AML/CFT structural changes. The plague. Yellow tuna fishing allowance quota early attainment.
M		Implications from domestic political tensions. Implications of global policy changes (including BREXIT). Financial crime risks arising through cash payments. Interconnected directorships within our financial sector.	Outcome of Mutual Evaluation by ESAAMLG against FATF Recommendations
L	Adverse outcome from expiration of Tourism Incentives Act.		Failure of a large domestic institution.

At the end of 2017, the RAM formulation showed significant interlinkages in the risks, such as the calls by CBS for a tighter monetary policy, in response to the high demand pressure for foreign currency, which is primarily being driven by credit for consumption purposes (as opposed to fueling the productive sectors of the economy). Coupled with the domestically disadvantageous rise in international commodity prices, this has been further fueling inflationary pressures. Further information on trends in this realm can be found in the CBS Annual Report 2017. The threat of the inflationary pressures on the financial system manifests through higher prices impacting disposable income and ability to repay debt which could result in higher household non-performing loans.

The National Risk Assessment commenced in January 2017 and brought together key stakeholders to assess the level of anti-money laundering and counter financing of terrorism legislation, enforcement and adherence within the various sectors. Whilst this was not deemed to be a high risk in and of itself, it was noted that the report highlights some key risk areas for which legislative amendments are required and highlights the need for enhanced effectiveness. In many respects, these also tied in with the observations of the Eastern and Southern African Anti-Money Laundering Group (ESAAMLG) mutual evalution against the Financial Action Tast Force (FATF) 40 Recommendations (see Focus box 4). The Mutual Evaluation Report will be published in 2018 and efforts will need to be undertaken to rectify core deficiencies that may be identified in order to mitigate the risk of the international community “black listing” Seychelles. Furthermore, Seychelles made commitments to the Organisation for Economic Cooperation and Development (OECD) to implement a set of legislative changes in 2018 within the initiative to comply with the Base Erosion Profit Sharing framework (see Focus Box 5). This was a key element that resulted in Seychelles being placed on a grey list. Failure to adhere to said commitments poses further risk of being ‘black-listed’. The risk of such links back to the de-risking and correspondent banking concerns in that being placed on any black-list will deter existing correspondent banks from continuing any relationship, and deter any others from engaging in new relationships with banks in the Seychelles.

Moreover, the element of financial technologies (FinTech) also arose. CBS is currently researching more in this regard and aims to take a position in 2018. There has been interest from local and foreign parties to engage in FinTech and potential financial stability threats need to be understood throughout the process.

Another risk identified was the retention of qualified staff by regulators whereby FSC members are subject to loss of institutional knowledge and technical capacity as a result of staff turnover. This risk impedes the authorities from effectively undertaking their respective duties and results in high training costs. Furthermore, the risk is reflective of a larger systemic concern pertaining to the limited pool of qualified local finance personnel. Whilst this shortage contributes to staff turnover, it is viewed as contributory to disparity in the level of qualification and knowledge for key positions in financial services. In this regard, the discussions focused on an initiative which is underway to set up minimum mandatory requirements for compliance and reporting officers; the ultimate aim being that this would be consistent across the entire financial sector whilst also providing for proportionality with regards to the nature of the entity concerned. Such requirements would ensure a minimum standard or level, as identified by qualifications, in order for individuals to be recognised and eligible to hold such roles and responsiblities, and also factor in the extent of its application on the basis of the nature of the work carried out by said person. It was also pointed out that the shortage of experienced auditors is increasingly problematic for the financial sector. Such shortage impacts on the quality of audits and the timeliness of submissions.

In addition, the valuation of non-tradable assets (such as real estate) was raised as a concern. The financial stability implications of such results in lack of conformity in valuation and thus places institutions at risk as there are ramifications on fair value accounting and collateral valuation for credit. Several key financial market players are either heavily exposed through collateral or directly through investment in real estate. The unresponsive market values observed on capital markets were linked to the level of financial literacy in the country and the lack of reaction to news. The low levels of trading and liquidity, coupled with the abovementioned lack of reaction, implies that the listed market price is not necessarily reflective of market conditions nor would investors actually be prepared to trade at that price. Such is further discussed in the following section on risk to the insurance sector.

The consensus obtained when developing the RAM over the course of 2017, was that many of the risks had high contagion possibilities likened to the threat of a domino effect. Several risks had potential knock-on effects to one another or had overlapping mitigating measures. Consequently, it can be concluded that the policy decisions available as mitigants could address or exacerbate the overall risk exposure domestically.

Focus box 4: FATF 40+9 Recommendations[6]

Established in 1989, the Financial Action Task Force (FATF) is an inter-governmental body. The objectives of the FATF are to set standards and promote effective implementation of legal, regulatory and operational measures for combating money laundering, terrorist financing and other threats to the integrity of the international financial system. As a policy-making body, the FATF aims to create the necessary political will to bring about required legislative and regulatory reforms at a national level. Consequent to this mandate and set of objectives, the FATF developed a series of Recommendations in 1990, that have since been revised in 1996, 2001, 2003 and 2012. These Recommendations are the international standard for the combating of: money laundering; the financing of terrorism, and; proliferation of weapons of mass destruction. Furthermore, the recommendations are the basis for co-ordinated response to these threats whilst ensuring a level playing field due to their intended universal application. The Recommendations, recognised and adopted by many international bodies, are neither complex nor difficult. They also do not compromise the freedom to engage in legitimate transactions nor do they threaten economic development. The specifics of the 40 Recommendations fall under the following four broad categories:

a. Legal Systems

b. Measures to be taken by Financial Institutions and Non-Financial Businesses and Professions to prevent Money Laundering and Terrorist Financing

c. Institutional and other measures necessary in systems for combating Money Laundering and Terrorist Financing

d. International Co-operation

The additional IX special recommendations are as follows:

v. Ratification and implementation of UN instruments

vi. Criminalising the financing of terrorism and associated money laundering

vii. Freezing and confiscating terrorist assets

viii. Reporting suspicious transactions related to terrorism

ix. International co-operation

x. Alternative remittance

xi. Wire transfers

xii. Non-profit organisations

6. The specifics of the 40 Recommendations can be sourced at: http://www.fatf-gafi.org/media/fatf/documents/FATF%20Standards%20-%2040%20Recommendations%20rc.pdf

Focus box 5: Base Erosion Profit Shifting (BEPS)

BEPS is a term used to describe initiatives aimed at exploiting gaps and mismatches in tax frameworks in order to shift profits to jurisdictions with more preferential tax frameworks. Such strategies allow companies to evade their actual tax liabilities in favour of much smaller amounts. Seychelles has made commitments to the OECD to collaborate with over 100 countries to implement the necessary measures to tackle BEPS.

