Economic survey

Recent economic events in Papua New Guinea: a continuing drought in development

Charles Yala and Theodore Levantis

Papua New Guinea continues to fall short of its potential in terms of economic and social development. It has extraordinary wealth in mineral, forestry and fishing resources and an enormous comparative advantage in tourism, yet social indicators place it amongst the poorest nations in the world and economic growth since independence has barely kept pace with population growth. The devastating drought was a major setback for the economy. While a full recovery from the drought is expected from the second half of 1998, the enormous frustration of the people will continue as there appears little prospect of a change in policy direction to secure Papua New Guinea's great potential for prosperity.

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Forces of nature have caused Papua New Guinea to endure severe economic and social setbacks in the past year. The drought which afflicted the country through the second half of 1997 and into early 1998 was the most severe in recorded history. The drought began to bite soon after Papua New Guinea had begun to recover from Cyclone Justin. Then soon after the drought had ended another natural disaster battered Papua New Guinea. The tsunami that hit the Sepik coast near Aitape washed away entire villages, took an estimated 3,000 lives, and injured many more. The unfolding of the East Asian financial crisis and the consequent slump in international prices for Papua New Guinea's mineral exports caps off an extraordinary period of disaster since the beginning of 1997.

Since independence, internal forces have led Papua New Guinea along a path of disaster in terms of economic and social development. Papua New Guinea is blessed with the resources to catapult it onto a strong path of economic growth, yet living standards are falling, health and education indicators put it amongst the poorest nations in the world, infrastructure is deteriorating, and there is still no road link between the nation's two biggest cities. Yet Papua New Guinea is close to East Asia which, until 1997,

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was the fastest developing region in the world. The nation is rich in mineral, forestry and fishing resources, and the potential for tourism is enormous with unparalleled natural appeal and rich and diverse culture. But GDP growth since independence has barely kept pace with population growth of 2.3 per cent per annum. Much of the growth that has taken place has come from exploitation of Papua New Guinea's mineral wealth, but with the government failing to redistribute the windfalls towards development, the beneficiaries have been localised and narrow. Non-mining GDP growth has lagged population growth since independence, averaging just 1.8 per cent per annum. In short, more than 20 years of opportunity to push Papua New Guinea towards prosperity has been lost and failing a fresh approach to policy, there is little reason to expect improvement in the years ahead.

Recent macroeconomic performance

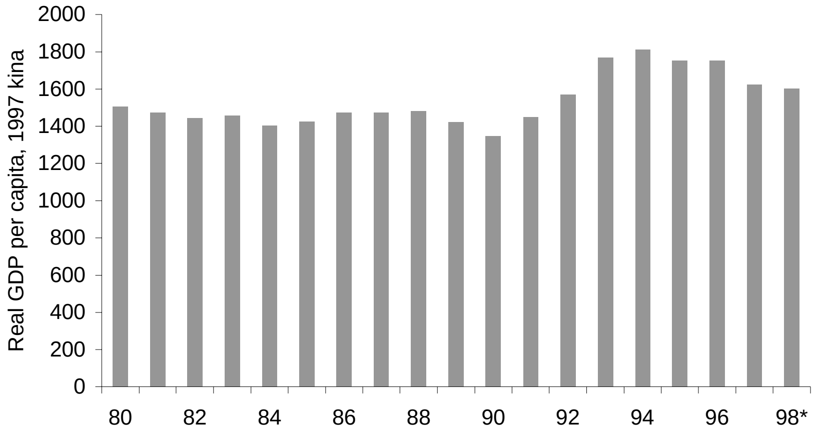
In the wake of the external economic and natural forces that have hit Papua New Guinea, GDP contracted 5.2 per cent in 1997 (Figure 1) and growth is likely to return to only a modest rate of about 1 per cent in 1998 with recovery in mineral sector output expected to compensate for declines in agriculture and forestry. The impact of the drought on the Papua New Guinea economy has been severe and is most responsible for the downturn. Agricultural production was so affected that around 260,000 people—8 per cent of the rural population—suffered chronic food shortages due to failed crops and had to rely on bush foods or food aid for survival (see Allen and Bourke 1997). A further 1 million people were exposed to severe but not chronic food shortages. Food production in Papua New Guinea

Figure 1 **Papua New Guinea: real GDP growth per annum, 1980–98** (per cent)

* forecast

Sources: South Pacific Economic Database, National Centre for Development Studies, Canberra; Duncan, R. and Chand, S., 1998. 'Papua New Guinea: chronic fatigue syndrome', in APEG (ed.), *Asia Pacific Profiles*, Asia Pacific Economics Group, Canberra; and Bank of Papua New Guinea, *Quarterly Economic Bulletin*, Port Moresby.

Figure 2 **Papua New Guinea: GDP per capita, 1980–98** (kina)



Note: *Forecast.
Source: South Pacific Economic Database, National Centre for Development Studies, The Australian National University, Canberra.

agriculture is mostly in the form of fruits and vegetables which rely on regular rainfall, and it is this production that was immediately affected by the drought. The impact of the drought on export tree crops was not felt until the beginning of 1998 with the unfolding of the new season. The drop in cash crop production (cocoa, coffee, cocoa and palm oil) and the slump in log exports in 1998 will cause a decline in the agriculture and forestry sector of about 10 per cent to follow a decline of about 6 per cent in 1997.

