

Economic reforms and structural change in Papua New Guinea: progress, performance and prospects

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Economic reforms geared towards alleviating the liquidity crisis and achieving structural reform to improve competitiveness and growth potential under the sponsorship of the World Bank and the IMF have been underway in Papua New Guinea since August 1995. This paper provides an update on the reforms undertaken so far, and foreshadows progress for the PNG economy if the reform process is maintained.

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Papua New Guinea was in a foreign reserves crisis in mid-1994. By September 1994 its foreign exchange reserves were almost completely exhausted from support of the kina against speculation. Assistance from international donors and multilateral agencies including the IMF and the World Bank was sought to help ameliorate the crisis. The Papua New Guinea Government, in collaboration with the Bank and IMF, instituted a reform agenda in the form of a structural adjustment program to overcome the

financial crisis and achieve a restructured and more competitive economy that would be able to attain long-run economic growth. Despite protracted, and at times publicly acrimonious, negotiations between the government on the one hand and the Bank and the Fund on the other during 1996, the structural adjustment program, which is also known as the Economic Reform Program (ERP), has remained in place since August 1995. Progress to date has been mixed and the reform process is still being implemented.



Discussions on the design and implementation of the second phase of the structural adjustment program, focusing on social and economic development, including the possibility of a second ERP loan from the Bank are ongoing. The second ERP loan, if it proceeds, will be aimed at continuing with the process of macroeconomic and fiscal management reform, natural resource management, including forestry and fisheries, public sector reform, private sector development, financial sector development and improved service delivery. However, negotiations were still underway at the time of publication of this paper.

Here we investigate the reasons for the crisis; comment on the rationale behind structural adjustment programs, particularly those that are undertaken jointly with Bank and Fund support; provide an update on progress made under the structural adjustment program; and draw lessons from the experience so far. In concluding, we foreshadow the future for reforms and prospects for the Papua New Guinea economy. We argue that the reform process being undertaken, if maintained, is likely to succeed. This assessment is made in the light of progress made on the reform front so far as well as steps already taken to see the remainder of the reforms being implemented in the near future.

Of some concern has been the recent history of a lack of fiscal discipline, particularly with regards to the purported use of proceeds from the sale of public assets. We hope that any problems concerning the probity of the use of asset sale revenues will be resolved in the short term—before the incoming Government assumes office following the 1997 national elections. The conclusion we draw is one of cautious optimism for

the future of economic progress in Papua New Guinea.

Forces behind the liquidity crisis of 1994

A number of reasons have been put forward for the liquidity crisis of 1994; here we concentrate on three. The first is the view that Papua New Guinea was faced with rapidly declining transfers of foreign exchange, including a decline in Australian budgetary aid as a result of a shift from direct budget support to jointly programmed. Professor Ross Garnaut of the Australian National University has been a strong proponent of this hypothesis—describing it as a decline in ‘manna from heaven’. Henceforth, we refer to this explanation for the crisis as the ‘manna hypothesis’.

The second explanation for the foreign exchange crisis is the loss in export revenue from the closure of the Panguna copper mine on Bougainville island (the ‘BCL hypothesis’). The independence movement on Bougainville culminated in an insurgency and ongoing civil strife which led to the closure of Bougainville Copper Limited’s (BCL) Panguna mine in 1989. Prior to closure the Panguna mine produced around 542 million kina of output (primarily copper but also silver and gold) which was equivalent to 17 per cent of GDP and accounted for 42 per cent of merchandise exports.¹

The third explanation relates to budget blow-outs over several years brought about by expenditure overruns. In an environment of increasing deficits the international community, and commercial banks in particular, have little incentive to hold kina-denominated deposits. When deficits exceed their



perceived threshold of sustainability, confidence in the domestic currency diminishes and ensuing capital flight can precipitate into a financial crisis.

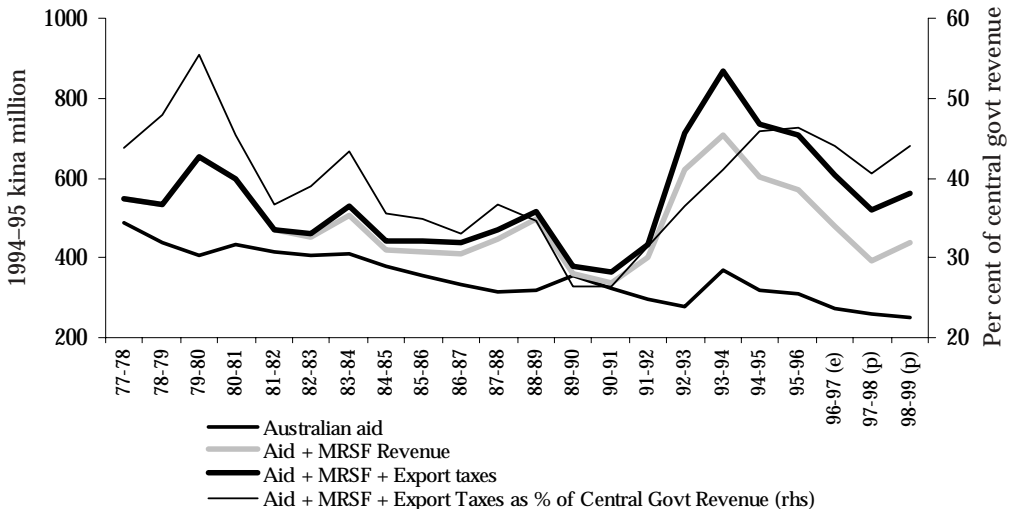
The first two explanations amount to exogenous shocks to the extent that Papua New Guinea authorities had little advance knowledge of, or control over, these events. The budget blow-out hypothesis is one over which the authorities have, in relative terms, more control. Hence the crisis may have been avoidable to the extent that the last hypothesis was responsible.

