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Employment strategy in Papua New Guinea: An international perspective

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Introduction

The East Asia and Pacific region has experienced rapid development over the past three decades. World Bank data show that the region's industrial output has grown fifteenfold since 1965. Exports went up nearly tenfold and Gross Domestic Product rose sevenfold.

Buoyant economic growth brought substantial social benefits to the region's population. Per capita income quadrupled. The primary school enrolment rate reached 100 per cent and infant mortality fell by two-thirds. Fifteen years were added to the average life expectancy of both men and women.

Not all countries within the region enjoyed the same success, however. Growth in Papua New Guinea (PNG) has been especially sluggish. Although endowed with good soils, abundant rainfall, considerable mineral resources, and forestry and fishery stocks of good commercial potential, Papua New Guinea's progress has lagged well behind that of most countries in the region. Per capita income has stagnated over the past 25 years (an annual increase of just 0.1 per cent). Infant mortality was 68 per cent above the regional average in 1990 and life expectancy at birth was 13 years below. A third of all girls in the primary school age group were still not enrolled.

Employment generally plays a dual role in development, providing a productive outlet for the creative skills and energies of the population and serving as the principal mechanism for the distribution of income. However, PNG's rate of job creation has been particularly disappointing. Employment fell sharply in industry and services from 1980 to 1990 and open unemployment rose from 2.5 per cent to 7.3 per cent of the labour force, over the same period.

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This article examines trends in the Papua New Guinean labour market and compares them with structural changes in other countries in East Asia and the Pacific, and elsewhere. It suggests that divergent trends reflect differences in the strategies pursued by those countries. In PNG, some well-intentioned policies have proved to be counterproductive: although designed to widen job opportunities for Papuans and to raise and protect their living standards, these policies have contributed to economic stagnation and retarded social progress for most of the population. On the other hand, in some other countries, policies that are often labelled as narrowly "economic" have had beneficial social effects: rapid growth of jobs and incomes has generated the financial resources (public and private) required to expand social programmes and to sustain improvements in social standards. Such considerations suggest the need for PNG to reappraise its employment strategy in the light of international experience.

Background

Papua New Guinea is composed of some 300 islands located in the West Pacific. It extends over 1,300 km from north to south, from the Equator to 12° south latitude, and 1,200 km from its border with Indonesia in the west to 160° east longitude. It is sparsely populated, with 3.8 million inhabitants and a total land area of 46,300 square km.

Population growth has been stable at around 2.5 per cent over the past decade. More than 80 per cent of the population lives in villages and produces treecrops for sale and rootcrops for subsistence purposes. The capital, Port Moresby, is the largest urban centre, with an estimated 145,000 inhabitants.

PNG is classified by the World Bank as a middle-income country. But taking into account its relatively high domestic price levels, real living standards are low. The United Nations International Comparison Project (ICP) estimates that PNG's per capita GDP averaged 1,500 international dollars (purchasing power parity) in 1990. This was just a third of Thailand's level, and a quarter of Malaysia's, both of which had lower nominal per capita incomes than PNG in 1960. The purchasing power of the average income in PNG in 1990 was below that in China, Egypt, Ghana, Indonesia, Pakistan and Sri Lanka, for example, all of which are considered to be low-income countries by the World Bank.

Three-quarters of PNG's labour force was engaged in agriculture in 1990 and its productivity was low. Agriculture accounted for only 29 per cent of GDP, and 34 per cent of exports (down from 90 per cent in 1965). Industry (mostly mining) contributed 31 per cent of GDP and services 40 per cent in 1990.

Diversification of the economy has proceeded very slowly over the past decade. Manufacturing output has not kept pace with population growth, increasing by just 1.9 per cent annually. Manufacturing value added amounted to $103 per head in 1990, compared with $316 in Thailand, $379 in Mauritius, $1,547 in Korea and $2,821 in Singapore. Manufactures constituted just 5 per cent of PNG's exports in 1990, compared with 66 per cent, 30 per cent, 94 per cent and 63 per cent for the other four countries respectively. PNG thus did not take advantage of the upsurge of world trade in manufactured goods that took place in the 1980s.

Movements in PNG's services sector was also slow: services output went up by only 1.4 per cent annually, reflecting declining government revenues to pay for public services and a failure to exploit its considerable tourism potential.

