

**LOWY INSTITUTE**

**ECONOMIC ANALYSIS OF  
PAPUA NEW GUINEA**

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PNG COUNTRY ASSESSMENT

AUGUST 2017

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- promote discussion of Australia's role in the world by providing an accessible and high-quality forum for discussion of Australian international relations through debates, seminars, lectures, dialogues and conferences.

This paper is part of a series produced by the Lowy Institute with the support of ExxonMobil to provide a country assessment of Papua New Guinea. The papers are authored by experts in their respective fields, drawing upon the best available evidence and data to support their judgements about key conditions and trends. This analysis is intended to provide insights about the likely and possible future implications of each area on the future of Papua New Guinea.

The views expressed in this paper are entirely the author's own and not those of the Lowy Institute.

## INTRODUCTION

This paper analyses the PNG economy by considering (1) macroeconomic stability; and (2) fiscal policy and debt.

From 2003 to 2015, Papua New Guinea experienced comparatively robust economic growth which underpinned increased formal sector employment and strong growth in government revenue. This performance was aided by high prices for PNG's commodity exports, supportive macroeconomic policy settings, and developments in the resources sector, the most notable being the construction of the PNG LNG Project and the first gas exports in 2014.<sup>1</sup>

This prolonged period of robust economic growth has not, however, translated into improved social indicators or improved standards of living, particularly for PNG's rural majority (around 80 to 85 per cent of the population). Papua New Guinea failed to achieve any of the Millennium Development Goals and it is currently ranked a lowly 154 out of 188 countries on the UN Human Development Index, compared with Fiji's ranking of 91, Vanuatu's of 134 and Solomon Islands' of 156.

The robust economic performance fuelled rapid growth in government expenditure, which increased from K3 681 million in 2003 to K13 789 million in 2015 (nominal terms). However, the effectiveness of the greatly expanded government expenditure program is questionable, with concerns that too much has been spent on 'prestige' projects rather than on projects which will expand the productive capacity of the economy. Even the PNG Treasury has raised concerns over the effectiveness of funds transferred to the Provinces and Districts.<sup>2</sup>

Following years of relatively strong economic growth, Papua New Guinea is now confronting a period of significantly weaker growth. This reflects a number of factors: weaker international commodity prices, declining oil production due to maturing oil fields, and the one-off boost in GDP growth due to gas exports which has passed. Over the medium term, the PNG Treasury is projecting modest economic growth of around 2.7 per cent, which is significantly below the estimated population growth rate of 3.1 per cent.<sup>3</sup>

## SECTION 1: MACROECONOMIC STABILITY

### KEY FINDINGS

- On three occasions since Independence, the PNG Government has sought external assistance from the International Monetary Fund (IMF) and the World Bank to deal with unsustainable pressures fuelled by budget deficits on the external accounts.
- Since 2013 Papua New Guinea has experienced a sudden reversal of its current account deficit precipitated by a significant reduction in FDI and a rapidly increasing trade surplus (from new LNG exports and significantly reduced merchandise imports).
- From 2012, fiscal policy settings began to deteriorate and the budget deficit increased markedly. While the end of the commodity price boom was a contributing factor, the government also adopted expansionary fiscal policies in order to maintain economic activity as the construction phase of the PNG LNG project approached completion.
- Over the course of 2016, the Central Bank was hopeful that the imbalance in PNG's foreign exchange market would be cleared. Commodity prices had improved somewhat, and mineral and petroleum exports increased as did exports from the agriculture sector.
- The strength of the PNG exchange rate over the last ten years could be considered a missed opportunity that reserves had not increased further.