Assessment of risk to the Seychelles insurance sector

The domestic insurance market is regulated and supervised under the provisions of the Insurance Act, 2008 by the Financial Services Authority. As at end of 2017 there were 13 licensed insurance companies compared to 14 in 2016, of which 6 were operating domestically whilst the remaining 7 were operating as non-domestic insurance companies. As at 2017 year end, insurance intermediaries consisted of 15 brokers, 3 agents, 37 sub-agents and 2 Principal Insurance Representatives (PIR).

The key risks to the insurance sector as identified over the course of 2017 were:

- **limited access to accurate investment valuations;**
- **interlocking directorships, and**

Further information on each risk is provided below. Of note, the quantitative assessment of risks facing the insurance sector has yet to be conducted by FSS but shall be implemented in tandem with the introduction of risk-based supervision by the FSA.

Access to accurate investment valuations

The inability of financial institutions to access accurate investment valuations which may result in the build-up of undisclosed risks has been identified as a priority financial market risk that needs to be addressed. The FSA is concerned with the insurance companies' inability to consistently access reliable and accurate valuations for real estate and other investments that are not listed shares on Trop-X, Seychelles' securities exchange.

Currently, several domestically available investments have few or no recorded transactions (purchases and sales) over a period of one year or longer. Such limits the ability of a financial institution (and therefore the regulator) to determine fair market

values as required under International Financial Reporting Standards[7] (IFRS).

An example of an investment asset class that experiences limited or no transactions annually can be found in real estate. Furthermore, there is substantial disparity between valuations from different property surveyors and assessors which results in lack of consistency and indication of true sale prices.

The impact of such on financial transactions filters through to impact other financial sector players such as:

1. **Banks and other lenders that loan money for real estate purchases, refinancing or reconstruction;**
2. **The pension fund, which invests surplus mandatory contributions in a reserve fund that is almost 50% real estate holdings such as office buildings and car parks that generate income used to finance payments to pensioners and survivors and SPF expenses;**
3. **Insurers who developed housing units that are rented to families and individuals that generate income used to finance claim payments and expenses; and**
4. **Ministry of Land Use and Housing, one of the largest domestic real estate holders.**

Interlocking directorships

Given the small size of the domestic jurisdiction and the limited resources available with regards to qualified and/or experienced persons to fill directorship roles, it is noted that often a single individual holds several directorships. The risks arising from such relate to corporate governance concerns and the possibility of conflicts of interest or elements of asymmetric information spreading through the financial sector.

1. **Unintended consequence of single person impacting several financial entities, e.g., creation of market instability.**
2. **Possible increased ease of manipulation by person in financial control position, conflict of interest, and money.**

This risk is viewed as prevalent to the insurance sector but arguably impacts the entire domestic financial sector. Potential for conflict of interest and a lack of decision-making independence present as concerns.

7. *Government of Seychelles mandated IFRS use in 2010; PEMC Act passed IFRS requirement for SPF and DBS by 2016.*

Assessment of risk to the Seychelles banking sector

The Seychelles domestic banking sector comprises of nine licensed banks currently operating in Seychelles. Banks in Seychelles operate under a single licensing regime[8] whereby they can conduct both onshore and offshore banking activities without distinct licences. As at the end of 2017, only two of the nine banks were operating purely in segment 1, which relates to banking business that gives rise to "foreign sourced income"[9] [10].

Table 1 below provides a snapshot of some key banking sector performance indicators for the year 2017. This section of the Financial Stability Report will not delve too deeply in this respect but will rather provide a brief insight. A more dedicated report is published annually by CBS, under the title of Financial Surveillance Report to cover this matter in depth[11].

Table 1: *Select indicators of the Seychelles banking sector in 2017*

	2017			
	Mar	Jun	Sept	Dec
Banking Sector Balance sheet (SCR)				
Total assets	18,090,138,626.59	18,579,261,444.64	19,171,427,314.60	19,813,242,889.14
Total loans & advances	6,308,424,000.72	6,488,728,767.26	6,896,002,691.19	7,053,039,803.08
NPLs	443,580,029.78	447,216,850.99	447,542,339.86	450,100,191.16
Foreign currency denominated loans	1,256,660,652.00	1,424,491,793.45	1,877,353,316.98	2,033,785,004.32
Total deposit Liabilities	14,955,978,424.80	15,367,681,084.97	16,139,549,463.97	16,772,078,304.27
Key ratios				
Loans to Deposit	42.18%	42.22%	42.73%	42.05%
Capital adequacy	25.52%	23.41%	22.38%	23.53%
Tier 1 capital adequacy ratio	19.85%	19.67%	18.30%	18.10%
NPLs to total loans	7.03%	6.89%	6.49%	7.09%
Foreign exchange loans to total loans	19.92%	21.95%	27.22%	27.73%
Return on assets (annualised)	3.66%	3.42%	3.29%	3.86%
Return on equity (annualised)	32.20%	31.67%	30.61%	35.06%

8. This was introduced via amendments to the Financial Institutions Act, 2004, as amended, in December 2011 and changed the need for separate license for banks in Seychelles to conduct what effectively amounted to "offshore banking". More details in this regard can be found within the 'Single Licensing regime guidelines' issued by CBS and which is accessible via http://www.cbs.sc/Downloads/legislations/Single%20Licensing%20Regime%20Guidelines%20-%2004.19.2012.pdf .