Employment structure

The broad economic trends and characteristics summarized above are mirrored in PNG's employment data. Table 1 shows the distribution of the labour force by sector in 1980 and 1990.

Agriculture remains the predominant source of employment, with nearly three out of every four workers engaged in the agriculture, fishery and forestry sectors in 1990 (up from 70 per cent in 1980). Half of those employed in agriculture were cash farmers in 1990. Over the decade, this represents a significant increase in the proportion involved in the monetary economy. But a third of the total labour force in PNG still consisted of subsistence farmers in 1990. Agricultural wage labour, mostly working in the large holding (plantation) sector, increased in numbers but accounted for only 4 per cent of total employment.

The proportion of the labour force engaged in industrial and service sector activities declined sharply during the 1980s, falling from 22.7 per cent in 1980 to 18.2 per cent in 1990. Formal wage employment increased slightly in absolute numbers, but the informal sector, which consists primarily of the self-employed, unpaid family workers and those included in the "other" category, contracted in both numbers and share over the period.

Open unemployment rose steeply. Roughly one out of every 15 members of the labour force was without work in 1990.

Some aspects of these trends are disturbing and especially so when seen from an international perspective.

Relationship between agricultural employment and income growth

Most surprising is the increase in the proportion of the labour force engaged in agriculture in PNG. International data show that the share of agriculture in total employment usually falls as per capita income rises. This was true for most individual countries over the period 1965-90, and among countries at different income levels. Incomes grew fastest in countries where agricultural employment declined rapidly. In Korea, for example, GNP per

Table 1. Distribution of the citizen labour force by sector

Employed	1980		1990	
	000s	% of labour force	000s	% of labour force
Total agriculture	1 075	69.8	1 279	74.5
Cash farmers	475	30.8	635	37.0
Subsistence farmers	552	35.8	578	33.7
Agricultural labourers (wage)	48	3.2	66	3.8
Total industry and services	427	27.7	312	18.2
Formal (wage)	146	9.5	160	9.3
Informal	281	18.2	152	8.9
Total employed	1 502	97.5	1 591	92.7
Unemployed	38	2.5	126	7.3
Labour force	1 540	100.0	1 717	100.0

Sources: National Statistical Office: Population censuses, 1980 and 1990; and P. A. McGavin: *Wages, incomes and productivity in Papua New Guinea,* (Institute of National Affairs, Port Moresby, 1991).

capita rose by 7.1 per cent annually from 1965 to 1990, while agricultural employment fell from 55 per cent to 22 per cent of the labour force.

These trends reflect some well-documented economic phenomena. They include: (i) relatively low income elasticities of demand for food and other agricultural commodities; (ii) barriers to international trade in agricultural products; (iii) higher income elasticities of demand and more open global markets for manufactured goods and services, resulting in higher rates of labour absorption in industry and services; and (iv) rapid urbanization pulling surplus labour out of agriculture thus inducing technological innovations which reduce agriculture's labour needs still further. Income growth is retarded whenever these mechanisms fail to function normally. Many of these effects and their relevance in the PNG context will be reviewed later in this article.

Wage employment

Another cause for concern is the stagnation in formal wage employment in PNG. Wage-earners in agriculture, industry and services combined constituted only 12.8 per cent of the labour force in 1990, down from 13.9 per cent in 1980.

This also runs counter to international experience. The share of wage employees in total employment generally increases as per capita incomes rise. This is the result of two main factors: (i) a shift of labour out of agriculture (where the proportion of self-employed and family labour is highest), as incomes rise; and (ii) an increase in the average size of firm in the industrial and services sectors to take advantage of economies of scale and technological progress, thus causing a contraction of informal (household) sector employment. A World Bank study of historical trends in a cross-section of countries concluded that "employment in household manufacturing was seen to decline first in relative and then in absolute terms as industrialization proceeds" (Anderson, 1982).