### ENSURING EXTERNAL BALANCE IN PAPUA NEW GUINEA: BACKGROUND INFORMATION

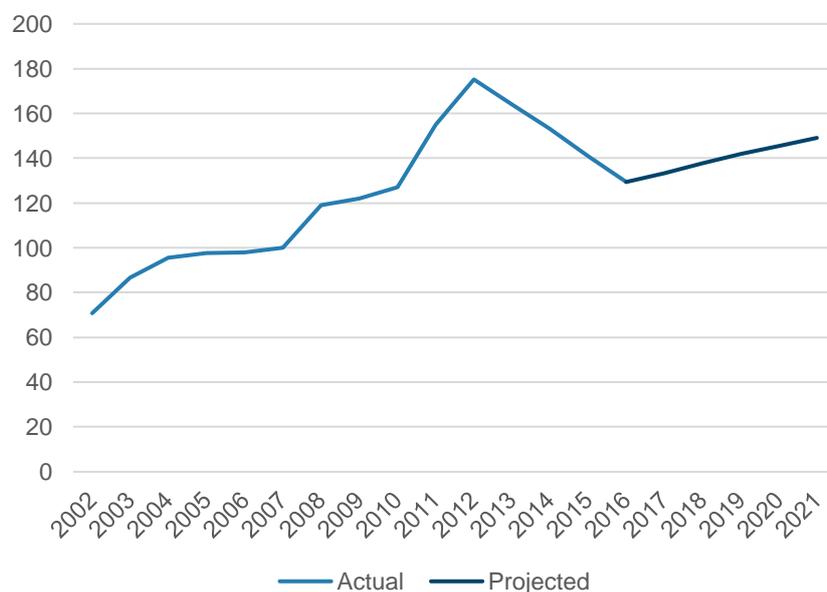
In broad terms, external balance is characterised by a comfortable level of external reserves,<sup>4</sup> a floating, albeit relatively stable exchange rate, and a readily convertible kina.<sup>5</sup> A major premise of macroeconomic management in Papua New Guinea since independence is that external balance is best achieved through the conduct of responsible macroeconomic policies, and especially fiscal policy.

The relationship between fiscal policy and external balance in Papua New Guinea is relatively straightforward. A fiscal deficit is normally financed by the government borrowing from the domestic banking sector, including the Central Bank (as has been the case recently). Because the banking system in Papua New Guinea is characterised by high levels of excess liquidity, the borrowings and subsequent expenditure of the funds through the annual budget adds directly to aggregate demand in the economy. With PNG's heavy dependence on imported goods, the increase in aggregate demand (or aggregate expenditure) will be reflected in an increase in demand for foreign currency. The subsequent imbalance between demand for foreign currency and the supply of foreign currency will manifest in a widening balance of payments deficit. The Central Bank can manage these pressures for a period of time by selling its holdings of foreign currency (i.e. external reserves) and by allowing the exchange rate to depreciate. However, PNG foreign currency reserves are low when compared with like countries, particularly given

the relative strength of the exchange rate over the past 14 years, reducing its ability to use this lever.

From 2002, the kina appreciated against a weighted average of foreign currencies (note that over this same time period other resource-dependent developing countries saw a 50 per cent depreciation of their currencies, relative to the US dollar). Between 2012 and 2016 the kina depreciated 26 per cent against the index (Figure 1).

**Figure 1: Real exchange rate index (2007 =100)**



Source: DevPolicy PNG Budget Database (accessed 17 July 2017)

On three occasions since independence, the PNG Government has sought external assistance from the International Monetary Fund (IMF) and the World Bank<sup>6</sup> to address unsustainable pressures on the external accounts fuelled by budget deficits. This occurred in 1990, 1995 and 2000 (the more recent pressure on PNG's external position is discussed below). Under an IMF Standby Facility, the Fund stands ready to directly lend foreign currency to PNG's Central Bank in order to bolster its holdings of external reserves, thereby enabling the Bank to manage the imbalance in foreign exchange demand and supply in a more orderly fashion.<sup>7</sup>

## RECENT DEVELOPMENTS IN PNG'S MACROECONOMIC ENVIRONMENT: THE CURRENT ACCOUNT AND FOREIGN CURRENCY SHORTAGES

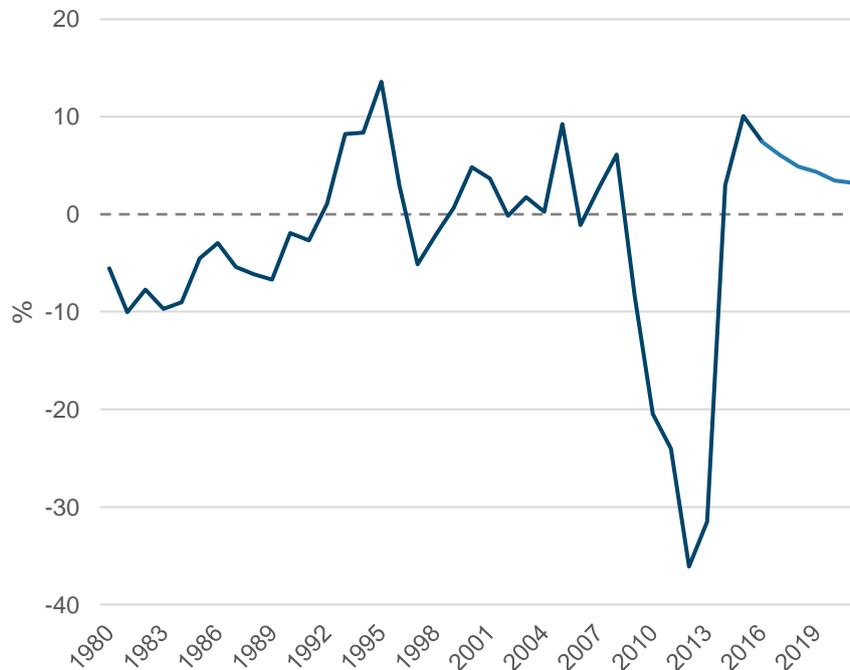
From 2003 to 2011, Papua New Guinea experienced comparatively healthy macroeconomic conditions. International prices for PNG's commodity exports were very high, and from around 2008 to 2011 the domestic economy received a major boost through the construction of the PNG LNG Project. For much of this period, strong revenue growth enabled the government to target modest fiscal deficits despite significant growth