9. "Foreign Sourced Income" derived from segment 1 activities attract a tax rate of 3 per cent, whilst the existing rate of 33 per cent applies to segment 2 activities, which encompasses all other activities not within segment 1.

10. There have been numerous reports from the offshore sector in relation to the unavailability of the necessary banking facilities for this sector, which thus have to bank elsewhere (typically in the region).

11. This annual publication was previously issued under the title 'Financial Services Supervision' report. The title will henceforth be changed to 'Financial Surveillance report' given the restructuring which took place in the middle of 2017. The report can be found on the CBS Website.

The total assets of the banking sector increased in 2017 by 11.50 per cent in year on year terms, as did the volume of loans and advances, which grew by 11.38 per cent (also on year on year terms). These are denoted in Table 1 and can also be observed in Chart 45.

Based on the aggregated data for sectoral distribution of loans from the banking sector in 2017, the largest three sectors (on average terms) were the:

- **tourism sector (at 13.10%),**
- **building and construction sector (at 11.52%), and**
- **private household (at 10.39%)**

The banking sector Non-Performing Loans (NPL) to total loans ratio (often referred to as the NPL ratio) provides a good indication of the level of risks on the banking sector's balance sheet. It denotes the proportion of the loans which are non-performing (i.e those facilities which are classed as either substandard, doubtful, or in the loss category) in relation to total loans.

$$\textit{NPL ratio} = \frac{\textit{Non-performing loans}}{\textit{Total Loans}} = \frac{\textit{Substandard loans + doubtful loans + loss loans}}{\textit{Total Loans}}$$

Accordingly, the two proportional relationships which exist in this ratio are thus as follows:

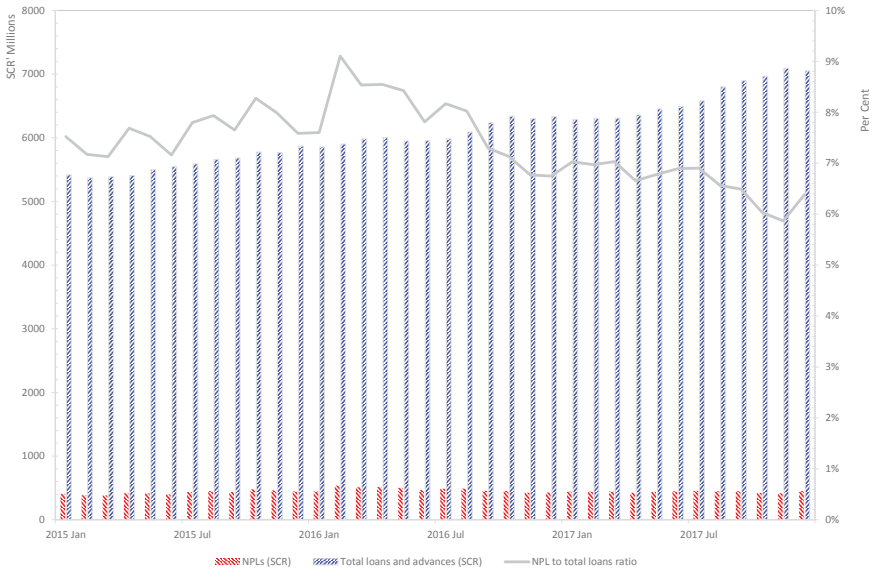
$$\textit{NPL ratio} \propto \textit{Non-performing loans} \quad \text{and} \quad \textit{NPL ratio} \propto \frac{1}{\textit{Total Loans}}$$

Therefore, when the volume of non-performing loans increases, so would the NPL ratio, assuming that total loans remain constant, and vice versa. On the flip side, if the volume of non-performing loans were to remain constant, the NPL ratio would decrease as total loans increase and vice-versa.

The NPL ratio is one of the key metrics which is consistently monitored and it did not fluctuate significantly during the year 2017. The average for the year under review stood at 6.63%, and this ratio fluctuated between a minimum of 5.87% and maximum of 7.03% during this period. The NPL ratio has remained close to the normal historical levels for Seychelles. In fact, it has been lower than average when the historical data for the last three years is considered, averaging at 7.16% for the last three years and 6.93% for the last two years. Chart 4 below illustrates the movements in relation to the

NPL ratio as well as total loans and advances. As can be observed in Chart 4, there was an overall decline in the banking sector NPL over the course of 2017, from 7.03 per cent down to 6.38 per cent as at the end of the year[12].

Chart 4: *Banking sector loan quality*



Another similar metric which is used to assess the level of a banking system's risk exposure is the foreign currency to total loans ratio[13]. Given that banks issue loans in foreign currency, such facilities entail that the banks are thus exposed to movements in exchange rate. The larger the portfolio of foreign currency denominated loans as a proportion of total loans, the greater the foreign currency risk exposure. Such is notwithstanding the overall foreign currency exposure as captured within the Net Open Position of the banking sector. The data provided in Table 1 denotes a significant increase in the levels of exposure to such risks over the year 2017. At the start of 2017, this ratio had dropped to 20.39% but gradually returned to the historical levels around mid-2017, to finish the year at 28.09%. These can be observed in Chart 5, below[14].

12. The upward blip towards the end of the year (November to December 2017) resulted from the downgrading of facilities by one bank on a group of loans.

13. The foreign currency loans to total loans ratio follows a similar proportionality relationship to that of the NPL ratio, except for the substitution of the NPL with foreign currency denominated loans.

14. Trends in foreign currency denominated loans are mainly driven by the three largest banks in Seychelles. It is also worth noting that the depreciation of the SCR against the USD and EUR contributed to the increases in the SCR amount of foreign currency denominated loans.

