



THE GAMBIA

SELECTED ISSUES PAPER

March 2018

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THE GAMBIA

SELECTED ISSUES

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ASSESSMENT OF MACROFINANCIAL LINKAGES¹

A. Background

1. Macrofinancial analysis aims to shed light on vulnerabilities in the financial sector and its linkages to other sectors of the economy. This is a two-way relationship, with weak macroeconomic fundamentals weighing on the financial sector and vulnerabilities in the latter affecting the real sector. Embedding macrofinancial linkages in the macroeconomic framework is a prerequisite for an integrated approach to risk analysis, as financial sector vulnerabilities may undermine macroeconomic stability. Shocks emanating in other sectors may lead to financial instability, which can have feedback effects, often through multiple rounds magnifying the initial impact. Knowledge of macrofinancial linkages permits a forward-looking holistic analysis of the entire economy that may inform policies ahead of distress to mitigate deleterious impacts across sectors. Ideally, an integrated macrofinancial analysis is based on a two-way assessment of macrofinancial risk and macroeconomic stability, with both macro-to-financial and financial-to-macro feedback loops.² We analyze the economy's balance sheet and systemic risks in the financial sector to assess the latter's resilience to macro shocks. Equally crucial is an analysis of how the financial sector may magnify or dampen shocks to the economy (IMF, 2017a).

2. Owing to the diverse nature of the Fund membership, methodologies applied for macrofinancial analysis vary. In many advanced countries and some emerging economies with relatively complex financial sectors and good data coverage it is possible to apply quantitative methodologies for assessing systemic risk in the financial sector and its linkages to the other sectors of the economy, for example measures of interconnectedness and cross sectoral balance sheet analysis (BSA). In other countries with meaningful data gaps, more qualitative analysis based on basic data and, in some cases, anecdotal evidence and judgment will have to be utilized. Still, such analysis helps highlight vulnerabilities in the financial sector and its counterpart sectors, including by sensitivity checks whose adverse assumptions may go beyond the assumptions already imbedded in the baseline.

3. In the case of The Gambia, good coverage of relevant banking sector data allows for sensitivity checks but not for a comprehensive cross-sectoral balance sheet analysis. Bank information dates back to the early 2000s, permitting to establish a credit cycle and a long-run relationship between bank exposures to government and credit to the corporate sector. Also, information on payment arrears based on authorities' definition between the sectors of the economy is comprehensive, though verification may be challenging at times. By contrast, the matrix of net claims (which go beyond arrears) that sectors have between one another is currently incomplete as the claims between state owned enterprises (SOEs) and government and

¹ Prepared by Torsten Wezel (AFR).

² The focus here is on vulnerabilities to and from the financial and other sectors as re-enforcing adverse (vicious) loops. However, these feedback effects can also be virtuous and re-enforcing if they reflect strength in sectors or a beneficial shock.

other sectors will only be fully known after the forthcoming special audits of the SOEs is concluded. In the meantime, the inter-sectorial matrix of assets and liabilities yielding the net claims and forming the basis for the balance sheet approach to assessing macrofinancial linkages only includes positions of the banks and the central bank.

4. The analysis proceeds as follows. It presents the macrofinancial linkages in The Gambia, sheds light on vulnerabilities in the banking sector, and shows via a sensitivity analysis how banks' stability may be affected by some key macrofinancial linkages playing out. It furthermore argues that financial frictions are likely to prevent a rapid rebound in private sector credit, and finally points to remedial action that banks, the private sector and the government may take to promote financial deepening.

B. Overview of Macrofinancial linkages

5. Significant macrofinancial linkages persist in The Gambia, first and foremost between the public sector and the banks. As elaborated below, banks are highly exposed to the government through large holdings of short-term government debt, which is a legacy of the large financing needs of the previous administration. In addition, large claims have built up between government and state-owned enterprises (SOEs) on the one hand, and banks and the corporate sector including SOEs on the other. The largest part of non-performing SOE debt that the National Water and Electricity Company (NAWEC) had owed to banks was consolidated into a government-guaranteed bond in 2014 and rescheduled in mid-2017. The central government has assumed debt servicing of that bond, reflecting a realization of contingent liabilities. The bond represents the largest obligation owed by SOEs to banks and is thus a significant macrofinancial linkage for the banks holding it.

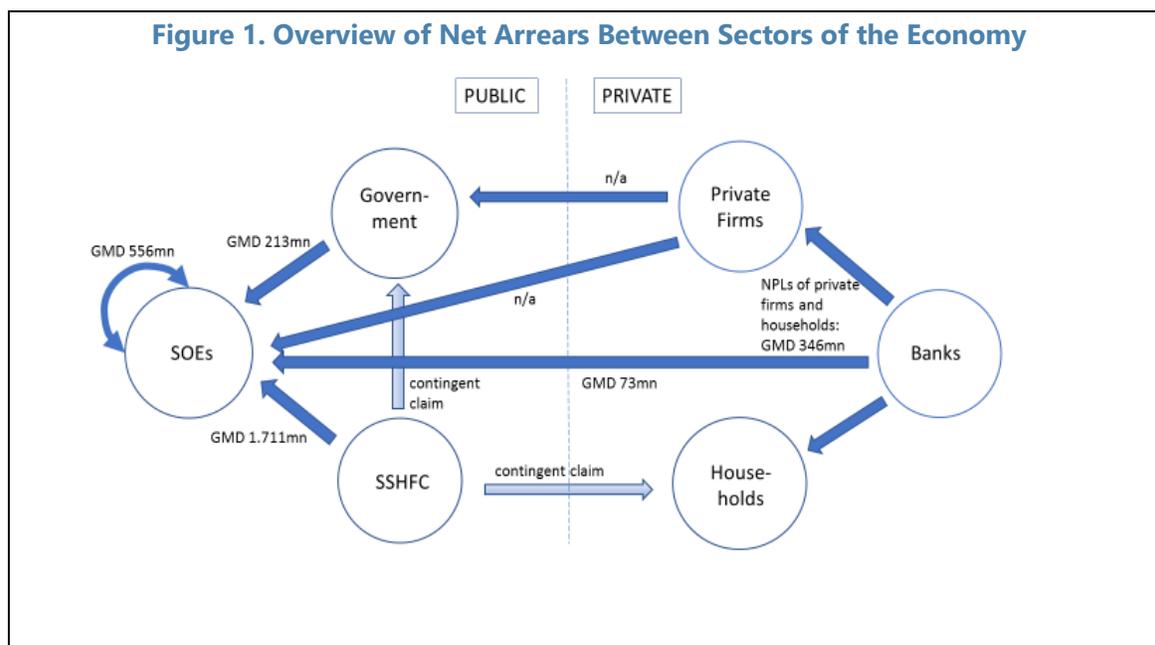
6. There has been persistent financial distress within the SOE cluster. Payment difficulties emerged first at NAWEC and the telecom operators (GAMTEL and GAMCEL) owing to operational deficits and cash flow problems (IMF, 2015) but have since spread to more than half of the SOEs.³ Fraud and embezzlement of funds reportedly contributed to substantial leakages, and unbudgeted fiscal spending on behalf of NAWEC and GAMTEL/GAMCEL worsened the fiscal performance in 2016 (IMF, 2017b).⁴

7. Weak SOE performance has led to arrears both to central government and within the SOE cluster. The largest arrears of SOEs to central government are, as of November 2017, by GAMCEL and the National Food Security Processing and Marketing Corporation (the former groundnut corporation) of around GMD 250mn each. Total SOE arrears to central government amount to at least GMD 708mn, but as government itself has overdue claims on two SOEs totaling GMD 495mn, the total net arrears claim by SOEs is lower (GMD 213mn). SOEs are also in

³ SOEs competing with private sector providers, notably GAMTEL/GAMCEL, complain about a lack of investment that has led to an erosion of their market share and thus to the operational deficits.

⁴ A first assessment of embezzlement by the old regime pointed to annual amounts of 4 percent of GDP during mid-2014 to end-2016.

arrears to one another: four SOEs have accumulated arrears with other SOEs of at least GMD 556 mn as of November 2017. Figure 1 displays the net arrears that sectors have against one another, with the direction of the arrow indicating that a particular sector has a net claim on another.⁵ These arrears have to be distinguished from total net claims that sectors have against one another, including non-impaired debt.



8. There are also arrears to the Social Security & Housing Finance Corporation (SSHFC) that provides financial services to the real sector and government alike. Apart from its mandate to provide housing loans, SSHFC has extended loans to SOEs and holds real estate investments (e.g. two hotels). According to the SSHFC, non-performing exposures (loans to SOEs) account for GMD 1.7 billion of its GMD 5.7 billion balance sheet, with the largest non-compliant debtor being NAWEC (total of GMD 1 billion in arrears). This number has been growing due to late-payment charges.⁶ SSHFC claims to have no arrears itself. If the arrears to SSHFC are not cleared, the existing resource gap will ultimately have to be closed by either an ad-hoc payment from government or, alternatively, a hike in the contribution rate which would impact households (indicated in Figure 1 as a contingent claim in either case).

9. Although difficult to quantify, SOE arrears have indirectly also caused non-performing loans (NPLs) at banks. Anecdotal evidence from banks points to NPLs caused by cash flow problems of the bank debtor associated with non-payment by an SOE. In any case, at end-September 2017 total NPLs at banks amounted to GMD 419 million, of which

⁵ The amount of net arrears between private firms and government/SOEs is not available. All data are as of November 2017 except data on NPLs which are as of end-September 2017.

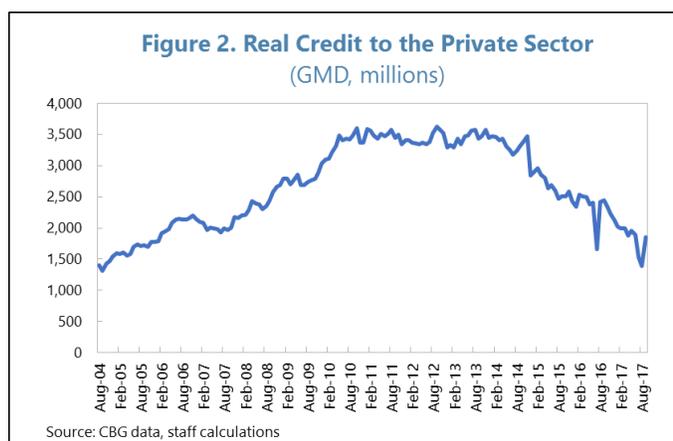
⁶ Total SOE debt in arrears with SSHFC may be as high as GMD 2.03bn according to the latest numbers.

GMD 73 million on account of SOEs. Indeed, direct defaults by SOEs to the banks, are quite rare, with almost all arrears owed by a single SOE (GMD 71mn). It is likely, though, that some SOE exposures are misclassified and under-provisioned.

C. Banking Sector Characteristics and Risks

10. In view of arrears and a strong multi-faceted sovereign-bank nexus,⁷ it is essential to assess banks' resilience to possible adverse macrofinancial linkages. While banks' financial soundness indicators point to ample buffers they are masked by zero-risk weighted sovereign assets, which could be compromised by negative macrofinancial linkages playing out. In particular, it is possible that financial disarray at SOEs impinges on the performance of the private sector and, indirectly, the banks. Also, while not imminent, a hypothetical haircut to the large domestic government debt would impair bank capitalization and liquidity. Lastly, in the case of a gradual shift from investment in government paper to lending to the private sector, banks' capital adequacy ratios would be affected by the concomitant increase in risk-weighted assets and thus potentially call into question their ability to support a rebound of private sector credit. While private sector credit would likely carry higher interest rates than on sovereign assets, thus contributing to banks' interest income and organic capital build-up through retained profits, loan loss provisions would likely also have to be increased offsetting in part the organic capital build-up.

11. The Gambian banking sector is characterized by sizeable investment in government securities and consequently low financial intermediation. Dubbed "armchair banking" by some interlocutors, most banks opt to invest more than half of their financial assets in low-risk, high-yielding government securities, primarily treasury bills. The high opportunity cost of not holding treasuries has come at the detriment of bank credit to the private sector that has been crowded out by the huge government financing needs. Real private sector credit has not grown in real terms since 2010 and even fallen for the past three years (Figure 2).⁸



Banks instead have so far resorted to three principal activities: apart from investment in government paper they provide short-term trade financing and engage in the foreign exchange market to generate fee and commission income.