Table 2 shows the trends in formal wage employment by sector in PNG from 1976 to 1990. The total number of wage-earners rose rapidly during the second half of the 1970s, reaching 213,000 in 1980. The 1980s witnessed significant annual fluctuations, but the long-term growth trend was weak. At the end of the decade, total wage employment was a bare 7 per cent above the level at the beginning, and more than half this gain was lost in 1991 as a result of the recession. The situation would have been worse without the steady rise in agricultural labourers. Furthermore, the sectors which are generally the most dynamic in successful economies – manufacturing, transport, trade and financial and business services – have experienced negligible employment growth in PNG over the past ten years.

Public service employment reached a peak of 56,000 in 1980, but after the retrenchment of the following two years, employment levels in public administration, education and health services were deliberately stabilized within the 49,000 to 51,000 range. Including employees in the state-owned electricity, post and telecommunications companies, the Government was still responsible for 25 per cent of total formal wage employment in 1990.

Information on employment trends since 1990 is patchy, but not encouraging. The Employers Federation of PNG (EFPNG, 1992) reported a decline in employment among its members from 55,517 at the end of 1989 to 44,953 in December 1991, a 19 per cent drop over the two years. The largest fall occurred in the plantation sector, where employment dropped from 24,972 to 15,016. The manufacturing sector also experienced a significant contraction, from 6,910 to 6,484 over the same period. Mining employment recovered somewhat from a very slack 1990. But the total of 5,036 at the end of 1991 was still well below the 6,145 recorded two years earlier. Only the construction sector showed evidence of the buoyant labour demand one would expect from the GDP growth in 1991 (estimated at 9 per cent by the Bank of PNG). Members of the EFPNG reported an increase in construction employment from 2,689 at the end of 1989 to 3,158 in December 1991.

Causes of low rates of employment growth

The data reviewed above show statistical trends and relationships. What are their determinants? Many factors can influence employment trends. The following discussion focuses on some of the main policy variables and compares the strategies adopted in PNG with those of other countries which have achieved higher rates of job creation and better overall economic performance.

Table 2. PNG formal wage employment by sector, 1976-90

	1976	1980	1984	1987	1990	1990
	(000s)					Shares %
Agriculture	38	48	54	59	66	30.0
Mining	5	5	6	8	5	2.4
Manufacturing	...	18	17	17	18	8.3
Construction	...	26	14	22	30	13.8
Transport	...	15	11	15	16	7.1
Trade	...	22	23	20	19	8.5
Financial business services	...	8	10	9	11	5.1
Public services	51	56	55	55	55	25.2
Other (residual)	...	15	9	6	–1	–0.5
Total (rounded up)	175	213	201	213	220	100.0

Source: P. A. McGavin, op. cit.

1. High labour costs

Viewed as costs, PNG's minimum agricultural wages compare unfavourably with agricultural wages of other countries that have plantation economies. Using ILO data, P. A. McGavin calculated that average agricultural labour costs for India and Sri Lanka were about 25 per cent of the PNG agricultural minimum wage in 1985/86; for Philippines about 36 per cent; for Indonesia about 65 per cent; and for Malaysia about 73 per cent. The percentages were still lower when compared with PNG average agricultural wages. Higher wage costs raised the prices of labour-intensive commodities produced by PNG (mostly treecrops – coffee, tea, cocoa, palm oil, copra, rubber and palm kernels) making them less competitive in international markets. High wages also squeezed the returns to plantation owners, thus discouraging further planting. These effects were accentuated by the decline in world commodity prices towards the end of the decade, reflected in PNG's deteriorating terms of trade.

The differentials were even greater for non-agricultural wages in most countries with per capita incomes similar to those of PNG. Non-agricultural wages in Sri Lanka were just 8 per cent of PNG's average urban wages, and 17 per cent of its non-agricultural minimum rates. The equivalent percentages for India were 14 per cent and 30 per cent; for Indonesia, 18 per cent and 38 per cent; and for the Philippines, 15 per cent and 32 per cent. Because of the relatively high earnings of semi-skilled and skilled workers, PNG's non-agricultural labour costs even compared unfavourably with those in countries with much higher incomes (and productivity levels), such as Korea (67 per cent of PNG's average), Hong Kong (60 per cent) and Singapore (62 per cent).