Chart 5: *Banking sector foreign currency denominated loans and total loan movements over a three year period*

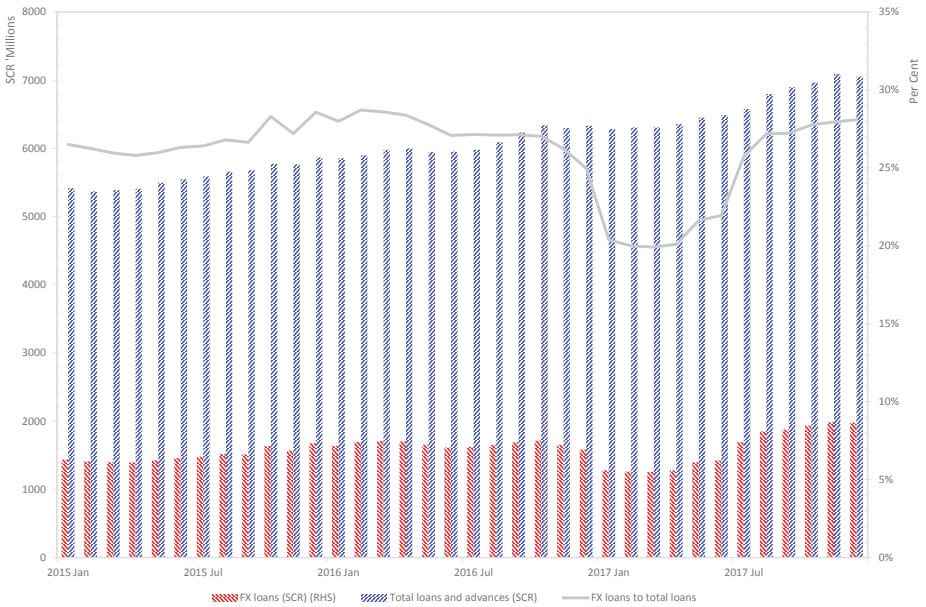
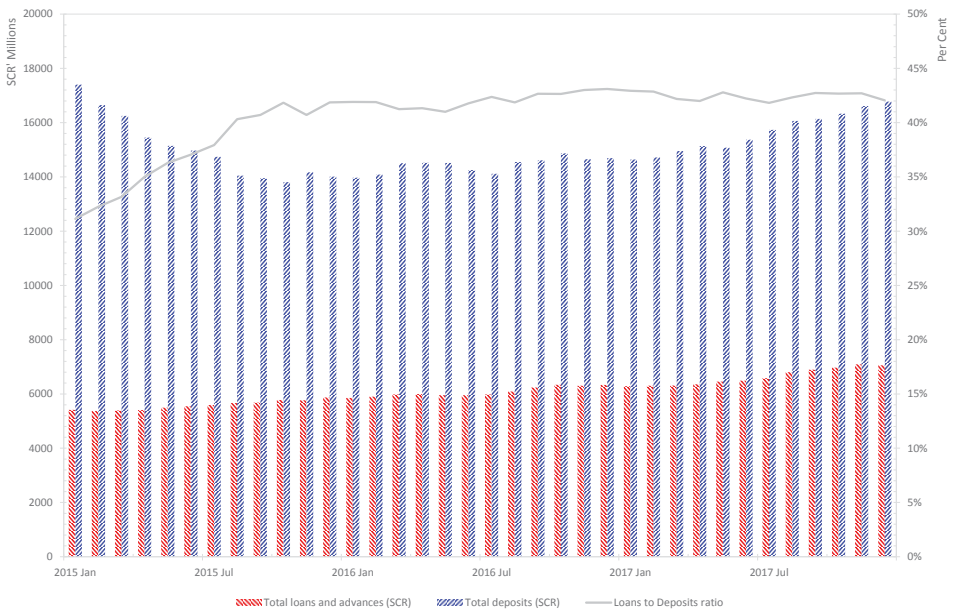


Chart 6 provides an overview of developments in regards to banking sector loans and deposits. The banking sector has a peculiarity, in that in comparison to other companies, customer deposits are booked as a liability for the bank (given the inherent need for the bank to repay these), and the loans issued by the banks are booked as its assets (given that the bank earns periodic returns on these). Accordingly, observing the loans to deposit ratio, provides one with an interesting insight into the bank's ability to meet its liquidity requirements and to meet its financial obligations as and when they fall due. As can be observed in Chart 6, the proportion of loans to deposit for the banking sector as a whole, remained fairly constant throughout the year, as loans and deposits grew by 11.38% (from SCR 6,285.95 million to SCR 7,053.04 million) and 14.18% (from SCR 14,643.12 million to SCR 16,774.42 million), respectively, in year on year terms. Accordingly, the loans to deposit ratio fluctuated between a high of 42.92% and a low of 41.82% for the year under review. This level has been the new normal for the last two years[15].

15. In 2015, the loans to deposit ratio moved up from approximately 30% to approximately current levels. This was as a result of a set of account closures by one large institution which closed off accounts it had previously held for its offshore customers. This is illustrated by the decline in total deposits illustrated in Chart 6.

Chart 6: *Banking sector Loans to deposit ratio*



FINANCIAL SECTOR RESILIENCY

Financial sector players are making increasing use of scenario analysis to understand the potential impact of various adverse shocks. CBS has not been an exception. A set of extreme but plausible scenarios were tested against the banks' positions as at December 2017 and these are shared in this section[16]. Given the sensitive nature of data used in stress testing, this report shall provide results for all banks in Seychelles collectively, as well as the sub-set of foreign banks. It is vital to note that this is the first time the results of such scenario analysis are being discussed in a publicly available document and at the same time appreciate the significance of such information. In this first publication, the focus has been on the element of credit risk, given that by the very nature of a bank's operations, this is a component that is typically the largest necessary risk element which must be properly managed.

The various scenarios did not reveal any worrisome outcomes, although they are useful to help guide CBS and the banks in relation to the necessary preventive action that may need to be implemented. The timely implementation of such would be an important tool to ensure the continued soundness of the banking sector. Another key

16. The model used is one which has been devised by Martin Cihak.

point to note is that this test is a static model, which is a key limitation in that it does not take into consideration that CBS should intervene in a timely manner to require the bank to take necessary remedial actions to prevent them from even reaching the 12.0 per cent threshold. The model is nonetheless deemed as a vital part of the analysis of potential future outcomes without necessary action.