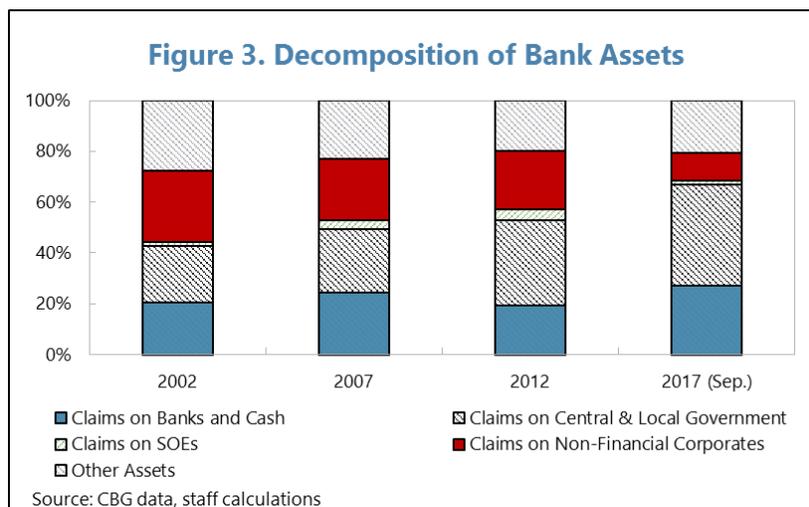
⁷ The sovereign-bank nexus can serve both as an amplifier or absorber of shocks at times of stress.

⁸ There was a lack of supervisory data for the third quarter of 2016. Missing observations were dealt with by interpolation.

12. The risk-return profile of Gambian government securities has led to an unusually high share of low-risk liquid assets. Compared to the early 2000s, the share of liquid assets

(cash, treasuries, claims on other banks) with zero or low-risk weights has gradually risen from about 40 percent to two-thirds of total assets. By contrast, exposures to the real sector account for only about 15 percent, with the share of claims on SOEs falling to 1 percent of assets excluding the NAWEC bond which after a restructuring in August 2017 is now serviced

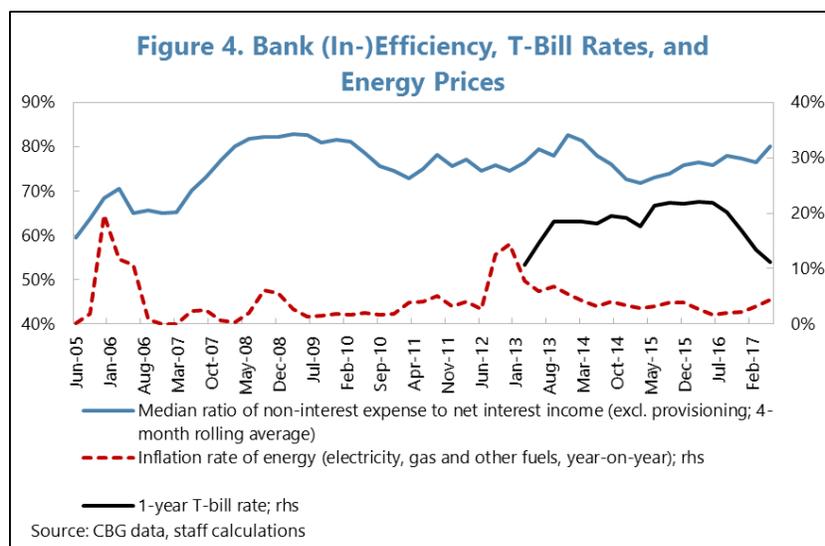
by the central government and therefore categorized under “other government securities.”



13. For years, banks lived comfortably off the high yields on treasury bills, masking an evolving adverse cost structure and thus low efficiency. The efficiency ratio measured as non-interest expense to net interest income has worsened since the mid-2000s, reaching 80 percent at times and thus leaving little space to cover an occasional spike in provisioning. In

2014, efficiency temporarily improved on the back of normalizing energy costs and a hike in T-bill rates.⁹ Although these drivers remained favorable until recently, efficiency started worsening again in 2015, likely because of having to run expensive back-up power systems due to frequent power outages.

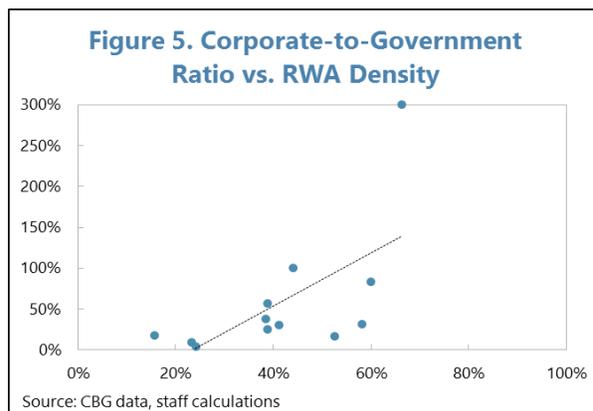
General expenses, driven by energy costs, now exceed salary costs at most banks. The recent drop in T-bill rates that banks unequivocally denounce as too rapid and not in line with fundamentals will soon put further pressure on profitability. Already now, one-third of the banks register a return on average assets (RoA) of near or below zero. Absent rationalization



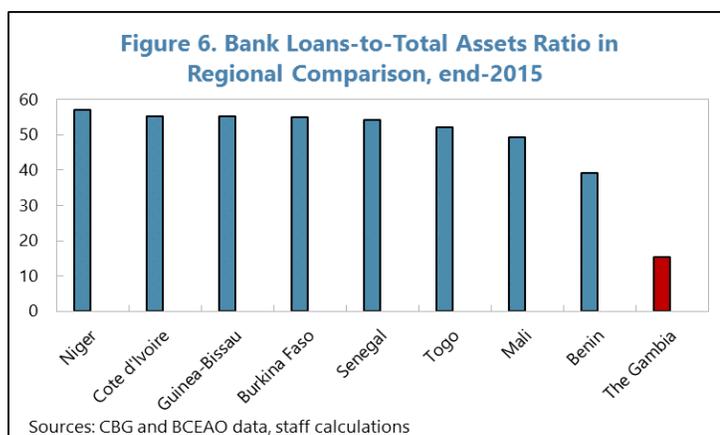
⁹ The time series of T-bills is available at a weekly frequency only from 2013.

measures, low operational efficiency is likely to cause some weaker banks to merge or possibly exit the market.

14. Banks' regulatory capital ratios are boosted by very low risk-weighted assets, raising questions about the effective size of buffers to absorb shocks. The high share of domestic sovereign exposures with zero risk weights and corresponding extraordinarily low ratio of risk-weighted assets (RWA) to total assets ("RWA density") at most banks boosts the system's capital adequacy ratio (CAR) to 40 percent (Figure 5). This is depicted in Figure 5 by the ratio of corporate exposures (including SOEs) to central and local government exposures (vertical axis), plotted against the RWA density (horizontal axis). The one outlier with corporate loans three times as high as government exposures and an RWA density ratio of 66 percent would be a representative bank in many other banking sectors with greater financial deepening.

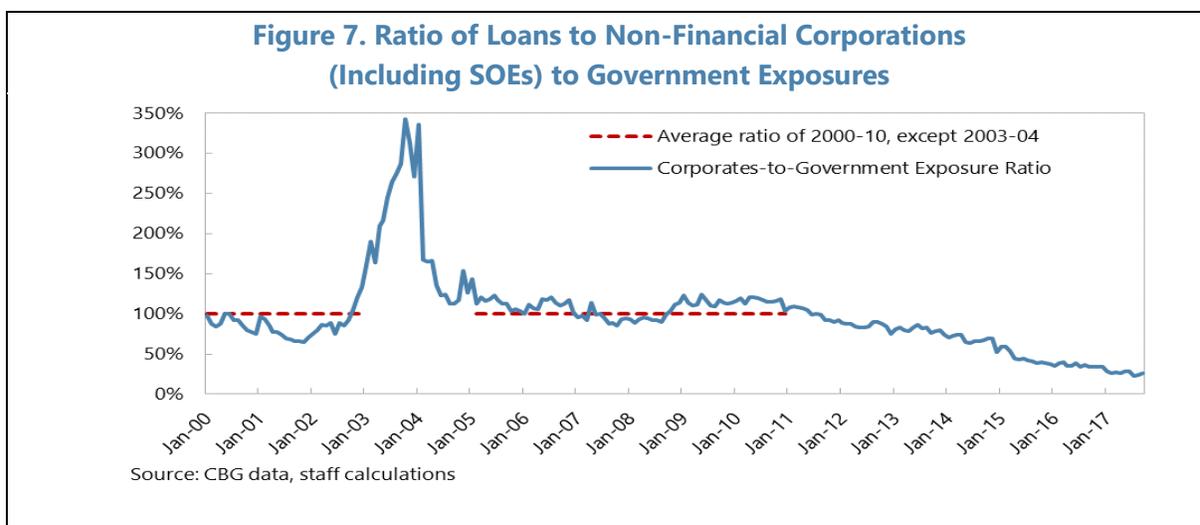


15. Gambian banks' loan exposure is low also in regional comparison (Figure 6). The share of bank loans in total bank assets is unusually low in The Gambia compared to the WAEMU countries where credit typically accounts for roughly half of total assets. With private sector credit in The Gambia expected to rebound over the medium-term, capital buffers would likely become less ample as they currently appear to be. The CBG's transition to risk-based supervision will have to ensure such capital and liquidity buffers reflect such business model and other forward-looking risks to ensure safety and soundness of banks.



16. Traditionally, Gambian banks had a more balanced portfolio structure, to which they should strive to return in the medium run. Before the secular decline in private sector lending relative to investment in government securities, banks used to have a fairly balanced portfolio structure. Leaving aside a short-lived credit boom in 2003-04, the long-run average corporate-to-government exposure ratio stood at 100 percent during 2000-10. CBG staff contends that the decline in the ratio was delayed by foreign banks entering the local market with an aggressive lending strategy to capture market share. With market saturation setting in, corporate lending then started declining in relative terms from 2011. Banks and policymakers

alike would like to see the exposure ratio return to the long-run average over time, provided that the emergence of lending opportunities, both large-scale investment projects and retail credit, can be supported by the banks without compromising their financial soundness and overall financial stability.



D. Testing Banks' Resilience to Adverse Linkages

17. The mission performed a sensitivity analysis to assess banks' capacity to sustain unfolding adverse macrofinancial linkages and still support private sector credit. The sensitivity tests centered on three salient macrofinancial linkages, one each separately in relation to the real sector, the SOEs, and government at large:

- (i) a rebound of corporate loans to be at par with government exposures (i.e. reaching the long-run 1:1 ratio);¹⁰
- (ii) a provision of 5 percent on the carrying value of the restructured NAWEC bond (lowering capital one-to-one) as for any restructured loan; and
- (iii) the imposition of a non-zero risk weight (arbitrarily set at 20 percent) on all government exposures against which banks currently hold no capital; this is in recognition of the risky sovereign-bank nexus. While there are discussions in train by the

¹⁰ Keeping the combined value of corporate and government exposures the same, additional loans are assumed to be funded by reducing holdings of government securities so that the two amounts are equal. RWA were increased by the amount of the new loans, since under the Basel I framework applied in The Gambia loans to the private sector carry a 100 percent risk weight at all time. As it is evident that the additional loans carry credit risk, a provision of 5.3 percent on those loans was assumed (the 18-year average of provisions to total loans is 7.8 percent less a tax shield provided by the statutory corporate income tax of 30 percent) and the resulting provisioning amount subtracted from regulatory capital.

(continued)

Basel Committee (BIS 2017) to look at the international regulatory treatment of sovereign risk, the current status quo at an international level is no change.¹¹

- In addition, a composite scenario (iv) appropriately combines the three impacts into a single analysis.¹²

To be sure, this ad-hoc, static analysis of a rebound in corporate credit would take several years to materialize as the economy's absorption capacity is currently still low, the government's domestic financing need is only gradually declining, and banks' risk management frameworks are not yet sufficiently well-established to support a credit expansion. Moreover, banks' lack the long-term funding required to support infrastructure lending, without incurring a sizable maturity mismatch. Similarly, the hypothetical non-zero risk weight on government exposures is not grounded in current domestic or international regulation but nonetheless provides a useful thought experiment about the impact of a potential, specific form of restructuring of domestic public debt on bank capitalization.

