



SEYCHELLES

TECHNICAL ASSISTANCE REPORT—SCOPING THE PROSPECTS FOR FINANCIAL MARKET DEVELOPMENT

June 2020

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SCOPING THE PROSPECTS FOR FINANCIAL MARKET DEVELOPMENT IN SEYCHELLES

MAY 2020

PREPARED BY

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GLOSSARY

ABP	Annual Borrowing Plan
AFS	IMF's Regional Technical Assistance Center for Southern Africa – AFRITAC South
ACH	Automatic Clearing House
ATM	Average Term to Maturity
CAA	Credit Auction Arrangement
CBS	Central Bank of Seychelles
CIC	Currency in Circulation
CSD	Central Securities Depository
DAA	Deposit Auction Arrangement
DMS	Debt Management Strategy
FMD	Financial Markets Division
FP	Fiscal Policy
FPAS	Forecasting and Policy Analysis System
FSA	Financial Services Authority
GCP	Government Cash Position
GMRA	Global Master Repo Agreement
HTM	Held-to-Maturity
IRT	Interest Rate Targeting
MCM	Monetary and Capital Markets Department of the IMF
(MoFTIEP)	Ministry of Finance Trade Investment and Economic Planning
MoU	Memorandum of Understanding
MP	Monetary Policy
MPCC	Monetary Policy Consultation Cause
MRR	Minimum Reserve Requirement
OTC	Over The Counter
PCI	Policy Coordination Instrument
PDM	Public Debt Management
PLB	Precautionary Liquidity Buffer
RM	Reserve Money
RSD	Research and Statistics Division
RTGS	Real-Time Gross Settlement System
SBA	Seychelles Banking Association
SCF	Standing Credit Facility
SCR	Seychelles Rupee
SDF	Standing Deposit Facility
TA	Technical Assistance
TIS	Treasury Information System
US\$	US dollar

PREFACE

In accordance with the IMF Monetary and Capital Markets Department (MCM) and AFRITAC South (AFS) Technical Assistance (TA) program in monetary policy framework and operations, a TA mission on scoping the prospects for developing a secondary market for government securities in Seychelles, visited Victoria, during October 29–November 9, 2018.¹ The mission team comprised of Mr. László Búzás (short-term expert), Mr. Sybi Hida (AFS), Ms. Marjorie Pampusa (attachment) and Ms. Carina Selander (AFS).²

The team had meetings with various stakeholders to discuss prospects and impediments for such a market.³ The mission held multiple meetings with various divisions/units at the Central Bank of Seychelles (CBS), the Ministry of Finance Trade Investment and Economic Planning (MoFTIEP) and the Financial Services Authority (FSA). In addition, the mission had a concluding session with Governor Abel, Mr. Christophe Edmond, First Deputy Governor, Ms. Jenifer Sullivan, Second Deputy Governor, and other staff members at the CBS to present and discuss its findings.

The mission team thanks management and staff of the CBS, and the Ministry of Finance Trade Investment and Economic Planning (MoFTIEP), and the Financial Service Authority (FSA) for their hospitality, assistance, and support during the mission.

¹ AFS provides TA and training to Angola, Botswana, Comoros, eSwatini, Lesotho, Madagascar, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Zambia, and Zimbabwe. AFS donors are the European Union, Switzerland, Germany, China, Mauritius, the United Kingdom, Netherlands, European Investment Bank and Australia.

² Mr. Hida only participated in the mission between November 7–9, 2018.

³ In addition to the relevant authorities, the mission met with the Seychelles Pension Fund, the Investment Board, the banking association, one insurance company (SACOS), a few securities brokers/dealers, the securities exchange (Trop-X), and commercial banks.

EXECUTIVE SUMMARY

This Technical Assistance (TA) mission focused on scoping the prospects of developing a secondary market for government securities in Seychelles. The Central Bank of Seychelles (CBS) has a leading role in developing the financial markets and thus acted as the primary counterpart for this mission. However, due to the mission being primarily fact-finding it reached out to all various possible stakeholders; the Ministry of Finance Trade Investment and Economic Planning (MoFTIEP), commercial banks, a pension fund, insurance companies, the securities exchange, securities dealers, etc. In addition, the mission sees the need to coordinate with the World bank (WB) and the IMF country (SYC) team as the former is providing assistance within the legal and payment system areas and the latter provides Seychelles with policy advice under the current PCI program.

Developing a viable government securities market in the Seychelles will take a considerable time and co-ordinated efforts. Money, FX and equity markets that form crucial support functions to the government securities market are barely active, as the uncooperative market environment and still basic infrastructure hampers interbank market activity. In addition, the investor base is thin, the infrastructure is underdeveloped, and the legal framework will need some upgrading.

The authorities should focus their efforts on reforming the primary market for government securities in a way that spurs the development of a secondary market. This includes limiting the access to the primary market to a selected group of market participants undertaking market making, reducing the auction frequency, and issuing more long-term securities. The latter would also contribute to smooth the maturity profile of the domestic debt. The current practice of issuing T-bills for Fiscal Purposes (FP) to meet the weekly cash-flow needs should give way to a more strategic approach.

Changes in the monetary policy framework—the CBS has started its transition from reserve money targeting to an interest rate targeting framework—should also facilitate market development. As the transition progresses, the need for a stronger interest rate channel and a benchmark yield curve will grow. Introduction of CBS bills, as a complementary instrument to absorb liquidity when the Government issuance of T-bills for monetary purposes decreases, would be helpful. It also has the benefit of clarifying, the currently blurred, distinction between monetary policy and fiscal objectives regarding T-bill issuance.⁴

The mission has identified a number of areas where the authorities will likely need further TA. A list of possible TAs as well as a recommended roadmap is provided in Table 1. This activity should be coordinated with other donors, who engage in providing TA in the Seychelles to avoid redundancies and conflicting recommendations.

⁴ Also recommended by TA mission in October 2017 in report “*Monetary Policy Implementation and the Money Market*” January 2018.

I. INTRODUCTION

1. This scoping mission sought to gather facts with a view to providing early guidance on the road towards a viable secondary market for government securities. The mission thus sought to broadly cover all areas linked to such an endeavor. The financial markets in Seychelles are still embryonic and much work remains to invigorate the supportive money, equity and FX markets for a secondary market to develop. In addition, there are reforms needed in the area of debt management and the primary market in order to stimulate the development of a secondary market. Although the legal framework with regards to the CBS and the FSA mandates, and financial market aspects in Seychelles has fairly recently been updated and the most relevant acts are quite adequate, there are some amendments that are needed to provide for the smooth operation of the securities market. Another key feature for market development is the implementation of the planned new payment system.

2. While acknowledging that it will take time and efforts, the CBS and other stakeholders are all very keen to develop the financial markets in Seychelles. They also realize the difficulties associated with Seychelles being a very small island economy with a thin investor base. For reference Appendix I provides for two country experiences (selected based on the mission's experts detailed knowledge and experience, and due to the similarities between Mauritius and Seychelles in particular) on their respective roads to building a secondary market for government securities.

3. The development of the domestic money market is hampered by structural excess liquidity. While some banks show willingness to develop interbank links, the fact that most, if not all, banks are structurally long of liquidity significantly reduces the incentives for money market development. The gradual reduction in government securities issuances, in relation with the public debt-to-GDP target of 50 percent by end 2020, has, and will continue to contribute to increases in excess liquidity.⁵

4. Thus, it will be important for the CBS in the new Monetary Policy framework to manage liquidity so that interbank rates are tightly linked to the policy rate which will be implemented by end of 2018. Once the automated payment system is implemented, the CBS should see a spur in interbank market activity and be able to better assess the interest rate formation on the interbank market.

5. In addition, to support the development of a secondary market the MoFTIEP should review its practice for issuing T-bills. Currently the T-bills issued for FP purposes are motivated purely by cash-flow management and the net issuance—as the government is running surpluses—is very low. As the cash-flows are quite unpredictable, to some extent

⁵ As part of previous economic targets of IMF's Extended Fund Facility (EFF) program and currently part of the Policy Coordination Instrument (PCI) program.

due to internal processes, it leads to very frequent issuances at unannounced volumes, which is not supportive of the development of the government securities market.

6. This report presents the findings of this scoping mission, and options on how to move forward in a sequenced way, and identifies perceived TA needs to support the proposed roadmap. The mission took a broad perspective in order to provide an overview of all areas linked to developing a secondary market. The findings of the mission will provide for a better understanding of the various issues that will need to be addressed along the way, and an indication of how long it would take to reach a point when a secondary market can possibly be initiated. The recommendations provided for each of the areas scoped by the mission are broadly phrased (summarized in the road-map in Table 1 below) as additional in-depth analysis would be needed to provide for more detailed recommendations in each area. This could be addressed by follow-up TA.⁶ The tables of main findings in the respective areas of (i) Infrastructure & Legal, (ii) Primary Market & Debt Management, and (iii) Financial Markets and Monetary Policy Operations, are presented in Appendix II–IV.

⁶ Such follow-up TA will be subject to AFR prioritization of country TA and budget constraints.

Table 1. Roadmap with Main Recommendations and Expected TA Needs

This Roadmap is based on broad findings and assessment of TA needs at the time of the mission and should be updated with more details as the authorities' progress and follow-up/complementary TA go deeper into specific areas. The Roadmap includes expected TA needs which will need to be prioritized according to available resources.

Timing (year)	Legal	Debt Management	Money and FX market	Infrastructure (WB)
2019	<p>Review and revise relevant legislation:</p> <ul style="list-style-type: none"> - Financial institutions Act and Securities Act (with WB). - Bankruptcy and Insolvency Act. - Draft/customize a GMRA for Seychelles. 	<ul style="list-style-type: none"> - Review of strategy (annual borrowing plan) for next year, issuance of some longer-term Bonds (including what type and for what market segment), implementation of issuance calendar (based on reduction of auction frequency). - Improve Government cash-flow management, streamline processes and structures. - Increase transparency in macro fiscal and debt management area. - Develop long-term strategy for increasing investor base. - Open a buy-back facility (window) for households, address related obstacles, like how to deal with immobilized Global Note, registration, technical issues related of redemption, method for calculation of prices, etc. - Investigate possible solutions to list Government securities on the securities exchange, given that there is no proper CSD; technical procedures, registration, CSD, clearing, settlement, etc. - SBA, CBS, Gov, Trop-X to prepare information and communication about the 	<ul style="list-style-type: none"> - Implement new MP framework (possibly, introduce Reverse CBS repos, and/or CBS bills (to replace T-bills issued for MP purposes), limit auctions to banks only, and oblige banks to facilitate customer orders. - Develop temporary collateralized framework for interbank market, to be later replaced by GMRA for horizontal repos. - Develop (or review) market code of Conduct (jointly with SBA). - Review current counterpart agreements and investigate possibility to make amendments including strengthening counterparty obligations. - Continue- FPAS developments. 	<ul style="list-style-type: none"> - Move forward with the Automated payment system project according to Action Plan and CBSs "Financial Sector Development Implementation Plan". - SBA to provide feed-back on proposed technical solutions and proposed amendments to the Legislation and GMRA. - Decide on CSD responsibility- one or two CSD's? - Strengthen supervisory/regulatory authority, licensing, etc.