The tests applied for this round focused on the element of credit risk mainly. It is worth noting that the key impact metric being assessed was the risk weighted capital adequacy ratio (commonly referred to as "RWCR" or on some occasions "CAR"), which in Seychelles is set at 12 per cent[17]. In principle, the international norm for this is set as a baseline of 8 per cent. The Authorities globally have however appreciated that capital is a crucial element that will help banks withstand shocks and over the years, the consensus is that banks must always be above this minimum. Practically, this is enforced in various other jurisdictions by the imposition of mandatory buffers which sit on top of this minimum of 8 per cent[18]. In Seychelles, currently there are no specific breakdowns for additional buffers, but merely a requirement for the bank's RWCR to be above 12 per cent[19]. Accordingly, for illustrative purposes, a horizontal line has been included in the below charts for each scenario to depict this minimum of 12 per cent.

Under the first scenario that was considered, the below listed provisioning rates (or rather under-provisioning) were applied against the bank's current portfolios. These rates are provided alongside the legally required provisioning rates for ease of reference.

	ASSUMED PROVISIONING RATES	REQUIRED PROVISIONS
PASS LOANS	0.0%	1.0%
SPECIAL MENTION LOANS	2.0%	5.0%
SUBSTANDARD LOANS	10.0%	25.0%
DOUBTFUL LOANS	20.0%	50.0 %
LOSS LOANS	50.0%	100.0%

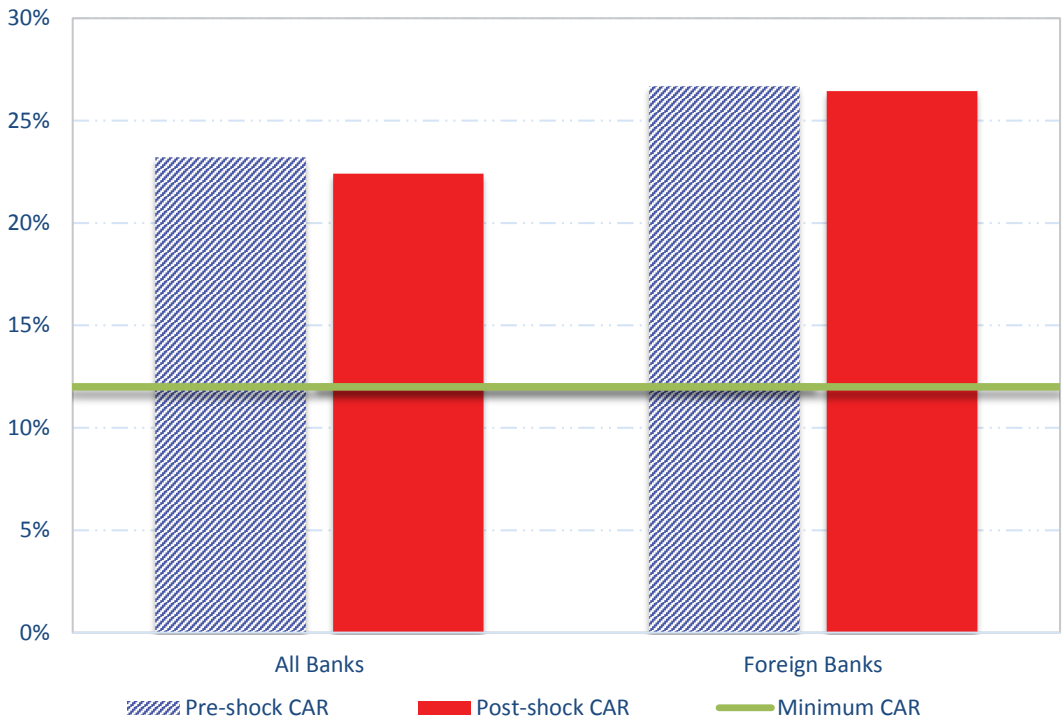
17. This is provided under section 23(4) of the Financial Institutions Act, 2004, as amended (FIA).

18. Seychelles is predominantly still at Basel I standards, and plans are underway to adopt some elements of both Basel II and Basel III. This will require legislative amendments, and the process is already underway. The element of training will also be a vital role in the adoption of these new standards.

19. Section 23(5) of the FIA in essence allows for a bank to remain in operation even if it falls between the 8 percent and the 12 per cent level, but this is on the assumption that the institution takes necessary measures to rectify this deficiency. In addition, section 13(1)(f) of the FIA provides that CBS may revoke a banking license or vary its terms and conditions if its RWCR falls to 8 or below 8 per cent.

Moreover, a haircut of 100 per cent was also assumed[20]. The outcome under this first scenario is illustrated in Chart 7. As can be observed therein, there is minimal impact under this scenario on the bank's RWCR which for the banking sector as a whole declined from 23.0 to 22.4 per cent and for foreign banks from 27.0 to 26.4 per cent.

Chart 7: *Results under scenario 1 (under-provisioning)*



The second scenario that was applied assumed that the level of NPLs increased by 30 per cent across all banks and aimed to understand the resulting impact on the banks. This scenario would arise for instance if people were somehow unable to afford to pay off their current existing credit facilities with the banks. A straightforward cause in this regard could be a substantial increase in interest rates such that the repricing of loans rendered significant portions of debtors unable to afford the higher loan repayments, reminiscent of the conditions after the introduction of the IMF-supported reform programme in 2008. Accordingly, a 30 per cent rise in NPLs would require a very severe shock. The intention behind analysing such a scenario is to better understand how resilient the banking sector is to such severe shocks.

