

## Chapter 3. Financing

*Under this heading, we “[r]eview the current arrangements around advances and financing to the government by the Central Bank, including a review of the TAF ... (focus on Section 55)” [“Options around quantitative easing options during a declared emergency” are discussed under item 5 below.]*

We first review the Temporary Advance Facility (TAF) ([Chapter 3.1](#)). We then assess recent trends in BPNG purchases of government securities, including the so-called “slack arrangement” ([Chapter 3.2](#)) and consider reforms in this area ([Chapter 3.3](#)). We note that a loophole has emerged over the last decade which has led to excessive central bank deficit financing, and propose a pragmatic, conservative approach to close it.

### 3.1 Temporary Advance Facility

The Temporary Advance Facility (TAF) is established under Sections 55(2) and (4) of the CBA to provide short-term advances to the Government. In 2020, the Government amended the CBA to increase the TAF cap from K300 million to 12% of revenue and grants (including aid), averaged over the last three years (currently about K1.7 billion).<sup>17</sup> The Act was also amended to give the Government 12 months to repay the TAF, up from six.

The amended Section 55(2) reads:

- (2) The Central Bank may grant temporary advances to the Government in respect of temporary deficiencies of revenue due to cash flow mismatches at an interest rate or rates no less favourable than the prevailing rates payable by the Government on Treasury Bills or notes, or securities issues by the Government.
- (4) Subject to Subsection (6),<sup>18</sup> the total amount of advances under Subsection (2)
  - (a) shall not at any time exceed 12 percent of the annual average total revenue and grants receipts (including donor grants but not including once off asset sales or their equivalent) averaged over the previous three years to the year in which advances are sought.
  - (b) shall be repaid to the Central Bank as soon as practicable, but in any case, not later than twelve months from the date of the advance.

Section 55(3) was removed in 2020. This had authorised BPNG only to grant advances “where the granting of such an advance to the Government is not inconsistent with the monetary policy stance outlined in policy statements of the Central Bank.” The amendments also removed the TAF from the prohibition of Central Bank deficit financing (Section 55(9)).

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<sup>17</sup> Prior to this amendment, the cap had always been expressed in nominal terms, but had been revised upwards from its initial value of K100 million.

<sup>18</sup> Subsection (6) refers to advances outstanding at the time of the 2000 Act and is no longer relevant.

BPNG was unhappy with the amendments, arguing that it was not consulted, and that the 12-month payment period is too long.

The earlier TAF limit was low by international standards, and the reform may help the Government solve its serious cash flow problems at the start of the year. The current limit is obviously higher by international standards, but reasonable. In Malaysia, temporary financing is limited to 12.5% of estimated revenue in the current year (Section 71(3)),<sup>19</sup> and the amount must be paid by three months after the end of the fiscal year in which it is extended.

BPNG has also argued that the increase in the TAF would worsen the problem of excess liquidity (discussed below), and “pose[d] a challenge to monetary policy management” (March 2021 MPS p.3). It therefore sold government securities in the second half of 2020 to “diffuse part of the liquidity injected through the TAF” (p.3). Whether or not the liquidity concerns were justified, it was odd for BPNG to sell these securities before it had observed how much the Government would use the TAF. According to Figure 6 below, the TAF has hardly been used in recent years, including in 2020. We lack full data for 2021, but we understand that there has been some limited use of the TAF this year.

The Government has a legitimate need to smooth cash flow, and PNG has a well-known problem of back-end loaded expenditure. Spending more earlier in the year would improve spending effectiveness. From this perspective, we endorse the increase in the TAF, and agree that the provision of the Facility by the Central Bank, given its short-term and capped nature, does not need to be dependent on an assessment of monetary policy conditions.

As mentioned above, advances have to be paid back within 12 months (earlier six months). The purpose of the TAF is to smooth cash flow. It is envisaged that it would be utilised early in the year and repaid at the end of the year. The Malaysia model is that the temporary advances have to be paid back not more than three months into the next fiscal year. Another alternative would be to require that the TAF be paid back within the fiscal year.

Neither alternative would be markedly different in practice from the 12-month rule currently in place. However, it is important to send a clear signal that the TAF is not a deficit financing mechanism but, as per Section 55(2), an advance “in respect of temporary deficiencies of revenue due to cashflow mismatches”. Therefore, we propose that the TAF provisions be amended to enforce repayment within the fiscal year.

The current legislation states that the TAF advance is to be paid back with interest “at an interest rate or rates no less favourable than the prevailing rates payable by the Government on Treasury Bills or notes, or securities issued by the Government.” For clarity, we recommend that “no less” be replaced by “no more and no less” and “prevailing rates” be replaced by “prevailing comparable rates”.

The Malaysian legislation states that “if after that date [i.e. that date on which repayment is due] any such financing remains outstanding, the power of the Bank to extend further

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<sup>19</sup> This includes other government securities purchased by the Central Bank, excluding those acquired in the course of monetary policy operations (Section 71(3)).

financing in any subsequent financial year shall not be exercisable unless and until the outstanding financing has been repaid” (Section 71(2)). This is a useful discipline, and we recommend a similar clause be added to the PNG legislation.

The 2020 amendments defined revenue excluding privatisation receipts but including aid. We would argue that both should be excluded. Much aid is spent off budget, and there are few if any problems with cash flow when it comes to aid.

Finally, the 2020 amendments leave it as a matter of discretion for BPNG whether it will provide the TAF.

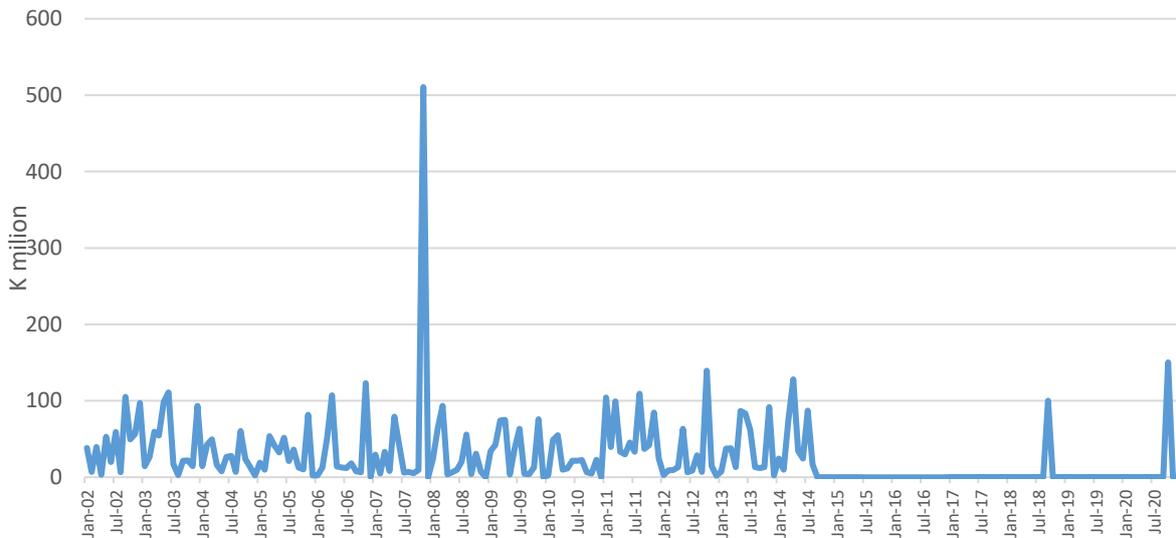
In [Chapter 5.5](#), we argue that providing good banking services should be one of the objectives of the Central Bank. The provision of the TAF is (unlike financing) a banking service that BPNG provides to the Government. In addition to this new objective, good relations between the Central Bank and the Treasurer and Treasury, and regular meetings, as proposed by various mechanisms in the previous chapter, should further reinforce a sense of collaboration in relation to the TAF, among other areas of mutual interest.

There nevertheless remain two risks: one that the Central Bank might refuse to issue the TAF without justification; and, two, that the Government will ask for it unreasonably, for example, very late in the year, and not because of a temporary cashflow mismatch. In general, as set out in the Executive Summary, we aim in this report to reduce the scope for discretion. We propose that in Section 55(2) ‘may’ be replaced by ‘will’. This still leaves room for the Governor to exercise judgement as to whether there is a temporary cashflow mismatch, but provides no other grounds on which the Governor could refuse a compliant request for an overdraft.