The above three hypotheses may all have had some role to play in the liquidity crisis, and may be to some extent interrelated. It would therefore be simplistic and problematic to consider them as independent phenomena. The closure of the Panguna mine resulted in a

substantial loss of revenue to the Government. Direct taxes declined by 74 million kina in 1990; equal to 20 per cent of total government revenue (SPSD, Papua New Guinea: Table 10.1). However, total consolidated revenue did not decline since the decline in revenue from mining was more than offset by increased aid inflows. In fact, increases in foreign grants contributed substantially to ameliorating the loss of direct tax revenue.

If we consider transfers from abroad, inclusive of foreign aid and mineral rents, as 'manna from heaven' (as these revenues include rents in the form of aid and non-transformed commodity exports), the data reveals support for the manna hypothesis up until 1992 only. Aid per capita declines since independence, along with exports and Mineral Resources Stabilisation Fund (MRSF) revenues, but only up to 1992 following

Figure 1 Australian aid, MRSF and export taxes (constant 1994–95 kina)



Sources: South Pacific Social and Economic Database, National Centre for Development Studies, Canberra: Tables 2.1, 8.4, 10.2, 11.22; AusAID, 1996. *The Economy of Papua New Guinea—1996 Report*, Australian Agency for International Development, Canberra: Table A12; AusAID for Australian aid statistics.



which increases in revenues from MRSF and other exports has more than offset the fall in aid (Figure 1). The closure of the Panguna mine did transmit into a shock, both in terms of aggregate output and loss in export revenues, but only in the short term. Subsequent recovery in the extractive sector brought about by the coming on-stream of new mines, Porgera and Misima in particular, and the Kutubu petroleum development more than offset the fall in mineral exports resulting from the closure of Panguna. Of course, revenue lost remains revenue lost. If Panguna did not close down, other new mines (for example, Porgera and Misima) would, in all probability, still have come on-stream and, total mineral revenues would have been much higher. However, the alternative argument is that the timing of the closure of Panguna was fortuitous to the extent that other major mining activity was coming on-stream at around the same time, thereby ameliorating the impact of Panguna's closure to some extent. Without other mining activity coming on-stream at this time the macroeconomic impact of the

closure of Panguna would have been far more substantial.

In real terms, aid revenue, particularly in the form of Australian direct budget support, has been declining over the past two decades. In particular, Australian direct budget support has been declining significantly since the early 1990s. However, the ongoing decline in budget support is, in nominal terms, almost revenue neutral as budget support reductions are being offset by a similar increase in the quantum of programmed/project aid. In addition, the shift in Australia's aid program was negotiated through the Treaty on Development Cooperation between Australia and Papua New Guinea and is continuing to be phased in over an 8-year period (Table 1).² This shift in the financial structure of the Australian aid program was known in advance and negotiated upon between Papua New Guinea and Australian authorities.

Nevertheless, the decline in manna revenues since independence up until the early 1990s required sound fiscal

Table 1 **Australian Treaty Aid to Papua New Guinea, 1992-93 to 1999-2000**
(projected, current A\$ million)

Australian fiscal year	Budget support	Jointly programmed aid	Total aid
1992-93	259.0	46.0	315.0
1993-94	249.0	56.0	315.0
1994-95	213.4	77.3	290.7
1995-96	177.8	118.6	296.4
1996-97	142.2	154.9	297.1
1997-98	106.6	191.2	297.8
1998-99	71.0	227.5	298.5
1999-2000	35.5	263.8	299.3

Source: Australia, 1995. *Treaty on Development Cooperation between the Government of Australia and the Government of Papua New Guinea and Exchange of Letters*, Commonwealth of Australia, AGPS, Canberra.