The gap in wage costs between PNG and its main competitors was opened up in the four years prior to independence when there was a big upsurge in minimum rates established by the Minimum Wages Board, a new statutory body created by the Government on the Australian model. These awards resulted in a big jump in nominal and real wages of both agricultural and non-agricultural workers. Nominal minimum weekly wages for general labourers in rural areas rose by 60 per cent from 1972 to 1976. Urban minimum rates went up by 124 per cent from 1972 to 1975. After adjusting for increases in the Consumer Price Index, this meant an increase of real urban wages of 52 per cent in just three years.

Nominal wages climbed more slowly after independence. Nevertheless, rural minimum rates in 1990 were 124 per cent higher than in 1976. Urban minimum wages went up by 107 per cent over the same period. However, in recent years, in an attempt to introduce more flexibility into the labour market, the Minimum Wages Board has not fully indexed wages to the cost of living. In 1990, real rural minimum wages were 8 per cent below their peak reached in 1979. Urban real wages in 1990 had slipped 11 per cent from their peak in 1975.

World Bank data show that real earnings in manufacturing rose during the 1980s at an annual rate of 3.0 per cent in India, 2.3 per cent in Sri Lanka, 6.4 per cent in the Philippines, 5.9 per cent in Indonesia, 3.2 per cent in Malaysia and 6.3 per cent in Korea. In contrast, real earnings fell by 1.9 per cent annually in PNG from 1980 to 1990. So the gap in wage rates between PNG and some of its main competitors has narrowed in recent years. But so far this has not resulted in a significant improvement in competitiveness because the kina remains overvalued and labour productivity is stagnant. These aspects are examined below.

2. An overvalued currency

IMF indexes for the real effective exchange rate (REER) of the kina take 1978 as the base year. They show a slight appreciation up to a peak of 108 in 1981, followed by a steady depreciation to 95 in 1989, and then a sharp drop after the 10 per cent devaluation in January 1990. At the end of 1990, the REER index stood at 85.

An effective depreciation of the kina by 15 per cent compared with 1978 has been in the right direction. But the effective exchange rate has not dropped sufficiently to overcome the disadvantage of the high rate adopted when the kina was first launched in April 1975, and pegged for eight months at a one-for-one parity against the Australian dollar. As we have seen, urban wages increased two and a half times from 1972 to 1975. Tight demand management policies were pursued during the first years of independence with the aim of maintaining a "hard" kina. The kina kept its value in broad terms against a trade-weighted average of other currencies, and rose against a sharply declining Australian dollar.

The result of these tight monetary policies was to lock in the PNG economy to a high cost structure compared with its main trading competitors. A 15 per cent effective devaluation over a period of 12 years has done little to improve the situation for agricultural commodity exporters and has proved to be a formidable barrier to manufactured exports and tourism: manufactured exports are negligible (5 per cent of total exports in 1990); and only 8,000 genuine tourists visited PNG in 1990, compared with 279,000 going to Fiji.

High wages have permeated the whole economy and pushed up total input costs and prices. A major devaluation of the kina, combined with liberalization of the labour market, would seem to be necessary to put PNG on a level playing field with its main competitors. Initially these measures would be painful to those in the modern sector presently spending a high proportion of their incomes on imports. But they would benefit producers of import substitutes and increase earnings and employment in export sectors. In the longer run, everyone should gain from a more dynamic, outward-oriented economy.

3. Stagnant labour productivity

Growth of output and incomes, and hence of domestic demand, has been retarded by the relative stagnation of labour productivity in the formal sector. As shown in table 3, from 1973-77 to 1985-89 value added per person employed in the formal economy increased by only 0.06 per cent annually in constant 1983 prices. Overall productivity growth was held back by static output per employee in the public services sector, and by a 3 per cent annual decline in the mining sector over this period.

Productivity is highest in the mining sector, followed by manufacturing, and trade, transport and financial services combined. From 1983 to 1990 there were productivity increases in mining, utilities and community and social services, but these were offset by declines in manufacturing and construction. So economy-wide productivity remained static at around 1,300 kina per member of the labour force, measured in constant 1983 kina.

P. A. McGavin sought an explanation for this stagnation in the data on capital formation and fixed capital per employee. Using plausible assumptions about average life spans of plant and equipment and rates of capital consumption, he found that fixed capital per employee in the formal market sector increased from 13,874 kina in constant prices in 1977 to 14,521 kina in 1983, but then fell back steadily to 12,496 kina in 1989.