It is one thing to amend the legislation underpinning the TAF. It is another thing for the Government to use it, and another thing still to resolve its cash-flow problems. In these paragraphs, we outline some of the underlying problems regarding TAF usage and budget cash-flow.

Utilisation of the TAF has been very low in recent years, as the graph below shows. It is not clear how advances could have reached K500 million in late 2007, but it is also evident that from 2015 the TAF has hardly ever been used (up to the end of 2020). This is surprising since the PNG government has had well-publicised cash flow problems since the end of the resource boom. One possible explanation for this is that, as discussed in the next part of this chapter, since 2015 BPNG has been buying large volumes of T-Bills and these may have become a substitute for the TAF.

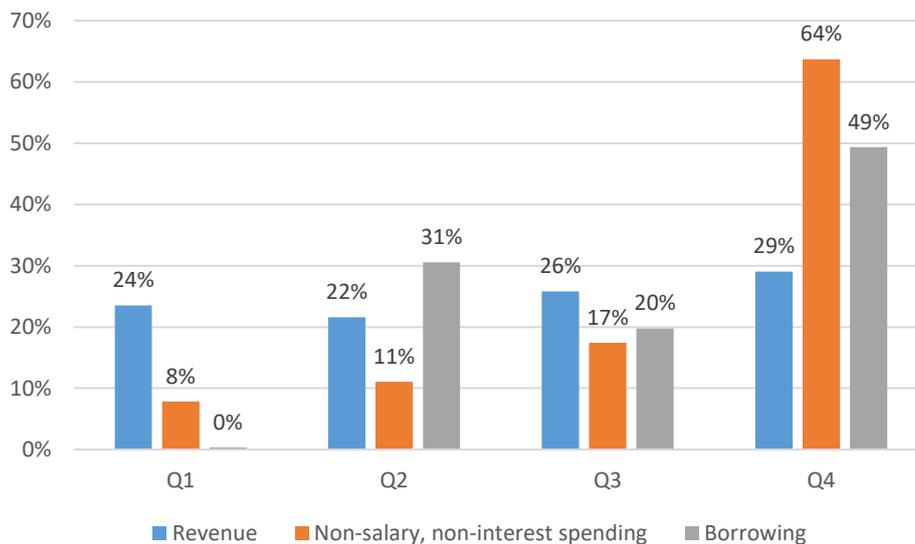
**Figure 6. TAF advances from BPNG to Government, 2002 to 2020**



Source: BPNG QEB Table 2.3. Notes: Data to December 2020. Balance at the end of each month

Spending remains very uneven. BPNG data for 2020 suggests that almost two-thirds of non-salary, non-interest government expenditure in this year was in the last quarter, and only 8% in the first quarter. Revenue was quite evenly spread over the year but, at least last year, borrowing, which has become increasingly important relative to revenue, was also back-end loaded. Uncertainty about borrowing prospects (especially overseas borrowing, which is very lumpy) would have led to spending hesitancy, but provides some justification for the TAF, since the borrowing was, at least in 2020, so back-end loaded.

**Figure 7. Revenue and spending by quarter in 2020**



Source: Calculated from BPNG QEB Table 7.1. Note: It is assumed that salary and interest spending are smoothly spread over the four quarters.

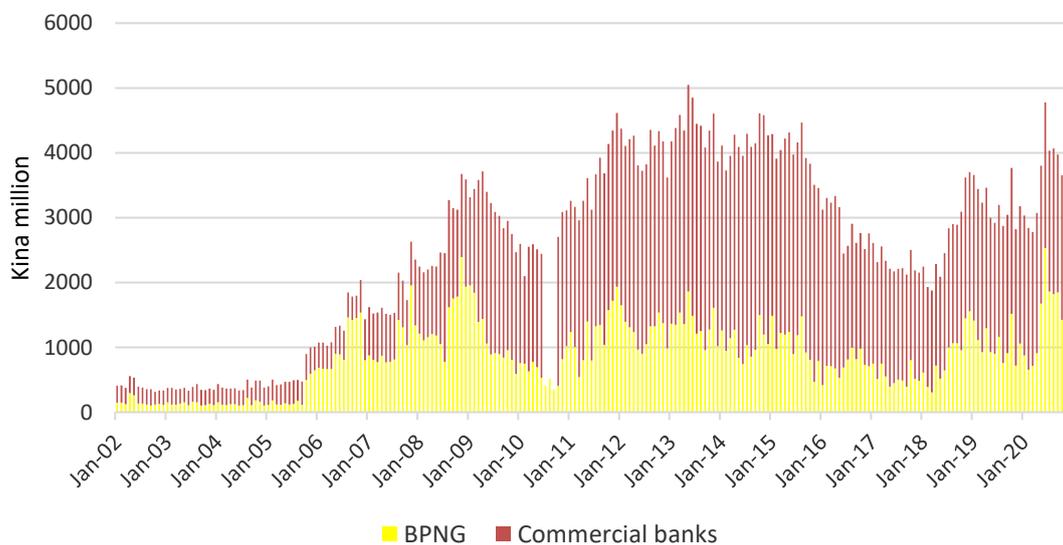
Spending is allocated to the quarter in which cheques are issued. Most cheques are issued in the last quarter (the 64% figure in 2020 in the graph above), but a significant amount of non-salary, non-interest spending may not be cashed until the completion of the first half of the

following year (say, 15-20%). This means that actual on-the-ground spending is smoother than the above graph suggests, since in the first and even in the second quarter actual spending will be a mix of this year's and last year's budgeted expenditure. However, this is hardly an improvement. First, issuing cheques several months before they are cashed, and in a hurry to meet end-of-year deadlines, is a recipe for corruption and mismanagement. Second, the stock of uncashed cheques becomes another claim on the next year's revenue and another drag on spending that year's budget. If departments have to acquit their last year's funds before they receive this year's, and it takes several months to do that, then this will also lead to an end-of-year spending rush.

Yet another piece of this complex puzzle can be seen in the next graph which shows government deposits at both BPNG and the commercial banks. Despite a tight budgetary position and the accumulation of arrears, since 2008 these deposits have hardly ever fallen below K2 billion, and the most recent data puts them at K5 billion. Since January 2011, deposits at the Central Bank have varied between K300 million and K2.6 billion. These deposits are government funds not yet spent (though they may have been committed or even counted as spent if they correspond to cheques written). K2.6 billion in BPNG deposits (at the end of December 2020) would seem excessive.

Deposits at the commercial banks have varied between K1.5 billion and K3.4 billion. Deposits at the commercial banks used to reflect trust account balances. However, these have fallen to only about K250 million according to the latest Final Budget Outcome. What contributes to the K2.4 billion of central government deposits at commercial banks requires further investigation.

**Figure 8. Central government deposits at BPNG and at commercial banks, 2002 to 2020**

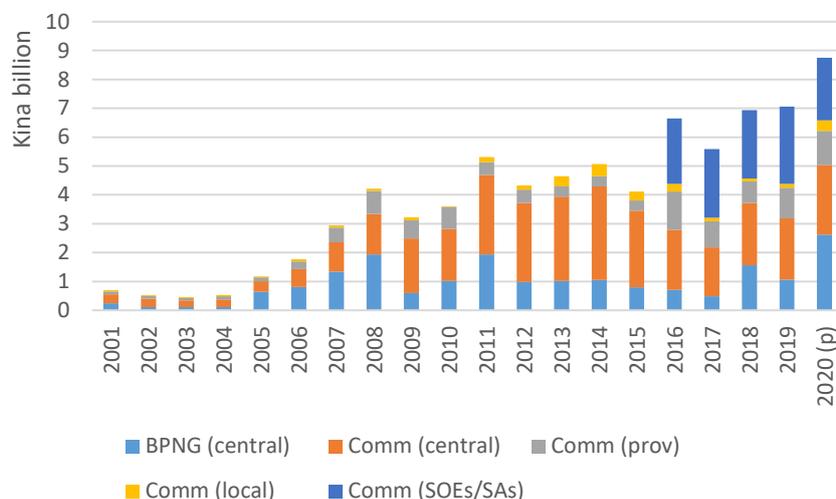


Source: BPNG QEB Table 2.2. Commercial bank deposit data monthly, but missing for July to September 2010.