in government expenditure.<sup>8</sup> However, from 2012, fiscal policy settings began to deteriorate and the budget deficit increased markedly. The end of the commodity price boom was a contributing factor but the government also adopted expansionary fiscal policies in order to maintain economic activity as the construction phase of the PNG LNG project approached completion. Combined with a marked slowdown in foreign exchange inflows,<sup>9</sup> the increased budget deficits and lower commodity prices placed pressure on PNG's external accounts. External reserves fell due to the Central Bank selling foreign exchange to address unmet demand, and the kina began depreciating (see Figure 1). Concerned in particular by the depreciation of the kina, in late 2013 the Central Bank moved to restrict the capacity of resident importers to enter into forward foreign exchange contracts.

Given the widening imbalance in the foreign exchange market, the Central Bank was concerned that the commercial banks were selling foreign currency to internal clients at heavily depreciated kina rates compared to the official rate. In June 2014, the Central Bank moved to curb this practice by imposing a trading band around the official exchange rate, directing banks to trade within this range. In March 2015, the Central Bank issued further directives in an effort to improve the inflow of foreign currency into the PNG banking system. Key directives included a three-month limit for PNG exporters to hold foreign currency offshore,<sup>10</sup> an embargo on the opening of new offshore accounts for PNG residents, and a requirement that all foreign currency transactions be undertaken in-country by resident PNG banks.

Notwithstanding these measures, and the continued sale of foreign currency (external reserves) by the Central Bank, the imbalance in PNG's foreign exchange market persisted, with demand for foreign currency significantly outstripping supply.<sup>11</sup> Even so, the Central Bank was hopeful during 2016 that the imbalance would be cleared. Commodity prices had improved somewhat, and mineral and petroleum exports increased as did exports from the agriculture sector. The government also secured an external loan of US\$200 million, drawn down in the third quarter of 2016. However, the backlog of demand for foreign currency was not cleared, for which the Central Bank blamed the re-emergence of forward foreign exchange contracts for importers and other practices by resident commercial banks.

Papua New Guinea's current account balance over this period tells an interesting story (Figure 2). During the global financial crisis, starting in 2007, many countries experienced a rapid and damaging reversal of their current account deficits due to the withdrawal of private financing. Papua New Guinea saw the opposite, and then from 2013 experienced a sudden reversal of its current account deficit precipitated by a significant reduction in FDI and a rapidly increasing trade surplus from new LNG exports and significantly reduced merchandise imports.<sup>12</sup> A sharp reduction in current account deficit can indicate a recession, as imports decline and stronger markets demand exports. A devalued currency (as was the case in Papua New Guinea) can also lead to a reduction of imports, shrinking the deficit more than expected under the prevailing economic conditions.

**Figure 2: Current account balance (% of GDP)**

Source: DevPolicy PNG Budget Database (accessed 17 July 2017)

Papua New Guinea, like many developing countries with ample investment opportunities and low rates of domestic savings, needs to run a current account deficit to support economic growth. However, the borrowed foreign funds need to achieve a higher rate of return than the interest rate payable on the liabilities. Papua New Guinea ran current account surpluses between 1992 and 2008, and again from 2014 after a large adjustment in the current account balance through the commodity price boom, the construction phase of the ExxonMobil LNG project, and the start of LNG exports. Papua New Guinea was therefore able to weather the recent reductions in commodity prices and the related economic slowdown, as it had sufficient capacity to increase its exposure to foreign liabilities. The problem now will be the degree to which FDI and imports turn around to stimulate economic growth.

## CONSEQUENCES AND OUTLOOK

The imbalance in PNG's foreign currency market, evident since 2013, will be very damaging to the PNG economy and investor sentiment. Resident companies that rely heavily on imports to service the domestic economy will have been particularly hard hit by the ongoing imbalance. In comparison, resident export companies should be relatively immune from the foreign exchange imbalance, as they can service their foreign liabilities from their internal generation of foreign currency.