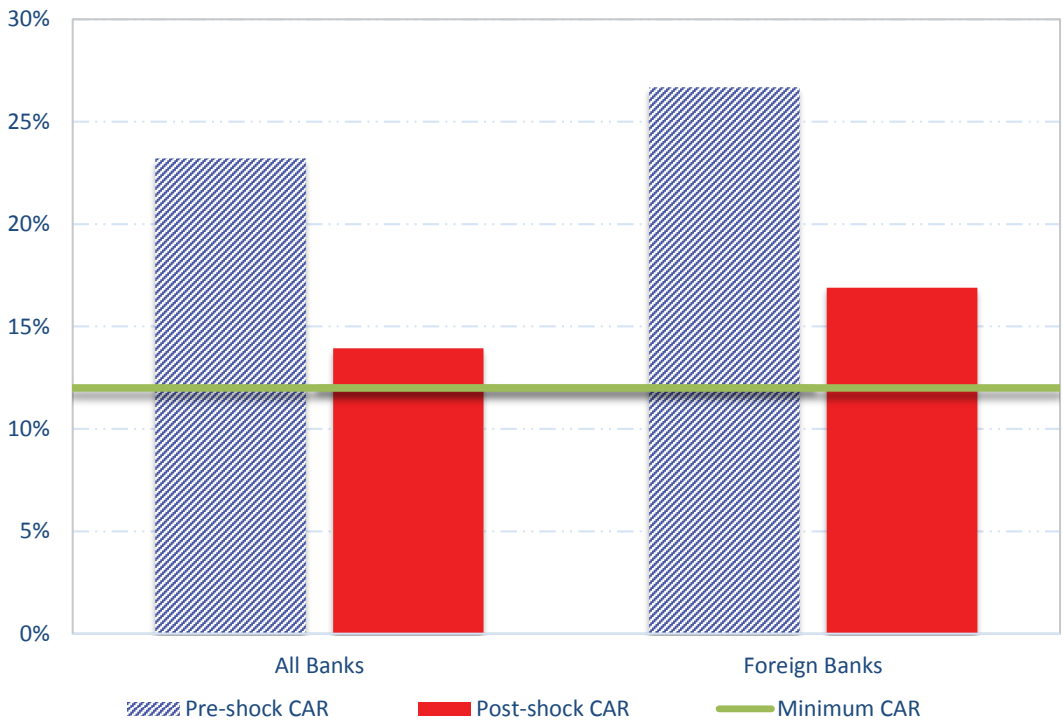
20. The term haircut is used to denote a reduction that is assumed to the value of the assets being used as collateral for the credit facility. In this case, the assumption was that the value of the collateral would be fully wiped out, which in reality is a very worst case scenario but in practice is very unlikely to be the case in most plausible scenarios.

To further extend the severity of the shocks, the following were also assumed:

- **banks would be able to provision for 50 per cent of the new NPLs;**
- **there would be a full effect on risk-weighted assets (RWA) to capital;**
- **the weights for housing loans as part of the RWA computation would increase from 50 to 100 per cent; and**
- **a 30 per cent growth in credit (as a percentage of total loans).**

This test was applied from a credit risk perspective solely. The outcome showed that the ratio for the banking sector would decline from 23.0 per cent to 13.9 per cent, and that of the foreign banks would similarly decline from 27.0 per cent to 16.9 per cent. These declines are naturally to be expected, given that the rise in NPLs will require the banks to set aside provisions, which would hit their capital levels. The main focus here ought thus to be on the level of impact and whether the 12 per cent minimum RWCR is breached, which is not the case, as can be observed in Chart 8.

Chart 8: *Results on RWCR under scenario 2 (30 per cent bank-wide increase in NPLs)*

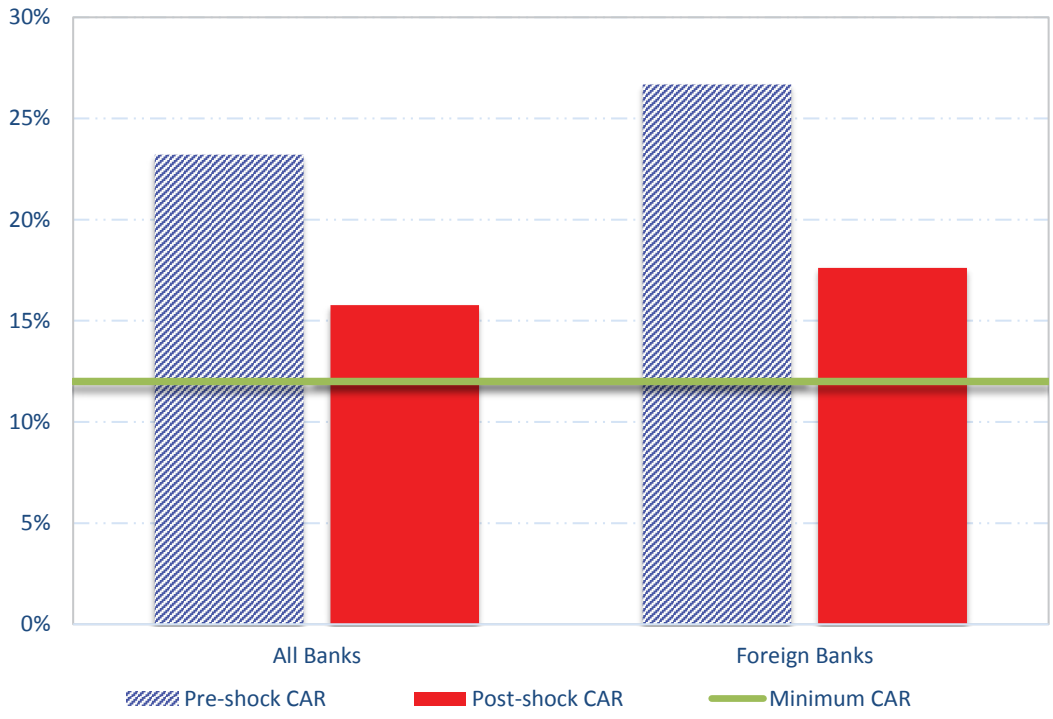


One interesting point here remains the static nature of the model. A bank should, in practice, be proactively managing its portfolio given the adverse impact of the increasing NPLs. Consequently, it would be expected that action be taken before a scenario like this materialized. However, the aim of stress testing or scenario analysis is to assess how the system would handle extreme events.