18. The three sensitivity tests and the combined scenario suggest resilience to macrofinancial shocks at the system level but also vulnerabilities at a few banks. The system's CAR remains well above the minimum required level of 10 percent of RWA despite the significant impact of some of the measures, dropping by between 0.5 and 14 percentage points under the individual tests and by 16.7 percent under the combined scenario (Table 1). However, one larger bank would not be able to support the credit rebound under the first test without violating the minimum capital requirement and thus needing to raise additional capital, and another one would fall below the 14 percent mark under the third test (risk-weighting government exposures). Consequently, these two banks also face capitalization issues under the combined scenario.

19. While these checks show that even under adverse circumstances Gambian banks could foster private sector credit, they do not appear prepared for this. In principle, most banks have ample resources at their disposal both in terms of capital and liquidity.¹³ However, caught by surprise by the pace of the T-bill rate decline, they have not had the time to develop the proper financial instruments like longer-term loan contracts and their equivalent on the liability side, term deposits exceeding a one-year maturity. In practice, many lending

¹¹ Most notably, the risk-weighted framework includes a national discretion that allows jurisdictions to apply a zero percent risk weight for sovereign exposures denominated and funded in domestic currency, regardless of their inherent risk. This discretion is currently exercised by all members of the Basel Committee. Sovereign exposures are also currently exempted from the large exposures framework. Moreover, no limits or haircuts are applied to domestic sovereign exposures that are eligible as high-quality liquid assets in meeting the liquidity standards. In contrast, sovereign exposures are included as part of the leverage ratio framework.

¹² For this scenario to be consistent, the first two individual impacts on RWA and capital were summed up and then combined with the third one where the additional RWA are calculated only on the reduced stock of government securities resulting from the first sensitivity test.

¹³ Even after decreasing liquid assets in favor of bank loans under the first test, all banks' liquidity ratios remain well above the required minimum. However, this does not necessarily mean that they would comply with more risk-based liquidity measures such as the Basel III Liquidity Coverage Ratio.

relationships are effectively long-term, but instead of originating multi-year loans, banks prefer to roll over shorter-term exposures. They may do so out of necessity to avoid incurring large maturity mismatches. In effect, long-term lending is carried out using banks' capital that is currently the only source of long-term funding.

Table 1. The Gambia: Capital Adequacy Ratio Under Sensitivity Tests

	Current State	(i) Credit rebound	(ii) NAWEC provisioning	(iii) Gov't 20% risk weight	(iv) Combined scenario
Average CAR (%)	40.4	26.4	39.9	32.7	23.7
Lowest CAR (%)	20.2	6.6	18.9	13.7	5.5
No. Banks < 10%	0	1	0	0	1
No. Banks > 10% < 14%	0	0	0	1	1

Source: CBG data, and staff calculations.

20. Banks also point at the scarcity of bankable real sector projects, particularly in infrastructure financing. While banks identify select lending opportunities in dynamic sectors such as hospitality and construction, these may not suffice to bring about a swift acceleration in private sector credit. After negative experiences in the past with lending to difficult sectors like agribusiness, banks are only gradually becoming more comfortable with taking on more credit risk, and some prefer to cater only to the most creditworthy firms in each sector for the time being. Gambian banks could participate in financing some of the priority infrastructure investment identified in the National Development Plan—including in financing downstream suppliers to such infrastructure projects. Yet, banks' local currency liquidity may not be sufficient to finance larger projects. In the absence of more loan syndication, banks are also likely to run into difficulties with their large exposure and concentration limits.

E. Financial Frictions and Remedial Measures

21. A swift rebound in private sector credit is being hampered by a number of financial frictions. Even if banks were determined on expanding credit to the private sector, shortcomings in the financial infrastructure, regulatory constraints, and market frictions are likely to keep lending at bay in the short run. In particular, banks and their clients grapple with:

- *Data gaps at the Credit Reference Bureau:* Banks posit that the debtor information at the credit registry run by the CBG is incomplete and therefore not trustworthy. In addition, they are hesitant to share information on clients with each other given the risk of losing some of the few good clients to competitors. The situation was compounded by a temporary system failure in 2016. Timely transmission of credit information to the bureau is not mandatory, and failure to comply is not sufficiently sanctioned. Thus, when making lending decisions, banks cannot be fully certain about a potential client's creditworthiness and may fail to make well-informed lending decisions.¹⁴
- *Regulatory exposure limits:* When trying to finance larger projects, banks are constrained by their single obligor limits (25 percent of regulatory capital), not least because of the low level of capital at some banks—notwithstanding satisfactory capital adequacy ratios. To circumvent this restriction, banks have sought exemptions from the CBG, but the general constraint persists.
- *Elevated lending rates:* Credit origination has, so far, also been hampered by high risk-adjusted lending rates that shut out some borrowers unable or unwilling to sustain the corresponding debt service burden. Others, like traders and exporters, tend to obtain credit in foreign currency at lower rates abroad or, in the case of hotel operators, rely on cash advances. Private sector representatives nevertheless signaled interest in local currency bank loans, if lending rates fell sufficiently.
- *Stringent collateral requirements:* Banks generally insist on collateral such as real estate despite long delays in execution and so tend to crowd out small and medium-sized enterprises (SMEs) unable to pledge such collateral. Although a public registry for movable collateral was established with SMEs in mind, banks' usage of the system is only gradually picking up.
- *Obstacles to mortgage credit:* The share of housing loans in private sector credit remains low, in part because of low national income and, hence, an insufficient domestic savings rate (though home purchases by foreign pensioners and the Gambian diaspora have recently risen). There are also provisions in the Mortgage Act that are seen as favoring debtors and allowing them to opportunistically delay the execution of collateral in the court system.

22. In dealing with these frictions, the banking system, the private sector, and government should take action to promote financial deepening. Specific measures are needed to overcome the obstacles to bank credit which would also help propel private sector development. Such steps include adjustments to banks' policies and organization, the private

¹⁴ Faced with asymmetric information banks may prefer to reject applicants, including creditworthy ones. On the other hand, low-efficiency banks may lend to risky clients at high rates to prop up results in the short run while incurring credit risk in the longer run. In either case, suboptimal credit allocation ensues.

sector's diversification of operations, and legal and regulatory changes to be undertaken by government and the central bank.

23. Specifically, banks could adopt measures to accommodate the budding credit demand. With opportunity cost dropping as T-Bill rates decline, banks could cautiously lower lending rates to equilibrate loan supply and demand, with a view to moving from recurring short-term investment in government paper and trade financing towards multi-year lending, including to primary and secondary sectors which currently do not receive much credit. At the same time, banks should seek to increase the share of longer-term funding by making depositors aware of the benefits of longer-term savings instruments. As the demand for large-scale infrastructure financing increases, banks should increasingly resort to loan syndication to overcome single obligor, concentration and internal risk limits, although for very large projects even syndication may not suffice. At the same time, they should be prepared to foster SME credit by setting up specialized SME units aimed at accommodating those clients' characteristics and making more use of the movable collateral registry like some microfinance institutions already do.

24. There are several reforms that the private sector could pursue to diversify operations and improve creditworthiness. To address the issue of some firms' volatile revenue throughout the year, industry reforms include gradually moving from a single-crop, single-season harvest towards irrigation-based agriculture as well as measures to stabilize hotel occupancy rates at a high level (e.g., more conference activity during the off-season) and pursuing reforms in the hospitality industry based on a needs assessment report currently being finalized. Furthermore, more could be done to develop downstream industries such as building a refinery for peanut oil. More generally, a sectoral development strategy should be rolled out as part of the forthcoming National Development Plan (NDP).

25. Lastly, legal and regulatory changes should be pursued by the government and the CBG. Such reforms should address deficiencies in the financial infrastructure and regulatory framework. In particular, it would be important to:

- *Ensure timely and complete information at the Credit Reference Bureau:* clarifying with banks and possibly reinforcing the mandatory provision of debtor information to the CRB in a timely manner, including by establishing sanctions for non-compliance. At the same time, with the recent award of a license, the establishment and use of a private credit bureau could be promoted, along with better use of the movable collateral registry.
- *Modify the Mortgage Act and loan contracts, and promote the use of arbitration:* legal changes should be introduced to facilitate banks' foreclosure on delinquent debtors more easily and curtail the latter's leeway to opportunistically challenge court decisions. Concurrently, the terms of loan and mortgage contracts could be revisited with a view to clarifying the roles and responsibilities of contract parties. In addition, use of the alternative dispute resolution mechanism should be encouraged, particularly for disputes in banking matters where this avenue is not used much at present.

- *Devise a mechanism to subsidize SME credit:* In the absence of a national development bank tasked with fostering SME credit, a mechanism for subsidizing SME credit could be established, for example by setting up a fund or obtaining grants that would be passed on to banks for them to grant credit to SME at subsidized rates. Additionally, the authorities could consider establishing and supporting credit guarantee schemes with a view to enhancing commercial agriculture.
- *Study the implications of low bank efficiency and impact of possible bank mergers/market exit:* As the low operational efficiency may cause bank mergers or exits, the authorities should seek to undertake risk-based thematic reviews of the financial stability and macrofinancial implications of such possible mergers or exits.
- *Introduce differentiated regulatory requirements for microfinance institutions:* As the microfinance industry is still in the early stage of development with limited resources, liquidity and reserve requirements that currently weigh on those institutions' revenues could be lowered somewhat, acknowledging their more stable funding base. Moreover, supervision could be enhanced to ensure lower liquidity requirements do not result in a build-up of liquidity risks over time. In general, more attention could also be paid to further developing the microfinance industry that is ready to work with those that are hitherto unbanked and have no financial track record nor collateral.
- *Further improve financial literacy:* To promote financial inclusion, a collaborative effort should be made to raise the population's awareness of the benefits of using financial institutions and instruments, thereby increasing the bankarization rate and promoting access to finance. In doing so, priority should be given to fostering traditional low-tech financial products until connectivity issues are overcome that currently impede widespread use of mobile banking technologies, and the needed extensions to the regulatory and supervisory perimeter have been put in place.

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FINANCIAL BENCHMARKING OF THE GAMBIA¹

Although The Gambia has significantly developed its financial sector over the past decade, there are areas of financial inclusion, depth and efficiency requiring continued improvement. In the near term, efforts should focus on sustainable private credit expansion facilitated by strengthened risk management, promotion of healthy financial competition and a conducive business environment. However, it is essential that private credit growth is gradual without weakening credit underwriting standards and commensurate with current economic activities to prevent any financial stability concerns from future NPLs. To fully reap the economic benefits of financial development, policy priorities should also be given to strengthening the supervisory and regulatory framework and financial infrastructure, supporting also financial innovations, and improve financial literacy to support financial access.

A. Background

1. The Gambia's financial sector is dominated by banks albeit with a significant presence of non-bank financial institutions (NBFIs). The sector is generally shallow and underdeveloped with no capital market. It comprises mainly banks, insurance companies, microfinance institutions, village savings & credit associations (VISACAs), credit unions and a state pension fund ² (Table 1). The banking industry comprises 11 commercial banks and one Islamic bank. Although all banks are domestically-incorporated, eight of them are foreign subsidiaries of mainly Nigerian origin. One of the four domestically-owned banks (Mega Bank) is under the Central Bank of the Gambia's (CBG) recovery and resolution procedures.