The shortage of foreign currency is reflected in the substantial reduction in value of PNG's imports. Merchandise imports for the September quarter 2016 were valued at K876 million, a fall of 70 per cent since the September quarter 2013.

The shortage of foreign currency has been a serious concern for many Australian companies with operations in Papua New Guinea. Foreign exchange access was a key issue raised by the Australia Papua New Guinea Business Council during a dialogue with members of the Australia PNG Ministerial Forum in March 2017. The difficulty of accessing foreign currency to meet foreign liabilities and obligations (payment for imports including services and profit repatriation) is a key consideration in assessing the sovereign risk of doing business in a foreign country. The foreign currency shortages could increase international perceptions of sovereign risk in Papua New Guinea.<sup>13</sup>

The IMF has disputed the Central Bank's view that the current exchange rate regime remains consistent with a "floating" regime. The IMF has consequently reclassified the regime as a "crawl-like" arrangement, and the IMF Executive Board urges greater exchange rate flexibility and a more efficient and transparent foreign exchange allocation mechanism.<sup>14</sup>

Recent developments clearly demonstrate that the Central Bank cannot address the foreign currency imbalance through action or regulation. Indeed, it may have accentuated the imbalance, as resident exporters appear to have developed more imaginative ways of holding foreign currency offshore (defying the Central Bank's three-month rule), in anticipation of a further sharp fall in the value of the kina. However, slightly higher commodity prices and improved exports from the mining and agricultural sectors may provide some relief, as would greater exchange rate flexibility through further depreciation of the kina, as recommended by the IMF. The government could also request direct financial support from the IMF and the World Bank, but this option may be politically unpalatable.

All things being equal, for macroeconomic stability to continue in Papua New Guinea the fiscal deficit will need to be brought back into a sustainable position to reduce pressure on foreign reserves and to re-establish equilibrium in the balance of payments. A more flexible exchange rate would also assist; however, this would require a change in government policy. Increased FDI would also assist in achieving macroeconomic stability.

## SECTION 2: FISCAL POLICY AND DEBT

### KEY POINTS

- Papua New Guinea has not effectively managed volatility in revenue and expenditure.
- As a result, government expenditure is unpredictable from one year to the next, reducing its ability to undertake medium to longer term planning for service delivery, reforms and infrastructure development.

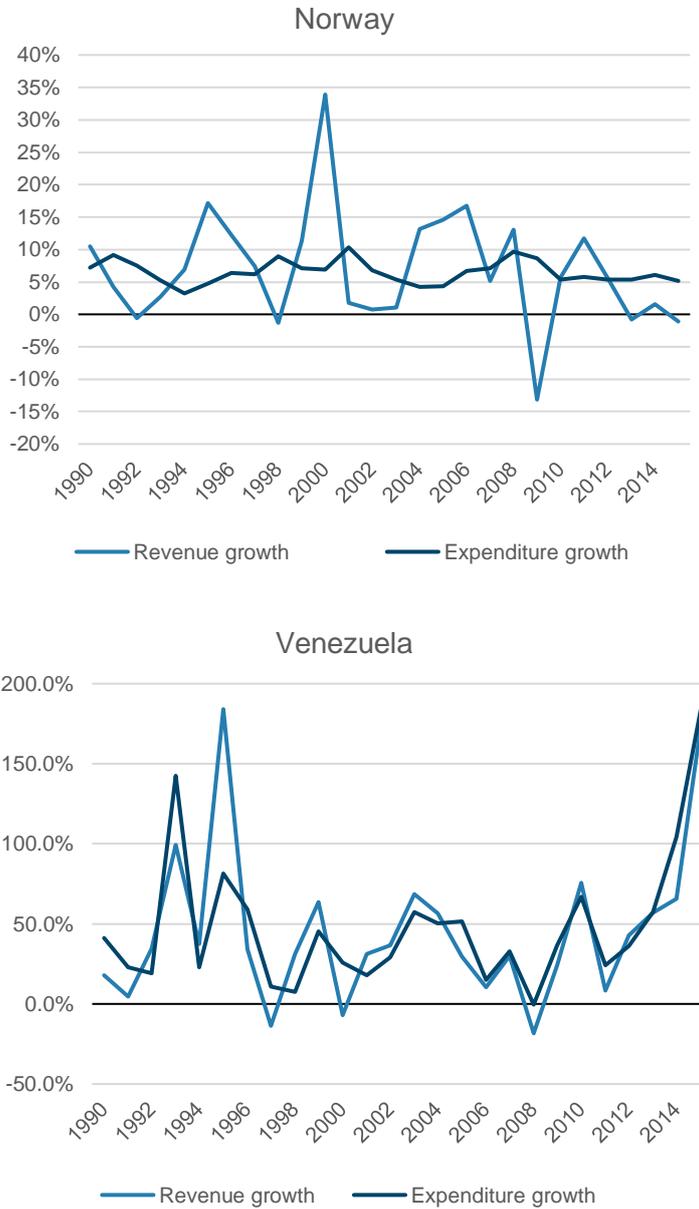
- The projected fall in expenditure as a share of GDP is below 20 per cent, the lowest level in over 30 years and well below the long-term average of approximately 32 per cent.
- From 2003 to 2013, PNG's expenditure as a share of GDP increased by 45 per cent, while revenue grew only 1 per cent, making it one of the worst performers among other resource-based developing countries.
- Papua New Guinea's Sovereign Wealth Fund (SWF) will need to be closely integrated with the policies and legislation governing Kumul Consolidated Holdings (the holding company of PNG's state owned enterprises), and its related entities, as they control dividends for the state. The SWF should align with the objectives of PNG's current and future Medium Term Fiscal Strategy, Medium Term Debt Strategy and annual National Budget, and vice versa.
- The IMF's 2016 Debt Sustainability Analysis of PNG concluded that "PNG's risk of external debt distress remains low but the overall risk of public debt distress is heightened".<sup>15</sup> A rising number of short-term Treasury bills combined with less concessionary external debt since 2014 (increasing exposure to US interest rates) have contributed to this heightened risk.