Despite the devastation to agriculture, the biggest source of contraction in GDP in 1997 was not agriculture but mineral production. In 1996, the mineral sector comprised 27 per cent of GDP, which is about the same contribution of the entire agriculture, forestry and fisheries sector. Mineral sector production fell more than 20 per cent in 1997 due to the forced closure of the giant Ok Tedi mine, and to a lesser extent, interruptions to production at the Porgera mine. The drought reduced the flow of the Fly river system—on which the Ok Tedi mine depends for transportation—to unprecedented low levels making navigation impossible.

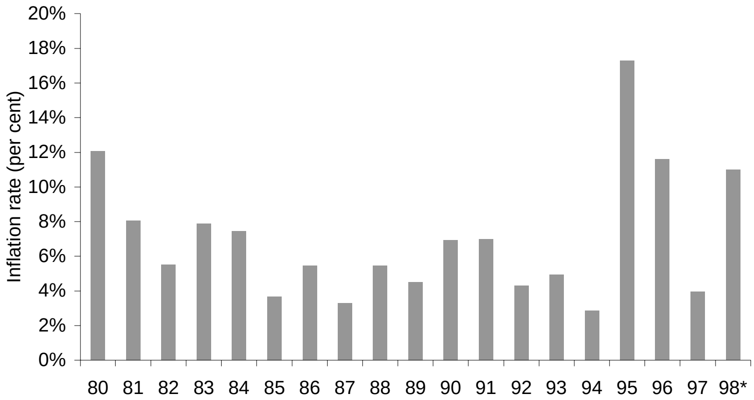
Increasing volatility in Papua New Guinea's growth performance (see Figure 1) is a reflection of strong fluctuations in mineral sector output (see Levantis and Chand 1998). After contracting 3 per cent in 1990, Papua New Guinea recorded growth in GDP exceeding 10 per cent per annum between 1991 and 1993 on the back of a mineral boom in which the corresponding growth for the mineral sector exceeded 25 per cent for each of these years and peaked at over 45 per cent for 1992. Stalled mineral growth caused weak GDP growth between 1994 and 1996 before the decline in 1997 for which the mineral sector, and the loss of production in Ok Tedi in particular, was most responsible. Real average GDP per capita boomed in the period from 1991 to

1993, but has slowly fallen back towards the level of the early 1980s (Figure 2). However, the benefits of growth were highly localised because of the concentration on the mineral sector.

After nearly two decades of prudent macroeconomic management, the early 1990s saw standards quickly deteriorate, culminating in the liquidity crisis of 1994. The hard kina policy which had been maintained since independence was questionable and certainly put a hold on growth through trade, but it did help to deliver low inflation rates (Figure 3). The kina was floated after the liquidity crisis, and since then Papua New Guinea has experienced currency depreciation and much greater volatility in inflation rates. With more than half of Papua New Guinea's imports sourced from Australia, and with imports making up the bulk of purchased consumption, inflation is closely linked to the exchange rate with the Australian dollar. The depreciations of 1995 and early 1996 pushed inflation well into double figures (Figure 3) while most other nations in the region were enjoying low and declining inflation. Depreciation set in again from late in 1997 due mostly to the drought and to declining prices for Papua New Guinea's major commodity exports. This has sparked off inflation again and it should reach 14 per cent by the end of 1998. The value of the kina against the Australian dollar is now half of what it was in 1994.

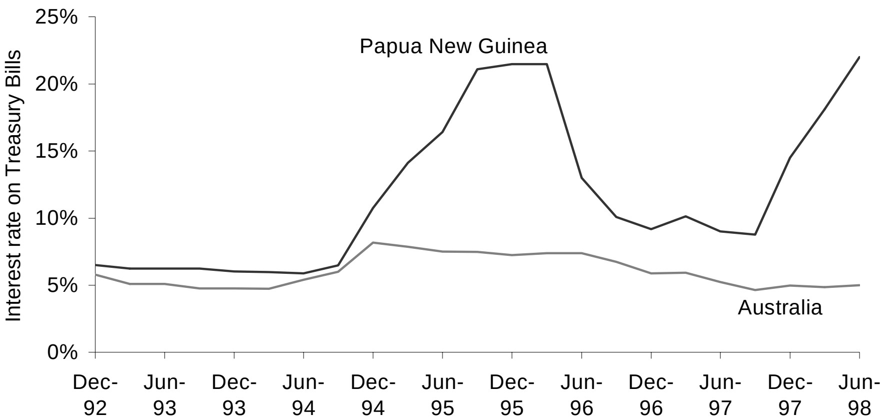
The appropriate exchange rate regime for Papua New Guinea is a matter of contention, but the volatility and instability since the floating of the exchange rate would suggest that it could hardly be considered a success. The previous regime of a pegged rate and over-inflated currency was also a failure as events in 1994 proved. It would seem that with a continued float of the exchange rate, Papua New Guinea can only hope for continued high, erratic and uncertain inflation outcomes. Compounding the unstable macroeconomic environment is the government's determination to 'correct' on occasions the market

Figure 3 **Papua New Guinea: inflation, 1980–98** (per cent)



Note: *Forecast.
Source: Bank of Papua New Guinea, *Quarterly Economic Bulletin*, Port Moresby.