Table 1, Financial System Size and Ownership in 2017

Institution		Size by Assets				Ownership Structure			
Type	Number	GMD millions	USD millions	Share, Percent	Foreign, Percent	Domestic, Percent			
						Gov	Pub.	Priv.	
BFI	Conventional Banks	11	34072	718	79	71	10	5	14
	Islamic Bank	1	2076	44	5	14	0	4	82
NBFI	Insurance Comp	11	558	12	1	37	0	0	63
	Finance Comp.	3	1063	22	2	0	0	n/a	n/a
	VISACA	45	n/a	n/a	-	0	0	0	100
	Credit Unions	80	n/a	n/a	-	0	0	0	100
	Pension Fund	1	5629	119	13	0	0	0	100

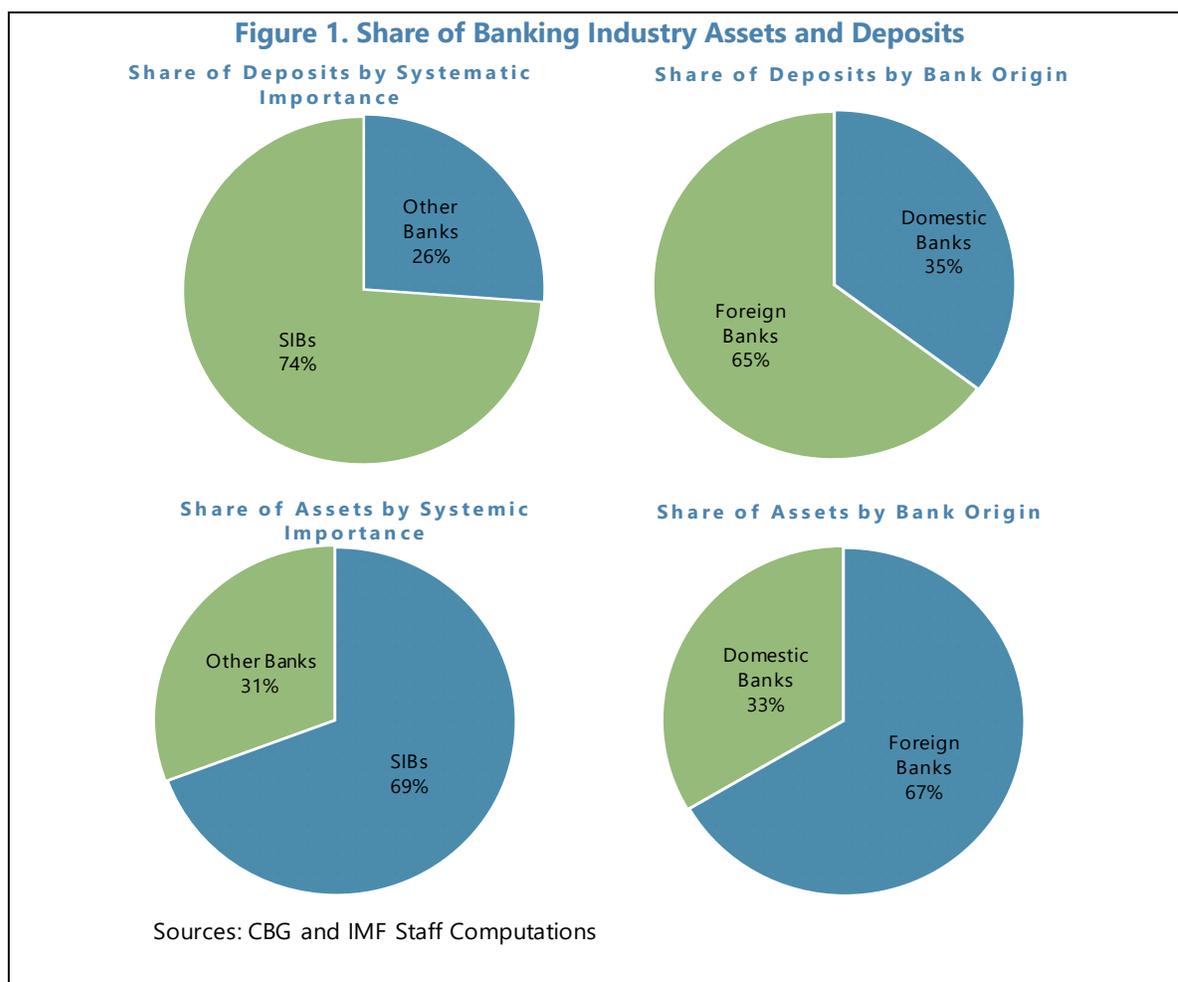
Source: CBG and IMF Staff Computations. NB: Share of assets excludes VISACAs and Credit Unions due to lack of data

¹ Prepared by Bernard Mendy and Dong Frank Wu.

² Social Security and Housing Financing Cooperation (SSHFC).

(continued)

2. The banking system accounts for more than 80 percent of total financial assets of the financial sector and is itself highly concentrated (Figure 1). Four of the twelve banks³ (based on assets size) are domestically systemically important banks (D-SIBs) and jointly account for about 69 percent of industry total assets and 74 percent of all deposits. Overall, the banking industry holds around 77 percent of all outstanding sovereign assets, and at least 41 percent (GMD 14.7 billion) of the industry’s assets are short-term government securities—mainly T-bills. This exposure is in addition to GMD 297.7 million in credit to the central and local governments, and public enterprises. Government’s heavy reliance on the T-bill market stems from protracted fiscal imbalances due to ballooning public expenditures, a low revenue base, and fiscal bailouts of struggling state owned enterprises (SOEs).



³ Eco Bank Limited (EBL), Trust Bank Limited (TBL), Standard Chartered Bank (SCB) and Guaranty Trust Bank (GTB).

B. Literature Review on Financial Development, Inclusion and Deepening

3. Recent analytical work explores the linkages between financial development and inclusion, and economic growth. Sahay et al (2015, 2016) found financial inclusion increases economic growth up to a point, after which “the marginal benefits for growth wane following additional increases in both inclusion and depth,” indicating a non-linear relationship between financial development and inclusion and economic growth. However, recent studies (REO, April 2016; African Departmental Papers, No. 5, 2016) point out that The Gambia and a majority of countries in Sub-Saharan Africa (SSA) are well below this threshold, and would benefit from further financial development in terms of its impact on growth.

4. Recent benchmarking studies show that The Gambia’s financial development is below its peers and potential (REO, April 2016). In the study by Sahay et. al. (May 2015), The Gambia’s financial development score was 0.1 on a scale of 0 to 1—among the lowest in the group of non-resource intensive SSA countries—and the score stagnated at the same level between 1980 and 2013 (REO, April 2016). Additionally, based on an empirical analysis of 152 countries, the report calculates benchmark levels of financial development consistent with individual countries’ structural characteristics. This analysis shows that The Gambia’s statistical benchmark or potential financial development is 0.3, suggesting a sizable gap in financial development (REO, 2016), and hence significant scope to boost growth through financial development.

C. Methodological Approach to Assess Financial Development

5. The paper uses statistical benchmarking to assess The Gambia’s financial sector development relative to peer countries and over time. It employs the FinStats financial indicator tool, which provides a standardized quantile methodology to benchmark and compare countries’ financial sectors. The quantile regression allows for more meaningful cross-country comparisons by controlling for the level of economic development, and other key structural, and country-specific factors. For each of the indicators referenced above, there are four sets of benchmarks of financial performance provided: (i) regional benchmarks, (ii) income group benchmarks, (iii) peer group country averages, and (iv) statistical benchmarks, including the expected median and expected 25th and 75th percentiles. Deviations from the statistical benchmark are indicative of the quality/effectiveness of policy. FinStats data for the peer country comparison spans 10 years from 2006 to 2015.

Table 2. The Gambia: List of Comparable Peer Countries

Country	Country Code	GDP per capita (const. 2017 \$)	Population size (in million)
The Gambia	GMB	529	2.0
Liberia	LBR	368	4.5
Eritrea	ERI	480	5.2
Sierra Leone	SLE	498	6.5
Guinea-Bissau	GNB	535	1.8
Togo	TGO	555	7.3
Comoros	COM	750	0.8
Timor-Leste	TMP	988	1.2
Guinea	GIN	417	12.6
Nigeria	NGA	2548	182.2
Ghana	GHA	1696	27.4
Lesotho	LSO	1227	2.1

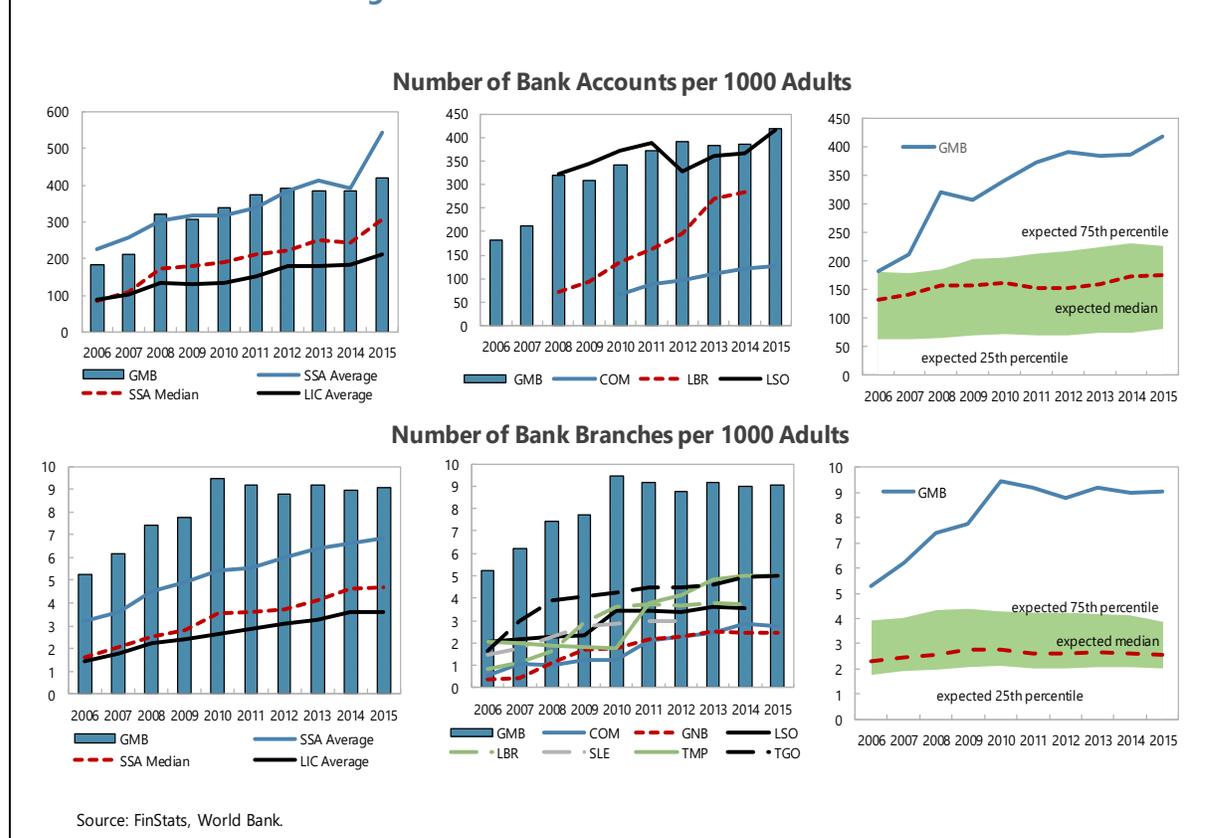
D. Empirical Analysis of Level of Financial Development

Financial Access

6. Despite its low level of financial development, The Gambia performs relatively well with respect to key access indicators at the national level (Figure 2). For instance, the country has a good level of financial access measured by indicators such as number of bank accounts per 1000 adults or number of bank branches per 100,000 adults. This was helped by the rapid rise in branch expansion in the last decade, with the number of banks doubling from seven in 2006 to fourteen in 2010. The period also coincided with the influx of new banks—partly due to the country’s aggressive policy of attracting foreign direct investment (FDI) at the time, partly due to increased competition among banks elsewhere in West Africa. Branch density stagnated from 2011 onwards, due in part to the exit of two banks⁴ and a weaker macroeconomic performance. However, notwithstanding recent gains in financial access, there is still significant room for improvement when it comes to the geographic dispersion of the financial institutions network. For instance, while 80 of the banking industry’s 87 branches are clustered in the Kanifing, Banjul, West Coast and the North Bank regions of the country, there are only four bank branches in the Upper River Region, one in the Lower River Region and no bank presence in the Central River Region. Similarly, with the exception of the North Bank and the Upper River regions which each have two ATM machines, 96 percent of the country’s 99 ATM machines are found within the Banjul, Kanifing and West Coast regions.

⁴ Oceanic Bank exited the market in 2012 followed by Prime Bank in 2013.

Figure 2. Financial Inclusion in The Gambia



7. A comparison with the peer SSA and LIC countries also shows that The Gambia financial services coverage has surpassed many regional peers except with respect to private credit provision. The Gambia remains in the upper half of the rankings when benchmarked against SSA and LIC countries. Similar results were observed when benchmarked against other West African Monetary Zone (WAMZ) member countries in terms of number of branches per 100,000 adults. Moreover, it only lagged behind Ghana when assessed for the number of accounts per 1000 adults. A quantile regression analysis used to control for outliers in the data and the influence of non-policy related structural differences such as economic and demographic factors also shows similar performance (Figure 2). Notwithstanding, the country lags behind all its regional peers when assessed for financial inclusion based on percentage of firms with credit lines largely reflecting the crowding out effects of fiscal dominance.