The third scenario also involved increases in NPLs, although such increases were sector specific in nature. As previously noted in section 4.2, the three sectors that benefitted the most from loans from the banking sector in 2017 were building & construction, tourism and private household. The scenario thus applied various increases in NPLs in these three sectors with the hits ranging between 10 to 30 per cent depending on the size of the institution. To render the scenario even more stressful, it was assumed this time that the banks would be able to fully provision for all of their NPLs.

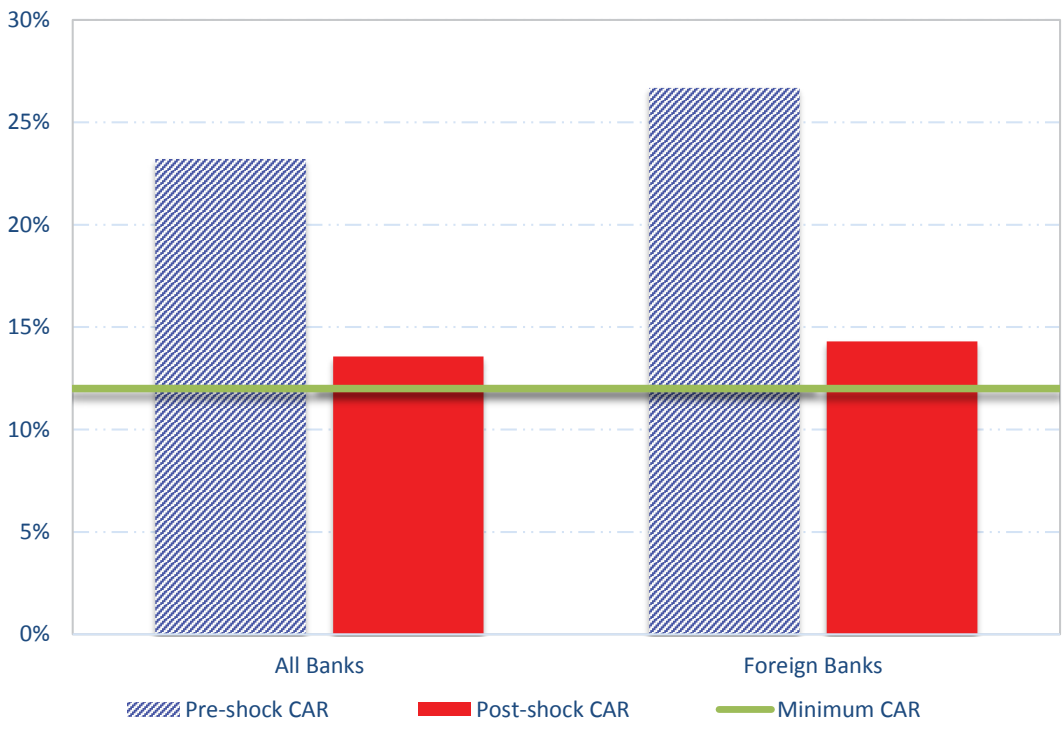
As can be observed in Chart 9, the RWCR for all banks drops from 23.0 per cent, down to 15.8 per cent; and that for foreign banks drop from 27.0 per cent to 17.6 per cent. In effect, this demonstrates that albeit such extreme scenarios, all of the banks in Seychelles remain above the minimum capital requirement of 12.0 per cent.

Chart 9: *Results on RWCR under scenario 3 (sectoral shocks to NPLs)*



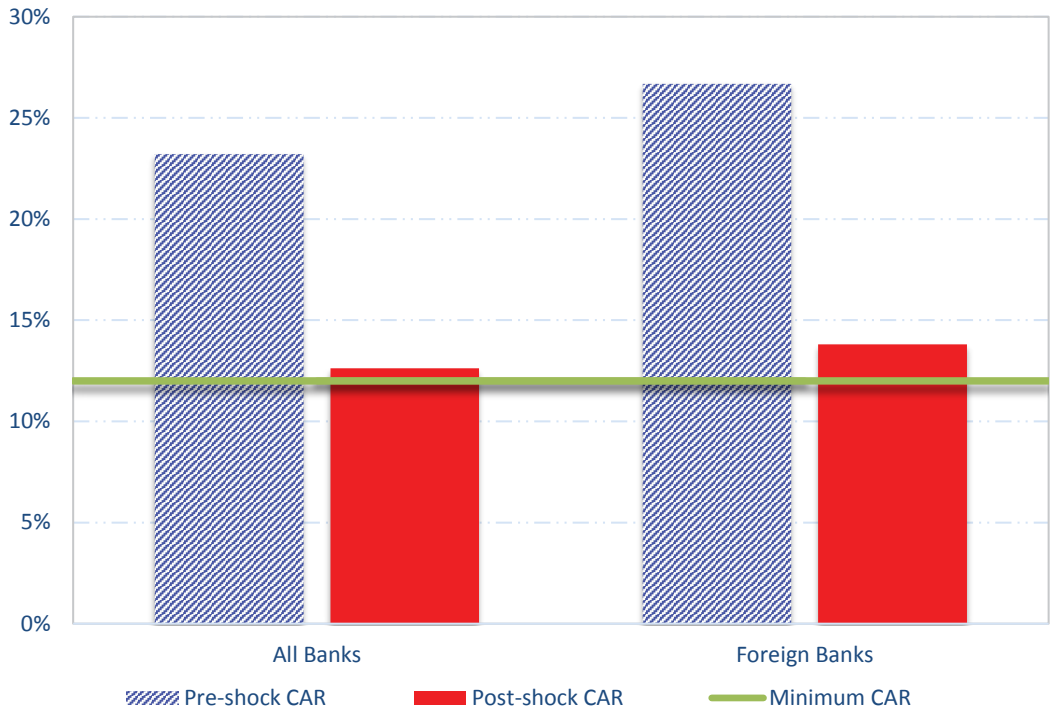
Another iteration of scenario 3 was run as scenario 4, where in addition to the increases in the three largest sectors for loans, the mortgage sector was also impacted by the same hits. Chart 10 below illustrates the impact, which saw a decline from 23.0 to 13.6 per cent for all banks and 27.0 to 14.3 per cent for foreign banks.