Finally, we can bring in provincial, local and SOE/Statutory Authority deposits. The latter category presumably includes District Services Improvement Program (DSIP) funding, which goes to District Development Authorities (DDAs). Once these deposits are included, the total value of government deposits in the banking system – including both BPNG and the

commercial banks – is K8.7 billion. Getting these deposit levels down might be difficult but would both help deal with the problem of excess liquidity and provide a one-off debt-free boost to spending.

**Figure 9. All government deposits at BPNG and at commercial banks, 2001 to 2020**



Source: BPNG QEB Tables 2.2 and 3.8. Notes: ‘Comm’ stands for commercial bank deposits of different type, central government (‘central’), provincial government (‘prov’), local government (‘local’) or ‘SOEs/SAs’. SOEs are state owned enterprises, and SAs are Statutory Authorities (including DDAs which receive DSIP funding). The SOE/SA category was only introduced in 2016.

While these problems run deep, a plan must be made both to reduce government deposits and to smoothen government spending, and thereby increase its productivity.

### 3.2 Deficit financing and the slack arrangement

The TAF facility is intended not for deficit financing but cash flow management. Rules governing BPNG lending to the Government are provided by Sections 55(8) and (9). These two clauses read as follows:

(8) The Central Bank may, for purposes of monetary policy management, purchase treasury bills or notes or securities issued by the Government at market-determined yields and such treasury bills, notes or securities will be excluded for the purposes of determining aggregated outstanding advances pursuant to Subsection (4).

(9) Excluding the temporary advances available in accordance with Subsection (2) and (4), the Central Bank shall not grant advances to the Government in respect of, or for the purpose of funding, a Government fiscal deficit.<sup>20</sup>

Together, these two clauses imply that whether purchases of government debt by BPNG are allowed depends on the purpose of that purchase: yes, if it is for monetary policy

<sup>20</sup> Note that Section 55(9) was also revised in 2020. Earlier, the clause contained the words “Notwithstanding anything to the contrary contained in this section” instead of “Excluding the temporary advances available in accordance with Subsection (2) and (4)”. Subsections (2) and (4) relate to the TAF.

management (Subsection 8); no, if it is for the purpose of funding a deficit (Subsection 9).

There are two problems with this set-up. First, it is very difficult in general to verify a purpose, and to distinguish between a genuine purpose and a rationalisation. Second, the differences between monetary policy and deficit financing can be blurred, especially, as we will see below, in PNG.

These problems have led to confusion, loopholes and a lack of transparency. Policy measures have been advanced that have had the effect of providing substantial, and in fact unlimited, assistance to the Government to finance its deficit.

In its September 2014 Monetary Policy Statement, BPNG announced that because the “issuance of Government securities led to a sharp increase in domestic interest rates ... the Treasury Department agreed for the Bank to take up under-subscriptions at the Treasury bill and Inscribed stocks auctions to on-sell to the public for monetary policy purposes” (p.10). This became known as the “slack arrangement”.

The original slack arrangement ran to March 2015, at which point it was suspended.<sup>21</sup> In 2015, the IMF advised BPNG “to refrain from providing any direct financing to the government.” BPNG in response “reiterated its intention to avoid any direct financing of the government budget deficit” (IMF 2015 Article IV, p.11).

In fact, however, the slack arrangement was re-introduced in July 2015. BPNG has informed the IAG that the slack arrangement ended in 2018. In 2020, as part of its Staff Monitored Program with the IMF, BPNG and the Government agreed not to make further use of the slack arrangement.<sup>22</sup> We are informed that in 2021 BPNG has recommenced the practice of purchasing undersubscribed government securities;<sup>23</sup> whether BPNG will hold these beyond the end of the year remains to be seen.

As is evident from these quotes, there are two types of government securities in PNG: Treasury Bills (or T-Bills), and Inscribed Stock (IS or bonds). The latter have a longer maturity.

It is not clear if all purchases since 2014 by BPNG of T-Bills and Inscribed Stocks have been through the slack arrangement, or if BPNG has also been purchasing these securities from banks and other holders. In its annual reports, the Bank talks about the slack arrangement only with reference to T-Bills, but in the September 2014 and September 2017 MPS announcements it is clear that this arrangement also covered Inscribed Stock.

The slack arrangement was carried out with a low profile. While monthly figures on BPNG holdings of government securities can be found in the BPNG monthly statistics, such statistics receive little attention, and are often published with considerable delay. (At the end of

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<sup>21</sup> Suspension was announced in the [BPNG March 2015 MER](#) (p.2).

<sup>22</sup> One condition of the SMP is “Halt BPNG financing of the public sector. BPNG additional net lending to the government under the ‘slack’ arrangement will be limited to zero (Quantitative Target).”

<sup>23</sup> The September 2021 MPS states that “between the end of December 2020 and June 2021, there was a net injection of K431.5 million through trade in Government securities”, which presumably refers to the purchase of government securities by BPNG.

September 2021, the latest monthly figures were for December 2020.) Moreover, no distinction is made in these statistics between government securities purchased from government and those purchased from third parties.

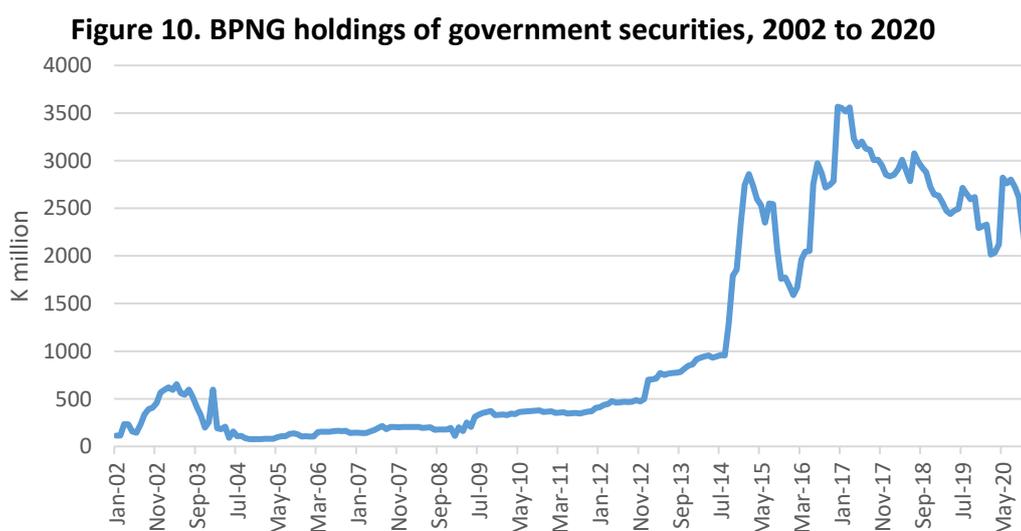
We could not find reference to the slack arrangement in annual government budget documents.

BPNG mentioned the slack arrangement only twice in its six-monthly MPSs, once, as mentioned above, in September 2014, and then again in September 2017 when it said:

In light of the Government’s tight cash-flow and domestic financiers reaching their limit on sovereign exposure, the Central Bank had to assist the Government by buying Government Securities (Treasury bills and bonds) when the auctions were undersubscribed. The formal arrangement, referred to as the Slack Arrangement, was entered into by the Treasury Department and the Bank from September 2014 to March 2015. Thereafter, this arrangement continued through exchange of letters up to 2016. The Bank has actively sterilised this liquidity generated by the Slack Arrangement through on-selling of the Government securities and CBBs to the market. As at the end of August, the Bank’s holding of securities (Treasury bills and bonds) under the Slack Arrangement was K1.600 billion. (pp.11-12)

This was the only time at which BPNG revealed the extent of its engagement in deficit financing. The figure of K1.6 billion is equal to the increase in BPNG holdings of government securities between August 2016 and September 2014. This suggests that all purchases of government securities over this period were direct from Government, under the slack arrangement.