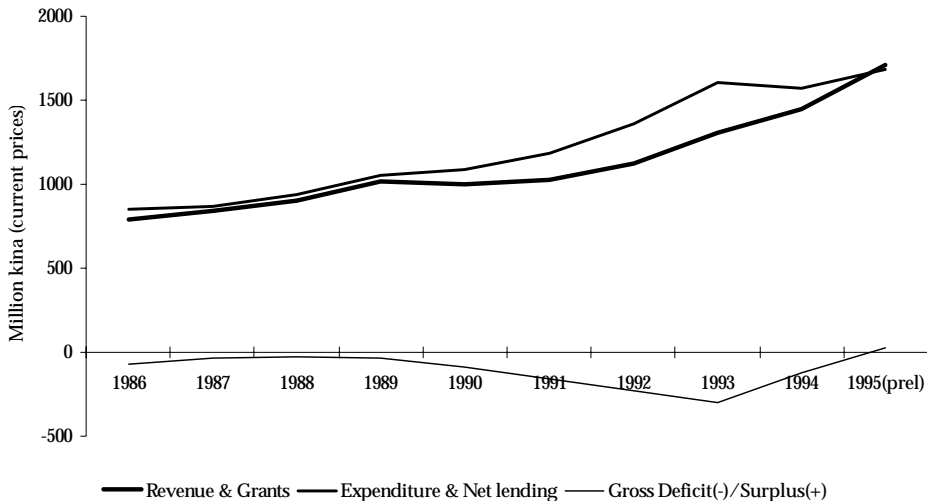
management to maintain economic stability while still achieving developmental progress. However, while prudential macroeconomic management was generally achieved for a considerable period of time since Papua New Guinea's independence, the increase in manna revenues in the early 1990s coincided with a deterioration in macroeconomic management which culminated in the financial and currency crisis of 1994.

With respect to the third hypothesis, budget overruns are not unique to Papua New Guinea. The surprising fact is the prolonged period over which overruns have taken place. The previous government had forecast that the 'manna' from mineral rents would continue to grow. Expansionary fiscal policy was planned on the basis of overly optimistic forecasts (Figure 2). As a percentage of GDP, gross budget deficits were greater

than 4 per cent of GDP in each of the three years 1991–93, peaking at 5.9 per cent in 1993.

The rationale behind this fiscal expansion was to provide a Keynesian-type stimulus to broaden the economic base. In February 1993, the then Minister for Trade and Industry, David Mai, stated that the 'government has chosen to diversify the economy and to steer the country and its people towards greater participation and prosperity, and has stated its commitment to undertake bold measures to achieve its aims' (Mai 1993:5). The measures included a substantial increase in domestically financed government outlays. Private institutions, commercial banks in particular, were more realistic in their expectations of the performance of the extractive sector and reacted swiftly when the deficit threshold exceeded their

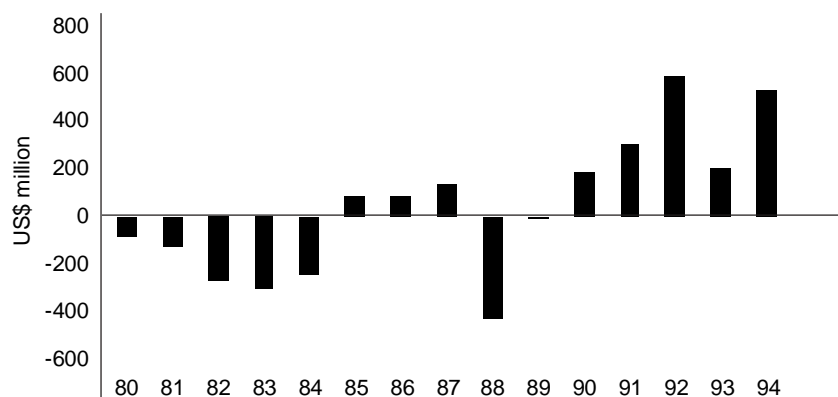
Figure 2 Central government budgets, 1986–94 (expenditure, revenue and deficits)



Source: AusAID, 1996. *The Economy of Papua New Guinea—1996 Report*, Australian Agency for International Development, Canberra.



Figure 3 **Capital flight from Papua New Guinea, 1980–94** (US\$ million)



Source: Computed using balance of payment statistics in the South Pacific Social and Economic Database, The Australian National University.

perceptions of sustainability. Capital flight from Papua New Guinea was at unprecedented levels in the five years leading to the crisis (Figure 3). Another disconcerting feature of the budget structure in the 1990s has been the bias towards recurrent expenditure at the expense of capital outlays. Furthermore, shocks to revenue in the past have been transmitted into shocks to investment and not recurrent outlays (Chand 1996), thereby penalising growth of aggregate output.

Structural adjustment programs

Understanding the motivations behind the policy initiatives in a structural adjustment program is made easier if it is looked at in the context of the analytical framework used by the authorities in the design of such programs.

Cooperation between the Bank and the Fund in the design and

implementation of rescue packages for developing countries began in the 1970s. Each of these two institutions has a different set of priorities and employs its own analytical framework in making specific policy recommendations. A detailed discussion of this is beyond the scope of this paper (see Khan and Knight (1982), Khan, Montiel and Haque (1986), and the references contained therein for more details on structural adjustment programs). Here a brief account is provided on how it relates to the current reforms in Papua New Guinea.