Timing (year)	Legal	Debt Management	Money and FX market	Infrastructure (WB)
	<p>Expected IMF TA needs:</p> <ul style="list-style-type: none"> - Off-site Review and draft of the GMRA and the B&L Act (could possibly be made part of the WB TA). 	<p>upcoming introduction of the sec on the securities exchange.</p> <p>Expected IMF TA needs:</p> <ul style="list-style-type: none"> - On-site debt management missions to assist with the above (MoF and CBS). - Continuous off-site advice for the set-up of the buy-back facility and the preparations for the listing of securities. 	<p>Expected IMF TA needs:</p> <ul style="list-style-type: none"> - Combined Money and FX market development mission (CBS). - Continued FPAS TA. - (option, jointly with WB?) Market focused workshop, code of conduct, capacity building among banks, the FSA and the CBS on trading. 	
2020	<ul style="list-style-type: none"> - Approval of Acts in AG, Cabinet, and Assembly. - Review and revise (if necessary) FX legislation and regulation with the purpose of introducing hedging instruments (swaps and forwards). <p>Expected IMF TA Needs:</p> <ul style="list-style-type: none"> - Off-site review of any legal amendments 	<ul style="list-style-type: none"> - List Government securities on the stock-exchange. - Implement all required technical and infrastructural features for the listing (settlement, clearing, registration, CSD function (AfriClear role?), etc.). - Investigate possible criteria for market makers, should you wish such a system to be implemented. Assess possible pros and cons of such a system given the small market. - Promote securities and continue to work on increasing the investor base. - Implement GMRA, CBS repo window and Horizontal Repos. - SBA, CBS and Gov to inform and communicate about the introduction of an OTC market. <p>Expected IMF TA Needs:</p> <ul style="list-style-type: none"> - Implementation of infrastructural and technical features, processes, etc. for listing the securities. 	<ul style="list-style-type: none"> - Implementation of recommendations and reforms on the money and FX market - Evaluation of the new MP framework and possible additional changes/modernizations - Continued FPAS developments, including developing a Monetary Policy Report - SBA to assist with training and capacity building among commercial banks for use of repo and prepare for sec market trade. - SBA to assist with training and capacity building for introducing FX swaps and forwards on the market. <p>Expected IMF TA needs:</p> <ul style="list-style-type: none"> - Follow-up TA on the FX and/or money market developments. 	<ul style="list-style-type: none"> - Move forward with the Automated payment system project according to Action Plan and CBSs “Financial Sector Development Implementation Plan” (procurement and implementation of soft- and hardware for trading platforms, settlement system, clearing system, information and quoting platforms, etc.)

Timing (year)	Legal	Debt Management	Money and FX market	Infrastructure (WB)
		<ul style="list-style-type: none"> - Developing a Market maker system (to be implemented at a later stage when investor base has expanded sufficiently). - Supervisory TA needs from the FSA? 	<ul style="list-style-type: none"> - Preparation for/assisting with the introduction of Repo window, reverse repos as MP instrument and horizontal repos. - Developing an MPR (communication). - FPAS. 	
2021	<ul style="list-style-type: none"> - Finalize revised FX legislation (if needed) 	<ul style="list-style-type: none"> - Implement OTC trade of government securities by end year. - Continued work on expanding the domestic and foreign investment base. <p>Expected IMF TA needs:</p> <ul style="list-style-type: none"> - Uncertain. 	<ul style="list-style-type: none"> - Implement Swaps and Forwards on the FX market by end year. <p>Expected IMF TA needs:</p> <ul style="list-style-type: none"> - CBS TA on Swaps and forwards for market use and CBS use. 	<ul style="list-style-type: none"> - Move forward with the Automated payment system project according to Action Plan and CBSs “Financial Sector Development Implementation Plan” <p>⇒ Full scale CSD function implemented along with clearing house and RTGS.</p>
2022	Legal update completed	<p>Secondary market started—to develop over time:</p> <ul style="list-style-type: none"> - New instruments/contracts to be introduced, Forwards, Options, etc. 	<ul style="list-style-type: none"> - FX and Money markets active and supportive of the developing of a secondary market. 	<p>All technical infrastructure and capacity in place.</p> <p>Examine feasibility of connecting the local CSD to international CSDs.</p>

II. STEPS INITIATED BY THE AUTHORITIES TO DEVELOP THE FINANCIAL MARKETS

7. At the request of the Government to create the necessary preconditions for sustainable market development, a Financial Sector Development Implementation Plan (FSDIP) was created by a team of international experts in 2014. The main objective of the FSDIP was to create the necessary preconditions for a sustainable market to develop. While it expected the creation of basic infrastructure (legal environment, CSD, credit systems, etc.) by 2015–17, most of these developments are now expected to be operational by 2020–21.

8. In addition, the authorities have developed a National Financial Education Plan with the purpose of strengthening and modernizing the financial sector. Even though Seychelles has the highest level of financial inclusion in the Southern African Development Community (SADC) several challenges remain. The financial education plan is meant to address some of these by improving the levels of financial capability of the population. This effort bodes well for the development of a secondary market.

9. The modernization of the monetary policy framework, including the introduction of a policy rate, will provide for stronger guidance on interest rate formation in the Seychelles economy. This is another step on the way towards a better functioning money market and will in the long run support the development of a secondary market.

10. The Seychelles Banking Association (SBA) can provide much needed cooperation among the banks and contribute to a “trade-friendly” environment. A key task for the SBA should be to establish a market developed and agreed code of conduct for the money and FX markets⁷ to agree on acceptable behavior between the banks and thus promote interbank trading. The SBA should also contribute towards capacity-building among the banks, including in the area of treasury management to stimulate the interbank market.⁸

11. The establishment of the Seychelles Securities Exchange is another step in developing the financial markets. The securities exchange could be considered for the trading of government securities as a way of activating the secondary market and providing an opportunity for early cash-in. In addition, as government has initiated privatizations, and especially if shares are listed on the securities exchange (which currently they are not), this could invigorate the equity market.

⁷ There is an existing code of conduct for the FX market developed by the CBS at the time Seychelles transitioned from a fixed exchange rate to a floating exchange rate regime in 2008. However, it has not been followed given that banks do not trade. Overtime as commercial banks recruited new staff the FX code and guideline were not passed on.

⁸ The long standing and well-established Mauritius Banking Association (MBA) could possibly provide some guidance on practices and the role of the MBA in developing a secondary market in Mauritius.

12. The CBS intends to introduce reverse repos as a monetary policy tool and use the T-bills currently on their balance sheet as the underlying collateral. As the CBS is holding about 1,2 billion of T-bills in SCR, this would have the potential of mopping up a large chunk of excess liquidity. These are intended to complement the current DAAs and will have the benefit of being a tradable instrument, which could be used to stimulate collateralized interbank market trade.

III. CURRENT CONDITIONS

A. The New Monetary Policy Framework

13. The CBS' monetary policy framework is in a transitional phase from reserve money targeting to interest rate targeting. Under Seychelles' program with the IMF, the CBS has, as of Q4, 2018 shifted from the money target and moved into a framework with a Monetary Policy Consultation Cause (MPCC) with an inflation forecast at its core.⁹

14. The CBS has not yet determined the definition of the policy rate but lean towards implementing it as a ceiling for the standard 7-day Deposit Auction Arrangement (DAA). Announcing a maximum bid rate for the key liquidity-absorbing operations (or a minimum bid rate for the key liquidity-providing operations) should help anchor bids around the level seen as appropriate by the CBS and support the monetary policy stance signal.

B. Liquidity Management and the Money Market

15. The CBS operates a Minimum Reserve Requirement (MRR) system that allows for reserve averaging to stimulate active liquidity management by the commercial banks. The maintenance period is now set to 4 weeks always starting mid-month, on a Wednesday ending on a Tuesday, thus displaying similar seasonal patterns avoiding coincidence with end-month and end-week liquidity shocks.

16. The CBS intervenes frequently to absorb excess liquidity, through Deposit DAA. The CBS will by start of 2019 reduce the "standard" 7-day DAA from three to two times a week on Wednesdays and Fridays. The "non-standard" DAA has been abolished in accordance to previous TA recommendations. The intention is to move to a one-week DAA auction. Figure 1 below shows the distribution of liquidity.

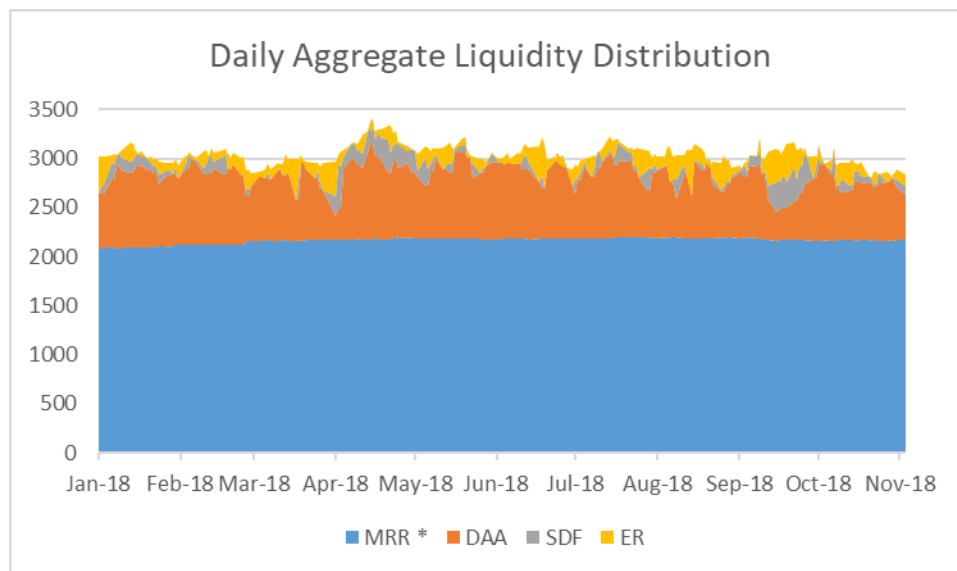
17. The standing facilities are open without limits and the rates attached form a 600 basis point wide interest rate corridor. Both facilities are now accessible through the

⁹ The forecast for inflation will be derived in cooperation with the SYC team on a quarterly basis. It is defined as a moving average of annual inflation with a +/- 2 percentage point fluctuation band.

online portal. The collateral framework should be made available on the website in connection to the CAA, SCF and ELF pages and descriptions.

18. As complement to DAA, the CBS uses government T-bills to absorb excess liquidity, which may lead to sending mixed signals to the market about the intentions of the monetary policy. There is neither explicit mention of the purpose nor any difference in terms when a T-bill issuance is announced. Consequently, some banks may wrongly interpret changes in the T-bill issuance amounts (related to fiscal factors) as a signal that the CBS may not want to absorb more liquidity on longer maturities. And vice versa, the CBS seem to want to use the T-bills for monetary policy purposes to signal a desired interest rate level. This may contribute to the interest rates on the same maturity T-bills consistently differing between Tuesday and Friday auctions. (See more under section 2. D Primary Market).