In any case, the holdings by BPNG of government securities (T-Bills and Inscribed Stock) have increased massively since the slack arrangement was introduced, as the figure below shows.

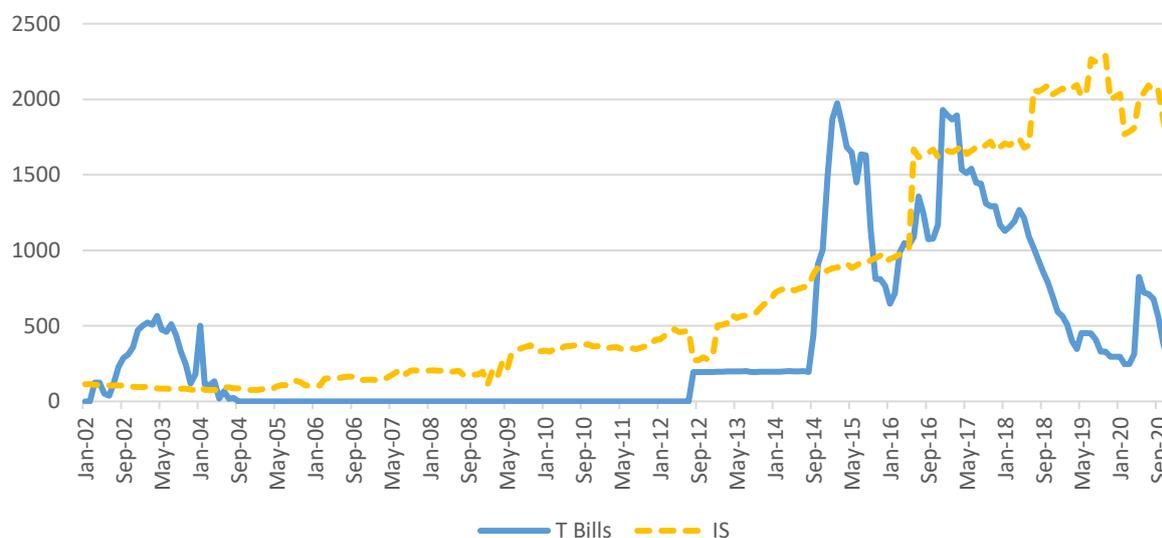


Source: BPNG QEB Table 2.3.

The next figure shows T-Bills and Inscribed Stock separately. BPNG holdings of T-Bills went from K193 million in August 2014 to K1,974 million in February 2015, an increase of K1,780

million in just six months. BPNG holdings of Inscribed Stock went from K762 million in August 2014 to K1,625 in August 2016, an increase in K862 million in two years.

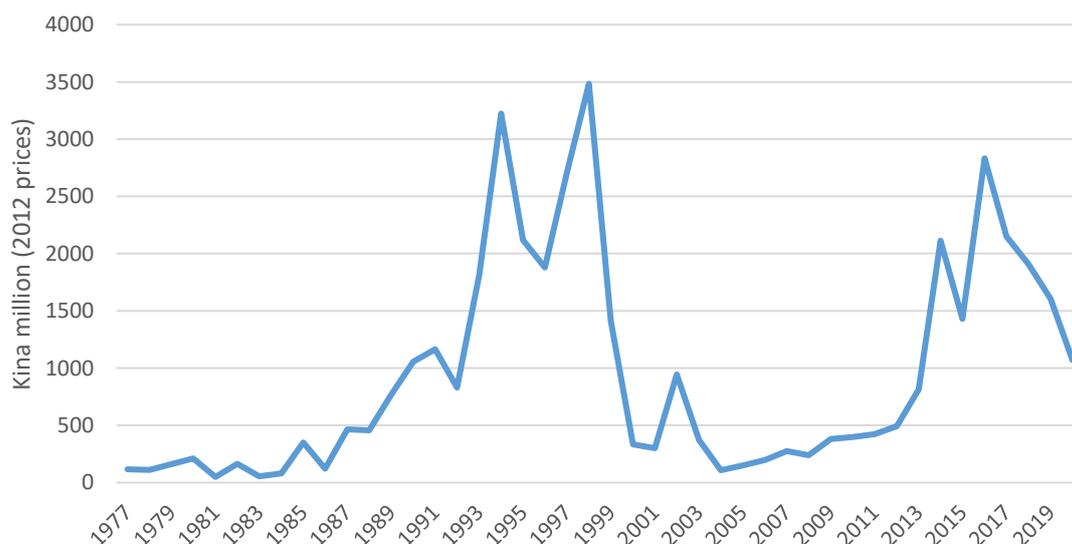
**Figure 11. BPNG holdings of T-Bills and Inscribed Stock, 2002 to 2020**



Source: BPNG QEB Table 2.3.

The figure below shows a longer time perspective. One of the main motivations of the central banking reforms of 2000 was to bring an end to excessive Central Bank financing of the deficit. However, adjusted for inflation, BPNG government debt holdings around 2016 were close to the levels seen in the crisis years of the mid and late 1990s. In fact, in 2016, 90% of domestic borrowing undertaken by Treasury was from the Central Bank.

**Figure 12. BPNG holdings of government debt (securities), adjusted for inflation, 1977 to 2020**



Source: PNG Economic Database.

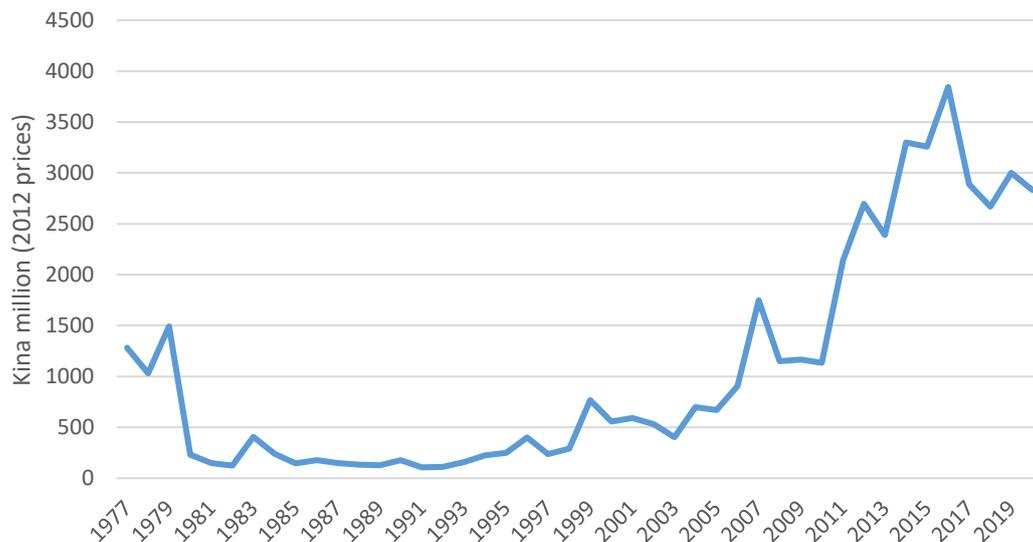
Why did BPNG engage in such an ambitious program of purchases of government securities from 2014 onwards? The written rationales, mentioned above, refer to the need “to address

the sharp increase in the interest rates of domestic Government securities” (BPNG 2015 Annual Report, p.32) and “to assist the Government” given “tight cash-flow and domestic financiers reaching their limit on sovereign exposure” (September 2017 MPS, pp. 11-12).

These rationales require further investigation. Section 55(8) requires that the purchase of bonds be justified with respect to monetary policy management, so we need to examine the issue from this perspective, as we do in the next few paragraphs.

It is well known that commercial banks hold deposits at BPNG way in excess of the Cash Reserve Requirement (CRR). The growth in commercial bank deposits at BPNG is one of the major monetary developments of the last decade or so. As the graph below shows, apart from the first few years after independence, commercial bank deposits at BPNG were less than K500 million (in 2012 prices) until in the early 2000s. Then with the resource boom, deposits poured into the commercial banks. Unable to find enough loans to utilise them, banks started depositing them with the Central Bank and these deposits skyrocketed reaching almost K4 billion in 2016 (in 2012 prices; K5 billion in current prices). Since then, with the economic slow-down, deposits have fallen, but at around K3 billion (in 2012 prices; K4 billion in current prices) they are still at an historic high.