The Fund's principal concern is with the balance of payments and macroeconomic stabilisation, which is primarily a short-run consideration. The Bank, in contrast, is concerned with the medium-term growth prospects of the economy. Cooperation by the two institutions, particularly at the operational level, is likely to reduce conflict and assist in achieving both goals, which are not necessarily irreconcilable. For example, a



policy package could be designed that attempts to rectify the immediate balance-of-payments crisis as well as initiate changes that would allow for medium-term economic growth. Such a policy package may include short-run demand restraint—through fiscal and monetary means—as well as exchange rate adjustment and deregulation of factor and product markets so as to raise economic efficiency.

Appreciation of the rationale behind each policy prescription requires some understanding of the analytical framework underpinning these recommendations. The Fund’s program is structured around the link between the financial sector and the balance of payments with a focus on nominal variables. Often, the mechanics of this association is provided for by a flow-of-funds model, an approach which is commonly referred to as the monetary approach to the balance of payments. In contrast, the Bank employs the two-gap growth model where real variables alone matter. Naturally, the real and nominal variables are linked but tying the two approaches in a tightly specified analytical model is difficult.

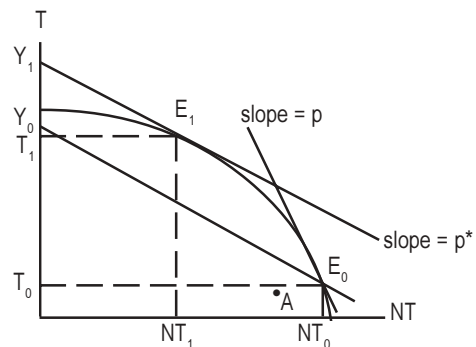
The policy package in a structural adjustment program is aimed at achieving a sustainable balance of payments position within an environment of price stability and improved long-term growth prospects for the economy. The price stability and balance-of-payments targets, in the short run, necessitate demand restraint through control of domestic credit expansion and exchange-rate correction. There is some potential conflict here in that a devaluation, as part of exchange rate correction, can lead to a price rise to the extent that imports contribute to the domestic output/consumption basket. But in general, it is

common to observe fiscal and monetary restraint accompanied with a devaluation at the initial stages of the reform process.

In the medium-term, policies focused on increasing investment and raising economic efficiency through ‘freeing-up’ of market forces are used to shift (restructure) the economy onto a higher and sustainable growth path. This freeing-up of market forces includes deregulation of prices and operations of factor and goods markets. The transition from a position of an economy riddled with domestic distortions where production is well below the production possibility frontier to one where output is maximised for given world prices is shown in Figure 4.

For ease of exposition, let the distressed economy produce two goods: tradables (T) and non-tradables (NT). Initially the economy is at point ‘A’, well within the production possibilities frontier (PPF) due to inefficiency. This inefficiency may be due to restrictions on imports of inputs, factor market distortions that restrain optimal use of existing resources, and so on. Removal of these distortions will move the economy from within the PPF, point ‘A’, to on the

Figure 4 Impact of liberalisation





frontier. With the given domestic (distorted) output prices p (slope = $-P^{NT}/P^T$), the economy shifts from 'A' to E_0 where T_0 and NT_0 quantities of traded and non-traded goods, respectively, are produced. Assuming that this country is small (as is the case with Papua New Guinea), the GDP (in terms of tradables) at international prices p^* is Y_0 . The slope of the budget line in Figure 4 is the ratio of non-traded to traded goods prices; as is depicted in the figure, domestic distortions favour non-traded prices (equivalent to an over-valued real exchange rate). Freeing-up of output prices, which brings about a rise in the (relative) price of tradables, shifts the economy from E_0 to E_1 with traded output rising to T_1 , non-traded output falling to NT_1 , and GDP at international prices increasing to Y_1 . The commentary so far is based on static considerations; growth effects arise from the process of transition between equilibriums. Such transitions may be stretched out over a long period of time. A permanent rise in growth is possible if external effects from investments and trade are allowed; this requires a dynamic treatment which is beyond the purview of this paper.

For higher incomes to translate into improved living standards for the population at large, improved income distribution and delivery of public services have also to be factored into structural adjustment programs. Public investment programs, such as building up capacities in education and health, have significant externalities for future output and growth but have serious budgetary implications in the short term. Some reconciliation of this short-term penalty against long-term gains has to be made which requires judgements on social discount rates. Goods such as physical and social infrastructure services,

including delivery of basic law and order, are public in nature. Hence, such goods are efficiently delivered only by the public sector. The availability of revenues to finance such provisions and the generation of capacity to meet such demands are legitimate concerns of any economic reform initiatives.