Figure 1. Daily Aggregate (all banks) Distribution of Liquidity at the CBS



Note: MRR is the Minimum Required Reserves and ER is Excess Reserves defined as Bank Reserves held at the CBS.

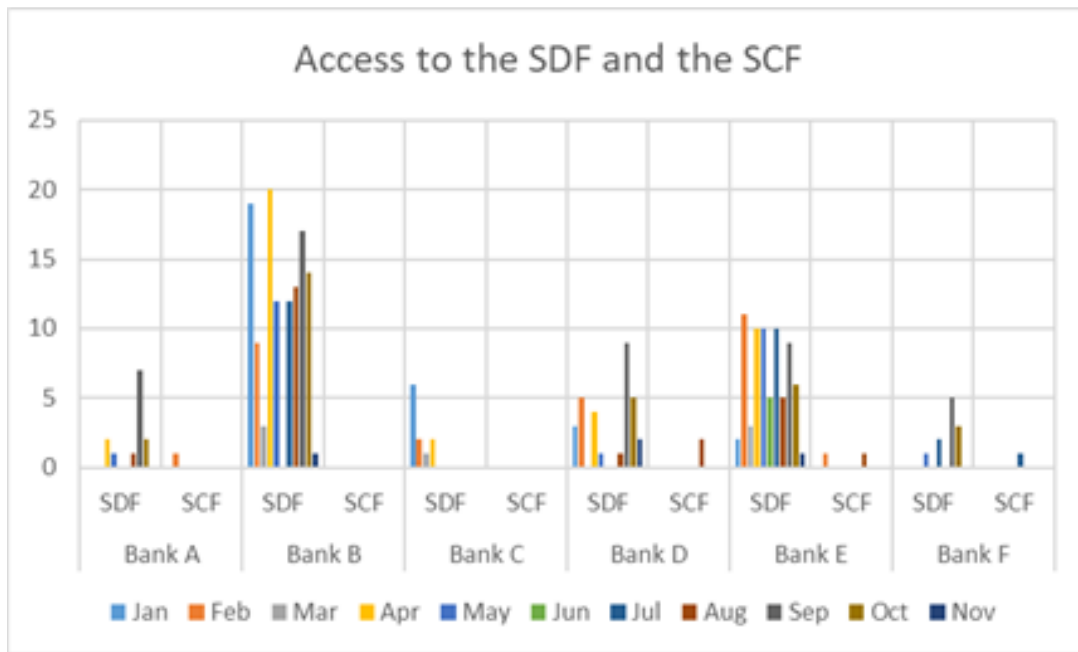
Source: CBS.

19. The CBS omnipresence in the market reduces the incentive for an interbank market to develop. With four liquidity-absorbing operations per week (possibly more if “non-standard” DAA are conducted), banks have little incentive to actively seek interbank counterparties for placing their excess liquidity.

20. The uncooperative market environment also seems to play a crucial role in hampering interbank market activity. The commercial banks in Seychelles seem to have little trust and will to engage with each other. There are instances where both the Standing Credit and Deposit Facilities (SCF/SDF) have been accessed, when banks have failed to agree on a mutually beneficial overnight rate (see figure 2 below), despite the width of the corridor at 600 basis points. In addition, there are few credit lines established between the

banks, and in the few cases there are, they are often one-way. In such an environment it may be futile to try to establish an uncollateralized overnight market, thus the CBS may want to consider making it collateralized instead. Appendix V provides more information about the commercial banks' liquidity management.

Figure 2. Access to the Standing Credit and Deposit Facility (number of times per month, per bank, in 2018).



Source: CBS.

21. The lack of dealing capacity at banks also does not support the development of the interbank market. Banks in general have no dedicated Treasury desks, staffed with competent staff for effective management of their liquidity on the interbank market. An Interbank Working Group comprising the CBS and banks' representatives has recently been created to address these issues constraining the interbank market.

C. Debt Management

22. At the end of September 2018, the total government and government guaranteed debt amounted to SCR 13,052.44 million, representing about 60 percent of GDP. After hitting 150 percent of GDP in 2008 and following debt restructuring agreements reached with major official and commercial creditors, the public debt of Seychelles has been put on a steadily decreasing path since 2010. The Debt Management Strategy for the years 2019–21 forecasts reaching the 50 percent Debt/GDP level by 2020.

23. Direct domestic debt of the government amounts to SCR 7,599.36 million (or 53 percent), domestic guaranteed debt accounts for 5 percent and external debt makes up 42 percent of the debt stock. The domestic debt (including guarantees) is predominantly in securities (82.8 percent), the rest consists of loans (15.3 percent) and other liabilities (1.9 percent) (Figure 3).

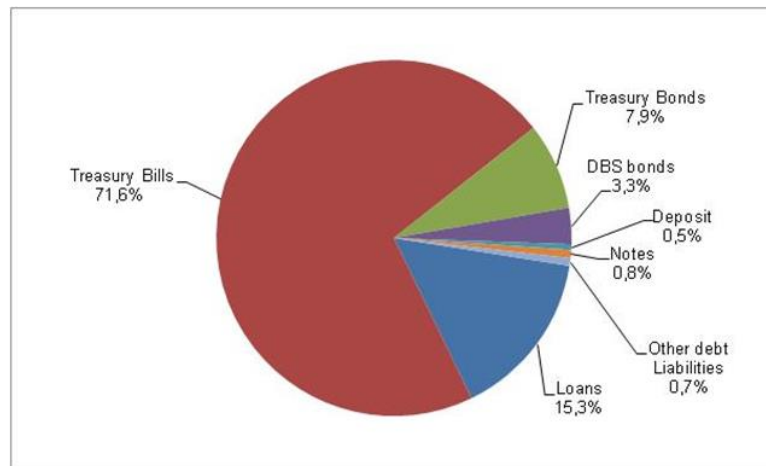
24. The overarching objective for debt management in Seychelles is “To ensure that the Government’s financing needs and payment obligations are met on a timely basis, and at the lowest possible cost, consistent with a prudent degree of risk”.¹⁰ The Debt Management Division of the MoFTIEP has the primary responsibility of debt management including management of government and government guaranteed debt as well as monitoring all nonguaranteed public enterprise debt. The Division only has 3 staff members and would benefit from an increase in resources. Public debt management in Seychelles is regulated by the Public Debt Management Act of 2008 (amended in 2009 and 2012).

25. An annual borrowing plan (ABP) is included into the Debt Management Strategy (DMS) and submitted to Parliament together with the Annual Budget for the forthcoming year. The 2019 DMS contains a detailed plan for external debt but remains vague in relation to the domestic issuance schedule. A more detailed borrowing plan containing all auction days, the aggregated amounts for T-bills of different maturities, as well as the planned issuance of longer-term securities would enable investors to better plan their investments. This ABP then can be supplemented by quarterly issuance plans, which would contain detailed data about the forthcoming offerings. One reason why banks keep high liquidity buffers is because they do not know how much T-bills will be auctioned.

26. The MoFTIEP aims to lengthen the maturity profile of the debt to reduce roll-over risk. They have also been encouraged to do so by the IMF country team. Smoothing the maturity profile and issuing more longer-term bonds will also be helpful in developing a secondary market. However, as debt is primarily issued for cash-flow reasons and thus mostly consists of rolling over maturing T-bills, it is unclear as to how this will be implemented. There is no clear link between a medium-term budget, medium-term fiscal policy objectives and the debt strategy and borrowing plan. This is an area which the MoFTIEP should develop further.

¹⁰ To be found at: <http://www.finance.gov.sc/national-budget/25/>.

Figure 3. Domestic Debt by Instrument Type as of September 30, 2018



Source: Ministry of Finance, Trade, Investment & Economic Planning.

D. Primary Market

27. The MoFTIEP issues discount T-bills with tenors of 91, 182 and 365 days at regular auctions conducted by the CBS weekly on Tuesdays and on Fridays. While there is no difference between the securities offered on these 2 auction days, the funds raised have different purposes; (i) the Tuesday auction is conducted for monetary policy purposes (to mop up excess liquidity) and is thus part of the monetary policy toolbox of the CBS; (ii) on Fridays, the issuance follows the objectives of the fiscal policy (mainly the cash management objectives of the MoFTIEP).

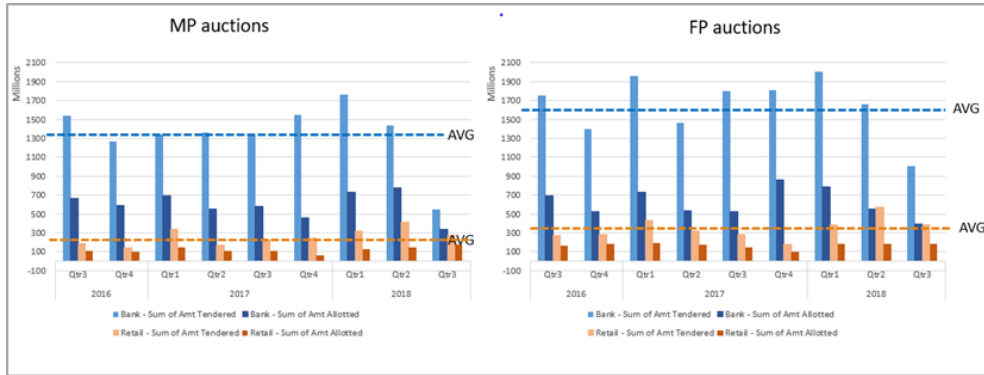
28. There is no regular issuance of longer-term domestic securities. In the past there had been occasional issues of 3, 5 and 7-year bonds (in 2014 and 2017) issued by the government for monetary policy and for fiscal purposes and as a means to encourage private saving. The government also provided a guarantee for a 3-year bond issued by the Development Bank of Seychelles in 2017.

29. Bonds represent only about 10 percent of the domestic government securities outstanding. As a result, the Average Term to Maturity (ATM) of the domestic debt is 2.3 years (vs. 6.1 years of external debt) and the share of debt maturing in 1 year is 72 percent, which exposes the government to a significant roll-over risk. In order to lengthen the maturity profile of the domestic debt, new bonds will be issued in 2019, although the exact amount is still being discussed. It will come at a cost as the bonds will certainly need a higher coupon to be sold in the market.