**Figure 13. Commercial bank deposits and cash at BPNG adjusted for inflation, 1977 to 2020**



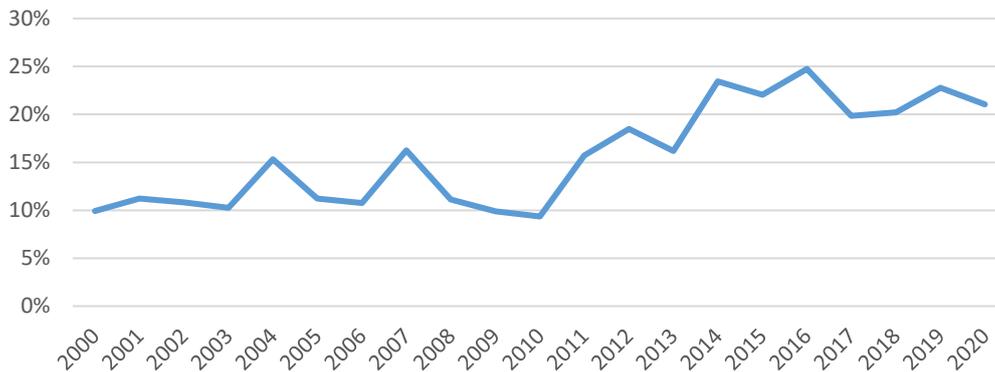
Source: [PNG Economic Database](#).

This excess liquidity, as it is known – the placing by commercial banks of deposits with the Central Bank significantly above the CRR – is a barrier to effective monetary policy in PNG, and a major goal of monetary policy has long been to reduce excess liquidity. For example, in its response to the 2015 IMF Article IV, BPNG “acknowledged that excess liquidity inhibits the monetary transmission mechanism” (p.11). The March 2019 MPS talked about the need “to manage excess liquidity in the banking system and improve the transmission of monetary policy” (p.9).<sup>24</sup>

<sup>24</sup> A BPNG research paper from 2019 noted that “Excess liquidity has been a salient feature of the PNG banking system for over a decade. This has largely [negatively] impacted the effectiveness of the monetary policy

In 2003, BPNG introduced CBBs (Central Bank Bills) to mop up excess liquidity. This worked well for a while and, until about 2010, commercial bank liquidity – that is the ratio of commercial bank deposits at BPNG to total commercial bank deposits – was contained in most years to about 10%. However, this ratio grew rapidly after 2010 to as high as 25% and even now is above 20%. For about a decade, the CRR has not been binding. Banks obtain no interest either on CRR deposits or other deposits with BPNG.

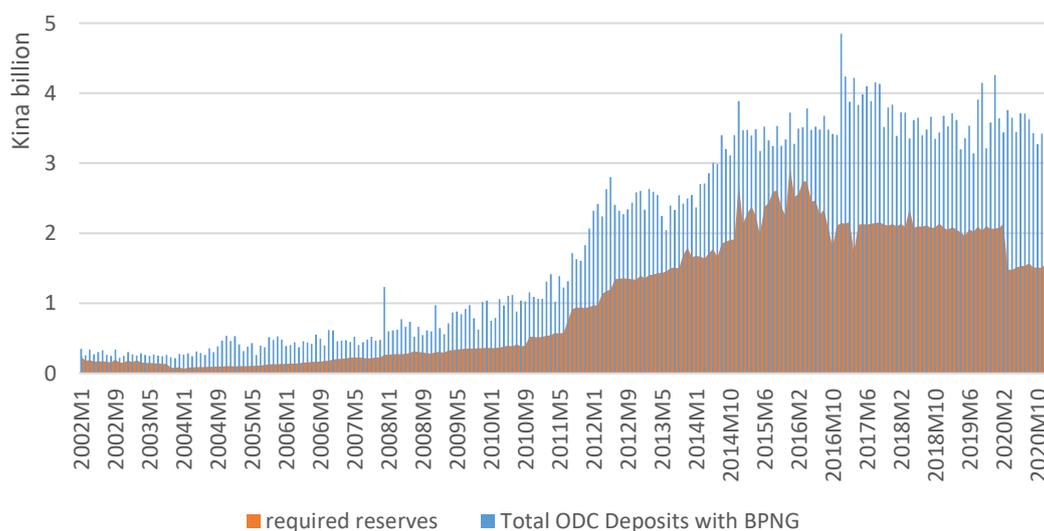
**Figure 14. Ratio of commercial bank deposits at BPNG to total commercial bank deposits, 2000 to 2020**



Source: [PNG Economic Database](#).

While banks need to hold some deposits in excess of the CRR for operational reasons, their actual deposits at BPNG are much higher. This figure shows the extent to which the deposits of the banks at BPNG exceed the minimum required, with actual deposits twice the level of the required amount.

**Figure 15. ODC actual and required deposits with BPNG, 2002 to 2020**

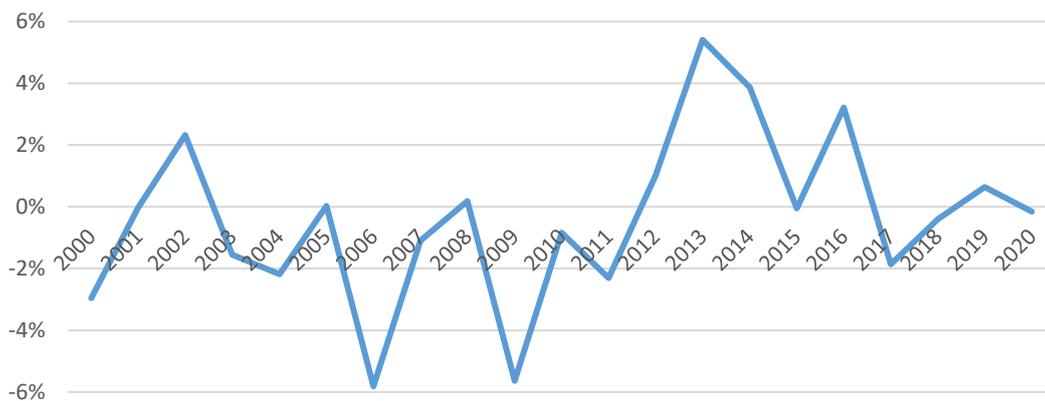


Source: BPNG QEB Tables 3.3 and 3.4. ODCs are Other Depository Corporations which include commercial banks and non-banking financial institutions such as microfinance banks and savings and loan societies.

transmission mechanism in PNG.” See Tumsok (2019) “[Estimating excess liquidity demand for Papua New Guinea](#)”.

Purchasing by the Central Bank of government securities likely worsened this problem of excess liquidity. Let us assume that if BPNG didn't purchase the government debt, then the commercial banks and other entities would have, using their idle deposits. We can then define BPNG liquidity injections as its net purchase of government securities minus its net sale of CBBs. From the graph below, which shows these liquidity injections as a percentage of GDP, we can see such injections are either zero or negative between 2000 and 2010, which is consistent with the Bank trying to mop up excess liquidity. However, after 2010, these injections become large and positive for a few years, 5.4% of GDP in 2013, 3.9% in 2014 and 3.2% in 2016 (all years of high BPNG purchases of government securities). Note from Figure 13 that this is the period in which excess liquidity got a lot worse.

**Figure 16. BPNG liquidity injections as % of GDP, 2000 to 2020**



Source: [PNG Economic Database](#). Note: Negative injections are withdrawals. Injections are defined as net purchases by BPNG of government securities minus net sales of CBBs.

In fact, as we discuss below, it may not be entirely realistic to assume that financial sector institutions would have stepped in and bought all the securities that the Bank did, but as long as they would have bought some we can conclude that BPNG policy of purchasing government securities would have worsened the problem of excess liquidity, and so, in relation to this key goal of monetary policy management, made no sense.<sup>25</sup>

But could in fact these purchases have had a justification, on some other grounds, in particular fiscal grounds? BPNG itself, as noted earlier, cited reducing interest rates and assisting the Government finance its deficit as rationales for the slack arrangement.<sup>26</sup> 2014 – when the slack arrangement was introduced – was a year in which PNG ran its highest deficit ever (to that point in time) and 2015 was a year of acute fiscal stress for PNG in which expenditure, budgeted to increase, had to be cut by 11%. In this context, it would not be surprising if the slack arrangement was introduced for fiscal reasons, specifically to enable additional borrowing.