Financial Depth

8. Efforts to improve financial deepening in The Gambia have stalled primarily due to fiscal crowding out and structural issues (Figure 3). The growing need for fiscal financing has led to a decline in private sector credit from 17.4 percent of GDP in 2011 to 12.8 percent of GDP in 2015, including by pushing up average lending rates to a high of around 28 percent in 2016. This has pushed the country's performance with respect to private sector credit below the average for LICs and below its expected median (using the quantile regressions, after controlling

for outliers in the data and the influence of non-policy related structural differences). Similarly, the performance of NBFIs, as indicated by insurance company assets-to-GDP ratio, trails the average for SSA, and the quantile regression shows that more recently the ratio was in line with the expected median through 2013 and then declined to the 25th percentile by 2015. By contrast, the country performs much better when financial depth was assessed based on the bank deposits-to-GDP ratio. The country's score was above the regional average, the average for peer countries and its own expected median. While this very high ratio depicts good financial depth, it may also reflect limited alternative investment opportunities.

9. The structure of banks' balance sheets is also holding back financial deepening.

The industry's liabilities are almost entirely short-term, which helps to explain the lack of appetite for long-term financing to avoid large maturity mismatches. Beyond this, difficulties in contract enforcement and foreclosures, software problems affecting both the credit referencing platform and the collateral registry, are a few of the structural problems that have an adverse impact on financial deepening.

Financial Efficiency

10. The banking industry's Return on Assets (ROA) and Return on Equity (ROE) suggests good performance which, however, is vulnerable to lower T-bill rates.

The country's performance as indicated by these two indicators (Figure 4), surpassed the regional average for SSA and its peers in the WAMZ region and those in the low-income bracket. However, this seemingly good performance also reflects the high level of T-bill interest rates and high dependence of the banking sector on low-risk, high-yielding sovereign assets in recent years. Lower government borrowing needs and declining T-bill rates will likely put pressure on profitability indicators

E. Policies to Support Financial Development

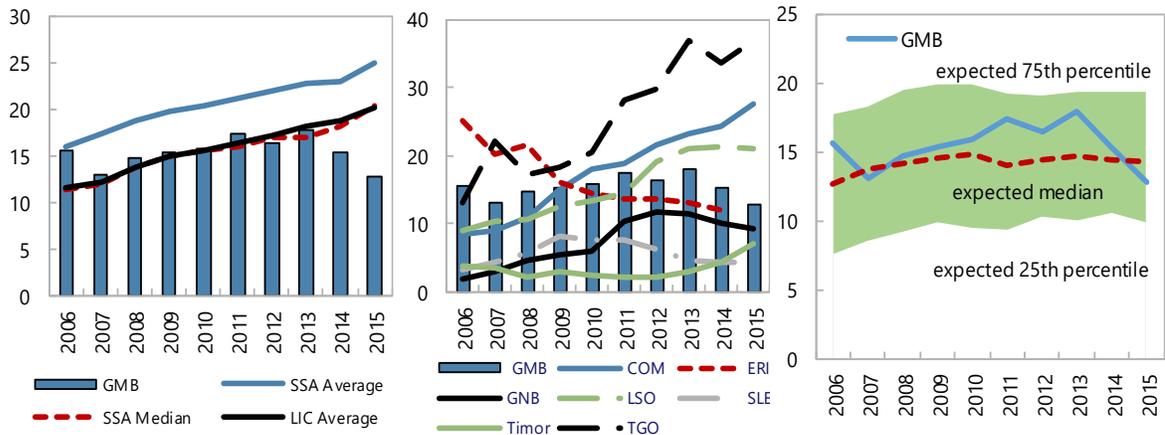
11. Financial development facilitates efficient resource allocation and promotes economic growth (Acemoglu and Zilibotti 1997).

Moreover, recent analytical work has shown that there is significant scope for financial development to contribute to the new government's drive to enhance inclusive growth. However, in order to achieve this objective, concrete efforts must be taken to address structural and policy challenges affecting the financial system as a whole. In addition to the policy recommendations in the previous section, the following could be considered:

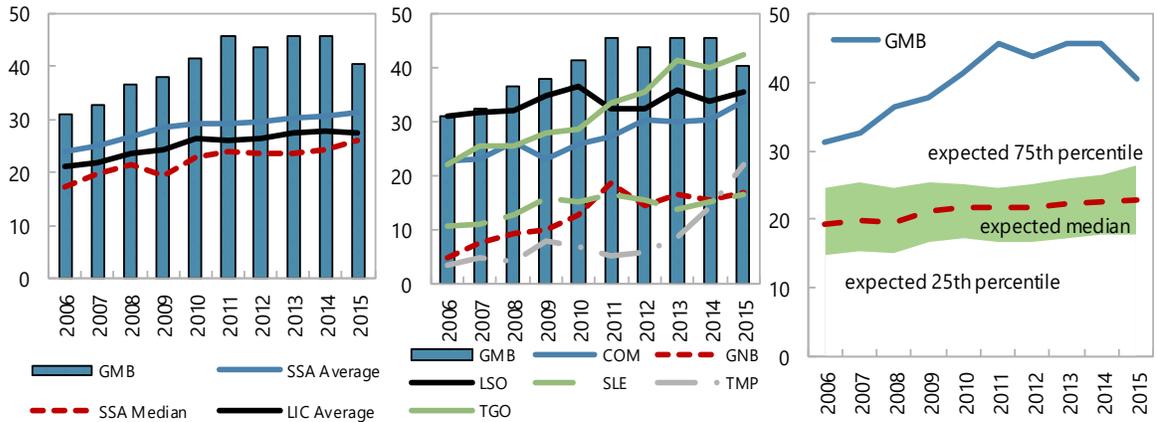
Strengthen the legal, regulatory and institutional frameworks to promote healthy financial competition and improve financial infrastructure. Efforts are needed to strengthen property and creditor rights protection, contract enforcement; to improve bank regulation and supervision in compliance with Basel Core Principles (BCP); strengthen the bank resolution and crisis management framework to allow the orderly exit of insolvent financial institutions; and upgrade the financial safety net, including the set-up of deposit insurance scheme in the long-run, to mitigate the associated impacts.

Figure 3. Financial Deepening in The Gambia

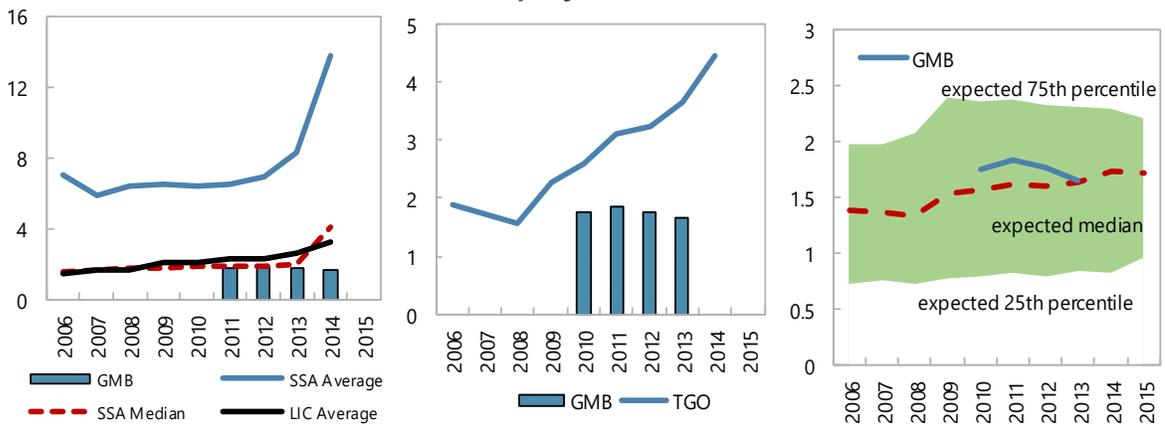
Credit to the Private Sector (Percent GDP)



Domestic Bank Deposits (Percent GDP)



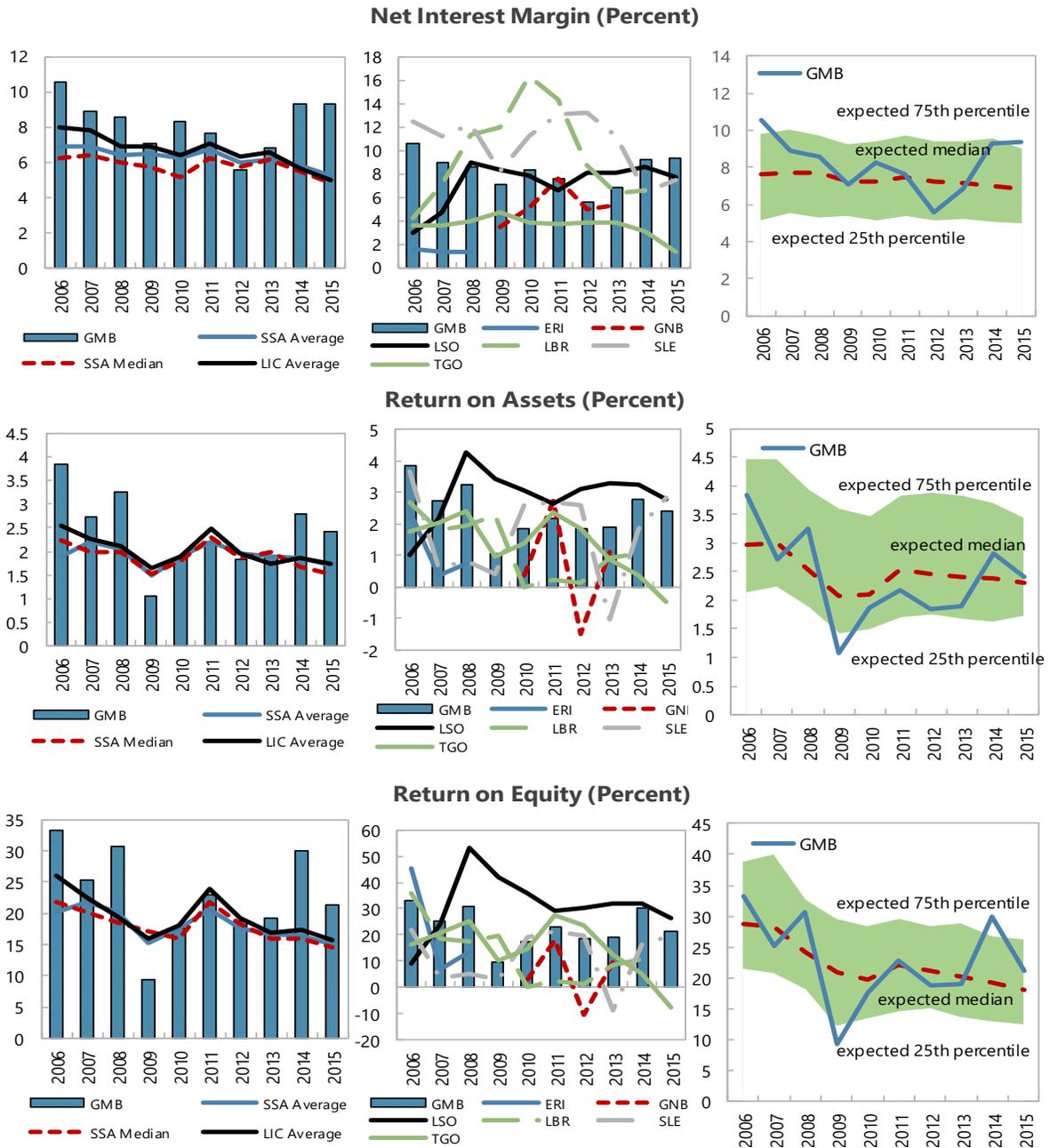
Insurance Company Assets (Percent GDP)



Source: FinStats, World Bank

- Maintain a flexible adoption approach to financial innovations while being vigilant to and prepared to mitigate its potential risks. For example, support mobile banking for financial inclusion by revising the legal and regulatory frameworks while setting up new oversight standards and institutional arrangement for e-payment.
- Formulate a strategy for financial inclusion. The authorities should formulate a financial development plan and strategy with a view to reaching out to the unbanked part of the population. The plan will also support its social protection and women empowerment objectives contained in the current NDP. Such a plan could also include a strategy to support VISACAs and credit unions, and by extension, SME credit through credit guarantee schemes.