30. T-bills are issued for monetary policy (MP) purposes, as well as for fiscal policy (FP) purposes. Despite the identical characteristics of the T-bills issued for MP and FP

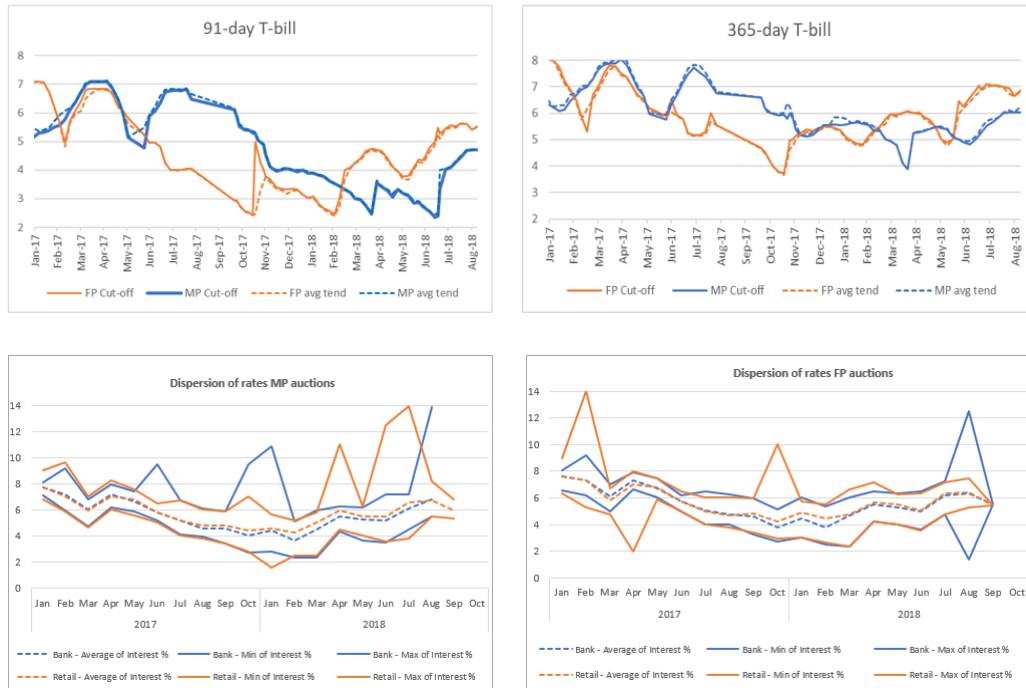
purposes, the market makes a distinction between the two auctions. The investor base of the Tuesday auction is tilted towards financial institutions and both the average rates and the tendered amount tend to be lower in comparison with the Friday auctions (which see higher tendered amounts and higher accepted yields, see figures 4 and 5). This can be explained by the fact that either the CBS is using the auction rates as signals for market, or by the significant cash-flow needs of the government, which have to be covered, or both.

Figure 4. Demand and Supply Developments at T-Bill Auctions (quarterly sums of amounts tendered and allotted for all tenures)



Source: CBS.

Figure 5. Cut-off and Tender Rates (monthly averages) for T-bills (91 and 365 days tenor) for MP and FP Purposes; Dispersion of Rates for MP and FP T-Bill Rates by Retailers and Banks (monthly averages, all tenors)



Source: CBS.

31. As the balance of the government account at the CBS is not remunerated there is little incentive for the MoFTIEP to be more flexible in their acceptance of amounts. At times, when the tendered amounts are high, and the rates are deemed to be favorable the MoFTIEP should accept more bids and create cash buffers. This would certainly help to make them less exposed to changes in market demand and keep yields at the FP T-bill auctions closer to the level of those of the MP actions.

32. Participation at the auction is not limited to a dedicated group of financial institutions (primary dealers or market makers). All investors types, whether institutional or retail, domestic or foreign may submit bids directly. The process is not electronic, so bidders are required to place their bids into a Tender Box located at the entrance of the CBS building or send e-mails to a secured e-mail address.

33. A well-functioning primary market is a pre-requisite for developing a secondary market. Other support markets will also become necessary, such as the money, FX and equity market to spur further deepening of the secondary market. Thus Seychelles authorities should to begin with focus on improving the functioning of the primary market along the lines described in this report, including most importantly upgrading the payment system and legal infrastructure.

E. Investor Base

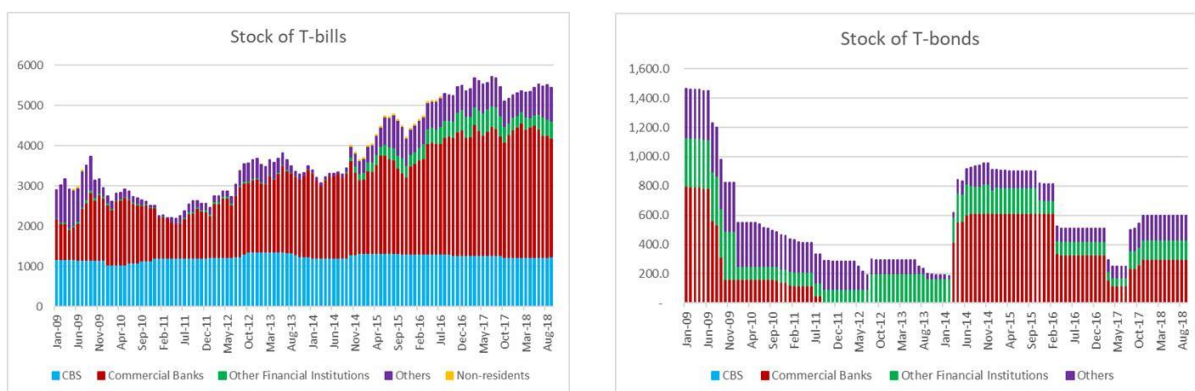
34. Commercial banks constitute the largest investor base for government securities, as investment into T-bills is the major vehicle to manage their liquidity. They hold 54 percent of outstanding T-Bills and 50 percent of T-bonds. Out of the 9 banks currently present in Seychelles, only 5 have government securities positions. All securities are marked as Held-to-Maturity (HTM) and not available for sale or trading.

35. CBS holds 23 percent of outstanding T-bills in their portfolio based on a Memorandum of Understanding with the MoFTIEP dating back to 2010. The purpose of this portfolio is to (a) undertake temporary and or permanent adjustments in liquidity by (i) collateralized transactions, (ii) selling T-bills for permanent sterilization purposes, and (b) to earn income that can ensure independence and enhance standing of the CBS in domestic and international markets. As the liquidity situation is eroding the balance sheet of the CBS, the latter purpose has become more predominant.

36. Non-bank financial institutions hold 8 percent of outstanding T-Bills and 22 percent of T-Bonds, while others, comprising mainly retail investors and to a lesser extent non-financial corporates account for 15 percent of outstanding T-Bills and 28 percent of T-bonds (Figure 6). The non-bank financial institutions licensed in Seychelles represent the pension funds, insurance companies, and various types of investment funds (private, professional and public). They are well regulated by the relevant industry Acts that are accompanied by guidelines detailing eligible assets for investment. None of the

investment funds currently incorporated under the laws of Seychelles is active in the domestic market, citing as the main reason the lack of investable assets. Foreigners, as investors in the government securities, are currently not present in the domestic market - at least not in the official statistics.¹¹

Figure 6. Investor Distribution of Government Securities
(as of November 2018)



Source: CBS.

F. Legislation and Regulation

37. There are several legislative acts that regulate the activity of market participants in the field of issuance and trading of government securities. The Financial Institutions Act (2004) enables banks to engage in *buying and selling debt securities* for their own account or for the account of customers. They may also engage in *safekeeping and administration of securities* and provide services as a *portfolio manager or adviser*.¹² Transactions with, or guaranteed by, the government are *exempt from the large credit limits*.¹³

38. The Securities Act (2007) limits dealing in securities to those, who are licensed to do so.¹⁴ Financial institutions licensed to carry on business under the Financial Institutions Act are *exempt from the licensing requirements* if any dealing is by way of offering for *underwriting, subscription* or *inviting to purchase securities in on the first sale* thereof.¹⁵

39. Government securities are not defined as securities under the Securities Act. Securities are defined among others as instruments creating or acknowledging indebtedness

¹¹ Anecdotal evidence suggests that they may be invested in the local securities market using resident intermediaries, but in the absence of statistical data it is difficult to judge to what extent.

¹² Para. 4.(d),(i),(j)

¹³ Para. 29.(1), (4)

¹⁴ Para. 45.(1)(a)

¹⁵ Schedule 4.

(e.g., debentures, bonds, certificates of deposit) “*other than ...*(e) any instrument creating or acknowledging indebtedness in respect of *money raised by the Government of Seychelles* or any public authority created thereby.”¹⁶ As government securities do not fall under the scope of the Act, it remains to be seen if they can be introduced (listed) on the Seychelles Securities Exchange. If they were, trading with them outside the Exchange would be made impossible by the limitation imposed by the Act that “*no dealing in a security listed in Seychelles shall take place in Seychelles except on the Seychelles Securities Exchange on which it is listed in accordance with this Act and any regulations or rules made hereunder.*”¹⁷

40. Short selling, per se, is not prohibited by the Act, but naked short selling is.

Except in accordance with regulations made by the Minister, on the recommendation of the Securities Authority, a person shall not sell any listed securities which that person or that person’s principal does not own either for that person’s own account or for the account of another person.¹⁸

41. Notwithstanding, covered short selling is possible based on the definition of ownership of securities.

A person is treated as owning securities only if that person (a) or his agent is legally entitled to the securities; (b) has purchased the securities, or has entered into an unconditional contract to purchase the securities, even if he does not yet have title to them; (c) owns other securities convertible into or exchangeable for the securities and has tendered the other securities for conversion or exchange; d) has an option to acquire the securities and has exercised the option; or (e) has rights or warrants to subscribe to the securities and has exercised the rights or warrants, and that person or that person’s agent has received or will receive a fixed or currently ascertainable amount of the securities at a fixed or currently ascertainable price.¹⁹ A person contravening this regulation commits an offence and may face fines and/or imprisonment.

42. Licensing and operation of non-bank financial investors are regulated by relevant Acts: (i) the Seychelles Pension Fund Act (2005); (ii) the Mutual Fund and Hedge Fund Act (2008), (iii) the Insurance Act (2008) and supplemented by relevant guidelines.

43. Authority to borrow in the domestic market is regulated in the Public Debt Management Act (PDM) from 2008. The Minister of Finance “has exclusive right to, for and on behalf of the Government, in the manner provided for in this Act, raise debt from within the Republic of such sums which in the opinion of the Minister are necessary to defray expenditures which may be lawfully defrayed”.²⁰

¹⁶ Schedule 1.

¹⁷ Para.8. (7)

¹⁸ Para. 67.(1)

¹⁹ Para. 67. (2)

²⁰ Para. 8.

44. Under the PDM Act securities are debt instruments issued under the authority of the Minister as evidence of a local or foreign debt raised under this Act and include bonds, and bills issued under section 9.²¹ These securities (i) shall, to the best possible extent, *be auctioned* through market-based procedures; (ii) maybe *traded or transferred* in a manner consistent with regulations governing securities, trades, and transfer; (iii) shall be *held by investors in book entry system*, the system of which shall be maintained by the Central Bank or by whoever conducts security auctions on behalf of the Government.²² The process of issuing government securities is described and regulated in the Operational Guidelines for the Issuance and Management of Government Securities (2018).

45. The Minister may raise a debt by issuing bills and bonds for the exclusive use of monetary policy of the Central Bank. The terms and conditions of such bills and bonds shall be determined by the Ministry and the Central Bank and the proceeds shall be held in an account with the Central Bank.²³

46. The issuance of government securities for monetary policy purposes is regulated in detail by an MoU. The Memorandum of Understanding on the Issuance of Treasury bills and Treasury bonds for monetary policy purposes was concluded between the Ministry of Finance and the Central Bank in 2012.