In the case of Papua New Guinea, the detrimental impact of widespread criminal activity on investment is a serious concern. Chand and Levantis (1997) show the likely magnitude of the cost of crime on output in Papua New Guinea and the close nexus between underemployment³ and crime is discussed. The authors argue that crime raises the cost of setting-up informal businesses which have the greatest potential to provide productive (legitimate) employment to the urban under-employed. The absence of employment opportunities together with rising working-age population pushes more people into crime. This locks the economy in a low-equilibrium growth trap; a 'big push' is required to get the economy out of this trap (see Chand and Levantis 1997). Productive employment provision is crucial if income inequities in Papua New Guinea are to be reduced. But such employment will only be provided in an environment conducive to investment in, and growth of, the informal and private sectors. Containing crime and improving the security image of Papua New Guinea is crucial—an issue to which the current structural adjustment program seems to have paid little attention.

Background to the 1994 crisis

Papua New Guinea suffered a major financial and currency crisis in 1994,



which largely reflected the culmination of several years of budget imbalances (see Figure 2). Despite large increases in recurrent government spending, however, the quality and coverage of essential public services, and law and order, deteriorated during the early 1990s. From 1991 to mid-1994 rapid growth was fuelled by booming mining sector activity with support from agriculture and forestry. Although rapid growth in the mining sector led to a surge in export revenue, the balance-of-payments position steadily deteriorated, primarily as a result of an expansionary budgetary stance, high leakage into imports and expenditure overruns which were aimed at fostering economic growth in the non-mining sectors. By the end of 1993 usable foreign reserves had fallen to US\$40 million (two weeks of non-mining import cover) and macroeconomic imbalances continued to worsen. In the first half of 1994, the budget deficit had increased to 11 per cent (annualised to June 1994), notwithstanding the impact of revenue measures and expenditure cuts introduced through a mini-Budget.

With expansionary fiscal policy flowing through to a high level of leakage (import demand and transfers abroad) the balance of payments position continued to deteriorate throughout 1994, with capital flight accelerating the deterioration from around the middle of the year. By early September 1994, gross international reserves were almost completely exhausted and the kina had lost its convertibility. The kina was devalued by 12 per cent on 12 September 1994 and the discount rate was increased by 0.25 per cent. The measures taken proved to be insufficient to ameliorate the pressure on the currency and on 10 October the kina was floated. Following the currency float, substantial

depreciation of the currency occurred throughout the remainder of 1994 and well into 1995. The currency eventually stabilised at around US\$0.76 per kina, some 40 per cent lower than its pre-float value.

The costs of the macroeconomic crisis included: an upsurge in inflation as a result of the flow-through effects of substantial currency depreciation; almost total depletion of foreign exchange reserves; a collapse in investor confidence and substantial capital flight; a sharp rise in civil disorder; an exodus of skilled labour (largely expatriates); mounting government debt; and a fall in public sector investment and maintenance expenditure.

The economic reform agenda and achievements to date

The Economic Recovery Program (ERP)

In response to the liquidity crisis, the Government introduced controls on non-contractual expenditure to sharply reduce the budget deficit from around 11 per cent (in mid-1994) to 2.3 per cent of GDP by the end of December 1994. The Government's economic reform program was developed with analytical assistance from the World Bank and formally presented in the 1995 Budget. The budget was delayed to March 1995 so that a well considered structural adjustment program could be formulated to lay the foundation for achieving sustainable and broad-based growth in income and employment. The budget was aimed at addressing key economic and long-term viability and sustainability issues, while providing a framework for restructuring the economy to improve efficiency and



international competitiveness in order to generate sustainable and broadly based growth in output and employment.

The five major objectives of the Papua New Guinea Government's Economic Reform Program (ERP) have been to

- restore and maintain a stable economic environment by sharply lowering fiscal deficits and improving fiscal management
- implement a series of structural reforms to enhance Papua New Guinea's competitiveness (by liberalising trade and investment regimes and privatising key government assets) and restore business confidence—thus bringing about a recovery in private investment
- promote sustainable, environmentally-sound natural resource development through implementation of effective forestry conservation and revenue policies
- substantially improve public service delivery through restructuring of public expenditures, significantly increase public investment, and initiate new non-governmental mechanisms to complement the public funds across regions by recognising the differences in per capita incomes and increase transfers to poorer provinces
- support measures to improve project and program implementation including emergency relief programs.

In order to achieve the ERP's macroeconomic objectives for the 1995–96 period substantial external financing, to a total value of around US\$350 million, was raised. Macroeconomic stabilisation measures supported by the IMF through a Stand-by Arrangement were accompanied by structural reforms, supported by an ERP loan from the World Bank. Additional external financing was provided primarily from the Asian

Development Bank, the Japan EXIM Bank and the Australian government.

World Bank Economic Recovery Program (ERP) Loan

The need for structural adjustment lending to Papua New Guinea arose out of a crisis in the balance of payments and the need for external finance to assist in regaining macroeconomic stabilisation and the achievement of structural reform. Without external financing the adjustment process would have been substantially more erratic and painful. The Bank's stated rationale for financial assistance was

- (a) the need for, and the Government's stated commitment to stabilisation and structural reforms; and (b) the need for balance of payments support without which the adjustment is likely to be disorderly (World Bank 1996:5).