Figure 4. Financial Efficiency in The Gambia



Source: FinStats, World Bank

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FISCAL STRESS TESTS FOR THE GAMBIA¹

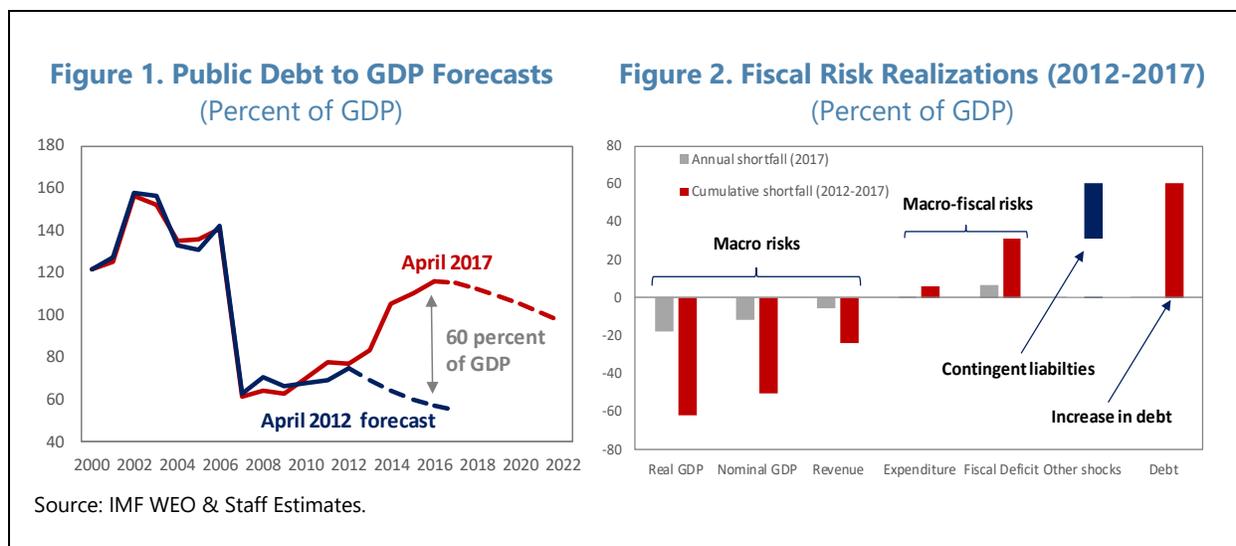
The Gambia's fiscal position in the past was adversely impacted by weather and pandemic related shocks; but also by weakened fiscal institutions and budgetary processes, and embezzlement of funds that are being addressed by the new democratically elected government. Even so, vulnerabilities to fiscal shocks from a variety of sources remain. Fiscal stress tests indicate that a tail-risk shock arising from an adverse macroeconomic shock from drought together with an Ebola-like pandemic would have adverse macrofiscal and macrofinancial impacts which would increase contingent liabilities, worsen government finances and make debt deeply unsustainable. Moreover, the fiscal shock would worsen the public sector's balance sheet (net wealth) undermining existing buffers to absorb these losses. Reducing the likelihood and impact of fiscal shocks would require reform of the SOEs, strengthening fiscal institutions and the budget process, lengthening the maturity of domestic debt, and seeking greater access to external financial support which would need to be mostly in the form of grants.

A. Background

1. **The Gambia's efforts to break with policies of the past and strengthen public finances are critical to enable economic stabilization and economic growth.** The Gambia is committed to desisting from the policies of the past regime which facilitated embezzlement of state resources, undermining the public finances. The authorities are strengthening fiscal institutions and increasing the credibility of the budgetary process by better aligning revenues with expenditures through expenditure control and revenue mobilization. Delivering sound public finances will help to create fiscal space from public sector balance sheets to enable policymakers to: (i.) provide support for aggregate demand consistent with macrofinancial stability; (ii.) scale up investment in line with national development priorities (NDP) (GoTG 2018); (iii.) ensure debt sustainability; and (iv.) respond to the broad range of other fiscal priorities and shocks that could emerge in the near future.
2. **The Gambia's past fiscal outturns have differed substantially from both budgeted and IMF staff's fiscal projections.** Deviations arose due to persistent fiscal slippages and shocks related to weather and pandemics, terms of trade, bad governance and embezzlement and resulting government support for SOEs (Figures 1-2). Failure to identify and prepare for such risks has caused additional
3. **Fiscal stress tests provide a set of analytical tools and best practices to help Gambian policy makers understand and manage fiscal risks in tail-risk scenarios.** In the past limited fiscal information and awareness has inhibited identification and management of fiscal risks. Fiscal stress tests provide the opportunity for the GoTG to assess the impact of specific adverse tail-risk scenarios

¹ This work is based mainly on a Technical Assistance (TA) Report *The Gambia Fiscal Stress Test* by Jason Harris, Alberto Soler, Mohamed Afzal Norat, Sybi Hida and Matthew Appleby, October 2017 as well as additional analytical work on macrofinancial linkages and additional linked fiscal-financial stress tests based on recent views from the Basel Committee on Banking Supervision on sovereign exposures and risks (BIS 2017).

government obligations higher public debts, and increased debt servicing requirements. and fully incorporate the macrofiscal and macrofinancial implications if these risks were to materialize. The toolkit enables authorities to embed their medium-term fiscal frameworks and medium-term debt strategies in a fiscal policy context where uncertainty around fiscal variables and debt metrics are better accounted for than through debt sustainability analysis alone. Given The Gambia's already sizeable fiscal and debt vulnerabilities (public debt-to-GDP around 120 percent) the fiscal stress tests results highlight the importance of strong action on key fiscal reforms to address budgetary, SOE and other contingent liabilities risks.



B. Fiscal Stress Test Scenario

4. Public Sector Balance Sheets (PSBS) were constructed to better understand the current fiscal strength and capacity to absorb fiscal shocks ahead of the fiscal stress tests. While debt sustainability metrics provide useful indicators of the impacts of fiscal shocks on public sector resiliency these frameworks necessarily focus on a narrower set of liabilities and cashflows. A more comprehensive determination of public sector resiliency can be developed from a balance sheet type approach which takes into account a broader set of financial and non-financial asset and liabilities. For the first time a balance sheet for the GoTG as well as the broader public sector was constructed. The PSBS is an estimation of the value of the public sectors' total assets and liabilities, with the difference being the value or net worth of public-sector equity. The comprehensive net worth (CNW) adds to current net worth the net worth of future discounted revenues and expenditures of both the government and broader public sector. The CNW also provides an ongoing and long-term signal of fiscal performance and resiliency. As CNW increases it indicates greater level of resilience to potential fiscal shocks that would otherwise need to be met through changes in fiscal policy. CNW is negative (liabilities greater than assets) in The Gambia at -106 percent of GDP in 2018 which under the shock scenario (see below) deteriorates further to -332 percent of GDP. Details of the PSBS and its construction are not covered here due to space constraints. The focus here is more on the fiscal stress test itself.

5. The fiscal stress test builds upon the baseline projections and stresses them with a large macroeconomic shock. The starting point of the fiscal stress test builds upon the baseline fiscal projections² and the PSBS. This baseline scenario is then stressed by a multifaceted macroeconomic shock that comprises three main components:

- A large exogenous shock, in the form of a drought combined with an Ebola-like pandemic, that hits two of the key sectors of the economy—agriculture and --which adversely impacts real GDP.
- Endogenous feedbacks to key macro parameters, such as interest and exchange rates, spillovers to other sectors of the economy and realization of increased contingent liabilities; and
- Asset price shocks to housing and equity markets (which are of less importance in The Gambia).

6. The combined shocks cause real GDP to fall sharply, before rebounding in a V-shape. A large macro shock could comprise a pandemic element of almost two standard deviations and an agricultural one of medium intensity, of around one standard deviation. Assuming that both materialize in 2018, their combined effect would cause real GDP to drop in both 2018 and 2019 and by 20 percent in absolute terms relative to the baseline level. From 2020 to 2022, annual GDP growth would exceed the baseline and help closing some of this gap (Figure 3).

7. The agriculture shock is assumed to be concentrated in 2018. Bad harvests are confined to 2018, giving rise to a loss in the output of the sector and a surge in the price of domestic food products. In 2019, agricultural production would return to near normal levels, which translates into a sharp rebound in the growth rate of the sector. No long-lasting effects are assumed.

8. The pandemic lasts two years and takes a heavier toll, even after its conclusion. In contrast to the agricultural shock, the pandemic is far more persistent. The immediate effect in 2018/19 is reflected in a dramatic fall in the number of tourists by 60-70 percent relative to the baseline. While the pandemic is assumed to be over in 2020, the return of the number of tourists to the baseline level would be very gradual. Tourist markets are very dynamic and recovering the pre-crisis market share may be difficult, as other competing suppliers could have attracted some former clients of the Gambia, and perceptions are persistent. Tourism output is assumed to grow above the baseline from 2021 on.

9. The exchange rate depreciates sharply on the back of the drop of exports and a loss of confidence from foreign investors. The dalasi/US\$ exchange rate has traditionally been volatile, with sudden and large depreciation bouts triggered by economic or political instability. The

² The baseline used here is from The Gambia: Request for Disbursement Under the Rapid Credit Facility, and Proposal for a Staff-Monitored Program-Press Release; Staff Report; and Statement by the Executive Director for The Gambia. <http://www.imf.org/en/Publications/CR/Issues/2017/07/03/The-Gambia-Request-for-Disbursement-Under-the-Rapid-Credit-Facility-and-Proposal-for-a-Staff-45020>.

recession in the tourist sector would reduce the demand for national currency. These factors translate into a cumulative 20 percentage points depreciation between 2018 and 2019, putting pressure on import prices and weakening imports of non-basic goods. From 2020 a slight appreciation occurs once the worst of the crisis is behind, reducing the cumulative effect on the exchange rate to 13 percentage points off the baseline level.

10. Inflation is initially higher, driven by the dalasi depreciation and the rise in domestic food prices, though this is partly offset by the widening economic slack. Food accounts for almost half of the CPI basket and, given the low-price sensitivity of demand for these products, a high pass-through of the dalasi depreciation is very likely. This is further compounded by the effect of the drought on domestically grown products. Thus, agricultural products bring prices above the baseline in 2018-19. From 2020 the dalasi appreciation and economic slack help the CPI index to revert broadly back to the baseline.

11. The spike in gross financing needs and public debt combined with the currency depreciation put upward pressure on interest rates. The abrupt fall in activity induces a substantial deterioration in fiscal outcomes (higher contingent liabilities), as happened in peer countries, with a consequent increase in gross financing needs. The massive additional borrowing in dalasi requires increased issuances together with the expected depreciation of the local currency, will drive up interest rates. Taking account, the magnitude of the depreciation and previous interest rate spikes, the 12-month T-bill rate surges 10 percentage points above the baseline. After 2020, the interest rate falls, although the higher debt stock keeps it elevated.

12. Finally, asset prices fall sharply, with equity prices dropping by half, and house prices by a third. These have relatively little impact on demand, as few Gambian have direct holdings of equities, and houses are not a ready source of liquid wealth. Nevertheless, this impacts on the public and banking sectors' balance sheets.

C. Fiscal Implications of Shock

13. The macro shock has severe implications for the fiscal position. In addition to the standard consequences of a fall in activity and tax bases resulting in steep reductions in tax revenues, the shock also generates non-linearities due to changes in the sectoral structure and, given the importance of tourism for revenue collection, will cause larger losses in revenues.

14. In response to the pandemic, grants from international donors are expected to increase. Budget support grants rise above the baseline both in nominal terms and as a share of GDP to a maximum difference of 4 percent of GDP in 2019. The temporary surge in grants only partially offsets the drop in domestic revenues in nominal terms but exceeds it as a percent of GDP due to nominal GDP falling by a greater amount (Figure 3).

15. Despite the sharp decline in GDP, primary expenditures would likely increase due to rigidities and transfers. Some expenditure items such as public wages, pensions and some externally financed public investment present downward rigidities and cannot be adjusted quickly.

Public investment overall strongly increases until 2019, both in nominal and GDP terms, due to the depreciation of the dalasi which increases the value of externally funded loans and grants. The deep recession also requires the government to raise expenditure on transfers to the private sector, notably for the most vulnerable groups of the population. Health expenditures would also grow, as new medical staff and equipment would be needed to contain the pandemic, though this is assumed to be financed by emergency grants (no net impact on the deficit). Non-interest expenditure over GDP by the end of 2019 is 12 percentage points over the baseline. This clearly indicates the need for a consolidation, once the effects of the pandemic gradually fade away. This consolidation will be based both on current and capital expenditure.

