Structural Adjustment Issues In Papua New Guinea

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Abstract

Poor economic performance and the Bougainville mine closure have focused attention in PNG on the appropriate stabilization package and micro policies necessary to improve the country's economic prospects. A package of structural adjustment "reforms", strongly supported by the IMF and World Bank, have been introduced. This paper examines the applicability and desireability of implementing these "reforms". Our paper suggests that PNG might profitably explore some alternative development options to the ones currently in vogue.

1. Current Economic Developments in PNG

If we define economic growth as occurring when a country achieves a substantial and sustained growth in real Gross Domestic Product per head, over the last 15 years the PNG economy shows no growth at all. The economy has been essentially stagnant. The Australian International Development Assistance Bureau (AIDAB) estimated that real GDP per

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capita grew by -1.0 per cent per year over the 1973-80 period and -0.5 per cent per year over the 1980-86 period. Real GDP grew by 3.1 per cent in 1988, -1.1 in 1989 and the projection for 1990 is -1.5 per cent. Our colleague, John Zerby, forecasts a -0.4 per cent growth rate for GNP per capita for PNG over the period 1990-2000.

These figures are surprising given PNG's abundant natural resource base and the high per capita aid contributions it receives. Australia has contributed nearly $3.7 billion in aid to PNG since 1975 and is to provide a further $1.5 billion in assistance for the five years from 1989/90 to 1993/94 (AIDAB 1990a).

There are those that argue that economic growth is not everything and that we should examine broader social indicators. However, there is no clear presumption, on the basis of these indicators, that PNG has significantly progressed in improving the living standards of the bulk of the population. This is quite disappointing particularly with respect to the substantial resources that have gone into the health and education sectors (see Throsby, 1987).

The recent disturbances at Bougainville have had a severe impact on the economy's performance [Thompson 1990]. The Bougainville Copper Limited mine, when operating, contributed net exports of around K200m p.a. (about 37% of PNG's exports) and 16% of Government Revenue. The mine provided about 10% of PNG's Gross Domestic Product and employed directly about 4000 people. Since commencement of its operations in 1972, BCL has paid the government almost K1000 million in the form of taxes, royalties and dividends.

In light of the closure of the BCL mine, no one questions the need for adjustment programs for PNG and external funding. In April 1989 the World Bank [1989 p.vii] estimated that PNG's total external funding requirements for the five years, 1989-93, was about US$6.3 billion. In early 1990 the World Bank estimated that PNG urgently required external funding of $75 million by September of that year to meet its obligations (Hastings, 1990).

It was clear that the PNG government knew what it had to recommend in order to gain access to international assistance. The PNG Government, in association with the IMF, World Bank, Asian Development Bank, and Australian Government, has made several responses to the mine closure. In terms of magnitude, PNG's adjustment effort is at the upper end of adjustment programs supported by the World Bank (AIDAB, 1990b p. 16). In other words, the proposals are so ambitious and far-reaching, they go beyond what most developing countries have tried to do in similar circumstances. The main components of the agreed upon 'structural adjustment program' for PNG are:

i. The government proposed a K100M cut in government expenditures and 10,000 jobs in the public sector were planned to be eliminated. It later lowered the estimates to an expenditure cut-back to K74M and a total staff reduction of 2000 in 1990 due to problems of implementing the large cuts. Over 3,500 public servants are to be retrenched over two years and public servants earning above the minimum wage will suffer a significant decline in real wages. The allocation of the cutbacks has been determined in consultation with the World Bank. The Departments of Tourism and Housing were abolished and replaced with 'privatized bodies' and there were further plans for privatization in forestry and civil aviation. The government received a K20 million grant from the World Bank for this public service 'rationalization'.

ii. The government proposed to raise taxes, tighten monetary policy and reduce real wages. The wage policy now in place should see significant reductions in real wages over the next two years. Agreement has been reached with the public sector union to limit nominal wage increases to 4.5% p.a, with inflation at around 9% in 1990.

iii. The Kina was devalued by 10% in January 1990 and continued downward movement in the exchange rate is desired. This will increase the price of imported goods, and in a country heavily dependent on imported foodstuffs, for example rice and tined fish, this has a serious impact. The National Investment and Development Authority is to be abolished to provide an open door treatment to foreign investment. Its replacement will be a 'promotional not regulatory' investment board. A committee will also be established to review all government regulations on business. A further condition applied to the Asian Development Bank agricultural sector loan is that the PNG Government provides no budgetary support for commodity price stabilization schemes.