These findings are supported by World Bank data which show that gross domestic investment in PNG declined at an average annual rate of 1.7 per cent from 1980 to 1990. The countries that achieved the highest rates of growth of investment, such as Korea, Thailand, and Singapore, also realized rapid growth of per capita GNP and of labour productivity in manufacturing.

Measures to raise productivity in PNG will need to include a reduction in unproductive government consumption, greater incentives to foreign and

Table 3. Changes in labour productivity in PNG formal economy

Productivity change (compound annual %)	1971-75/ 1976-80	1976-80/ 1981-85	1981-85/ 1986-89	1973-77/ 1985-89
1. Formal economy	0.06	0.02	1.18	0.06
2. Formal market sector	2.88	1.66	1.17	1.29
3. Formal non-mining market sector	3.22	3.26	0.65	2.37
4. Mining sector	1.92	–5.25	–0.83	–3.12

Source: P. A. McGavin, op. cit.

domestic investors, and more effective promotion of exports, as discussed below.

4. High government consumption

The ratio of government employees to total population in PNG was only 2.0 per 1,000 inhabitants in 1990, which is lower than in other Asian and Pacific countries, such as Thailand (3.0), Sri Lanka (3.0) and the Philippines (2.1). However, PNG government consumption expenditure reached 24 per cent of GDP in 1990. This was one of the highest ratios in the developing world, exceeded only by Ethiopia (26 per cent), Zimbabwe (26 per cent) and Nicaragua (29 per cent). It was more than double that of Sri Lanka (9 per cent), Indonesia (9 per cent), Philippines (9 per cent) and Thailand (10 per cent), and still well above India's 12 per cent and Malaysia's 13 per cent.

This high level of government consumption expenditure might be justified if it reflected heavy spending on educational and health services. Significant improvements in standards in these fields have occurred, but primary and secondary school enrolment rates are still substantially lower in PNG than in most other countries in the East Asia and Pacific region.

The main explanation for the high government consumption/GDP ratio in PNG is the high level of civil service salaries in relation to per capita income. Wages of the average civil servant in PNG cost six times the average citizen's income, compared with double in the Philippines and 1.8 times in Sri Lanka. This high wage cost reduced the proportion of government revenue that could be allocated to infrastructural investment. Government capital expenditure amounted to just 14 per cent of total government expenditure in 1990, one of the lowest percentages in Asia.

The high cost of government consumption also results in higher taxes. Central government revenue amounted to 23 per cent of GDP in 1990. On top of this must be added local government taxes and sundry quasi-taxes ("compensation") paid to landowners, which add to operating costs and squeeze the profits (and hence the investable funds) of the private sector. Considering that the taxpaying private sector is quite small in PNG, its tax burden constitutes a major constraint on growth of output and employment in the market economy. In contrast, the tax burdens on much broader private sectors amounted to just 18.3 per cent in Thailand and 13.9 per cent in Korea in 1990.

5. Barriers to private non-mining investment

One of PNG's most serious development problems has been its inability to generate sufficient investment in the non-mining sector of the economy. As noted earlier, gross domestic investment declined at an average annual rate of 1.7 per cent in real terms from 1980 to 1990. Gross non-mining investment fell even faster, from 360 million kina (in 1983 constant prices) in 1981 to 195 million kina in 1991. The share of private non-mining investment in GDP dropped from 13.4 per cent in 1981 to 8.2 per cent in 1991. With depreciation normally in the range of 4 to 6 per cent of GDP, net investment in non-mining activities (including the public sector) has probably been only 6 to 8 per cent of GDP per annum. Such low levels of net investment are hardly sufficient to generate growth of output in excess of the rate of population increase, even if high levels of efficiency in resource use could be achieved.

Although national savings have been relatively low, averaging 15 per cent of GDP during 1986-91, the lack of investment has reflected more the lack of viable investment opportunities and disincentives to investment rather than a financing constraint. PNG has enjoyed ample recourse to international sources of finance, including foreign aid.

Official Development Assistance (ODA) constituted 11.4 per cent of GNP in 1990). Outstanding domestic credit to the private sector rose from 401 million kina in 1983 to 1078 million kina in 1991 (at current prices), rising at an annual rate in excess of inflation. So access to domestic loans has not been a problem either.