47. The role of the CBS with regards to the issuance of government securities is defined in the CBS Act (2004).²⁴ It states that: ‘the Government may, on such terms and conditions as may be agreed with the CBS, appoint the CBS as agent to undertake the issue and management of securities. National Payment Systems Act (2014) authorizes the CBS “the Central Bank may act as a central securities depository.”²⁵

48. There is no Global Master Repo Agreement (GMRA) in place. A General Repo Agreement is being discussed among stakeholders, but it seems to be stuck with the definition of the insolvency. From this point of view, in order to facilitate certain transactions with financial collateral, the Seychelles Bankruptcy and Insolvency Act (2013) should be reviewed and modified accordingly. Another impediment in repo trading is the immobilization of the securities series (i.e., the whole series is treated jointly). The establishment of a CSD and the dematerialization of government securities should solve this problem.

49. Since the removal of capital controls in 2008 non-residents may have unlimited access to securities issued in Seychelles. Government securities can be purchased by any

²¹ Para. 2.

²² Para. 9. (b) (c) (d)

²³ Para. 13 A. (1) (2) (3)

²⁴ Section 34. (1) (b)

²⁵ Para. 4. (19) (f)

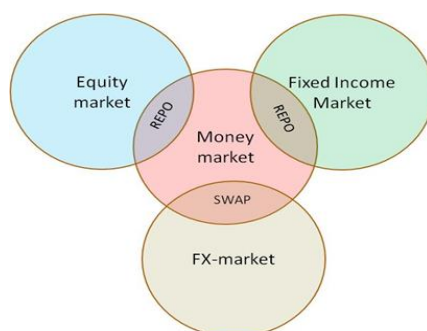
individual and in the case of a body of persons they should be incorporated or registered under the laws of their country of domicile.²⁶ The Business Tax Act (2009) applies taxation on non-residents earning certain types of income in the Seychelles including interest paid by a resident of the Seychelles to a non-resident that is a non-financial institution. Interest income on T-Bills is taxed in the form of withholding tax at a rate of 5 percent for non-residents that are non-financial institutions, but zero rate if they are financial institutions. Residents also enjoy a zero rate on interest earnings on T-bills. There is no capital gains tax in Seychelles and a number of states have double taxation agreements with Seychelles.²⁷

50. Financial institutions in Seychelles currently apply IAS39 rules as their accounting rules, but this will be changed to IFRS9 in 2019. Government securities purchased by them are marked as HTM and kept in the banking (investment) portfolio. They do not hold a trading book and there are no securities Available for Sale (AFS), which creates an impediment to secondary market sale and trading.

G. Infrastructure

51. The basic market infrastructure that would be needed to introduce trading in government securities is currently missing. The development of the securities market cannot take place independently from the level of development of other financial markets and is largely influenced by the existence of the financial infrastructure used by these adjoining markets (Figure 7 below illustrates the interdependencies between the financial markets).

Figure 7. Relationship Between Financial Markets



Source: IMF staff.

52. Functioning money and FX-markets would require the existence of several electronic systems and platforms. It should include a nation-wide payment system (a Real-Time Gross Settlement system - RTGS) that facilitates timely and safe settlement of transactions between banks and interbank trading platforms (like the Reuters dealing, or

²⁶ Foreigners may not be recognized as non-residents as they have to have a domestic bank account in order to participate at the auction.

²⁷ Bahrain, Barbados, Botswana, China, Cyprus, Indonesia, Malaysia, Mauritius, Oman, Qatar, South Africa, Thailand, United Arab Emirates, Vietnam, Zambia and Monaco.

Bloomberg). These can also be used for concluding repo and collateralized transactions. The lack of an RTGS system is a major technical impediment to interbank trading, as banks will be less likely to engage in interbank transactions if they are unsure about their intraday positions.

53. To process transactions with securities banks should be connected to a Central Securities Depository (CSD). This should be done via a settlement system for securities (that has an interface to the RTGS) and (in case they are auction participants, or primary dealers) to the electronic auction platform operated by the Debt Management Office or the Central Bank. Securities trading, including government securities, can take place on a Stock Exchange/Securities Exchange, which requires connectivity to these systems. Over-the-counter (OTC) transactions can be executed not only by phone but also on different trading platforms including specialized ones: Bloomberg, Reuters and MTS.

54. All the above systems except for the Seychelles Securities Exchange and the adjoining (limited operation) clearing and depository institutions (AfriClear and AfriDep) are currently absent in Seychelles. The lack of the systems listed above means that some type of transactions cannot be concluded and settled. In the case of Seychelles an overnight repo transaction being concluded over the phone cannot be settled as the confirmation will take place by post sent to the securities registry operated by the CBS (or by submitting physically on site).

55. In the absence of a CSD settlement of primary (and secondary) market transactions takes place in registry maintained by the CBS. The securities are not dematerialized, but immobilized (represented by a global note), which makes secondary market trading and early redemption of individual securities holdings quite troublesome. This would be a problem for conduction horizontal repos (i.e., among the banks) as well.

56. Market participants blame the small size of the domestic market for the lack of trading facilities. But a greater problem is that the market is so small that investments into this market infrastructure is quite unfeasible. At the same time, some services that would facilitate more trading are absent because of the lack of interest. No bank in Seychelles wants to provide custodian services—they say they lack the capacity (or expertise), so International Business Companies rather open accounts in Mauritius.

IV. THE WAY FORWARD—REFORMS AND TA NEEDS

Monetary Policy Operations and Money Market

57. To foster the development of an interbank market the CBS has significantly reduced the number of its short-term liquidity management operations. In addition, the CBS should have the flexibility to adjust the final allotment amount based on the latest information on liquidity conditions. By stressing that the announced intended allotment

amount is indicative, the CBS would keep the flexibility to react to new information and to adjust the tender rates in line with the policy rate it is about to implement.

58. The CBS could support domestic banks to set up secured interbank credit lines, even if the structural liquidity surplus currently discourages such efforts. An active secured credit line requires a written confirmation by the CBS to the lender that the borrower has mobilized the appropriate assets as collateral. The development of a web of secured credit lines between banks could provide for a more active (collateralized) interbank market until such time horizontal repos can be introduced.

59. As the issuance of T-bills for monetary policy purposes is gradually decreasing, one option is for the CBS to replace them with central bank bills with tenors up to two months.²⁸ This would have the benefit of creating stronger incentives for a secondary market to develop as well as becoming a much clearer signal of the monetary policy stance.²⁹

60. Expected TA needs include money and FX market development, continued FPAS TA and possible legal assistance for the implementation of repos. (See Appendix VI, Table A5) It is assumed that the WB continues their support of the payment system project, which includes legal aspects and the review of some crucial acts.

Primary market and debt management

61. The Treasury (via the CBS) could, as a temporary feature, offer a buy-back window for households that need early redemption on their T-bills and bonds. Until a secondary market is established this would offer a temporary solution to the currently perceived problem. In addition, the authorities could list the securities on the securities exchange making them more accessible for foreign investment and easier to trade as long as there is no infrastructure to support OTC trades.

62. To smooth out the domestic debt profile and support secondary market development the MoFTIEP should replace some of the T-bills with longer term bonds. This would contribute both to reducing roll-over risks and to matching the maturities of debt with financing needs, as well as contribute to secondary market development as bonds typically constitute most of secondary market trade. The planned new issuance of bonds in 2019 is a starting point but looking forward more bonds will be needed.

63. The MoFTIEP should also publish an auction calendar to help market participants plan their liquidity management and reduce uncertainty. The calendar would provide estimates of government financing requirements on an annual, quarterly and monthly basis. While it may be indicative at the start of the year, it would become more

²⁸ CBS bills have a legal basis in the CBS Act but has not been used actively.

²⁹ This step would have implications for the CBS' capital position, as CBS bills are considered monetary liabilities, and the CBS' capital is appropriately required by law to be maintained above 10 percent of monetary liabilities.

accurate about the planned issues as the deadlines approaches. This would in parallel require improvements in the MoFTIEP cash-flow forecasts.

64. The CBS and the MoFTIEP should consider introducing fees for the services provided by the CBS and at the same time remunerate the government account to incentivize optimal behavior. This would discipline the MoFTIEP in their issuance of T-bills and help reduce the frequency of auctions, as well as give a stronger incentive for flexibility in the allotment procedures, i.e., to become more opportunistic when market conditions are good.

65. The development of the government securities market in Seychelles would require a well-designed approach to widening of the investor base. Promoting the use of collective investment schemes not only abroad but in the domestic market as well, incentivizing (e.g., tax benefits) savings in voluntary private pension funds, offering easier access for non-residents to the domestic securities market together with the implementation of the necessary technical infrastructure would ensure a stable demand for government securities in the medium- and long-run.

66. Expected TA needs include, among others, debt and cash management, implementation of a buy-back window, and listing of securities. (See Appendix VI, Table A5).

Legal and infrastructural developments

67. The new automated payment system is intended to include a CSD function at the CBS. This in-house solution comes with pros and cons that should be carefully considered before a final decision is made (see table 2 below).

Table 2. Pros and Cons of a CSD in house at the CBS

In House CSD for Government Securities	
Pros	Cons
Possible capacity advantage	There would be 2 CSDs in the country – higher cost – connectivity issues
Trusted authority	The existing CSD could be expanded to accommodate for trades outside of the securities exchange
More easily linked to the RTGS and the ACH as they would be set up simultaneously	Current Securities Act applies the regulatory and licensing responsibilities for a CSD to the FSA
More easily accommodative to OTC trading	Too many responsibilities appointed to one authority? – Resource constraints?

Source: IMF staff.

68. Listing government securities at the securities exchange could help promote a secondary market, attract more foreign investment and thus widen the investor base. However, for this to be possible the following is needed:

- Amendments to the Securities Act, with regards to the definition of government securities and the possibility to trade the government securities OTC; and
- Securities would have to be dematerialized, separable from the global note.

69. Since a GMRA will take time, the CBS is working on drafting a general agreement to facilitate repos and reverse repos between the CBS and the financial institutions that could be considered as an intermediate solution. However, it would most likely require some changes in the Bankruptcy and Insolvency Act to cater for default, without it the CBS would bear all the risk.

70. In conjunction with the implementation of the new automated payment system, the CBS may want to consider implementing counterparty agreements with the institutions and authorities using the system. These agreements could preferably stipulate the terms and conditions, and annual fees for the counterparty, in line with the various degrees of usage: (i) eligible counterparty in money market operations, (ii) eligible counterparty for FX operations, (iii) use of payment system for transfers. This would help finance this costly, but much needed infrastructural project. In the terms and conditions both benefits, and obligations could be included. The latter part could be made to include demands for upholding markets, contribute to educate the public on financial products, etc. This would be helpful for the CBS in developing its financial markets and make clear what is expected from the financial institutions operating in Seychelles.

71. The above suggestion could also very easily be combined with the implementation of a market maker system for government securities, should the CBS wish to implement such a system. However, it has to be carefully analyzed as it has both pros and cons (see Table 3 below).