<sup>25</sup> In its comments to the IAG, BPNG noted that “The arrangement was fully sterilised through the issuance of Central Bank Bills to financial institutions and the Tap Facility offered to the public.” However, the analysis shows this isn't the case as the net purchases of government securities far exceeded sales of CBBs. Moreover, given the concern with excess liquidity, it would have made more sense for the Bank to have issued CBBs and not purchased government bonds.

<sup>26</sup> BPNG also mentioned cash flow problems as a rationale for the slack arrangement but given that from November 2014 the Government stopped using the TAF it is hard to give that rationale much weight (see Figure 6).

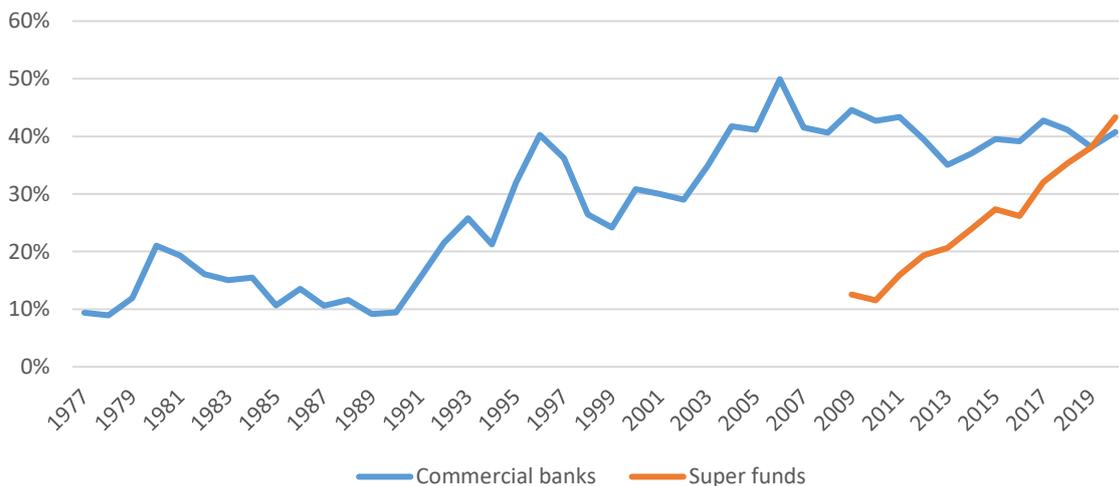
This would be consistent with the September 2017 MPS justification and its reference to BPNG “assist[ing] the Government by buying Government Securities.” It is also consistent with the comments BPNG made in its submission to the IAG, namely that:

The slack arrangement between the Government and BPNG was entered into in 2016 as a result of the challenges brought about by the El Nino drought and low international commodity prices, resulting in low Government revenue and economic growth.

Single borrower exposure limits are a significant challenge to deficit financing in PNG. Prudential single borrower limits issued by BPNG in 2011 do not apply to government debt.<sup>27</sup> However, any financial institution will be wary about loaning too much to a single borrower, and will have limits in place to manage the risk. In the course of our consultations, banks informed us that they do indeed have limits on how much they will lend to the Government, but that they are not necessarily expressed as a single number.

Let us consider loans from banks to the Central Government, to SOEs and to BPNG together – whether through actual loans or T-Bills, Inscribed Stock or CBBs. The figure below shows that the holdings by commercial banks of government debt thus defined rose to about 40% of their total assets over the 2000s and have stayed there ever since. From Figure 17, it looks like banks are reluctant to invest more than 40% of their assets in the government sector. The graph also shows that the superannuation sector has massively increased its exposure to government paper and now has over 40% of its assets in government debt holdings. This sector also limits its exposure to government at around 40%.<sup>28</sup>

**Figure 17. Commercial bank and superannuation fund holdings of government debt as a percentage of total assets, 1977 to 2020**



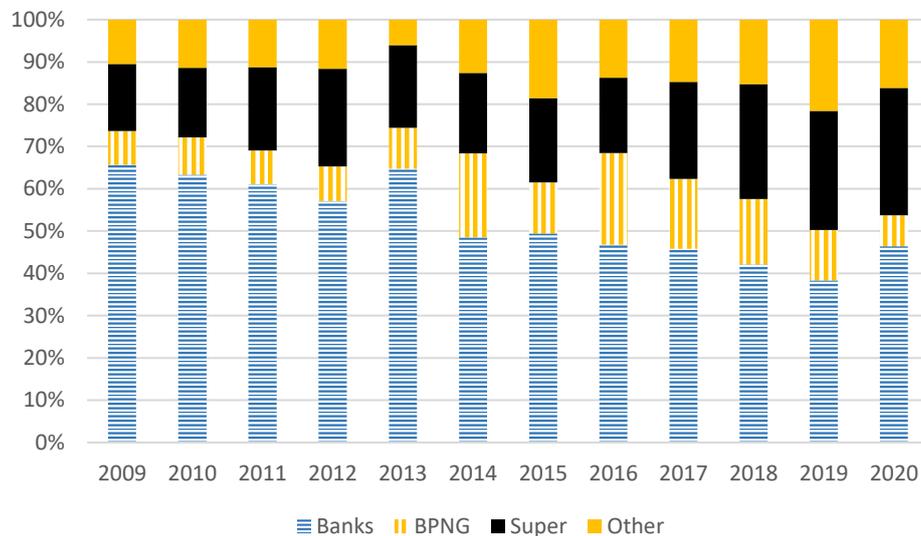
Source: BPNG quarterly statistics.

<sup>27</sup> See BPNG Prudential Standard 1/2011 “[Single borrower and large exposure limits](#)”.

<sup>28</sup> According to the 2015 World Bank report, “Review of the PNG government bond and capital market development”, the maximum bound on government paper holdings is 38.5% for Nambawan (the public service super fund) and 38% for Nasfund (pp. 37 and 38). It is possible that these bounds have subsequently been increased.

Consistent with the argument that commercial banks have been at their limit for carrying government debt for some time, the Government has diversified away from the banks for the funding of their deficit. Up to 2013, commercial banks held two-thirds of government domestic debt. As the figure below shows, now they hold only about 40%. Superannuation funds in particular now have a much bigger share of government debt.

**Figure 18. Holders of domestic PNG government debt, 2009 to 2020**



Source: BPNG quarterly statistics. Note: T-Bills and Inscribed Stocks only.

Given all this, it is reasonable to conclude that the heavy BPNG purchases of government debt from around 2013 to 2016 helped governments run higher deficits than it would have been able to otherwise, since it would have taken time for the Government to diversify its borrowing away from the banks. It would also have helped reduce interest costs – since to attract other commercial players, the Government would have had to offer higher interest rates.

To summarise, the slack arrangement, even if it worsened the problem of excess liquidity, could have been justified under Section 55(8) if “monetary policy management” is defined to include pursuit of the goal of lowering the interest rate on government securities. However, the slack arrangement definitely helped the Government fund its deficit, and from this point of view was illegal under Section 55(9).

The bottom line is that the slack arrangement confirms the ambiguity of the current legislation and the need for reform. Either deficit financing should be banned altogether, or it should be allowed within limits, but the current wording of Section 55 which allows it to happen without limits is clearly unsatisfactory, as it defeats the original purpose of the legislation.

We pursue the issue of amendments to Section 55 in the next section, where we propose a pragmatic, conservative solution. We conclude this section with two remarks.

First, we note that the slack arrangement also brings home the need for greater contestability and transparency. A properly constituted MPC certainly would have helped clarify the

grounds on which the slack arrangement was occurring, and whether it was justified given that it would likely worsen the problem of excess liquidity. More transparency also would have helped. Regular and timely reporting by the Bank of its purchases of T-Bills and Inscribed Stock, both from the Government and from third parties, should be included in the biannual Monetary Policy Statements and in the Bank's monthly reviews.