The main factors that have contributed to the low rate of private investment outside the mining sector may be summarized into three categories as follows. Some have already been discussed; others will be reviewed later.

General economic constraints:

- high costs of housing and consumption goods;
- a small, fragmented domestic market;
- poor internal transport and communications facilities;
- unclear and cumbersome arrangements for the acquisition of land;
- declining prices of PNG's major agricultural exports;
- stagnant per capita income;
- a deteriorating law and order situation.

Labour market constraints:

- a high wage cost structure compared to PNG's competitors;
- limited availability of local skills and low labour productivity;
- excessive labour market regulations and rigidities;
- controls on the entry and employment of foreign workers;
- relatively high earnings and greater job security provided by public sector employment, encouraging most of the better-educated PNG citizens to enter government service rather than accept the greater risks of setting up their own businesses; the greater part of personal and family savings has thus been channelled into land, housing, vehicles and consumer durables, rather than into equity investment in secondary industries.

Investment constraints:

- restrictions on informal sector activities that have limited the opportunities for indigenous entrepreneurs to acquire experience in running small business requiring little capital, thus inhibiting investment and entry into more formal enterprises;
- specific constraints on foreign investment, including exclusion from numerous sectors, protracted licensing procedures and weak fiscal incentives for investors compared to what is offered by PNG's competitors.

All these barriers will need to be lowered if not removed, if non-mining investment is to be raised.

6. Disincentives to foreign investment

Foreign investors can make an important contribution to the developing countries. They not only supplement scarce capital resources, but also facilitate the absorption of modern technology and managerial know-how and promote exports through their marketing networks abroad. Some East Asian countries have benefited greatly from foreign investment. In Thailand, for example, net foreign direct investment inflows reached $2,400 million in 1990. Firms with at least 10 per cent foreign ownership accounted for 46 per cent of sales in the textiles, leather and clothing industries and a quarter of sales in the food industries. All these sectors were major actors in export markets.

PNG has attracted little foreign investment outside the mining sector, and even there the investment climate has not been very hospitable. A large-scale mining project on the island of Bougainville was forced to close down by a dispute over royalties and a deteriorating law and order situation.

Several World Bank and United Nations reports have analysed the foreign investment regime in PNG and concluded that cumbersome regulations, extensive controls and slow decision-making processes have discouraged foreign direct investment in PNG's non-mining sector. The main constaints were arbitrary definition of foreign ownership; unclear criteria for approval; uncertain duration of permits; compulsory transfer of ownership to nationals; and long delays in obtaining approval.

A new Investment Promotion Act was passed in 1992 and an Investment Promotion Authority set up to deal with these problems. However, continuing restrictions on the sectors in which foreign investors are allowed to participate weaken the likely impact of the reforms. It is clearly desirable to encourage indigenous entrepreneurship, but it is debatable whether this is best done by excluding foreign investors. Foreign entrepreneurs could bring valuable experience and capital, and help to establish and improve standards. Their experience could be transferred to indigenous entrepreneurs through partnerships, training of local managers (who could set up in business for themselves after acquiring experience), and through a process of demonstration/emulation in a competitive market.

The share of employment provided by small enterprises has declined in recent years, which suggests that the policy of reserving sectors for indigenous entrepreneurs has not achieved its aims. Deregulation of entry and ownership, coupled with better training programmes for citizens, would seem to offer better prospects for growth.

7. Barriers to exports

The bulk of PNG's exports come from the capital-intensive mining sector which has created few jobs directly and has few linkages with the rest of the economy. Exports of treecrops have been hampered by high wage costs (in relation to productivity), declining world prices and discouragement of foreign ownership of large holdings. But perhaps more serious in the long run are the policy constraints which prevent PNG from diversifying its exports into the more dynamic world markets for labour-intensive manufactures.

Several international studies have shown a close relationship between export growth and GDP growth. Less familiar are the links between exports of labour-intensive products and the growth of non-agricultural employment. Several East Asian countries demonstrate the benefits that flow from these links and which could develop in PNG.