The Bank's US\$50 million ERP loan to Papua New Guinea was to be provided in two US\$25 million tranches in support of the first phase of the Government's ERP. Essential actions were required to be taken by the Papua New Guinea Government before the loan proposal was put to the Bank's Executive Board for consideration. Release of the second tranche of the loan required prior actions in a number of areas including satisfactory preparation of the 1996 Budget and assessment of the impact of the new Organic Law on Provincial and Local Level Governments (OLPLLG).

The loan was designed to address 'only key macroeconomic and structural issues whose implementation is expected to stabilise the economy, begin the process of sustainable private-sector led growth, while improving the delivery of public



services and strengthen natural resource management, particularly forestry' (World Bank 1996:6). Negotiations with the Bank and the Fund commenced in late 1994 and programs were agreed with the IMF in July 1995 (1995–96 IMF Stand-by Arrangement) and August 1995 with the Bank (ERP loan).

IMF macroeconomic stabilisation objectives

The objectives of the IMF's 1995–96 Stand-by Arrangement were to restore economic and financial stability and to encourage strong, broadly based, and sustainable economic growth. The Arrangement allowed for Papua New Guinea to access SDR71.48 million from the IMF in several tranches over the period to the end of 1996, subject to Papua New Guinea meeting the requirements of specific performance criteria. The program's performance criteria included restoring financial stability and restraining CPI inflation to 14 per cent in 1995 and 5 per cent in 1996, achieving an increase in gross international reserves to US\$176 million in 1995 and US\$300 million in 1996 (A\$375 million; 3.3 months of non-mining imports) and limiting, to the extent possible, the negative impacts of the adjustment process on economic activity.

To achieve its objectives the program required a reduction in the fiscal deficit to no more than 1 per cent of GDP, including a substantial shift from current to capital expenditures, supported by tight monetary and wages policies to contain inflation and help maintain exchange rate convertibility. Over 1995 and 1996 both the IMF Stand-by Arrangement and ERP loan programs experienced substantial problems in relation to the implementation of policy reforms and

meeting specific performance criteria. In fact, heated negotiations, and sometimes acrimonious public outbursts, pushed the programs to the brink of collapse on several occasions. However, discussion on the specifics of the problems associated with the program's implementation is beyond the scope of this paper.

Despite the problems experienced with the programs, successful negotiations on both the 1995–96 Stand-by Arrangement and the ERP loan were completed at the eleventh hour: in December 1996 the IMF Executive Board agreed to extend its Stand-by Arrangement with Papua New Guinea through to December 1997. The World Bank agreed to release the second tranche of funding under the ERP loan in January 1997 and entered into discussions with the Papua New Guinea Government on a possible second loan.

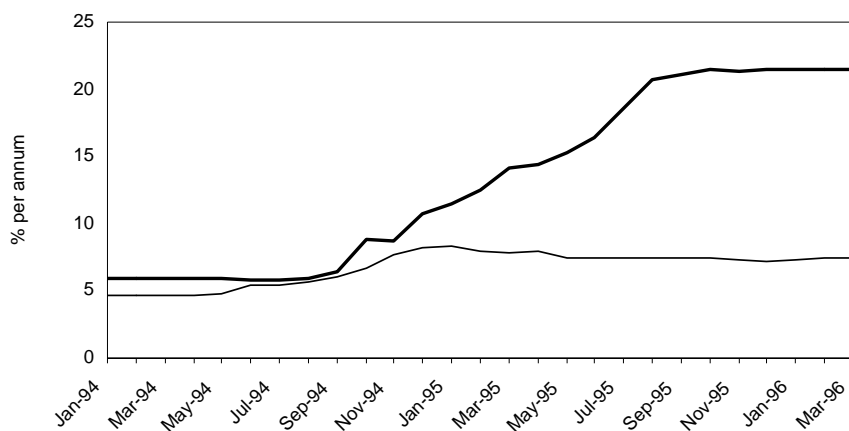
Assessment of recent developments

The ERP has been largely successful in achieving its short-term macroeconomic stabilisation objectives. Fiscal tightening combined with tighter monetary policy contributed to improvements in financial stability. Inflation declined during 1996 from a peak of around 18 per cent in 1995 (September: year-on-year average) to 10 per cent by September 1996, and is expected to remain relatively low and stable in line with the more stable exchange rate.