## FISCAL POLICY: FOCUSING ON STABILITY

Resource economies such as Papua New Guinea need to manage revenue and expenditure volatility to maintain debt sustainability. There are a number of possible approaches, such as strong macroeconomic frameworks with fiscal rules and special purpose funds (natural resource funds or sovereign wealth funds) to smooth and/or constrain government expenditure and maintain sustainable levels of debt. Papua New Guinea has a history of applying such mechanisms: the Mineral Resources Stabilisation Fund, the PNG Sustainable Development Program with its development and long-term funds, and now the PNG SWF. It has also used trust accounts to smooth expenditure, and medium-term fiscal strategies with fiscal rules to constrain expenditure growth and minimise debt.

The effect of fiscal rules and tools on revenue and expenditure volatility can be seen in revenue and expenditure growth rates. Figure 3 compares fiscal management in Norway and Venezuela. Norway has a fiscal rule and Natural Resource Fund that stabilises the revenue available for budget expenditure. The fiscal tools stabilise (or smooth) expenditure despite volatility in revenue growth rates. By contrast, Venezuela has no effective fiscal rule to manage volatility, and expenditure mirrors revenue volatility. This makes budgeting very difficult.

**Figure 3: Using fiscal tools to reduce volatility: Norway vs Venezuela (government revenue and expenditure growth rates)**

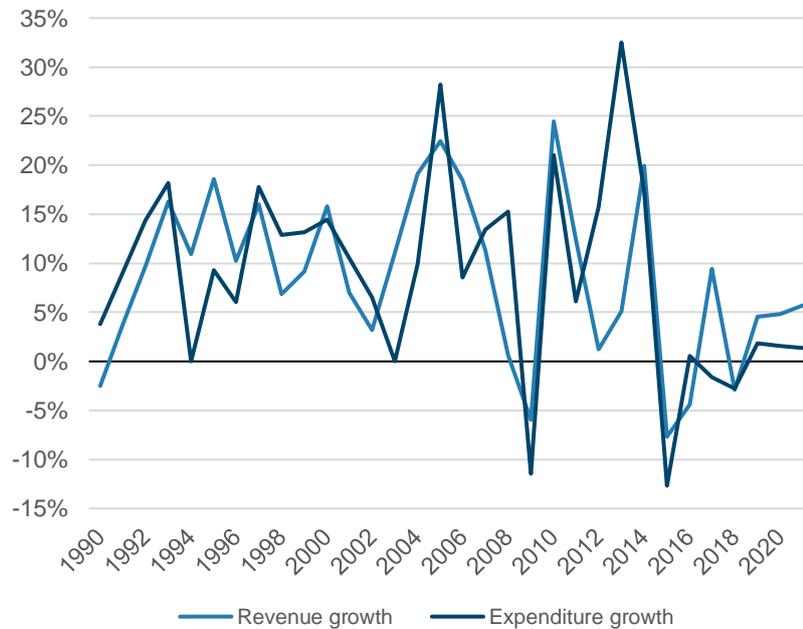


Source: IMF, World Economic Outlook 2017, <https://www.imf.org/external/pubs/ft/weo/2017/01/weodata/index.aspx>

Papua New Guinea appears to manage volatility in revenue and expenditure like Venezuela, rather than Norway (Figure 4). It has made attempts to improve the management of volatility but they have been neither long-lasting nor very effective. In consequence, government expenditure is unpredictable from one year to the next,

reducing the ability for government to undertake medium to longer term planning for service delivery and infrastructure development.