Figure 4 **Papua New Guinea: interest rates, 1992–98** (per cent)

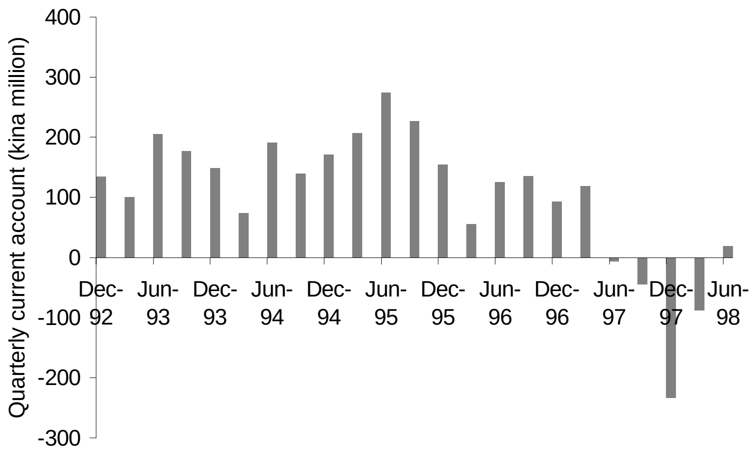


Note: These rates refer to 6 month bills for Papua New Guinea and 3 month bills for Australia.
Source: Bank of Papua New Guinea, *Quarterly Economic Bulletin*, Port Moresby (various issues)

determined rate for the kina with use of monetary policy. Interest rates have fluctuated wildly since 1994 in contrast to the long period of low and stable rates before 1994 (Figure 4). In the decade prior to the 1994 liquidity crisis, the rate on 6-month treasury bills was in a range of 6-12 per cent. In early 1996, the rate jumped to 21.5 per cent before falling back to 8.4 per cent by July 1997 and then spiking back up to 22.0 per cent in the middle of 1998. The volatility in interest rates has probably accentuated rather than dampened volatility in the exchange rate. This macroeconomic performance hardly provides a confident environment conducive to private sector investment and business groups have been calling for a return to stability in interest rates and the exchange rate. The government hopes to address this with its economic reform package announced in July, but the delivery in terms of stability is likely to be limited, although more recently, the currency has stabilised due to increased intervention of the Bank of Papua New Guinea (see Manning, this issue).

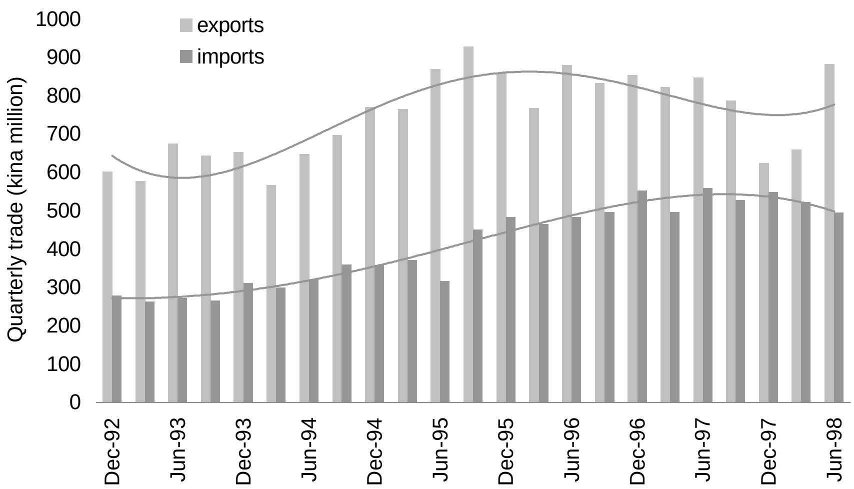
Despite the devaluation, Papua New Guinea's trade performance deteriorated significantly between 1995 and 1997 (Figure 6). Exports fell 10 per cent, mostly due to the fall in mineral exports in 1997, while imports increased 31 per cent despite weakness in the economy. With a small and narrow domestic manufacturing industry, the demand response to increases in import prices is small since there is limited scope to substitute to domestically produced commodities. Papua New Guinea is an open economy with high exposure to fluctuations in the mineral sector. Mineral exports in 1997 amounted to 28 per cent of GDP and total exports to 47 per cent of GDP. The boom in mineral exports has seen Papua New Guinea record large trade surpluses in the 1990s and in 1995 the surplus peaked at 28 per cent of GDP before falling back to K950 million or 15 per cent of GDP in 1997. The trade surplus has picked up

Figure 5 **Papua New Guinea: quarterly current account position, 1992–98** (kina million)



Source: Bank of Papua New Guinea, *Quarterly Economic Bulletin*, Port Moresby.