Table 3. Pros and Cons of a Market Maker System

Market Maker System	
Pros	Cons
Would limit retail customer access to primary market and increase client trade for banks	May be viewed as favoring banks and further increase their profits – difficult to gain support for
Should generate trade between banks	Limiting the number of banks has no impact as only half of them participate in the Auctions
Will come with obligations linked to purchase at the auction and trade in the secondary market	Increased risk for collusion
Increased transparency (daily fixing/trade reporting), market information and marketing	Difficult to implement ahead of the new infrastructure project

Source: IMF staff.

72. Pending decision about a market maker system, there would be a case to restrict access to the primary auctions to a distinguished circle of financial institutions.

Domestic and foreign corporates, non-bank financial institutions and retail investors could submit bids through these banks.

73. Expected TA needs include primary and secondary market operations, building a market maker/primary dealer system and investor base development. (See Appendix VI, Table A5).

Appendix I. Case Studies: Mauritius and Hungary

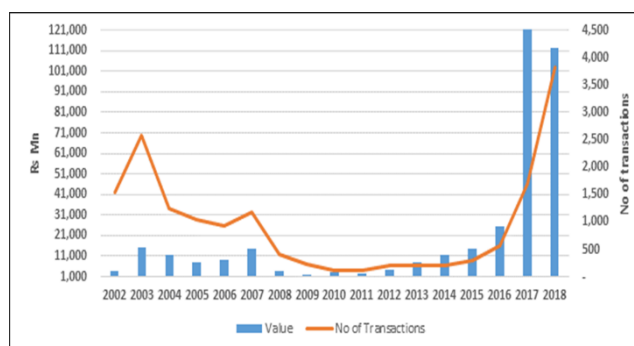
Box 1. Case Study: Market Development in Mauritius

Substantial headway has been made in the development of the domestic debt market in Mauritius since the introduction of weekly auctions of Treasury Bills in 1992, which marked a transition towards market-determined interest rates.

Currently, auctions of Treasury Bills are held weekly with the market informed two months in advance of the range of Treasury Bills to be put on tender. The issuance of Government Notes and Bonds takes place in accordance to an issuance calendar defined at the beginning of the fiscal year. The mix between short- and longer-term securities is based on the desired maturity profile of government debt. From 2004, the range of government securities has expanded, with a significant increase in the medium to long-term securities (3-5 year bonds) in line with the strategy of lengthening the maturity structure of government debt.

In 2002, Mauritius implemented a primary dealer system, with four banks licensed as primary dealers. However, other banks, licensed stockbrokers and some statutory institutions also had direct access to the primary auctions whilst individuals and non-financial institutions were required to submit their bids through either the primary dealers or licensed stockbrokers. Gradually, most banks became licensed as primary dealers, effectively diluting the effectiveness of the system. In 2003, government securities were listed on the stock exchange, banks and licensed stockbrokers were authorized to trade, but the level of activity remained very low and eventually, government securities were removed from the stock exchange.

The lack of secondary market trading prompted a significant review of the primary dealer system in 2017 that cut back the primary dealers to four and allowed them the exclusive right to bid at primary auctions for Bills, Notes and Bonds. Their obligations became more stringent, notably in terms of committing to underwrite the entire auction, transferring at least 50 percent of their primary market purchases to their trading books, providing continuous two-way pricing, and achieving specific success and turnover ratios. These changes led to a marked increase in secondary market trading and contributed to the establishment of a yield curve for government and Bank of Mauritius securities.



The technical infrastructure has improved over time. Securities are now dematerialized, and a book-entry system is in use. All transactions are cleared and settled electronically through the Mauritius Automated Clearing and Settlement System. In 2017, the Bank of Mauritius introduced an on-line auctioning system that reduced allotment time and communication of results, and in parallel, set up a secondary market trading platform on which all primary dealers are obliged to provide continuous two-way prices and report all transactions.

Important progress has also been made in public debt management through the creation of a Public Debt Management Unit, who is now responsible for debt management strategy, risk management of the public debt portfolio, debt recording and servicing as well as debt reporting, including on the Ministry's website.

Box 2. Case Study: Market Development in Hungary

In Hungary sporadic issuance of government securities for retail customers via subscription started at the end of the 1980s, but the market remained small and illiquid as the main source of budget financing were loans extended by the National Bank of Hungary (NBH) to the government. Starting 1991 with the new central bank Act, monetary financing was gradually phased out and by 1996 the government had no other alternative for financing but the development of the domestic government securities market.

During the 1990s the legal and institutional frameworks were modernized, and technical reforms were implemented and thus the basis and preconditions for market development were put in place.

<p>New Acts passed</p> <p>1991: Investment Funds 1996: Securities Act 1999: Law on the FSA 2001: Capital Markets Law</p> <p>Modification of Acts</p> <p>1992: Bankruptcy Law</p>	<p>1994. Keler became Central Securities Depository (CSD)</p> <p>1995. The Government Debt Management Agency (ÁKK) was established and took over issuance, planning, risk management and settlement of domestic debt.</p> <p>1996. The Primary dealer system was set up with 20 banks participating.</p> <p>1997. ÁKK took over responsibilities for external debt management.</p> <p>2003. Non-resident (remote) Primary dealership was made possible</p>	<p>1996. An electronic auction platform operated by BSE was implemented.</p> <p>Primary dealer quotation on an electronic trading platform at BSE.</p> <p>1998. Government securities were dematerialized and Delivery versus Payment (DvP) introduced by Keler Zrt.</p> <p>1998. A real time gross settlement system (VIBER) and an electronic interface device (KID) for securities transactions were introduced.</p> <p>2012. A new MTS platform for Primary dealer quotations introduced</p>
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All the while these reforms were taking place the government securities market started developing. Regular government securities issuance started in the early 1990s with short term (1-month, 3-months, 12-months). Treasury bills targeting both wholesale and retail customers. Auctions, where the main investors were banks and non-bank financial institutions, were conducted by the NBH, but the same securities were also available via subscription to retail investors in a period immediately following the wholesale auction. Later, extension of the maturity profile was facilitated by the issuance of 1.5- and 2-year bonds. After the introduction of the Primary dealer system participation at the auction became a privilege of PDs, but they were obliged to take customer orders and submit them at the auction. The first 5, 10, and 15-year fixed rate bonds were issued in 1995, 1999, and 2001 respectively. Benchmark bonds were introduced enabling ÁKK to decrease the number of outstanding securities series and helping PDs in their market making activities. The roll-over risk is now taken care of by regular buyback and exchange auctions.

Today a wide range of retail securities (interest bearing bills, floating rate notes, inflation-linked, FX-denominated bonds and physical paper) are available to cater to the needs of retail investors and government securities indices that provide benchmarks for institutional investors have been developed. Fixings for benchmark securities take place daily and are published on the website of ÁKK, as well as on Reuters, Bloomberg. Best bid-offer prices for off-the-run securities are published daily to facilitate portfolio evaluations. Primary dealers (PDs) are obliged to quote fixed spread bid-offer prices for benchmark securities on the MTS platform. The OTC market is based on a request for quote via phone, Bloomberg and Reuters dealing systems. ÁKK operates a standing repo facility for PDs via the Reuters dealing.

The annual borrowing plan is published in every December together with an auction calendar. Quarterly plans with more information on the forthcoming auctions are published on a rolling basis. All relevant information is available on the website both in Hungarian and English in a user-friendly way (both in pdf and excel). Current data are complemented by searchable archives of documents and data.

Appendix II. Main Findings—Primary Market and Debt Management

Finding	Implication	Options	Risks/Issues
The Primary Market and Debt Management			
Frequency of Auctions (twice a week)	No need for a secondary market	1. Gradually reduce the number of auctions/issuances of T-bills for FP and MP purposes to once per month (i.e., MP and FP every other week).	1. Government may become short of liquidity during the month. 2. Cost may increase. 3. Increased difficulties in liquidity management by banks and the CBS, at least temporarily.
No differentiation between MP and FP auctions BUT: interest rates are quite different between auctions CBS views MP issuance as part of policy tools and thus MP stance	Both perceived equally inflationary by market and may push rates up Confusing for market participants and opportunity to arbitrage between auctions Hampers price discovery	1. Replace Government T-bills by CBS bills and limit participation to Banks—part of MP toolkit and clearer signal of MP stance. 2. Keep status quo but make a clear difference about purpose and ensure rate setting procedures consistent.	1. May become costly for the CBS. 2. Rates not reflective of market conditions as they should be (T-bills not a MP instrument).
Primary market auctions open to all	No need for a secondary market	1. Limit access to primary market to financial institutions. 2. Limit access to market makers.	1. Banks may still buy and hold to maturity as excess liquidity is large. 2. May not make a difference since only a few banks participate. 3. Both options increase risk for collusion. 4. May be viewed as “unfair” and thus difficult to implement, limiting savings options for the public.
No “blind” allotment	Risk for bias in allotment procedures and detrimental for credibility	1. Allotment must always be done “blindly”, committee must not be allowed to see the identity of the bidder.	

Finding	Implication	Options	Risks/Issues
Thin investor base—auctions dominated by Banks (in particular a few)	Risk for collusion	1. List securities on Stock exchange to attract investors, both foreign and domestic.	Risk for collusion
Debt-target—decrease in T-bills for MP	More excess liquidity will have to be absorbed in the CBS DAAs. May cause (or increase) excess demand for T-bills, thus lessen trade incentives and push rates.	1. Replace Government T-bills by CBS-bills and limit participation to Banks (1–2-month maturity) – part of MP toolkit and clearer signal of MP stance. 2. Increase issuance of DAAs but not tradeable on a secondary market (nor anywhere else).	1. Too costly for the CBS? 2. Stock of tradeable bills and bonds too low.
Only bills, no bonds	No longer instruments available for pension funds and insurance companies. Trade is often done with longer instruments- thus not inducive of secondary market trade Increase roll-over risk in domestic debt. Mismatch between long-term financing needs and short-term financing.	1. Reduce the issuance of T-bills and replace by Bond issuance twice a year (maturities 2-5 years and once every other year or so issue a 7–10 year bond).	1. May increase cost. 2. Need a more forward-looking approach and better planning/forecasting.
No auction calendar	Difficult for market to plan and prepare for Bond issuance that are very rare and irregular. Auctions twice a week may make it seem unnecessary, but volumes do change, and banks need to plan for their liquidity management both in the very short run, and for the maintenance period as well ad for a longer horizon, as well as for	1. Introduce an auction calendar for 2019, for estimated needs on an annual, quarterly and monthly basis, and map the volumes to the less frequent auctions. Calendar may be preliminary at start of the year, with indicative intervals and more precise as deadline approaches.	1. Estimates may need big adjustments if cash-flow forecasts are too poor—credibility issues. 2. But should contribute to hold rates down as market is not surprised.