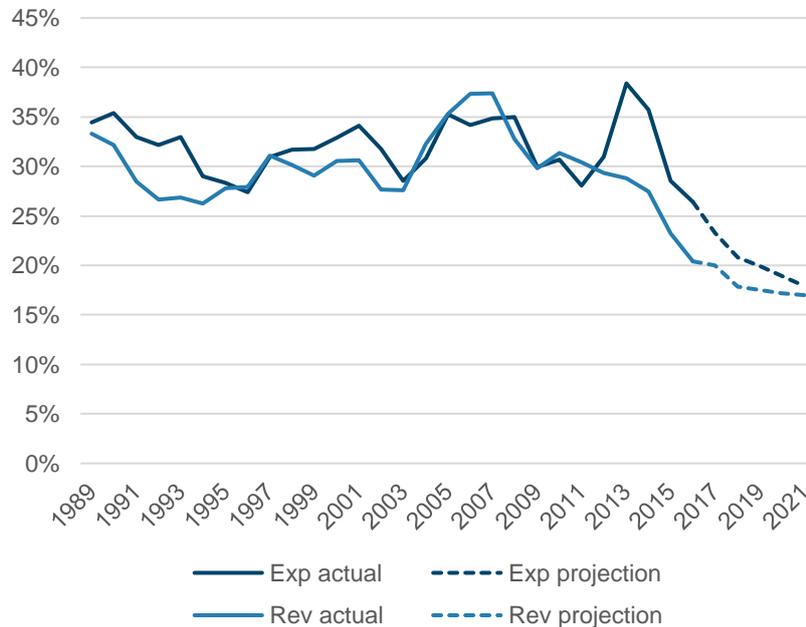
**Figure 4: Revenue and expenditure growth rates**



Source: DevPolicy PNG Budget Database (accessed 17 July 2017)

From 2003 to 2013, PNG's share of revenue to GDP remained steady at approximately 28 per cent, while the share of expenditure to GDP increased from 28 per cent to 38 per cent, indicating a worsening fiscal position, with the majority of the change occurring in 2012 and 2013. Since 2013 both revenue and expenditure have been falling in both kina terms and as a share of GDP (Figure 5).

The recent and projected fall in revenue and expenditure to GDP reduces the government's ability to provide basic services and to invest in reforms and infrastructure to stimulate future growth. The projected fall in expenditure as a share of GDP to below 20 per cent is the lowest level in over 30 years (Figure 5), and well below the long-term average of approximately 32 per cent.

**Figure 5: Revenue and expenditure (share of GDP)**

Source: DevPolicy PNG Budget Database (accessed 17 July 2017)

## FISCAL TOOLS

Papua New Guinea needs appropriate fiscal tools to manage revenue and expenditure volatility. It is a resource-dependent developing country that faces a *resource curse*. Fiscal tools must not only be capable of implementation but also take into account political realities.

They must also be coordinated. An effective SWF must be integrated within a country's broader fiscal policy and coordinated with all related fiscal policy tools.<sup>16</sup> For example, a savings fund would only be effective if there was a genuine increase in government saving, not offset by increased borrowing). PNG's SWF will need to be closely integrated with the policies established under Kumul Consolidated Holdings and related entities, controlling resource equity and related dividends for the state. Logically, the SWF should align with the objectives of PNG's current and future Medium Term Fiscal Strategy, Medium Term Debt Strategy and annual National Budget, and vice versa.

In the past, growth in PNG's revenue and corresponding rise in expenditure was largely absorbed through the use of trust accounts, as the economy was unable to expand in line with growing expenditure. The government allocated funds through the annual budget cycle and supplementary budgets, and held the funds in trust accounts. The trust accounts had a 'smoothing' effect, holding funds until the economy had sufficient capacity to implement the designated project or program. However, there have been questions over missing funds from many trust accounts, and allegations that funds were not used effectively or for their intended purposes.