Korean exports, for example, rose by 27 per cent annually from 1965 to 1980 and by 13 per cent annually from 1980 to 1990. Textiles, clothing and other relatively labour-intensive manufactures accounted for over 70 per cent of Korea's exports during the whole of this period. The share of industry in total employment went up from 15 per cent in 1965 to 33 per cent in 1987, and in services from 30 per cent to 46 per cent. Korean manufactured exports were encouraged by an outward-oriented trade strategy, including the maintenance of a realistic exchange rate, access to ample export credit, strong fiscal incentives for exporters, and a low overall tax burden on the private sector. Workers benefited from rising real wages (annual increases in the 6-10 per cent range from 1965 to 1990).

In contrast, PNG's exports of manufactures have been negligible. They have been held back by an overvalued currency, a centralized wage determination machinery and an incentive structure biased towards imports and production for the domestic market.

It is sometimes argued that incentives are of little interest to investors, who are said to be more concerned with such factors as political stability and the size of the domestic market. But investment incentives, combined with the adoption of realistic and flexible exchange rate policies, have undoubtedly transformed an economy like that of Mauritius, for instance. In 1965 Mauritius was a poor, remote island in the Indian Ocean, dependent on a single agricultural commodity – sugar – and with unemployment and a small population (under 1 million). It is now prosperous and diversified, exporting a variety of manufactures to the major markets of the world and with a thriving tourist trade. Per capita income increased by 3.3 per cent annually from 1965 to 1990 and by 5.0 per cent annually over the past decade. Its per capita income in 1990 was $6,500 in international dollars (purchasing power parity).

Export incentives offered by Mauritius might serve as a model. They include: complete exemption of import duty and excise taxes on imported machinery, equipment, raw materials and components; exemption from corporate profits tax for 10 to 20 years and a subsequent nominal rate of 15 per cent during the whole life of the company; exemption from payment of income tax on dividends for the first ten years; free repatriation of capital, profits and dividends; loans, investment and export finance at preferential rates from the Development Bank of Mauritius, the State Investment Corporation and commercial banks; tax allowances for investment in buildings, machinery and equipment; favourable labour legislation to assist export enterprises to meet their objectives, including freedom to pay wage rates below the minima set for the traditional sugar-processing industry; guarantee against nationalization; availability of factory buildings on lease/rent within serviced industrial estates, but incentives available to all eligible firms irrespective of location; exemption of two-thirds from municipal rates during the tax holiday period. These incentives are available to domestic or foreign investors without discrimination and no activities are reserved for nationals and no limits placed on degree of foreign ownership.

Despite recent reforms, the incentives offered by PNG to exporters are significally less attractive. The trade regime is biased in favour of import-substitution activities. The effective rate of protection to domestic manufacturers is of the order of 50-75 per cent for most manufactures, though this does not apply to sales to mining companies (which are allowed special concessional import duties of 13 per cent), or to central and local governments which can import duty-free. This discrimination diminishes market opportunities for PNG manufacturers in the segments of the domestic market which are likely to grow fastest as the result of the mining boom.

Specific incentives for exporters are weak. Income tax exemption on the net export income is provided for only the first four years of income. For the following three years the excess of export sales over average export sales of the previous three years is exempt. Only certain products are eligible. PNG should consider introducing a tax holiday of 15 years for all manufacturers and service enterprises exporting at least 80 per cent of their products.

Exporters – as well as other producers – should also be allowed greater freedom to negotiate wage rates with their employees. The alternative incentive policy adopted by PNG of offering wage subsidies to enterprises manufacturing new products has failed. It is administratively cumbersome and restricted to firms which receive no other forms of government assistance (e.g. tariff protection) and must not be in competition with other firms. Only nine firms have ever applied for wage subsidies. Just five are still operating and employ only about 240 employees.

The training levy system should also be modified. At present, only the salaries of full-time in-house training personnel and the costs of external training courses qualify as allowances against this levy liability. But the training in labour-intensive industries, such as garment-making, is mostly on the job and carried out by more skilled workers or supervisors on the production line.

It would be desirable to include service sectors within the scope of any new export incentive schemes, and to open them up both to foreign and national investors. Thus trading companies exporting such products as handicrafts and artifacts, frozen crustaceans, crocodile skins, copra products and feather products (such as fishing hooks) bought from independent producers should be encouraged, irrespective of ownership. The specialized expertise of these traders and their familiarity with distribution channels abroad would create new marketing opportunities for indigenous producers, who often lack the experience and financial resources to export directly themselves. This is one of many possible examples of productive cooperation between foreign-owned and national enterprises which would bring benefits to both parties if ownership restrictions were lifted for export activities. Substantial benefits could also flow from incentives to foreign investment in the tourism sector, including hotels, restaurants, tour operators, car-hire firms, etc.