Second, for completeness we tie this analysis back to the earlier discussion in [Chapter 2.5](#) of BPNG's own financial position. As noted there, between 2011 and 2014 the Bank's liabilities exceeded its assets (due to appreciation of the Kina, its foreign exchange reserves were no longer as valuable in Kina). Over time, the Bank reduced its CBBs (a liability) with its "Debt securities issued" falling from K3.2 billion in 2013 to K1.6 billion in 2015. And it increased its "GoPNG securities" (an asset) from K0.9 billion in 2013 to K2.4 billion in 2014 and K2.2 billion in 2015. BPNG's reduction in the stock of its own bonds (CBBs) and purchase of government bonds certainly helped its balance sheet. However, under the legislation there is no provision for the Bank to buy government bonds in order to boost its balance sheet, and there is certainly no evidence that that is what actually drove BPNG government bond purchases.

### 3.3 Recommendations for revising Section 55

From the preceding section, we can see that the way that Section 55 is currently written is ambiguous, and can lead, and indeed has led, to uncertainty not only over whether BPNG purchases of government bonds are sensible but even over whether they are legal. Moreover, the section places no cap on the purchases of such bonds, and in some years they have grown rapidly and seemingly without limit, undermining one of the main intentions of the legislation.

Revisions are needed to Section 55. A different approach is needed to the role of the Central Bank in deficit funding, one that is less focused on intentions, which cannot be observed, and one that gives appropriate weight to competing considerations.

We must start by acknowledging that it is risky to require or even allow a central bank to have a deficit-financing role. PNG and international experience have shown that this can lead to political interference, and to high inflation. This is the traditional argument against giving the central bank a deficit-financing role, and it is a powerful one. But it not the only consideration.

The other consideration that has to be taken into account is that the PNG financial sector is not competitive, and is shallow. There are very few market players, and large banks and superannuation funds know that the deficit cannot be financed without them, meaning that the banks and superannuation funds can exercise monopsony power. Their significant leverage helps explain why interest rates on government bonds are high even though they are low-risk (the Government has never defaulted on an interest payment). Exposure limits further reduce the competitiveness of the PNG market since they further reduce the ability of players to take on government debt. This again pushes up interest rates to entice other players to come in and buy the debt (e.g. superannuation funds). Last year, to finance its COVID-19 bond, the PNG Government offered a 12% interest rate on a 10-year bond. In Australia, the interest rate on government 10-year bonds is currently 1.3%. In Malaysia it is 2.4%, in Singapore 1.4%, in Fiji 5.3%.

As the World Bank comments in a 2015 report on PNG's bond market:<sup>29</sup>

The PNG institutional investor base exhibits minimal competition, especially amongst commercial banks where there are only three players. The government as an issuer is very dependent on a few investors and their preferences. This poses potential funding and refunding risks for government debt... (p.39)

In such a non-competitive market, BPNG has a legitimate role to play in reducing the market power of the big financiers, and thereby reducing interest rates.

Weighing up these two competing considerations is key to resolving this financing issue. One extreme approach would be to ban all deficit funding by BPNG. Another equally extreme would be to put no limits on it. Neither of these two represents an appropriate balance. An intermediate position is needed, whereby some deficit funding is allowed but within limits.

It is useful, as always, to review international experience. The IMF has produced two valuable reports on the subject. In 2012, the IMF reviewed international experience with the provision of central bank credit to government.<sup>30</sup> This review found that 51 countries prohibit all credit, 47 allow short-term advances, and 40 allow longer-term credit. When we look at developing countries, however, only 17 have a full ban on credit, 53 allow advances, and another 22 allow longer-term credit. Where central bank financing is allowed, it is normally for the exclusive benefit of the central government, and within legislated limits: "there is consensus that central banks should only be allowed to provide a limited amount of credit to the government to avoid undermining their operational autonomy" (p. 14).

We can agree with this IMF report that "As a first best, central banks should not finance government expenditure." However, it is also obvious that a financial market environment such as PNG's does not admit first-best solutions. The solution adopted by many countries, as revealed by the survey, to allow government financing within limits is an appropriate second-best response.

This second-best argument is further elaborated by another useful 1993 report from the IMF.<sup>31</sup> This report argues, correctly, that:

When, as in many developing countries, banking and financial markets are thin, inefficient, and lack flexibility, and, particularly, when no market for treasury bills or for any other government paper exists, some of the provisions of the ideal model for the direct financial relations between the government and the central bank may be inappropriate. (p.12) [The "ideal model" is defined by the report as the one seen in developed countries where the central bank has no deficit financing role.]

The report concludes that, in such circumstances, "some limited access to direct central bank

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<sup>29</sup> World Bank (2015) "Review of the PNG government bond and capital market development", August.

<sup>30</sup> Jacome et al (2012), "Central bank credit to the government: what can we learn from international practices", IMF Working Paper 12/16, January.

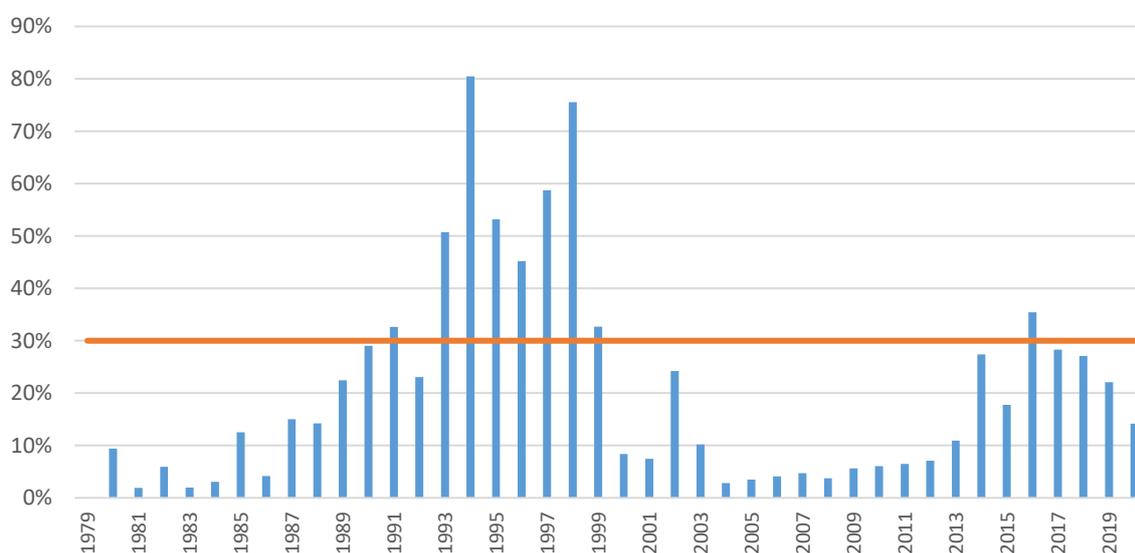
<sup>31</sup> Cottarelli (1993) "Limiting central bank credit to the government: theory and practice", IMF, Occasional Paper 110, December.

credit may be unavoidable” (p.12), and recommends a ceiling defined in terms of a percentage of government revenue (p.15).

The Fijian example is pertinent. In Fiji’s central banking law, there is a limit for central bank holdings of government securities and advances of 30% of government revenue (excluding aid, averaged over the last three years).

The graph below illustrates how this limit would work in the PNG context. A 30% limit would have ruled out the extent of central bank financing in the 1990s, and the extent of financing seen in 2016. We consider what the actual limit should be below. Here we just want to establish the basic proposition to allow some, but limited, financing of the deficit by the central bank.

**Figure 19. BPNG holding of government securities as a percentage of revenue (excluding aid) over the previous three years, versus a 30% threshold, 1979 to 2020**



Source: [PNG Economic Database](#).