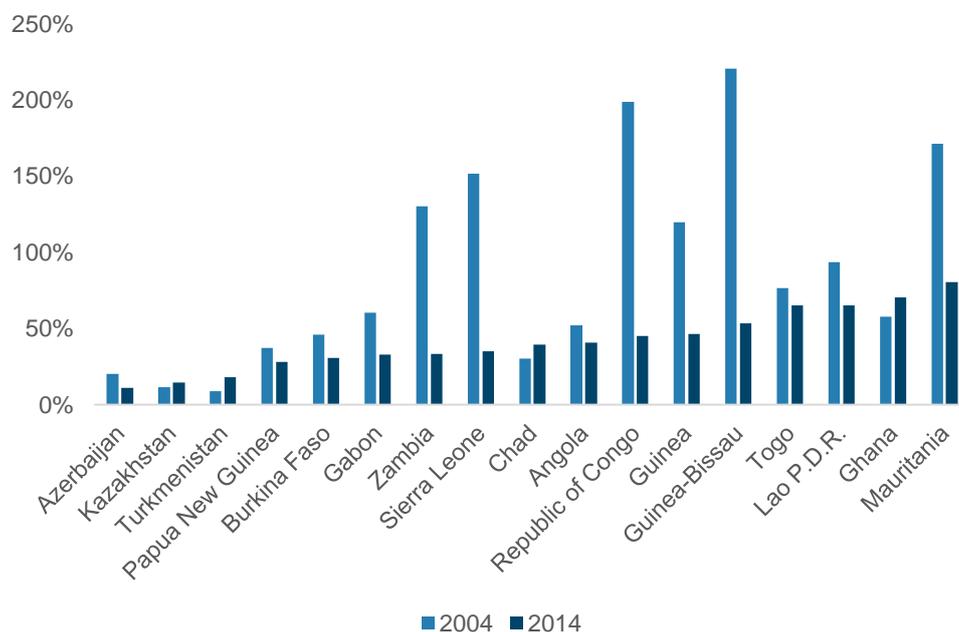
Papua New Guinea’s fiscal framework now needs to be positioned to respond to economic events. Trust accounts should not be the default mechanism, and their use should be minimised. Keeping funds ‘on-budget’ and clearly within formal public financial management systems would enhance international and public confidence. Global commodity prices may have stabilised for now, but history indicates that increased prices or expanded output will return.

The new government will be required to formulate and approve a new Medium Term Fiscal Strategy for 2018–2022. The government therefore has the opportunity to consider options for an accelerated fiscal consolidation program, and better integrate fiscal policy with exchange rate policy and foreign exchange management.

## DEBT PROFILE

Papua New Guinea’s current stock of debt is approximately 33 per cent of GDP (see Figure 6), which is above the guideline of 30 per cent in the *Papua New Guinea Fiscal Responsibility Act 2006*. This debt is within historical levels and remains low compared to ‘peer’ countries.

**Figure 6: Resource exporters, debt to GDP**

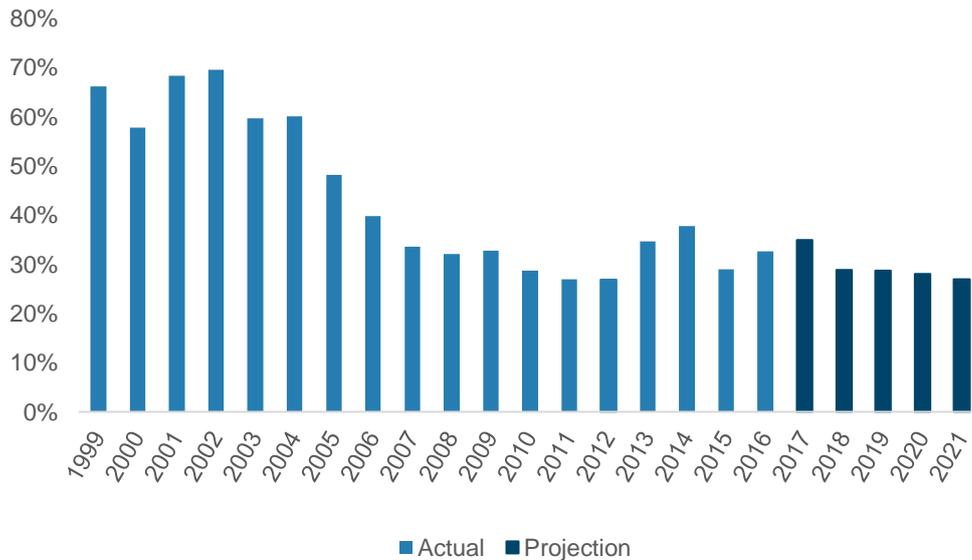


Source: IMF, World Economic Outlook 2017, <https://www.imf.org/external/pubs/ft/weo/2017/01/weodata/index.aspx>

In its 2016 Debt Sustainability Analysis of Papua New Guinea, the IMF concluded that “PNG’s risk of external debt distress remains low but the overall risk of public debt distress is heightened”.<sup>17</sup> A rising share of short-term Treasury bills, combined with less

concessionary external debt since 2014 (increasing exposure to US interest rates) have contributed to this heightened risk.