As a result of promising to undertake these 'reforms' PNG received access to the first K100m tranche from the IMF and was promised K40m more. At the Consultative Group meeting for PNG, donors pledged $US 710M in balance of payments support and project aid. Australia's cofinancing of the structural adjustment loan links Australia's support to these reforms. There are certain specified performance indicators which the PNG Government must meet in each quarter or its access to IMF standby funds is suspended. For example, a condition of release of the second tranche is the expected phasing out of price support stabilization schemes for cocoa, coffee, copra and palm oil (AIDAB, 1990b p. 12).

There has been little discussion of the merits of these responses or a serious discussion of *alternative* strategies available. Indeed the standard IMF/World Bank adjustment package seems to rule the roost. This is not to say that some of these measures are not desireable and the attempt, for example, to tackle the social costs of adjustment is commendable. However, a major objective of this paper is to provide critical reflections on aspects of the package and to suggest some alternative policy options. Policy decision-making is likely to be improved through a broadly-based examination of *all* the available options. In PNG there has been little serious discussion of the overall efficacy of the reform program. This is despite the fact that there is a huge international literature on the purported failings of the orthodox stabilization model. Where one stands in the debate is unimportant; that the nature of this debate be communicated to decision-makers is crucial.

2. IMF and World Bank Structural Adjustment Policies

The International Monetary Fund (IMF) has taken on the role of advising LDCs and providing funds to alleviate their balance of payments problems, provided that certain conditions are met. Access to funds from the IMF is not given freely. 'Conditionality' is the cost, and is defined as "the policies the Fund expects a member to follow in order to use the Fund's general resources" (J. Gold, 1979, *Conditionality* IMF Phamphlet Series No. 31 p.1). Conditionality of access is intended to ensure that the IMF's goals are achieved and that improper use is not made of its resources. When the IMF has judged that a country's programme is consistent with the IMFs provisions and policies and that they are confident that it will be carried out, approval is given for that country to use the IMF's resources.

The typical IMF sponsored program has a macroeconomic and a structural adjustment component. The macro package is mainly based on restrictive monetary and fiscal policies, aimed at reducing inflation and improving the current account. Special emphasis is usually placed on the control of fiscal deficits. The structural adjustment package includes trade liberalization, deregulation in all markets, devaluation, privatization, and reducing the role of government in the economy.

On this last objective, the thoughts of a former Vice-President for Research at the World Bank are instructive. In a paper published in April

1990, entitled *Government Failures in Development,* Anne Krueger places almost all the blame for the poor performance of developing countries on the shoulders of government in these countries. Her 'empirical evidence' for this position is the following observation:

> There is no evidence that living standards fell in the now-developing countries prior to 1950, a time [which] many observers associate with a period of laissez-faire. In many African countries, however, living standards have been falling - in some cases precipitously - since. The latter period has been one of active government intervention, and there is no other obvious reason for the difference in performance in the two periods (1990 p. 5).

These comments display the anti-government bias that underlie the policies of these lending institutions and the simplistic basis from which it derives. Sebastian Edwards (1989a p. 180) comments that 'recently trade liberalization has, in many ways, become synonymous with free-market policies involving minimum or *no government intervention* at any level' (original emphasis).

3. Critical Appraisals of IMF/World Bank Structural Adjustment Policies

Orthodox IMF stabilisation policies have been subject to criticism from many quarters. For example, Manual Pastor (1987a, 1987b) conducted a study of 18 Latin American countries over the period 1965 to 1981. He found that IMF programs were associated with:

(i) An insignificant improvement in the current accounts of programme countries. Although the overall balance of payments improved significantly, this was due to a significant improvement in the capital account, resulting from the 'seal of approval' which follows from signing an IMF agreement. This allows programme countries to obtain loans from foreign banks, attract foreign investors and entice local capitalists to stay. However, this capital inflow does not promote long-term balance of payments equilibrium.