16. Interest expense surges, because of both the soaring borrowing needs and the sharp increase in domestic interest rates. Substantially larger deficits require additional borrowing leading to higher interest payments.

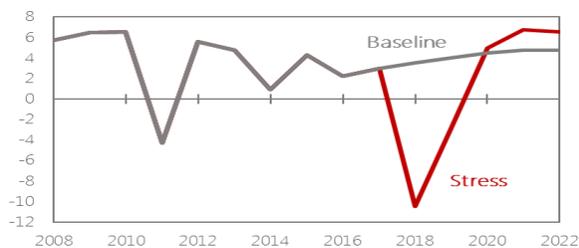
D. Contingent Liabilities (CLs) and Fiscal Balance

17. Public finances are also hit by the realization of additional CLs on top of those in the baseline as the shock reduces SOEs revenues and increases concerns around their viability requiring public support. These include an increase in loan guarantees as well as capital injections into SOEs and the financial sector (see below). In addition, a non-macro related legal liability is realized (Para 19). The realization of contingent liabilities has three substantive effects on public finances:

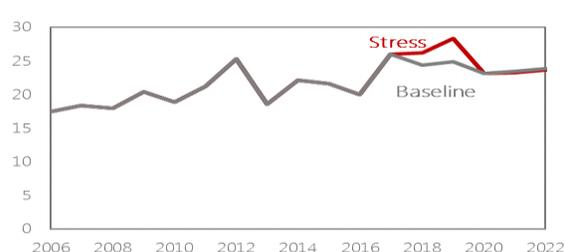
- **Public debt of the government** increases from an already high 120 percent of GDP in 2016 to more than 180 percent in 2020, as the government assumes guaranteed debts that were previously on the SOE balance sheets. The bulk of this is due to macro effects including revenue falls, increase in interest and exchange rates and valuation effects, while the realization of CLs adds a further 30 percentage points to which the lower GDP denominator also contributes.
- **The fiscal deficit** increases due to capital injections (which are accounted for as capital transfers) and interest payments of assumed debt. The deficit (including contingent liabilities) is 16 percentage points above the baseline in 2019 reaching 20 per cent of GDP.
- **Gross financing needs** increase from 37 percent of GDP in 2017 to 61 percent in 2020 as the government has to finance (and subsequently refinance) its higher deficits, as well as pay amortizations of assumed debts. This ratio is slightly higher than the previous peak in 2016 (60 percent). Refinancing risk remains a concern which is being tackled by authorities through longer term (3-year and 5-year bond issuances). About 1.6 bn. dalasi of 3-year bonds were issued in 2017 replacing an equivalent issuance in T-bills.

Figure 3. Fiscal Stress Impact on Key Macroeconomic Variables

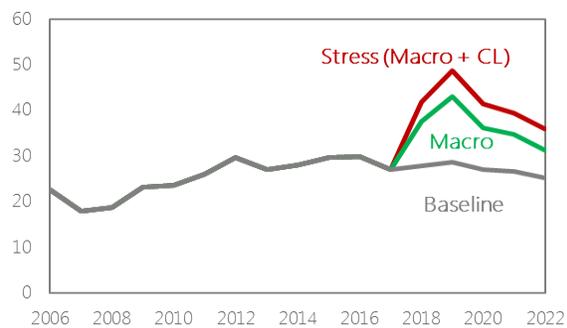
Real GDP (percent)



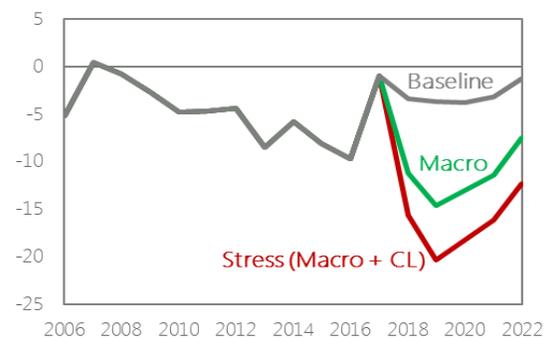
Revenue and Grants (percent of GDP)



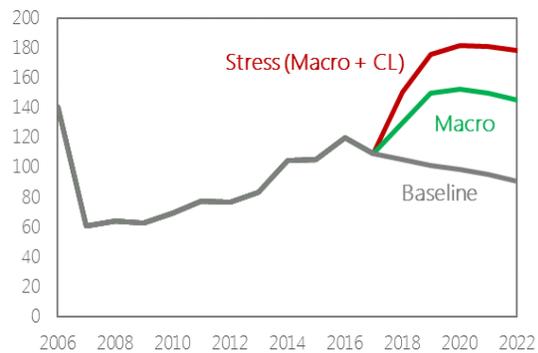
Expenditure (percent of GDP)



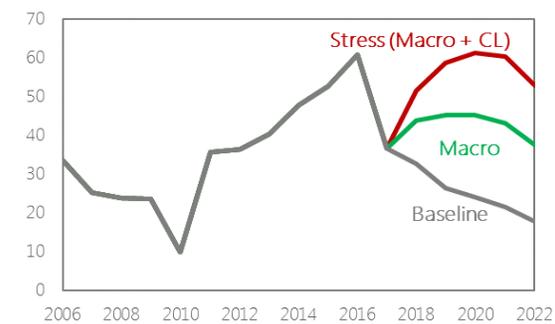
Fiscal Balance (percent of GDP)



Public Debt (percent of GDP)



Gross Financing Needs (percent of GDP)



Source: Staff Estimates.

18. The main source of CLs for the government is SOEs. This sector forms an important part of The Gambian economy and comprises 13 enterprises, with total assets of 50 percent of GDP and 8,000 employees. Several SOEs perform badly and are heavily indebted, posing a drain to government resources with continuous deficits and payment arrears. Total unconsolidated liabilities of the sector in 2017 are estimated at 43 percent of GDP. Apart from the explicit guarantees of the central government (13.9 percent of GDP), the level of implicitly guaranteed liabilities poses another risk for the government. The impact on SOEs due to the stress test focused on the deterministic projection of the net operating cash-flows of the main SOEs in the baseline and stress scenarios, taking into consideration their specific business characteristics, such as cost structure, productive capacity and potential demand.

19. The CLs realization in the stress scenario may be broken down into three categories:³

- The assumption by the government of 13.9 percent of GDP of existing CLs, made up largely by existing guaranteed debts, which under the stress scenario are unable to be serviced.
- Capital injections of 19.4 percent of 2017 GDP over the period 2018-2025 provided by the government to make up cashflow shortfalls to ensure that key utilities remain operational. These translate into roughly 2.8 percent of GDP each year.
- Pending legal claims. Although there is not yet an inventory of legal claims against the government, there are indications that pending claims to the central government could account for around 2.8 percent of GDP.

E. Fiscal Stress Tests and Macroeconomic Linkages and Channels

Gambian Financial Sector

20. Cross exposures across the fiscal, external, real and financial sectors in The Gambia mean that fiscal stress has significant spillovers. The fiscal shock articulated here impacts the Gambian financial sector through multiple macroeconomic linkages and channels. The impact on the financial sector then feeds back to other sectors (external, fiscal, real) which can result in vicious or virtuous feedback loops, depending on the nature of the initial shock. The financial sector in Gambia comprises 12 commercial banks and 11 insurance companies (Mendy and Wu, 2018).

21. Total financial sector assets are worth 77 percent of GDP (SSA median of around 50 percent) with the banks playing a significant role in purchasing government's domestic debt in the primary market. Much of these are being held in short term government debt (Treasury Bills - 74 percent of outstanding face-value of stock 13.1 billion GMD.⁴) Secondary to

³ The contingent liabilities quantified below are provided as a share of 2017 GDP and are consistent with the direct impact of around 20 percent of GDP presented in paragraph 42.

⁴ Latest estimate is 14.2 billion GMD as of January 2018.

investments in government debt, and by some considerable margin, are loans to the private sector which are around 15 percent of total bank assets well below many regional SSA peers (Wezel 2018).

Fiscal Shocks and Sovereign-Bank Risks

22. Gambian banks' high level of sovereign exposures results in a well-developed sovereign-bank nexus that is inherently risky. These risks are multidimensional, and include credit, interest, market and refinancing risk. The realization of these risks can affect The Gambian banking system through various sovereign-bank channels. These include (BIS 2017):

- **Macroeconomic channel**, whereby the crystallization of sovereign risk could trigger a recession, which in turn could increase borrowers' riskiness, increase NPLs and add to banks' fragility and funding costs, resulting in a spiral of credit tightening that deepens the recession, independently of banks' direct exposures to the sovereign.
- **Direct exposures channel**, whereby increased sovereign risk (higher yields lower asset values) can inflict losses on banks' sovereign exposures, weakening their balance sheets;
- **Collateral channel**, where an increase in sovereign risk can reduce the value of sovereign collateral used by banks, raising funding costs and liquidity needs;
- **Sovereign credit rating downgrades**, which generate cliff effects and may precipitate downgrades to the ratings of other entities in the economy given that sovereign ratings set a "ceiling" on other credit ratings;
- **Government support channel**, where a weakening of the sovereign could reduce the funding benefits that banks derive from implicit and/or explicit government guarantees. A number of post-crisis reforms (e.g. resolution regimes) seek to weaken this channel;

23. These channels, in isolation or in combination, can make individual banks more susceptible to sovereign distress or failure, increasing the risk of contagion to the rest of the banking system. The causality can also run in the opposite direction: a banking crisis can increase sovereign risk. For example, if a government is expected to support the banks in a banking crisis, a strained banking system could erode the sovereign's own creditworthiness as SOEs can (see earlier).⁵

24. The impact of the Fiscal Stress Test reduces the commercial banks' level of capital and their ability to meet increased daily cash withdrawals. The impact of the stress test comes to fruition through two primary channels for the commercial banks' in The Gambia. The first is a direct cost to the value of the banks' assets and liabilities, and the second a cash shortage through

⁵ On the other hand, banks can also act as shock absorbers in times of distress when they act as stable and willing investors in sovereign debt. Furthermore, sovereign defaults may be less likely to occur in countries where domestic agents/banks hold more domestic sovereign debt, as this concentrates the costs of a government default on resident citizens and banks, thus creating a commitment device for the sovereign. In addition, a high proportion of sovereign debt held domestically reduces the dependence on external investors, who are typically more prone to taking flight in the presence of shocks, thus potentially subjecting governments to refinancing risk.

increased demand –“run on the banks.” The fiscal stress test is initially realized through the commercial bank’s balance sheet through a multi-factor shock in terms of an increase in interest rates (interest rate risk) combined with a depreciation in the Dalasi (FX risk), along with an increase in non-performing loans (credit risk) and lower confidence in banks generally.

Fiscal Stress and Basic Financial Sector Impact

25. The multi-factor shock results in lower capital adequacy ratios (but still above regulatory minimums), but for some of the smaller local banks the demand for cash requires the government to recapitalize and provide liquidity support. The outcome of the shock sees the total commercial banking sector balance sheets contract by GMD 744 million or 1.8 percent of GDP due to the credit risk alone. For the Gambian banking system as a whole combining credit losses with net losses from increased interest rates and net FX losses from GMD depreciation result in aggregate losses of GMD 959 million (2.27 percent of GDP)⁶ with recapitalization needs from the losses amounting to GMD 367 million (0.8 percent of GDP). For all banks the average risk weighted capital adequacy ratio drops to 30.3 percent, down from the current baseline of 35.6 percent, but still well above the regulatory minimum of 10 percent (Figure 4). However, three of the local banks’ ratios drop below the 10 percent minimum and therefore require capital injections. Compounding this further is that one of these three banks doesn’t make it through the first day of the liquidity run, and as a result requires additional cash to honor its customer cash withdrawals (0.5 percent of GDP). In the absence of any safety net liquidity schemes the immediate capital requirements from the central government would mount to around 1.3 percent of GDP.