The Fijian legislation does not distinguish between primary and secondary purchases. This is appropriate for PNG because in PNG there is no secondary market,<sup>32</sup> and may not be one for a long time.<sup>33</sup> As should be clear from the previous section, whether BPNG purchases securities from the Government or from banks, this can, in the presence of an exposure limit and non-competitive markets, enable higher deficits and lower interest rates.<sup>34</sup>

<sup>32</sup> The World Bank 2015 report referenced earlier notes that currently “there is no secondary market activity” (p.16). BPNG purchases and sales of government paper do not themselves constitute a secondary market.

<sup>33</sup> One of BPNG’s aims is to establish a secondary market for government securities, through its Central Securities Depository (CSD) project. This project commenced in 2019, but is not yet complete. Even if this platform is established, however, there is no guarantee that market players will use it. The 2015 World Bank report notes that: “The development of a secondary market for government securities is a considerable challenge for most emerging, developing, and even developed markets” (p.42) and that in PNG “[t]he limited number of intermediaries, three banks, and the non-existent service of secondary market-making functions greatly undermine any potential secondary transactions” (p.43).

<sup>34</sup> Primary purchases: BPNG buy securities from the Government, leading to a higher deficit. Secondary purchases: BPNG buys government securities from banks, giving banks the headroom to buy more government securities, again leading to a higher deficit.

Discretion would be left with the Central Bank as to how close it wants to be to the legislated limit (as long as it does not exceed it). It should not be at the limit all the time or the Bank would leave itself no room to offset market power. Leaving BPNG with this discretion is important to respect central bank independence. It also recognises that the Central Bank needs independence to buy and sell government securities to implement monetary policy. It would be up to the Monetary Policy Committee of the Bank to decide what its holdings of government securities should be. Its decision as to how much government debt to buy is a matter of monetary policy, but the rationale or justification may be monetary or fiscal. The Bank can be trusted to make the right judgement if it has the right objectives, and the balanced objectives we propose in [Chapter 5](#) will give BPNG the incentive to want to help the government finance its deficit, and to balance that against its price stability objectives.

Interest rates would be set by the market as per current arrangements. The language of Section 55(2) could be used, revised as proposed in [Chapter 3.1](#).

Given that there is no secondary market in PNG, one could argue that all BPNG purchases should be direct from the Government. This would have the value of reducing discretion. Because of the lack of a secondary market, different securities bought in and released to the market have different yields. If BPNG is able to buy government securities directly from banks, there is a risk the banks will sell lower-interest rate securities to BPNG, and then buy higher-interest securities from the Government. However, if BPNG cannot buy from and sell to banks, then a secondary market might never develop. There should at a minimum be a requirement that BPNG demonstrate that it is conducting its sale and purchase of government securities with a view to minimising the cost to it of those purchases.

Two further questions remain: (a) Would the limit include the TAF?; and (b) What should the limit be? On the first question, the TAF is intended to be only for cashflow management and not for deficit financing, and we have proposed in [Chapter 3.1](#) that the legislation be clarified to reflect this. Therefore, the TAF should be excluded from that limit.

What then should be the limit? There is no “right” answer. Looking at the graph above, we could use the Fijian limit of 30%. Other countries have lower limits, but note that the limit we propose would apply to all purchases of securities not just those directly from the Government.<sup>35</sup> A limit of 20% would send the message that BPNG’s purchases of government securities in the last decade were too high, and that a more conservative approach is now being taken. Whereas the 30% limit was only exceeded once in the last decade (2016), a 20% limit was exceeded five times. A 20% limit would allow BPNG currently to hold K2.3 billion of Central Government debt, up from its currently level of K1.6 billion. A higher limit could be considered during emergencies (see [Chapter 4.2](#)).

To recap, the lesson that we need to learn from the slack arrangement is not that such arrangements are necessarily bad and should be eliminated altogether. To the contrary, the experience suggests that, in the PNG context, such arrangements may be desirable or even

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<sup>35</sup> Jacome et al (2012) write: “In practice, most countries limit credit, overdrafts, or advances to 10–20 percent of government revenues in the previous fiscal year” (“Central bank credit to the government: what can we learn from international practices”, IMF Working Paper 12/16, January. p.20). From the IMF Central Bank Legislative Database, Laos has a limit of 25% of ordinary revenue for the last three years.

necessary. But, (a) ambiguity around their use should be eliminated, and (b) limits around their use should be imposed.

There are several advantages of an approach like the Fijian one. The first is that it is clear. The central bank's motive for action – which is difficult to ascertain and impossible to verify – does not need to be assessed. The second is that it closes the current loophole whereby no limit is placed on the extent to which BPNG can finance the government deficit. The third is that it suits the realities of the PNG market environment.

We conclude this section with consideration of other non-legislative measures that could be taken to lower government interest rates. Obviously, the long-term solution is more competition. It is ironic that in 2020 PNG depositors got 1.1% on a one-year commercial bank term deposit (BPNG QEB Table 6.3), but the banks themselves got 7.2% on a 365-day T-bill. One solution is to give savers more direct access to government paper. BPNG has been trying this through its Tap Facility, which aims to encourage investment by individuals, in amounts of K5,000 or more. By the end of 2019, cumulative sales of K797 million had been achieved. This represents annual sales of some K440 million, about 6% of the deficit. While the Tap is a positive, the amounts involved are small, and it cannot be used to put downward pressure on interest rates.

Another approach would be to improve the way in which government bonds are auctioned to attract more players, including foreign investors. The current set-up leaves much to be desired. The World Bank 2015 report<sup>36</sup> referenced throughout this section commented that:

... investors expressed frustration and concerns with the uncertainty created in the market over the issuance announcement procedures, auctions cancelled on occasions, and the relative short time to react to the issuance announcements, particularly with T-Bills. (p.32)

It also noted that:

The primary market remains manual and physical where registered bidders, primarily commercial banks place bids, usually through e-mail, without accompanying payment instructions, while other non-registered bidders submit physical cheques at the central bank along with the bidding documents. *This current manual and cumbersome process will not attract non-resident investors.* (p.30)

The report noted that “BPNG has evaluated and is currently testing the Bloomberg Automated Auction System for the government securities and central bank bills primary market.” This system has still not been introduced.

The Central Bank is the Government's banker and financial agent, and auctioning government debt is a joint responsibility of the Treasury and BPNG. As of late September 2021, the most recent Treasury Bill and Inscribed Stock auction plans and results on the BPNG website date from 2020, in some cases August 2020, more than a year ago. The Treasury website has Treasury Bond announcements for April to June 2021 and before that the most recent is July

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<sup>36</sup> World Bank (2015) “Review of the PNG government bond and capital market development”, August.

2019. This can only be described as woeful.

A joint approach by BPNG and Treasury to overhaul government bond auction arrangements does not require legislation but needs to be implemented urgently with the aim of introducing new buyers of such bonds, including overseas buyers.<sup>37</sup>

One of our recommendations in the chapter on objectives is that it should be explicitly stated that one of BPNG's objectives is to provide efficient and effective banking services to the Government (see [Chapter 5.5](#)). With this objective in place, it is hoped that the Bank will increase efforts to improve auction arrangements, which will lead to lower interest rates. Of course, it goes without saying that Treasury too must make additional efforts, and that only by collaboration can improved auction arrangements be put in place.

Even with such reforms, however, we anticipate that the market for government bonds will remain both highly concentrated and shallow and that there will for many years to come be policy grounds to allow the Central Bank to be active – within prescribed limits – as a buyer of government bonds.

The approach set out in this chapter is a pragmatic, conservative one, based on common-sense. To recap the main arguments, in PNG any purchase by the Central Bank of government debt, whether from the Government or another entity, will potentially help the Government finance the deficit given shallow domestic capital markets and single exposure limits. If we want to stop BPNG from helping the Government finance the deficit, then we must stop it ever purchasing government bonds. That would be extreme: few central banks are subject to such a bar. A better approach would be to allow BPNG to buy government securities but only up to a limit. We take a conservative approach, as we think that the fiscal support provided by BPNG to the Government in recent years has been excessive, and we wish to limit it more tightly. We therefore propose a limit on BPNG holdings of government securities of 20% of revenue minus aid, averaged over the last three years.

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<sup>37</sup> Though note that overseas buyers will be deterred by the lack of assurance that they will be able to repatriate their investments upon maturing. This underlies the importance of addressing Kina convertibility, the subject of [Chapter 5.1](#).