Chart 10: *Results under scenario 4 (layering of hits to mortgage sector shock to those from scenario 3)*



Scenario 5 took a more severe test, whereby the 5 largest exposures of the banks were assumed to become NPLs. To render the test even more adverse, it was assumed that the banks would have to fully provision, and the haircut applied was extreme at 100 per cent. The outcomes are illustrated below in Chart 11.

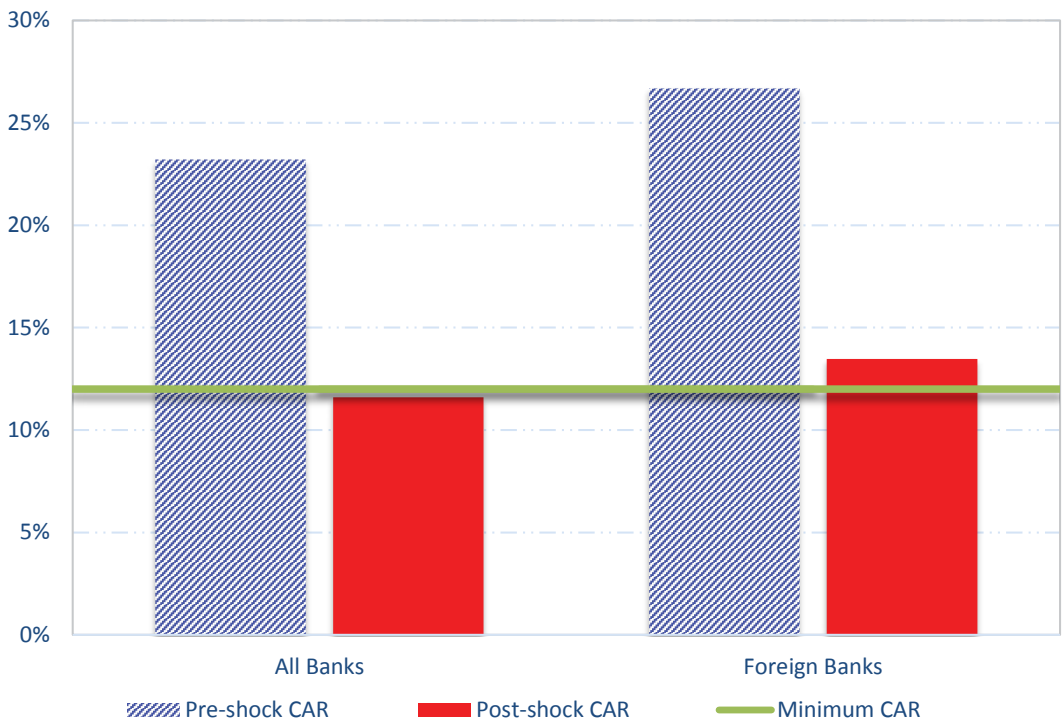
Chart 11: *Results under scenario 5 (5 largest exposures becoming NPLs)*



Even under such extreme conditions, the RWCR for all banks drop from 23.0 to 12.6 per cent, and that for foreign banks from 27.0 to 13.8 per cent. This thus demonstrates that the banks' current capital can withstand quite severe shocks.

The sixth and final scenario that was tested was a hybrid of scenario 1 and scenario 5 (i.e. a combination of under-provisioning alongside the largest 5 exposures becoming NPLs). The results are illustrated below in Chart 12.

Chart 12: *Results under scenario 6 (under-provisioning combined with largest 5 depositors becoming NPLs)*



This scenario was rather extreme in that it took an already severe shock (scenario 5) and layered another additional shock. The results thus showed a decline in the RWCR from 23.0 to 11.6 per cent for all banks and from 27.0 to 13.5 per cent for foreign banks. Were such severe shocks materializing, CBS would immediately intervene and for instance require the bank's shareholders to inject additional capital to buffer against such. Such a move would curtail the impact and thus prevent the ratio from being breached. Moreover, it is vital to note that CBS operates on a policy that banks must always be proactively managing their risks (of which credit risk generally tends to be the largest risk for banks, owing to the nature of their operations).

Overall, the various scenarios that were applied indicated that the banks are adequately capitalized to withstand some rather large adverse situations as at the end of 2017. CBS will continuously be monitoring their positions and stands ready to intervene to require the timely deployment of any required remedial measures.

CONCLUSION

As the domestic financial sector develops, the role of financial stability is to ensure that the balance between innovation and market deepening does not impede upon stability and soundness. Overall, the domestic financial sector is resilient to the common threats assessed under financial stability – credit growth and capital adequacy being prime examples. However, threats presented during 2017 were largely from less quantifiable domains. The political uncertainty – both locally and globally – alongside de-risking were key threats to the domestic financial system.

Whilst the crux of global threats to financial stability arose as finding the correct policy mix, the same could be said of domestic threats. The need to ensure that policy decisions and actions take into account potential threats to the financial system and the provision of financial intermediation was paramount in 2017 and will likely remain so throughout 2018.

External threats such as de-risking and cybercrime cannot be controlled entirely locally however mitigants can and should be implemented to reduce the threat to domestic financial intermediation, in large part due to the relationship with the macroeconomy.

The resilience of the banking sector based on 2017 data demonstrates sufficient capital adequacy to withstand extreme shocks to the system. Such is reflective of the strong regulatory framework and the prudent approach of the banking sector to capital and credit risk. Whilst the analysis was based on end-2017 data the stress tests are conducted regularly, in addition to continuous microprudential supervision, in order to monitor and track resilience. As new risks and developments occur with the banking sector, the Financial Stability Section shall endeavour to capture such in the stress testing scenarios.

Going forward, the domestic financial system will continue to be monitored such that mitigating actions can be taken where necessary to reduce the risk exposure.