26. The basic multi-factor financial stress scenario implied by the fiscal stress indicates that a relatively modest level of capital would be required to have all the banks meet statutory requirements. However, there are bigger and more fundamental structural issues underlying the Gambian banking sector’s links with the government. A systemic risk nexus exists between sovereign and bank credit risk which is evident by the level of government debt held by the financial sector in The Gambia. In effect the current multi-factor financial shock implied by the fiscal stress underprices sovereign risk, namely the inherent risks in holding domestic sovereign debt⁷. That underpricing mainly occurs because the current international and domestic Gambian regulatory and supervisory framework applies zero-risk weights on domestic currency sovereign debt, as is the

⁶ Some banks gain from gains due to increased interest rates and depreciation given their balance sheet assets and exposures other banks lose, in net terms across all banks losses are greater than gains.

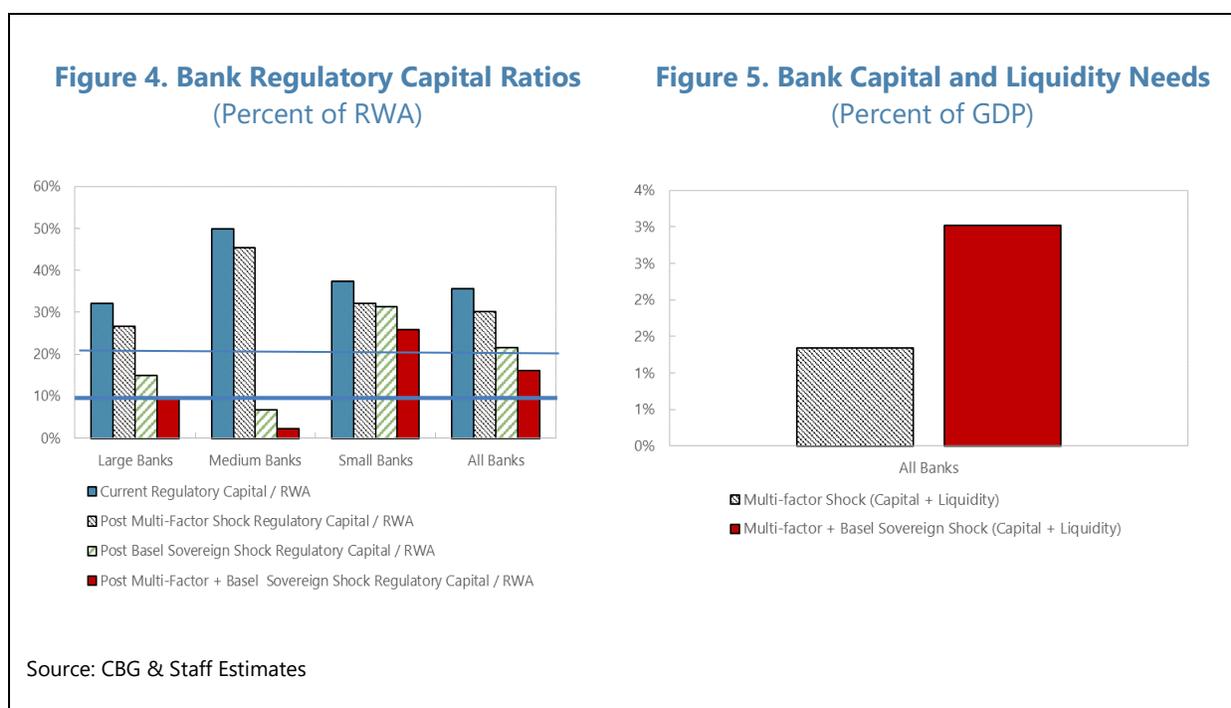
⁷ “The existing regulatory treatment of sovereign exposures is more favorable than other asset classes. Most notably, the risk-weighted framework includes a national discretion that allows jurisdictions to apply a zero percent risk weight for sovereign exposures denominated and funded in domestic currency, regardless of their inherent risk. This discretion is currently exercised by all members of the Committee. Sovereign exposures are also currently exempted from the large exposures framework. Moreover, no limits or haircuts are applied to domestic sovereign exposures that are eligible as high-quality liquid assets in meeting the liquidity standards. In contrast, sovereign exposures are included as part of the leverage ratio framework”. Basel Committee on Banking Supervision, Discussion Paper, “The regulatory Treatment of Sovereign Exposures,” December 2017, (BIS 2017).

(continued)

practice in other jurisdictions. If risk weights were positive and sovereign risks were more fully accounted for, the capital adequacy needs would be greater (see below) (Figure 5).

Incorporation of Enhanced Sovereign Risk

27. The Gambia has a significant sovereign-bank nexus that suggests sovereign exposures are risky but that risk is not reflected in the current regulatory treatment of sovereign exposures. One way to better reflect that risk would be to assign positive risk weights on sovereign exposures in local currency. It is worth bearing in mind that while sovereign exposures carry risks they also play important roles in the banking system, financial markets and the broader economy.⁸ Any application of positive risk weights would also have to guard against procyclicality (i.e., if capital requirements increase too much in a sovereign distress episode, banks could reduce their exposures undermining banks debt stabilizing behavior for sovereign debt).



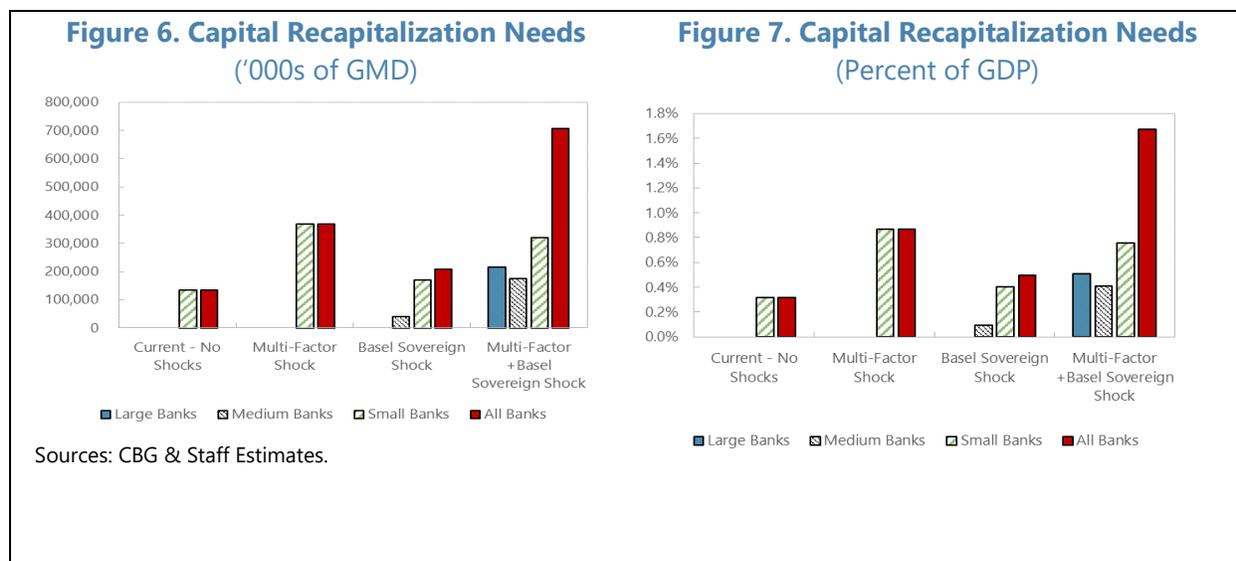
28. Properly calibrated risk weights on sovereign exposures could improve financial stability and market efficiency. A recent discussion paper by the Basel Committee on Banking Supervision (BCBS) suggest, among others, that positive risk weights properly calibrated to avoid unintended consequences and marginal risk-weight add-ons to avoid excessive holding of

⁸ "Sovereign exposures are used by banks for liquidity management, credit risk mitigation, asset pricing, financial intermediation and investment purposes. Banks' holdings of sovereign exposures also play an important role as part of monetary policy operationalization. As banks are generally one of the main investors in government debt, they also play a role in the operationalization of fiscal policy." (BIS 2017).

(continued)

sovereign exposures by banks could be beneficial in that regard.⁹ Moreover, it could better balance banks' sovereign holdings with provision of private sector credit reducing the prospects for crowding out of investment. In the case of the Gambia this would mean banks would apply a 9 percent risk weight on domestic currency sovereign exposures and marginal risk-weight add-ons that would account for exposure concentrations (percent of Tier 1 capital) from 100-300 percent and exposures greater than 300 percent.

29. Capturing sovereign risks more fully results in greater declines in capital buffers and recapitalization needs. Incorporating the above approach to capturing sovereign risk and distress through positive risk weights results in a decline in the capital adequacy ratio to 21.6 percent for all banks, with medium sized banks falling below the minimum capital threshold of 10 percent. Combining the sovereign distress from the fiscal stress test with the Basel risk-weight shock together with provisioning of the NAWEC bond¹⁰ results in much larger declines in capital adequacy with the average of all banks falling to 16.1 percent and seven large and medium sized banks falling below the minimum threshold. Capital adequacy of small banks is less impacted, in part due to their lower and less concentrated sovereign debt holdings¹¹. Capitalization needs in absolute terms (GMD millions) and in percent of GDP are small but sizeable especially for smaller banks (Figure 6-7). For all banks recapitalization (excluding liquidity needs) amounts to GMD 707 million or 1.7 percent of GDP under a combined shock.



⁹ See BIS 2017 for full details of Pillar I, II and III revised measures as they pertain to the regulatory treatment of sovereign exposures and how to operationalize them.

¹⁰ The NAWEC bond is now serviced by the GoTG.

¹¹ Sovereign debt exposure concentrations for Gambian banks range from 0-733 percent, with median concentration of 295 percent.

30. Macrofinancial analysis implies much lower capital buffers of Gambian banks under fiscal and sovereign stress. The macrofinancial analysis which incorporates both the fiscal multi-factor shock with greater sovereign risks emerging from the various channels of the sovereign bank nexus make clear that bank capital buffers are significantly smaller under fiscal and sovereign stress. Capital buffers would need to be raised and over time excessive holdings of sovereign debt would need to be reduced gradually to avoid destabilizing the domestic debt market. This would help to boost private sector credit as banks' risk management capacity is strengthened without undermining credit underwriting standards. The fiscal and related financial stress scenario assumes that the government does not default—the latter would have sizeable capital and liquidity needs resulting in further (and much larger) implicit CLs from the financial sector than assumed here.

F. Key Policy Recommendations

31. The fiscal stress test results in very adverse macroeconomic, fiscal and macrofinancial outcomes with no capacity to absorb these given Gambia's precarious debt position. The following key policy actions and support by donors will help the Gambian authorities build fiscal space and more resilient longer term public sector balance sheets to reduce the probability and/or impact of fiscal shocks and sovereign distress.

- **Strengthen the first line of fiscal defense.** The GoTG will need to progress and follow-through on structural reforms to maintain fiscal sustainability over the medium term by better aligning revenues and expenditures, much lower domestic borrowing, resolution of government and cross arrears of SOEs, and reform and rehabilitation of SOEs.
- **Preserve debt sustainability and place debt on downward path.** This will require implementing and regularly reviewing the authorities' medium-term debt strategy, including progressive lengthening of the maturity of domestic debt to reduce refinancing risks; pursue external creditors for debt rescheduling and softening of terms on existing commitments; and mobilizing grants to finance investment on NDP priorities and to foster debt sustainability.
- **Increase resilience of GoTG finances.** Identify policy options to increase resilience of the finances, including increased use of drought insurance, diversifying and expanding revenue bases and putting in place ex ante agreements with donors to provide funding and support in the event of a pandemic.
- **Conduct regular Fiscal and Financial Stress Tests.** Incorporate macrofiscal models into the fiscal forecasting process and use them to undertake annual sensitivity analysis, and biannual fiscal stress test exercises, including in combination with financial stress tests. This would also help to establish a closer working relationship on fiscal and linked financial stability matters between MoFEA and the CBG to foster policy coordination.

- **Strengthen Gambian Banks Capital and Liquidity Buffers.** The capital and liquidity buffers of Gambian banks should be further strengthened to ameliorate adverse macrofinancial spillovers and feedbacks from fiscal stress and linked sovereign distress thereby avoiding the establishment of a vicious sovereign-bank nexus loops.
- **Initiate a regular and frequent information exchange with major SOEs, to collect financial statements, financial plans and other relevant information to update the provided financial cash flow forecasting models.** Use of these models to analyze, for each SOE, macrofiscal implications of the baseline and stress scenarios involving the Macroeconomic and Policy Analysis Unit and Directorate of Public-Private Partnership in MoFEA will be needed.

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