Figure 6 **Papua New Guinea: trade performance, 1992–98** (kina million)



Source: Bank of Papua New Guinea, *Quarterly Economic Bulletin*, Port Moresby.

from the trough early in 1998 due mainly to recovery of the minerals sector from the drought. The current account position has also turned around, recording a small surplus in the June quarter (Figure 5) and relieving pressure on reserves. At the peak in 1995, the current account surplus reached 13 per cent of GDP.

Sectoral performance

The bulk of the population live in rural areas and depend on subsistence production supplemented with cash earnings from tree crop production and surpluses from subsistence production. Because villages tend to be located in isolated areas, accessibility to basic services like health, education, extension, research, infrastructure and credit is difficult. The law and order problem and the land tenure system amongst other social and cultural factors complicate the opportunity for expansion and diversification in food and export crop production. Papua New Guinea is yet to exploit its vast potential in the agricultural sector.

With the spread of knowledge and information on production, processing and distribution and the adoption of simple farming techniques, the export tree crops, coffee, cocoa and copra, have developed largely into smallholder cash crops (Temu 1997). The El Niño drought that hit in 1997 had a big impact on the production of most of these cash crops, but with the lagged impact of flowering patterns the reduction in production and export volumes did not occur until early 1998. In fact the total value of agricultural exports increased 34 per cent in 1997 due in most part to improved coffee prices. The fall in volumes for the smallholder crops, as well as palm oil and tea, were massive for the first half of 1998 compared to the same period in 1997 (Table 1). Export commodity prices improved significantly during the first half of 1998 (Table 2) due to the combined effect of the depreciation of the kina and improvements in world commodity prices, helping to alleviate the overall drop in value of agricultural exports. The export value of cocoa, coffee and copra fell, but increased for tea, copra oil, palm oil and rubber (Table 3).

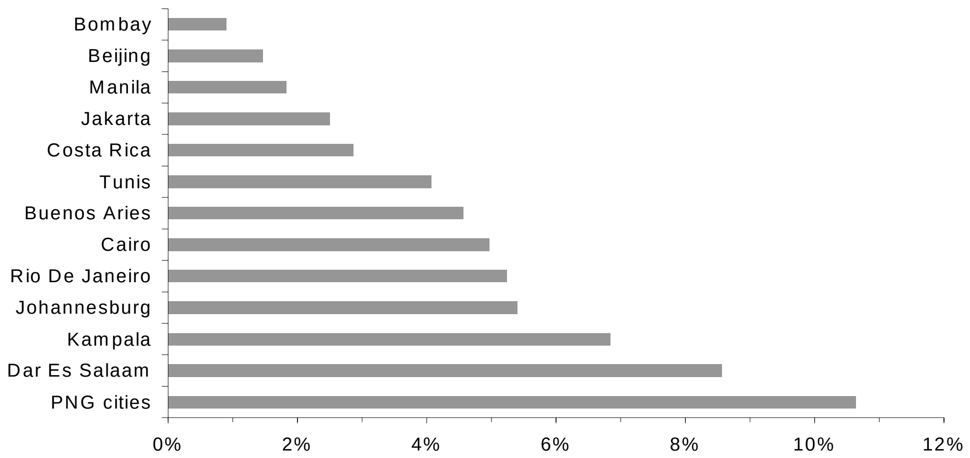
In the case of tea, the big improvement in prices is due to the export to Europe of a new tea product. This serves as a good example of how

Table 1 **Papua New Guinea: agricultural exports by volume, 1995–98** ('000 tonnes)

	1995	1996	1997	1998, 1st half	Change 1st half 1998 vs 1997 (per cent)
Cocoa	30.6	41.0	38.6	10.2	-47.2
Coffee	55.1	62.3	59.2	16.0	-48.9
Tea	4.2	9.3	6.5	2.9	-32.6
Copra	64.2	99.2	90.3	31.5	-36.5
Copra oil	33.1	49.6	48.6	29.5	9.7
Palm oil	186.6	267.0	274.9	113.2	-14.8
Rubber	2.7	2.8	4.4	2.7	8.0

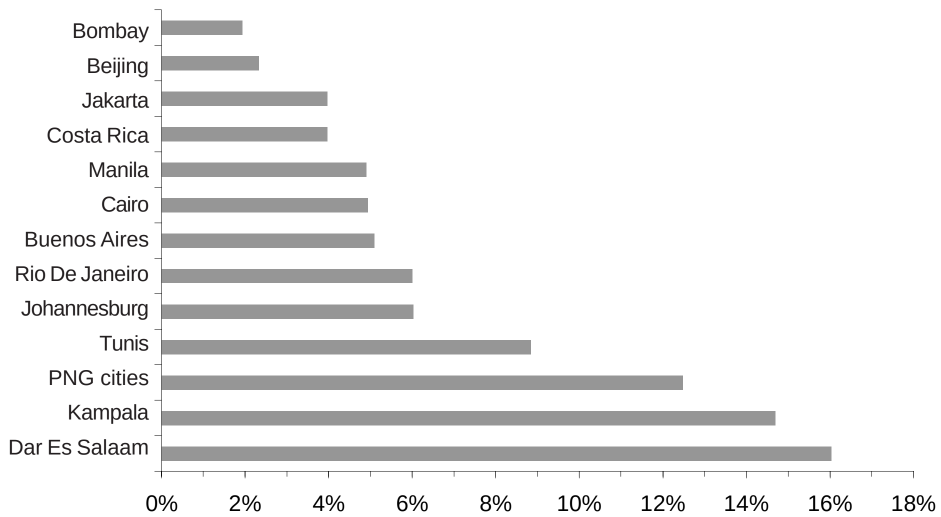
Source: Bank of Papua New Guinea, 1998, *Quarterly Economic Bulletin*, June, Port Moresby, S34.