**Figure 7: Total public debt as a share of GDP**



Source: DevPolicy, PNG Budget Database (accessed 17 July 2017); Papua New Guinea, Mid-year Economic and Fiscal Outlook Report 2017

If PNG's projections are realistic and recent downward revisions to both revenue and expenditure are realised, then debt as a share of GDP will remain at historically low levels. However, sudden and large reductions in government expenditure will have a significant impact on service delivery, activity in the broader economy, and livelihoods.

Papua New Guinea is confronted with a prolonged period of low revenue growth as it faces some of its greatest development challenges. The process of expenditure prioritisation and the return it achieves from social and economic investments will determine the sustainability of its current fiscal deficits and related debt. If money is wasted on low priority and low return initiatives then it will be hard to see how human development indicators can improve over the next decade. There is a strong case for PNG to establish a fiscal management regime that manages its budget volatility so that expenditure is more stable and predictable, allowing both the public and private sectors to undertake longer term investment and planning.

## NOTES

<sup>1</sup> The ramp up in the construction phase of the project contributed to overall real economic growth of over 10 per cent in 2010, while the first full year of gas exports contributed to overall economic growth of over 12 per cent in 2014.

<sup>2</sup> The Treasury noted in the 2013 National Budget that: “The quality of expenditure must also be increased. This means some lower priority or wasteful expenditure will need to be cut, while high priority expenditure, such as on health, education, law and order, and infrastructure, [will need to be] increased and made more effective”: PNG, *2013 National Budget: Volume 1 – Economic and Development Policies*, 41.

<sup>3</sup> The 2011 Census estimated PNG’s population at 7,275 million. With a growth rate of 3.1 per cent, PNG’s population will double in 23 years.

<sup>4</sup> Foreign currency holdings by the Bank of Papua New Guinea (the Central Bank).

<sup>5</sup> Meaning PNG residents and resident companies can readily purchase foreign currency with kina.

<sup>6</sup> Bilateral partners, including Australia, also provided financial assistance under these programs.

<sup>7</sup> A fundamental policy condition of IMF Standby programs is a requirement to address the original and primary source of the external account pressures; that is, by returning the fiscal account to balance. World Bank Structural Adjustment programs directly fund reforms aimed at improving the efficiency of government and the business operating environment.

<sup>8</sup> From 2008 to 2011 PNG’s external position was greatly assisted by foreign exchange inflows associated with the construction of the PNG Gas pipeline, as reflected by an appreciating exchange rate and increasing external reserves.

<sup>9</sup> Also associated with the winding down of the construction phase of the PNG LNG project.

<sup>10</sup> Meaning that resident exporters can hold foreign currency proceeds offshore for a period of three months and can use those proceeds to meet their foreign liabilities. However, after three months, any surplus of foreign currency proceeds must be repatriated to PNG.

<sup>11</sup> While 2014 heralded the first full year of gas exports, the resulting inflow of foreign currency into Papua New Guinea was not substantial. The foreign currency earnings from the project are, in the first instance, predominately used to service the project’s offshore loan commitments.

<sup>12</sup> World Trade Organization, Trade Statistics database, accessed 14 June 2017.

<sup>13</sup> In April 2016, the credit rating agency Moody’s downgraded the PNG government’s foreign currency and local currency issuer ratings. This decision was made in large part by “Strains on foreign currency reserve adequacy due to heightened balance of payments pressures that will continue over the next two years”: Moody’s Investor Service, “Moody’s downgrades Papua New Guinea’s Rating to B2 with Stable Outlook”, Global Credit Research, 25 Apr 2016.

<sup>14</sup> International Monetary Fund, 2016 Article IV Consultation, Papua New Guinea, IMF Country Reports 17/22.

<sup>15</sup> International Monetary Fund, 2016 Article IV Consultation, Papua New Guinea, IMF Country Reports 17/22.

<sup>16</sup> Phil Garton and David Gruen (2012), “The Role of Sovereign Wealth Funds in Managing Resource Booms: A Comparison of Australia and Norway”, Address to the Third Annual Asia Central Bank and Sovereign Wealth Fund Conference, 23 February.

<sup>17</sup> International Monetary Fund, 2016 Article IV Consultation, Papua New Guinea, IMF Country Reports 17/22.

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