With high capital mobility, the consequences for domestic industry of monetary restraint and consequent high interest rates have been serious. Foreign firms can avoid credit squeezes by using foreign sources of financing, but domestic firms generally do not have this option. Rural Papua New Guinea, which relies primarily on subsistence agriculture, is



Figure 5 **Time plot of Treasury Bill rates, Australia and Papua New Guinea, 1994–96** (per cent per annum)



Source: Chand, S., 1996. 'Papua New Guinea: from stabilisation to growth', *Pacific Economic Bulletin* 11(2):1–13.

less monetised than the urban areas and has escaped the brunt of the impact of monetary tightening. Therefore, the role for prudent fiscal policy *vis-à-vis* monetary policy is significant for macroeconomic management in countries like Papua New Guinea with dualistic economies, and where subsistence is prevalent and domestic and foreign firms coexist. An over reliance on credit restraint to contain inflationary pressures could decimate domestic urban industry. An alternative policy anchor in the form of the nominal exchange rate with firm monetary targets and accompanying fiscal adjustments are argued as being the better strategy (see Schadler (1996) for elaboration on the last point).

Although progress on the macroeconomic front has been largely successful it has been blemished from time to time. For example, 1996 Government expenditures exceeded budget targets as a result of recurrent

expenditure overruns due to higher-than-planned wage bills and higher interest payments, as well as extra-budgetary expenditures on goods and services and clearance of pre-1995 arrears. Recurrent expenditure overruns had an adverse impact on the public investment program and efforts to accelerate project implementation and aid disbursements were not effective. In addition, the inflation target for 1996 of 5 per cent was substantially exceeded.

In his 1997 Budget Speech, the Papua New Guinea Minister for Finance indicated that overall real growth in GDP will strengthen from around 3 per cent in 1996 to 5 per cent in 1997. Strengthening growth in the non-mining sector is anticipated to offset partially the negative impact of a projected decline in the mining sector arising from lower production levels in line with production cycles and in some cases lower world prices.



CPI inflation for 1997 is estimated to be around 8 per cent, similar to the level of inflation in 1996, and substantially lower than the rate of around 18 per cent experienced in 1995. Neither labour force estimates nor estimates for employment are specifically considered in the 1997 Budget Speech. An encouraging sign on the employment front had been the consistent increase in the Central Bank's employment index over the three quarters from December 1995 to June 1996. However, the most recently available measure of this index shows a small decline in the September quarter 1996 (Bank of Papua New Guinea 1996).

The rebuilding of foreign reserves since the crisis of late-1994 has continued to gather momentum. The level of reserves at the end of December 1996 were K789 million which was sufficient for 4.8 months of total import cover and 6.3 months of non-mining import cover. The rebuilding of reserves led to a further substantial increase in banking sector liquidity over 1995 and 1996. However, despite the increase in liquidity, bank lending to the private sector has continued to decline. From mid-1996 the Central Bank significantly eased official interest rates with the 6-month Treasury Bill rate falling from 21 per cent in May to 10 per cent at the end of December (Figure 5). Increasing foreign reserves will raise pressures for currency appreciation (at least in the long-run), something that will dampen supply response from the export sectors. The sluggishness in investment and growth can be attributed to three causes: slow growth of final demand, restraint on public investment, and lack of investor confidence in policy stability. The last reason is highly significant in the current Papua New Guinea context. Lack of policy credibility in an environment of macroeconomic

instability makes investors take a 'wait-and-see' approach, thereby stalling the growth process (Offerdal 1996).

Prospects

The principle macroeconomic objectives for 1997 are to continue with the task of fiscal consolidation so as to secure financial stability and to continue to improve the environment for broad-based and sustainable economic growth. Monetary policy will continue to focus on containing inflation and strengthening the external position.

While the ERP has been largely successful in stabilising the Papua New Guinea economy, achievements on structural reform under the World Bank's program has been mixed. A condition under the ERP loan was that minimum shares of total public expenditure should be achieved in key essential service areas: 25 per cent for primary and secondary education, 25 per cent for primary health and hospital services, and 25 per cent for agriculture and renewable resources. While these quantitative targets have almost been achieved, significant efficiency gains in delivery of these services will have to be made to make a dent in the poor statistics on social indicators of development.

Macroeconomic mismanagement over the early 1990s saw lost opportunities for use of the benefits from the resource boom to invest in the people's health and education so as to improve poor social indicators of development statistics. Despite Papua New Guinea being classified as a lower-middle income country (LMIC),⁴ some of its basic social indicators are more in line with those of low income countries (LICs): life



expectancy at birth is 57 years compared to the LMIC average of 67; adult literacy is 28 per cent, substantially lower than the LMIC average of 34 per cent; infant mortality at 65 per 1,000 live births is substantially higher than the LMIC average of 40; and maternal mortality at 700 per 100,000 live births is amongst the highest in the world. These poor statistics imply significant potential for improvement.⁵

A delicate balance needs to be achieved between macroeconomic stabilisation and structural reform objectives. A key ongoing requirement of the IMF program is to maintain prudent fiscal management by containing budget deficits—presently to no more than 1 per cent of GDP. On the other hand, the World Bank program requires increases in government outlays on public investment in the areas of health, education and transport infrastructure. While these two objectives are not necessarily incompatible—that is, spending more while reeling in and containing budget deficits—there is a clear potential for difficulties to develop in attempting to satisfy both requirements.