Figure 7 **International comparison of victimisation rates, average for violent crimes**



Source: Derived from data in Zvekic U. and Alvazzi A., 1995. 'Criminal victimisation in the developing world', Interregional Crime and Justice Research Institute, New York.

Figure 8 **International comparison of victimisation rates, average for crimes of larceny**



Source: Derived from data in Zvekic U. and Alvazzi A., 1995. 'Criminal victimisation in the developing world', Interregional Crime and Justice Research Institute, New York.

Table 2 **Papua New Guinea: agricultural export prices, 1995–98** (kina per tonne, fob)

	1995	1996	1997	Average 1st half 1998	Change 1st half 1998 vs 1997 (per cent)
Cocoa	1559	1615	1909	2840	60.9
Coffee	3893	3055	5505	6205	35.9
Tea	1286	1366	1600	2685	83.3
Copra	427	494	523	603	14.9
Copra oil	897	1036	1051	1186	9.7
Palm oil	762	683	753	1124	50.2
Rubber	1481	1464	1477	1644	12.9

Source: Bank of Papua New Guinea, 1998. *Quarterly Economic Bulletin*, June, Port Moresby, S35.

Papua New Guinea producers can improve diversification and value added by pursuing niche markets. There is great potential in Papua New Guinea for high valued specialised food production. Production of organic food crops for export is a good example of potential niche markets. Papua New Guinea has a comparative advantage in the production of many agricultural crops with suitable soil and climatic conditions, and with smallholder dominance the rewards of expanded agricultural production are distributed to the masses. It should therefore be a national priority to foster development of the agricultural sector. The potential benefits can only be realised with rural development, particularly of infrastructure, and a containment of the law and order problem.

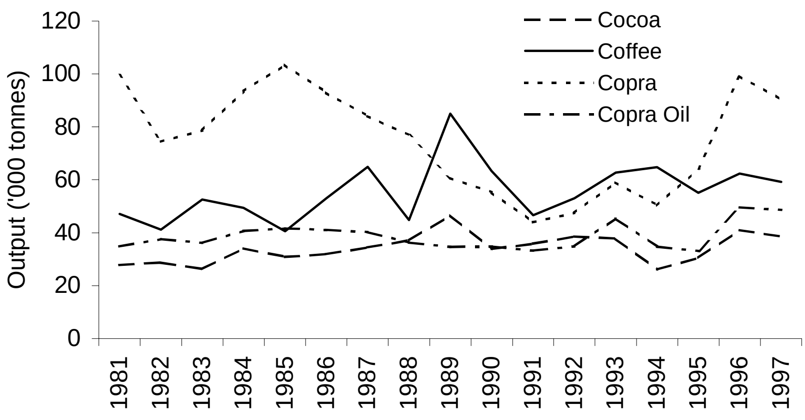
Commentators have tended to exaggerate the overall impact of the East

Table 3 **Papua New Guinea: agricultural export by value, 1995–98** (kina million, f.o.b.)

	1995	1996	1997	1998, 1st half	Change 1st half 1998 vs 1997 (per cent)
Cocoa	47.7	66.2	73.3	29.2	-13.9
Coffee	214.5	190.3	325.9	99.6	-39.5
Tea	5.4	12.7	10.4	8.6	36.5
Copra	27.4	49.0	47.2	18.9	-27.6
Copra oil	29.7	51.4	51.1	34.6	17.7
Palm oil	142.2	182.4	207.1	122.1	23.6
Rubber	4.0	4.1	6.5	4.3	19.4

Source: Bank of Papua New Guinea, 1998, *Quarterly Economic Bulletin*, June, Port Moresby, S33.

Figure 9 **Papua New Guinea: smallholder dominated cash crop production** ('000 tonnes)



Source: South Pacific Economic Database, National Centre for Development Studies, The Australian National University, Canberra.