Finding	Implication	Options	Risks/Issues
	meeting other prudential internal and external regulations.		
FP actions all cash-flow driven	<p>Leave very little flexibility.</p> <p>If/when known to market may push rates higher.</p> <p>Makes them too frequent.</p>	<ol style="list-style-type: none"> 1. Longer cash-flow forecast and less frequent auctions. 2. Be more opportunistic and issue more than tender amount when rates on bids are low. 	Increased cost as money may not be used instantly and hence not remunerated while stored.
Debt-management strategy and report	<p>Maturity profile for domestic debt too heavy on the one-year horizon, high roll-over risk and mismatch to financing maturity needs.</p> <p>Too vague about the domestic portfolio and maturity profile.</p> <p>Alternative scenarios quite brief and not clear which scenario is followed.</p>	<ol style="list-style-type: none"> 1. Even out the profile gradually by replacing some T-bills with longer bonds. 2. Both issues better clarified in the 2019 debt strategy. 	May increase cost by lengthening the maturity and by issuing Bonds for which demand may have built up over time.
No remuneration or service fees between Government and CBS	No incentive for optimal behavior: fees would reduce the frequent demand for auctions and remuneration of the government account would provide incentive for opportunistic auction behavior from government.	1. Introduce fees for the service that the CBS is providing for government and remunerate the government account.	Should be cost neutral
Not opportunistic (doesn't allow for an increase in volume when beneficial)	See above	See above	See above

Appendix III. Main Findings—Legal and Infrastructure

Finding	Implication	Options	Risks/Issues
Legal and Infrastructural			
<p>Securities Act: Government securities are not defined as securities in the Act</p>	<p>Cannot be listed on the Securities Exchange and therefore cannot be traded on the Securities exchange.</p>	<p>As the original intention was to exempt the government from the prospectus requirements, change the law accordingly (exempt the government), and include government securities into the definition of securities and list them.</p>	<p>Securities traded on the Securities Exchange cannot, according to the Securities Act, be traded elsewhere (e.g., OTC).</p>
<p>Securities Act: Only licensed securities dealers can trade securities</p>	<p>Banks, who own securities, have not applied for securities dealer license, therefore cannot trade government bonds on the Securities Exchange.</p> <p>The Securities Exchange does not offer the banks attractive conditions.</p>	<p>Introduce membership in a separate fixed income section of the Exchange and offer it to banks at an affordable rate and build infrastructure that would enable them to participate in other sections (equity, futures, options, etc.) of the Exchange (once they acquire membership in these sections).</p>	<p>Banks may still not join because of the fees, increased supervision, reporting, etc.</p>
<p>Securities Act: Naked short selling is not allowed, but covered short selling is, which can help market making</p>	<p>There are a number of cases defined in the law which would make short-selling covered. If it is deemed to be naked short selling it is considered a criminal offence and has serious consequences (fine, imprisonment).</p> <p>No market maker (whether bank or securities dealer) would risk going short.</p>	<p>Naked short-selling should not have criminal consequences, should be punished by fines, or suspension of license only.</p> <p>It is needed to make institutions comfortable with market making.</p> <p>Repos and Securities Lending should be introduced to minimize the risk of an uncovered short position.</p>	
<p>Securities Act: Banks are exempt of licensing in certain types of securities transactions</p>	<p>This relates only to issuance of securities (management and placement of securities in the initial offering) not trading.</p>		<p>Currently, it does not relate to government securities as they are not considered as securities in the Act.</p> <p>This would be useful if more securities would be issued in the domestic market</p>

Finding	Implication	Options	Risks/Issues
<p>Financial Institutions Act Banks may engage in buying and selling of debt securities and provide services (safekeeping, and administration of securities, portfolio management, and advisory services)</p>	<p>Banks can participate in government securities auction on their own behalf, or on behalf of customers.</p> <p>Banks could take orders from customers, provide them with certain services.</p> <p>Banks should be more active in this field (fee generating business).</p>	<ol style="list-style-type: none"> 1. Limit primary auction access to banks in exchange for certain obligations (i.e., providing bid prices for customers in case they want to sell back). 2. Limit primary auction access to banks and non-financial institutions. 	<ol style="list-style-type: none"> 1. (option 1) Investors may view it as a monopoly granted (and favoring) to the banks. Investors may hold back as they do not trust banks. Allows for market-making obligations. 2. (option 2) More difficult to implement a market making function. Excluding only households. 3. Education and capacity building among market participants will be required for both options to be feasible and become functional.
<p>Central Bank Act and Memorandum of Understanding The CBS can issue T-Bills for monetary policy purposes</p>	<p>The current Government T-bills for MP purposes could be replaced by CBS-bills.</p>	<ol style="list-style-type: none"> 1. Replace the Government T-Bills with CBS bills on shorter maturity only (1–2 months). 2. Replace the Government T-bills with CBS Bills and Bonds on short to medium term maturity. 	<ol style="list-style-type: none"> 1. Issuing CBS-bills would increase transparency and accountability of the CBS. CBS-bills would be part of the MP-toolbox (which Gov T-bills are not) and used for clearer signaling of MP-stance. 2. These could create competition to government securities especially if tenors do not differ significantly.
<p>PDM Act National Debt Management Committee and Technical Debt Management Committee do not meet regularly</p>	<p>Little apparent coordination between the CBS and Ministry of Finance on debt management strategy and implications for liquidity management and monetary policy implementation.</p>	<p>Establish a regular forum for Ministry and CBS officials to discuss on cash-flow forecasts, planned issue of T-bills, and impact on liquidity in the system.</p>	
<p>Bankruptcy and Insolvency Act The definition of insolvency is not an exemption in case of</p>	<p>For the introduction of a Global Master Repo Agreement (GMRA) the legal status of collaterals should be unequivocal.</p>	<p>Modify the Bankruptcy and Insolvency Act so that the position of counterparties in a repo, or other collateralized transactions are not endangered by legal uncertainty.</p>	<p>The absence of legal clarity concerning financial collaterals can hinder the development of the money market (e.g., collateralized lending among banks).</p>

Finding	Implication	Options	Risks/Issues
collateral posted in repo transactions			
Draft General Repo Agreement:	Instead of GMRA the CBS intends to introduce a General Repo Agreement	<ol style="list-style-type: none"> 1. Use the GRA as a temporary solution, but the GRA needs to be tested in court in order to be 100 percent sure of its values. 2. Wait until possible to introduce a GMRA. 	While the current measures aimed at the introduction of a General Repo Agreement may help the CBS in widening its monetary policy tool-box, the legal consequences for horizontal repo are not clear, thus may be insufficient to incentive interbank market trade
Mutual and Hedge Fund Act, Seychelles Pension Fund Act and the Insurance Act. Regulation of the non-bank financial investors	<p>Mutual and Hedge Funds have been set up as International Business Companies that have only off-shore operations.</p> <p>There is only one Pension fund operating under the Seychelles Pension Fund Act.</p> <p>There are only 5 functioning insurance companies in Seychelles (only 2 which offer life insurance).</p>	The government should incentivize collective investment funds in order to widen out the investor base of government securities.	As pension funds and insurance companies are typically investors on the long end of the yield-curve, current number may be insufficient for creating enough demand.
Accounting rules No trading books, or securities Available for Sale (AFS)	Banks buy securities as investors and mark them as Held-to-Maturity (HTM).	In order to be able to sell securities in the secondary market (Securities Exchange) the minimum requirement is to have securities AFS.	A trading book, or AFS securities have implications on the profit and loss, and on the capital of the institution – banks may not be willing to oblige.
Trading infrastructure	Not only platforms for securities trading but those for money and FX markets are missing.	The Banking Association should coordinate to agree on the systems that banks operating in Seychelles should purchase and implement.	The systems may prove costly for banks and the forecasted volume of business may not be sufficient to maintain even this basic infrastructure.
Existing Securities Exchange (Trop-X)	A possibility for introducing also government securities.	<ol style="list-style-type: none"> 1. Allow for Government securities to also be listed on this exchange and traded on the exchange. 2. Only introduce government securities to be traded OTC. 3. Allow for both. 	<ol style="list-style-type: none"> 1. Legal impediments and not typical, too limiting in the long run. 2. May not spur the market as fast. 3. Optimal but has both legal and technical impediments.

Finding	Implication	Options	Risks/Issues
Existing Central Securities Depository (CSD) for non-Gov Securities (Trop-X), but no CSD or clearing house for Government Securities	<ol style="list-style-type: none"> 1. The CBS intends to set up a CSD for government securities 2. The new central bank CSD is regulated by the FSA (Securities Act)? Amend regulation/set-up MoU – joint regulation? 3. A possibility to also transfer the CSD function for government securities to Trop-X. 	<ol style="list-style-type: none"> 1. Allow Trop-X to be CSD for government securities, benefit of only one CSD, clear supervision by the FSA. 2. A new CSD set up as a private company (but could still be owned by the CBS, or jointly with other market participants including the Securities Exchange and supervised by the FSA. 3. Keep CSD for Government securities at the CBS, draw-back of two CSDs. 	<ol style="list-style-type: none"> 1. Current CSD is currently only capable of handling trades on the securities exchange, risk of complications and delays as adapted to also account for OTC trades, but knowledge capacity seem to be in place. 2. If trade is allowed both on securities exchange and OTC, the systems need connectivity, high investment cost, complications and delays. 3. Option 3: The two institutions would create redundant capacities at a high cost and the system could still lack efficiency 4. Regulation by FSA may create “tensions” between the CBS and the FSA with regards to the fact who is in charge.
Securities settlement system – No Real-Time Gross Settlement System RTGS	<p>The CSD would need a RTGS and a settlement system for securities Without RTGS: Settlement risks; Delays in settlement</p>	<p>Project is in motion with WB support.</p>	<p>CSD and legal issues must be catered for as well.</p>
An electronic auction system and electronic trading platform (ETP) are missing	<p>The current “paperwork” for auctions is not efficient.</p> <p>ETP can offer straight-through-processing of transactions making sure that no transaction is missed by the CSD.</p>	<ol style="list-style-type: none"> 1. Several off-the shelf systems are offered for electronic auctions. 2. As a starting point either Bloomberg or Reuters may be requested. If banks already subscribe to certain services the securities trading platform may come free (e.g., Bloomberg Auctioning System and E-Bond platform or Reuters Fixed Income Callouts). 	<p>In-house development may be costly and take long time.</p> <p>The issuing agency and the auction participants may find it expensive to subscribe to Bloomberg.</p>