8. Restrictions on activities in the informal sector

The final issue concerns controls over the informal sector. Employment levels in informal (non-wage) activities outside agriculture are much lower in PNG than in other countries at similar stages of development. For example, household and cottage industries were responsible for 76 per cent of total manufacturing employment in Indonesia and 53 per cent in the Philippines in 1975. Employers and own-account workers provided for 80 per cent of employment in wholesale and retail trade in Indonesia in 1980 and 48 per cent in Korea in 1987.

In PNG, just 4.0 per cent of the national labour force was in the informal (non-wage) sector in 1990 as self-employed or family workers in industrial or service activities. Surprisingly, the percentage was lower in urban areas (2.7 per cent) than in rural areas (4.0 per cent). In fact, the great bulk (91 per cent) of the national informal sector workers were in villages or scattered rural communities.

In other developing countries, much higher percentages of the urban labour force are engaged in informal activities. Opportunities to work in agriculture are limited for inhabitants of towns. Urban disposable incomes tend to be higher than rural incomes, thus offering a larger market for the products and services that can be provided by the self-employed. The urban informal sector often acts as a reservoir of labour waiting to find more secure, higher income-earning opportunities in the formal sector.

The fact that this has occurred to only a very limited degree in PNG reflects significant barriers to entry into the informal sector. This impression is conveyed visually in Port Moresby by the virtual absence of the petty traders who normally crowd the main shopping streets of cities in the Third World. Informal traders are confined to a few formal market areas for which they have to pay a daily entrance fee before being allowed to sell their wares. They offer only fresh vegetables, smoked fish and fruit. In other countries it is usual to find a wide range of consumer goods on sale by informal traders at all locations where potential customers are encountered. In PNG their activities are restricted by the police who enforce city ordinances prohibiting itinerant trading.

Ostensibly, the restrictions are intended to protect consumers from hazards to their health (e.g. from contaminated food), but they also seem to be applied to other goods (such as garments and plastic ustensils) which do not entail such risks. The desire to maintain clean and tidy streets may be another reason for these restrictions. Complaints by formal traders of "unfair competition" may be a factor; law and order considerations are also cited in justification. However, it is questionable whether controls which prevent the urban unemployed from engaging in legitimate trading and other informal activities, where proximity to the customer is vital, is an appropriate or effective means of tackling the problem of urban robbery and violence.

Crime is on the upsurge. It adversely affects formal business operations and frightens away tourists who could be a major source of income and employment in both the formal and the informal sectors. Relaxation of restrictions on urban informal sector activities could be an important component of a strategy designed to turn the present vicious circle into a virtuous circle. The vicious circle, which afflicts urban youth in particular, consists of unemployment, poverty and idle time leading to theft and violence and a stagnant economy. A virtuous circle could take the form of wider job opportunities, a more productive and legitimate use of the energies of the unemployed, rising incomes, greater optimism about the future and a better investment climate, all generating positive multiplier effects on the entire economy.

Conclusion

This review of employment strategy in Papua New Guinea has not been exhaustive. It has focused on economic and labour policies and regulations, and has neglected some important topics, such as education and training. Nor has it given due recognition to political complexities and difficulties faced by a newly independent country, where the vast majority of the population was emerging from relative economic isolation and technological backwardness.

None the less, international experience indicates that similar problems have been encountered, and tackled more effectively, by some countries in the East Asia and Pacific region and elsewhere. Whatever the inherent constraints, appropriate policies make a difference and the strategies adopted by the most successful economies can provide useful guidance to other countries, even if their circumstances are not identical. A shift in policies by PNG might entail some short-term costs for higher income groups and special measures may be needed during a transitional period to avoid hardship among the underprivileged sections of the population. But most of those presently engaged in the rural and informal sectors should enjoy wider employment and market opportunities. All should benefit in the medium and longer terms from a more efficient, outward-oriented economy.

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