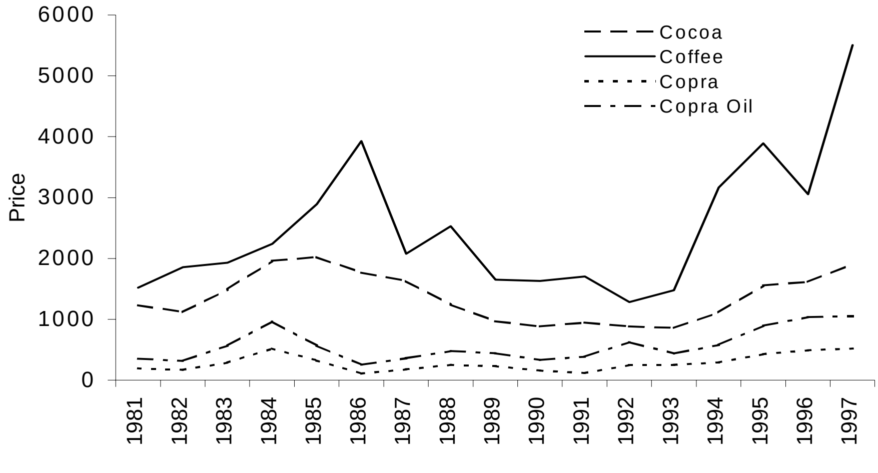
Asian financial crisis on the economy. The exposure in terms of investment and exports is limited to the forestry sector which accounts for 14 per cent of all commodity exports. The events of East Asia have hit the forestry sector hard with the destination of logs almost exclusively to the Japanese and Korean markets. Despite the currency depreciation, log prices have plummeted in domestic currency by about 25 per cent and demand since the last quarter of 1997 has slumped. With the boom in prices in 1993, log exports reached K495 million in 1994 making up 19 per cent of all commodity exports. The weak final quarter of 1997 saw exports for the year drop to K434 million. Exports for the first half of 1998 were just K81 million—down 65 per cent on the corresponding period of 1997—and are unlikely to exceed K200 million for the year. Around 7 per cent of government revenue has come from export taxes on logs so the slump in 1998 will put a big hole in the government's revenue base. After sustained pressure from the forestry lobby, the government reduced export taxes on logs and exempted logs sold for under K130 per cubic metre. The average price is now around K135 million per cubic metre. With logging operations foreign-owned, most of the benefit of the logging industry to the Papua New Guinea economy has been from export taxes and to a lesser extent from labour usage and royalty payments. Reducing the export tax is effectively a transfer of economic rents abroad (see Livernois and Levantis this issue). Unfortunately, since logging operations began in Papua New Guinea, the main beneficiaries have always been the offshore logging companies (see, for example, Duncan 1995).

The arrangements for retrieving rents from the mineral sector are far more balanced and efficient. But misappropr-iation of these funds towards wasteful recurrent expenditures rather than development has seen little reward for Papua New Guinea from the massive revenues generated. The mineral sector has now recovered from the slump in production due to the drought and prospects are encouraging. The Lihir gold mine is now in its first full year of production, and oil has begun flowing from the Gobe oil and gas field. Prospects for the oil and gas sector are bright with negotiations for construction of a pipeline to Queensland advancing and ongoing prospecting is uncovering further reserves of gold. A nickel/colbalt mine near Madang is set to enter into production in the near future. But while an expanding and prosperous mineral sector should normally be viewed with optimism, in the case of Papua New Guinea there should only be cautious optimism. Unless the government can use the windfall revenues for productive development, then much of the potential prosperity will be lost.

Law and order

The law and order problem has been the most important constraint to development in Papua New Guinea. This is a point that is poorly understood and rarely acknowledged and accepted—particularly by government. The crime problem in Papua New Guinea is severe and is at least as bad as anywhere in the world. An international study carried out by the United Nations in the early 1990s found that the violent crime rate in Papua New Guinea's urban centres was double that of well known violent cities Rio de Janeiro and Johannesburg, and higher than notorious cities in Africa (see Figure 7). For less serious crimes of theft, only Kampala and Dar Es Salaam had a higher rate of incidence (Figure 8). The crime problem is so serious that it is easily the most important impediment to investment and the most serious problem facing businesses—as was confirmed by

Figure 10 **Papua New Guinea: prices of smallholder dominated cash crops, 1981–97** (kina million, f.o.b.)



Source: South Pacific Economic Database, National Centre for Development Studies, The Australian National University, Canberra.

Duncan and Lawson (1997). With a twenty-fold increase in the urban crime rate since the early 1970s, the deteriorating business environment has seen private sector employment in urban centres stagnate with employment in 1998 about the same as it was in the early 1970s, despite a four-fold increase in the urban population. Employment growth has come solely from the public sector. The respective governments over the years have failed to show any serious intent of dealing with the law and order problem. Expenditure on law and order represents about 10 per cent of total government expenditure—little changed from the 1970s when crime was not a problem.

The law and order problem has also become serious in rural areas, particularly in the highland regions, and while there are many constraints that have impeded the development and expansion of cash crop production, the most important have been the lack of infrastructure development and the deteriorating law and order situation. The law and order problem has played a big role in the failure of smallholder crop production to expand, despite increasing prices. In fact, production levels are about the same as they were in the early 1980s (Figures 9 and 10). Armed hold ups, robberies and tribal fighting have put severe constraints on the growth of the coffee industry in particular. A total of K100 million was estimated to have been lost in 1997 by the coffee industry due to the law and order problem (*The National*, 14 October 1998). Coffee prices have increased nearly four-fold in domestic prices since the early 1990s, yet exports have not responded. Long-term prospects for export crop production, particularly of coffee, do not look promising and in the event that prices were to again turn down, production would also be expected to turn down strongly—unless the law and order problem is dealt with.