Appendix IV. Main Findings—Financial Markets and Monetary Policy Operations

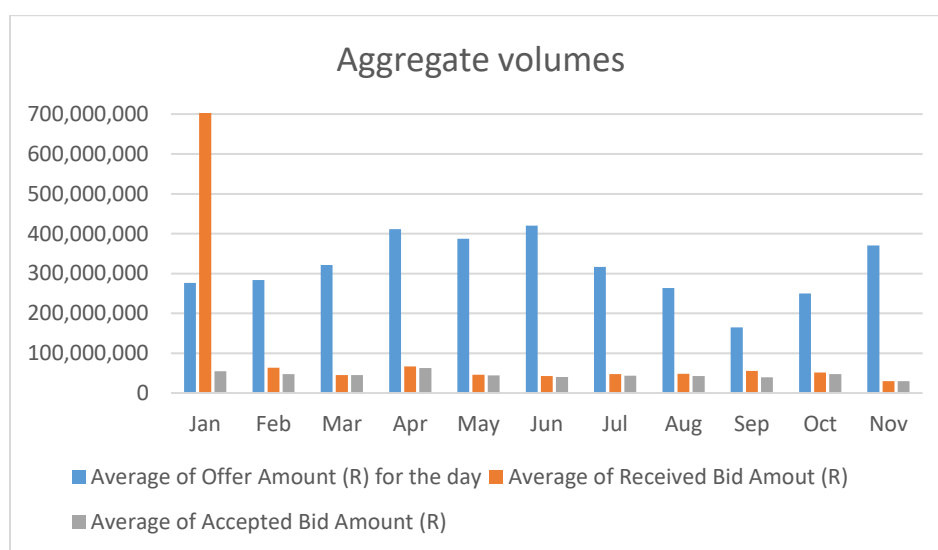
Finding	Implication	Options	Risks/issues
Other Financial Markets and Monetary Policy			
No interbank money market and large structural excess liquidity	Banks rely exclusively on CBS for liquidity management; No overnight money market rate; Unnecessary access to the SFs .	<ol style="list-style-type: none"> 1. Issue long-term CBS security or government bond to remove structural excess. 2. Mop-up short-term in DAA. 3. Mop up short-term in reverse Repo – What underlying security to use? <ol style="list-style-type: none"> a) CBS-Bill; b) Government T-bill. 	<ol style="list-style-type: none"> 1. Higher cost for either CBS or government and possible government debt increase 2. Ineffective? 3. a) Effect of cost increase of issuing CBS-bills? Given the minimal financing need of the government, most of the extra liquidity may go into CBS instruments. It could hamper Government Securities market development, but could stimulate interbank market. Needs careful planning as to the timing of operations/auctions. The government may find it difficult to meet their cash requirements, or have to pay up significantly. Would allow government to focus more on medium and long-term funding.
Market sentiment hampering trade and set-up of new Banking Association	No trust- no trade; No credit lines; Weak BA.	<ol style="list-style-type: none"> 1. Envisage collateralized interbank transactions – repos; 2. Amend counterparty agreement between commercial banks and CBS; 3. Request banks to establish credit lines among one another; 4. Code of Conduct (see below). 	<ol style="list-style-type: none"> 1. Currently no legal support for repos – difficult to establish. 2. Possible to amend? 3. May refuse due to cost – incentives/force?
No market Code of Conduct	No functioning rules/guidelines to frame market behavior and encourage well-functioning markets	Establish market code of conduct based on best international practices e.g., FX Global Code.	Should preferably be done by/via the SBA, but currently very weak with no consensus.

Finding	Implication	Options	Risks/issues
No interbank FX market, asymmetric FX liquidity distribution	No price discovery; No reference rate.	<ol style="list-style-type: none"> Adjust asymmetry in FX liquidity distribution by: <ul style="list-style-type: none"> Selling FX (via auction?); Linking the Bureau the Changes tighter to the market. Implement a market maker system. Establish market code of conduct based on best international practices e.g., FX Global Code. 	<ol style="list-style-type: none"> Decrease in FX reserves; Less players increase risk of collusion.
Very frequent OMOs and main instrument is not tradeable (and likely not usable as collateral between banks)	No incentive for banks to trade among themselves; No incentive to be forward looking in liquidity management.	<ol style="list-style-type: none"> Reduce frequency of auctions (averaging of MRR already in place); Open repo window and intraday credit facility; Issue tradeable CBS security. 	<ol style="list-style-type: none"> Possible steep learning curve – temporary loss of liquidity control; Legal issues to overcome; Higher cost for CBS.
New MP framework under implementation	Uncertain period: <ul style="list-style-type: none"> Effectiveness in managing liquidity; Effectiveness for inflation expectations and interest rate formation. 		Mis- or not fully understood; Communication difficulties; More changes on the horizon; Too swift—can market and CBS keep up with the changes?
Lack of dealing capacity at banks—banks not aware/interested in trading opportunities	No push/demand for market development.	Require ACI dealing certificate for a minimum amount of staff.	
No trading/information platforms at banks (Reuters, Bloomberg)	No transparency; price discovery difficult; Lengthy process to complete transactions; Settlement risks.	<ol style="list-style-type: none"> First step: Communication via secure electronic means e.g., digital signature, encrypted mail. Second step: Establish portal and website – centralized at CBS? Third step: Implementation of the new automated payment system, Contact vendors for group deal discounts, 	
Difficulty for foreigners to open bank account	Foreign investment in securities constrained.	Clarify AML/CFT guidelines; Ensure compliance.	

Appendix V. Analysis of Liquidity Management by Banks

The commercial banks in Seychelles do not seem to always behave rationally. It is now more than one year since the re-introduction of an interest rate corridor (July 2017) which implied a positive rate on the deposit facility. The 7-day DAA rate have since been kept inside the corridor. Rationally, the banks would opt to try and place their excess liquidity in the DAAs, but it seems that the banks are underbidding for the DAAs (see figure A1 below). This is also confirmed by looking at individual banks behavior as they don't even seem to be trying to place their excess liquidity in the DAA (see examples in figure A2 a-c below). In addition, the positive rate on the SDF should also induce the banks to place any excess at the end of the day in the SDF instead of keeping it on their current account, this doesn't seem to always be the case either (as shown in Fig 1, in Section II. B).

Figure A1. Aggregate (all banks) Monthly Averages of Amounts Offered, Tendered (bid) and Accepted in the DAA.



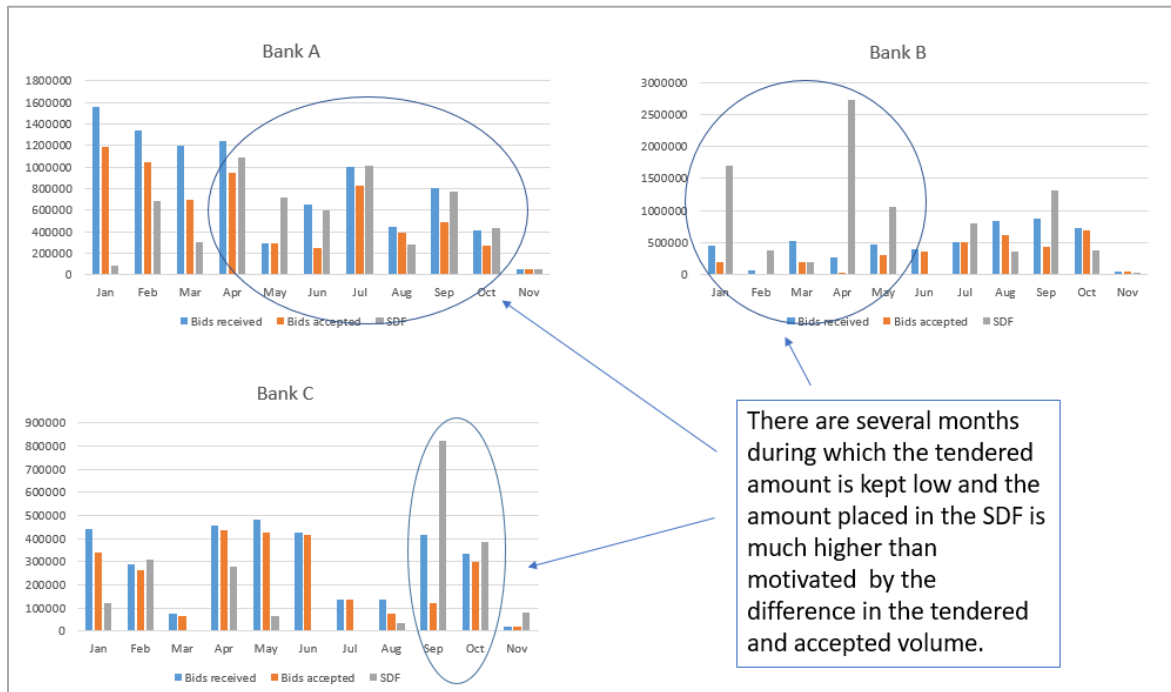
Source: CBS.

There are several reasons that may explain, at least partly, this behavior among the banks:

- The level of PLB may be elevated due to the inactive interbank market and the high cost of accessing the SCF, exacerbating the amount of underbidding;
- The continuous presence of the CBS on the market always provides for a new opportunity, hence no need for the banks to plan their liquidity management too carefully, hence contributing to the underbidding;
- The unannounced volumes for the frequent T-bill auctions may cause banks to withhold liquidity to have it readily available for participation in the primary market since rates are generally higher (see Fig. 3A below), hence the underbidding in the DAA; and

- The window and process of accessing the SDF may be untimely and/or too lengthy, hence banks don't know their position in time to apply for access, hence the liquidity left on the current account.

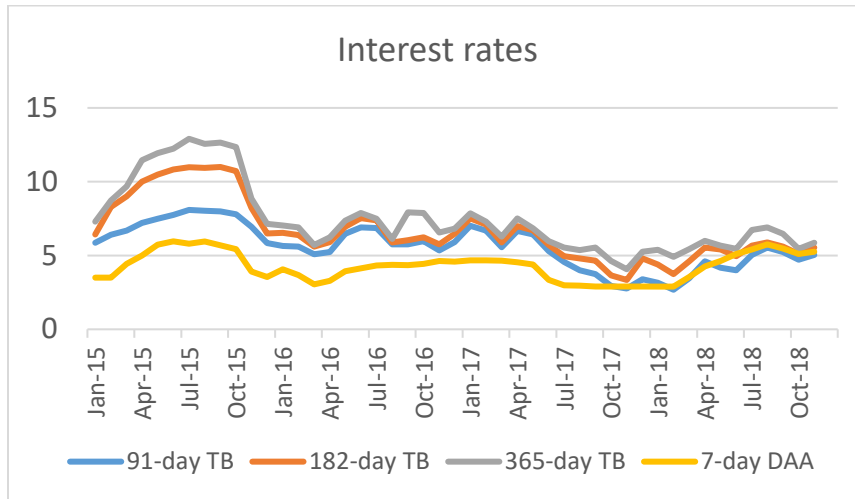
Figure A2. Monthly Averages of Amounts Tendered and Accepted in the DAA and the Amount Placed in the SDF by Individual Bank



Source: CBS.

To spur competitiveness on the market and rational behavior among participants, it is important that the CBS makes rational choices (i.e. accepting first the most competitive bids). Given the significant excess liquidity, this may result in a fall in rates, but this volatility in interest rates should be mitigated by the interest rate corridor and can be gradually addressed through a better calibration of liquidity-absorbing operations (and if needed possibly by a tighter corridor). There are several instances during 2018 when the average tender (bid) rate from a bank has been lower than the average accepted rate for the same bank (see Figure A4 a-d below) hence the accepted amounts have been lower than the tendered amounts by rejection of competitive bids.

Figure A3. Average Monthly Interest Rates for T-bills and DAA



Source: CBS

Figure A4. The Difference between Tendered and Accepted Amounts and between Tendered Bids and Accepted Rates for DAA (displayed as negative when rates have been cut from below and positive when rates have been cut from above),



Source: CBS.