However, the 1997 Papua New Guinea Budget Speech (Haiveta 1996) indicates total expenditure projections for 1997 of 2407 million kina (approximately 32 per cent of estimated GDP). Within this total the public investment program (public investment program) budget at 421 million kina is just 17 per cent of total estimated budgetary outlays. 568 million kina (24 per cent) is allocated for grants to the provinces. The debt service commitment at 555 million kina (23 per cent) is substantial. Estimated expenditure by national departments and statutory agencies (863 million kina—36 per cent) makes up the remainder of the

1997 estimated budget expenditure. While considerable additional public investment expenditure (that is, in addition to the national public investment program) will take place through grants to the provinces, it would appear, *prima facie*, that there is at least some scope for restructuring of the public expenditure profile in favour of public investment expenditure without necessarily increasing total outlays. In addition, it may be possible to increase public investment expenditure with deficit targets continuing to be met through addressing the revenue side as well as the expenditure side of the budget. In this context, it is worth noting that revenue reforms are being implemented. A major scheduled revenue reform is the introduction of a national value-added tax in 1998. While it is intended that the value-added tax be revenue neutral it will be an encouraging development if such a significant reform can be successfully implemented.

There is also considerable scope for public expenditure efficiencies to be achieved through additional maintenance and rehabilitation expenditure being provided for existing public infrastructure assets and services. Substantial improvements could be made through such an approach which could, in some circumstances, delay or even avoid the need for substantial investments in new public infrastructure projects which are invariably expensive and have long lead and implementation timeframes.

As discussed earlier in this article, one important lesson from the recent Papua New Guinea experience is that monetary policy is less effective than fiscal policy in macroeconomic management. As the experience after



monetary restraint in Papua New Guinea demonstrates, a credit squeeze has the potential to decimate domestic urban industry. Foreign firms have the option of using external sources of financing while the rural sector, being based primarily on subsistence activities, can escape the monetary squeeze. The brunt of monetary tightening, therefore, is borne by the domestic urban sector. This underscores the importance of prudent fiscal stances.

A preoccupation with low budget deficits (for example, targets of 1 per cent of GDP), may be counterproductive. The structure of the budget may be just as important as the level of the deficit *per se*. Investments in areas with rates of social return greater than the interest rate and financed from resource rents could raise welfare and the rate of economic growth. Improved creditworthiness and the ability to prioritise public outlays could justify small increases in the level of the deficit within the medium term while laying down the foundations for long-term growth.

Conclusion

The liquidity crisis of 1994 was primarily the result of internal 'endogenous' causes. Loss of fiscal discipline was the main factor responsible for rising levels of budget deficits in the early 1990s. Increased outlays as a result of the Bougainville insurgency contributed to the budget blow-out, but only in the short term. Aid withdrawal by Australia, though significant in real per-capita terms, has been offset by increased income from resource rents in the post-1992 period.

Current policies and structural reforms, if maintained, will be adequate

to sustain macroeconomic stability and help bring the Papua New Guinea economy to a more broadly based sustainable growth path.

Growth is an ongoing and complex process requiring adherence to policies conducive to entrepreneurial activity over prolonged periods of time. Expenditure targets such as those under the structural adjustment program on health and education alone will not suffice. Improving the efficiency and effectiveness of public service delivery is also essential and such 'qualitative' issues need to be addressed.

Finally, the crisis of 1994 will hopefully generate a continuing process of action on economic management that was long overdue and delayed, at least partly because of the policy reform latitude that the substantial revenue arising from the rich resource base and generous external assistance provided. Notwithstanding substantial achievements so far, as the Minister for Finance said in his 1997 Budget Speech '...we [Papua New Guinea] are only at the beginning of the beginning. There is still a long way to go.' (Haiveta 1996). If the reforms undertaken now are successful in achieving their goals and the reform process is maintained then the end of the beginning may be in sight and the future may be a lot brighter for Papua New Guinea.

Notes

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The views expressed in this article are those of the authors and not necessarily those of the Australian Government or the Australian Aid Agency for International Development (AusAID).

- ¹ Figures are for 1988, the last full year of production.
- ² The Australian bilateral aid program to Papua New Guinea will be fully transformed to jointly programmed aid by 30 June 2000.
- ³ The subsistence nature of production in Papua New Guinea and the absence of a social security net implies that open unemployment in Papua New Guinea is neither observed nor officially recorded, though Mawuli (1996) estimates unemployment in Port Moresby to be in excess of 40 per cent.
- ⁴ Papua New Guinea is classified as a lower-middle income country (LMIC) using the *World Bank Atlas* method. For 1996 groups are defined as low-income with per-capita GDP of US\$725 or less; lower-middle income for per-capita GDP in the range of US\$726–2895; upper-middle income with per-capita GDP between US\$2896–8955; and high-income with per-capita GDP of US\$8956 or more. Literacy figures are for 1995 (World Bank 1996).
- ⁵ Delivery of health and education deserve separate attention, and this is being worked on.

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