If the law and order problem were to be contained, tourism would boom. Papua New Guinea has the potential to attract 1 million tourists a year given its immense comparative advantage in terms of natural beauty, diverse culture and vicinity to an array of big markets. Yet Papua New Guinea struggles to attract 20,000 tourists per year—about the same number it was attracting in the 1970s. This represents just 0.06 per cent of the Asia Pacific market, and is less than tiny and isolated nations such as Cook Islands and Western Samoa. If Papua New Guinea is able to tap into the tourist market and reach 1 million tourists—a possibility only if the law and order problem is overcome—goods and services exports could increase 50 per cent and GDP about 20 per cent. The law and order problem is eliminating an extraordinary opportunity for development and prosperity.

Political developments

Politics in Papua New Guinea is never boring and much has happened since the 1997 national elections. After the elections held in July 1997 for Papua New Guinea's fifth national parliament since independence, 88 election petitions against winners were registered with the National Court (*The National*, September 17 1998). Most of the problems raised were due to flaws in the electoral system. One of the key problems related to the common roll. The common roll had 3.4 million people registered (Manning 1997)—a number probably much greater than the true number of eligible voters due to the prevalence of 'ghost' names—and yet the names of many eligible voters were absent. Many petitions were struck out by the National Court, but most of these are subject to appeal in the Supreme Court or have been taken for judicial review. As a result, the court system has become clogged and there are many cases still pending in both courts.

The trend seems now to be that losing candidates do not accept defeat but go to the courts for a second chance. As a result of these petitions, the state has incurred huge legal and associated costs. The electoral commission has estimated that by-elections for the six seats declared null and void will cost K6 million (*The National*, September 7 1998). The cost in terms of political uncertainty and instability is of particular concern. Petitions create anxiety and uncertainty in the minds of political leaders and act to impede project and policy implementation as politicians become distracted by court proceedings. Political stability at the national level is already fragile with power dependent on loosely aligned political parties. The electoral laws and rules governing election petitions are in serious need of review.

The less than stable political environment is highlighted by the fact that the Skate Government has made four cabinet Ministerial reshuffles. On two occasions, two political parties (Pangu and People's Progress Party), both holding the position of deputy prime minister (Chris Haiveta and Michael Nali), have been sacked along with the cabinet ministers aligned to those parties. Politicking will intensify in the next few months as the 18-month grace period over which the opposition cannot bring a vote of no confidence against the current government expires in March 1999. From previous experiences, it has been the case that individual and coalition partners within the reigning governments have crossed over to support votes of no-confidence. From recent events, it would seem that the current Prime Minister is trying to weed out all potential floor-crossers. But not many reigning Prime Ministers have survived a vote of no-confidence despite all their politicking skills.

Instability extends to the operations of the public sector. Since the formation of the Skate Government, there has been a series of changes to heads of departments and statutory corporations. Further, a number of departments have either been downgraded, converted to statutory authorities or amalgamated. In 1998, there were three Governors of the Central Bank. Likewise, there were three Secretaries for the Department of Treasury and Corporate Affairs. Frequent changes of ministers and heads of departments result in conflicting and inconsistent policy, and for key positions such as Central Bank Governor and Secretary to the Treasury, leads to lack of confidence in economic management. Of great controversy has been the recent reappointment of Brigadier General Jerry Singirok as commander of the Defence Force. The appointment was made despite his being implicated by the recently completed commission of inquiry into the Sandline affair.

Particularly controversial has been the appointment of the former head of the World Bank mission to Papua New Guinea, Dr Hamidian-Rad as chief economic advisor to the government. Dr Hamidian-Rad's appointment created tension between the World Bank, the International Monetary Fund and the Papua New Guinea Government and resulted in the refusal by these international agencies to forward previously agreed loans to Papua New Guinea. It has been reported that Dr Hamidian-Rad's consultancy company was awarded a K7 million contract for two years (*Post-Courier*, September 11 1998). Add this to the damage in relations with the World Bank and the International

Monetary Fund, and the government has paid an extraordinary price for his advice. It remains to be seen what benefit this advisory role will bring to the Papua New Guinea economy, but based on a recent speech by Dr Hamidian-Rad (*The National*, 15 October 1998) one should be pessimistic given his lack of recognition of the law and order problem.

The implementation of the provincial and local-level government reforms face serious financial, infrastructure and human resource constraints. So far, the distribution of funds to provinces and local-level governments have been irregular. In some provinces, funds are kept in the provincial treasuries and are either passed to the local-level government or diverted to other unbudgeted activities (*Post-Courier*, 15 October 1998). The distribution of responsibilities between the three levels of government for the development and maintenance of infrastructure are often not well defined, causing problems in the implementation of programs and projects.

Update on Bougainville

The Bougainville conflict has now moved into its tenth year. Attempts to bring peace and normalcy to the island have gained momentum this year. With the active participation of the New Zealand and Australian governments, all parties involved in the conflict signed the Burnham Declaration, Lincoln Agreement and the Arawa Ceasefire Implementation Agreement. A Peace Monitoring Group made up of personnel from Australia, New Zealand, Fiji, Solomon Islands and Vanuatu is on the ground in Bougainville and the United Nations has sent a UN observer team at the request of the Papua New Guinea Government. The Government of Papua New Guinea for its part rescinded the callout, established the office of Bougainville Affairs to act as a co-ordinating agency for the restoration program, and relocated all Papua New Guinea Defence Force troops from Arawa to Loloho to facilitate the creation of a demilitarised zone in Arawa (*The National*, 7 September 1998).

Many meetings have been organised within and between different parties involved in the conflict (rebels, resistance fighters, the Bougainville Transitional Government, the National Government and the Bougainville Interim Government). More importantly, there has been more external involvement than previously. The New Zealand and Australian governments took the lead, resulting in the Lincoln declaration and the subsequent cease fire agreements in Bougainville. With the cease-fire agreement in place, more meetings are scheduled with the overall aim of achieving a negotiated settlement. The Bougainville Transitional Government will be succeeded by the Bougainville Reconciliation Government (BRG) which is expected to be put in place early next year. The BRG will have representatives from all parties involved in the conflict from Bougainville. It will be the BRG which will negotiate with the Papua New Guinea government to achieve a settlement. In the final analysis, it must be remembered that the Bougainville crisis is a complex issue and finding a solution will be difficult. Moreover, the financial implications of both maintaining the peace process and restoring the island and its people to near their former circumstances are going to be high.

Positive steps have been taken in the restoration, rehabilitation and redevelopment of the physical, social and economic infrastructure on the island. Consultative meetings have been organised with donor agencies. So far, the European Union and Australia have made commitments and are set to begin work on various infrastructure projects. Working groups were formed by the Department of Bougainville Affairs to coordinate the process of rehabilitation. It should be emphasised that the Papua New Guinea government's commitment to the restoration, rehabilitation and redevelopment of the physical, social and economic infrastructure on the island has significant implications on its budget.

Value-added tax

The idea of introducing a value-added tax in Papua New Guinea was given serious consideration in 1994/95 as part of the World Bank and IMF sponsored stabilisation and structural adjustment program. The idea was to have a uniform rate of tax on goods and services. The specific form of the value-added tax has been debated for sometime but it seems likely that a 10 per cent rate on all goods and services will be levied with some exemptions in health, education and financial services. As far as legislative changes are concerned, amendments to tariffs, import duties and provincial sales taxes have been made. The value-added tax bill is now before Parliament for its final reading. If passed, it is expected to be implemented in 1999. Amendments to the Customs Tariff Act and the Excise Tariff Act pave the way for a gradual reduction in the forms of tariffs. These amendments should be seen as complementary to the proposed introduction of the value-added tax. Revenue-sharing arrangements have been established between the national government and the various provincial governments, because provincial sales taxes (3 per cent in most provinces) will be removed when the value-added tax is introduced.

The strong argument in support of the tax is that it allows a broadening of the tax base and provides a stable and reliable form of revenue. Further, the tax structure for the private sector will be less distorting with businesses given rebates on value-added tax for intermediate inputs and exports. In terms of its disadvantages, without a compensation package or social security system in place, the low income category is likely to be worse off with prices of basic essentials increasing.

At present there is an over-reliance on windfall revenues from mineral extraction to support recurrent expenditures. Apart from the point that it is inappropriate to allocate these revenues to anything other than development expenditure from where Papua New Guinea can gain future income from the windfalls, the revenue flow from these natural resources is erratic and unreliable. This has been the experience in 1998 with declining revenues from the forestry and mineral sectors. After renewed prudency resulting in small budget surpluses in recent years, for 1998 a budget deficit of 3 per cent of GDP is likely despite a privatisation program and despite a real decline in recurrent expenditures of about 12 per cent (excluding interest payments). A solid and stable revenue base is imperative for the government to be able to maintain its public services while avoiding unforseen financial problems due to shocks in its volatile revenue sources.

Summary

In summary, it is clear that fundamental changes in approach are needed if Papua New Guinea is to realise its enormous potential for prosperity. Improving the government's revenue base with a value-added tax is a positive development and it is hoped that the strengthening of the revenue base will help fund an improved delivery of health and education. But the revenue base needs to be further strengthened while windfall revenues from resource industries need to be diverted towards development, infrastructure in particular. Major initiatives are required to overcome the law and order problem and it needs to be established and understood in public circles that development and prosperity cannot occur so long as Papua New Guinea continues to carry the law and order burden. Other initiatives such as those proposed in the government's economic reform program are fine, but are peripheral to the fundamental problem of law and order and lack of infrastructure development.

Unfortunately, there appears little prospect that Papua New Guinea's fundamental problems will be addressed, in which case the general economic outlook is not bright. Future growth will continue to depend on developments in the mineral sector for which the outlook is positive, but without a changed approach from government, the benefits are unlikely to result in improved development and living standards.

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