(ii) Increases in both the inflation rate itself and its rate of increase after the introduction of IMF-supported stabilization programmes.

(iii) Mixed impacts on growth rates.

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(iv) Strong evidence that the labour share of income has decreased. Pastor concludes (p. 89) that 'the single most consistent effect that the IMF seems to have is the redistribution of income away from workers.'

For a thorough examination of the impact of adjustment programs on the poor and on the social sectors see Behrman and Deolalikar (1990).

The nature of the economic models used by the IMF is subject to intensive scrutiny by Sebastian Edwards in a series of articles. He argues, in an article entitled *The International Monetary Fund and the Developing Countries: A Critical Evaluation,* that the programs designed by the IMF are based on an analytical framework which appears to have changed little over the past 30 years and it can be questioned whether the Fund has incorporated any of the many developments that have occurred in open economy macro-economics since this time (1989c p. 13).

Edwards argues that many Fund programs are of a short-term nature and that as a consequence, many of the structural reforms implemented may be reversed once the program is over. The timing and distinction between temporary and permanent policies then becomes very important. The inability of the government to make credible pre commitments on future policies will generally result in undesirable policy outcomes. On the question of credibility, Edwards notes that a common concern has to do with the survivability of structural reforms once implemented. If there is no credibility and the liberalisation measures are expected to be reversed, then the government or the public may actually take steps that will undermine the effectiveness of the reform program. If a specific reform is not credible to economic agents, liberalising other sectors may actually be welfare reducing.

A further set of issues pertain to the speed of adjustment and the sequencing of structural reforms (Edwards 1989e). Many commentators point to the crucial role of foreign capital inflow during the structural reform period. Krueger argues that increased reliance on foreign funds will greatly reduce the frictions that will emerge during the transition. She states that multilateral institutions should provide financial assistance to those indebted nations committed to reforming their internal sectors. It is a short step from here to the case for 'capital first' in the sequencing of structural reform which suggests that restrictions on the importation of capital should be reduced before the trade reform takes place. However, it is noted that this is only desireable if first there has been a liberalising of the domestic financial sector. The benefits of this policy have come under strong criticism from Diaz-Alejandro (1985).

On the other hand, Ronald McKinnon has perhaps been the strongest opponent of the view that structural and especially trade reforms should be

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accompanied by capital inflows. He argues that capital account restrictions should be relaxed only after trade and other industrial sector distortions have been dismantled. The reason for this is that capital inflow will result in a real exchange rate appreciation which in turn disadvantages the tradables sector at a time when, due to tariff reductions, a real exchange rate depreciation is needed. The problem is worsened by the fact that the inflows may not be sustainable. McKinnon has compared Chile's successful transition with Argentina's failure. He ascribes this to the fact that Chile kept the capital account closed while tariffs were reduced whereas Argentina did the opposite. He concluded that trade liberalisation should occur only after the fiscal deficit has been eliminated and thus the need for capital inflows has been reduced.

On the speed of the adjustment process there are also a variety of views. Many economists argue that what is needed are gradual reforms to minimise short-term costs such as business failure and unemployment which could generate political opposition. Krueger also argues that the most serious problem with a liberalisation program is the political resistance that it generates. In particular, economic agents can generally recognise the short-run adjustment costs associated with structural reform but usually have difficulties perceiving its long run benefits. The evidence indeed suggests that in many cases trade liberalisation reforms have been associated with short-run increases in unemployment. However, she is quite emphatic in advocating a rapid dismantling of distortions.

There is also considerable disagreement on the benefits of trade liberalization policies for all countries. There is little agreement on whether trade liberalisation packages have played an important role in the performance of outward-oriented economies. A number of countries, such as Japan, Korea, Singapore and Taiwan have promoted exports but in an environment where imports had not been fully liberalised. The success of the East Asian countries with export-led growth suggests that some selectively determined degree of government intervention played a key role. There is now considerable new theoretical research being undertaken on the benefits of trade liberalization. Of particular interest is the work on trade liberalization with imperfect competition and scale economies (Richardson 1989, Helpman & Krugman 1985) and on the link between trade intervention and long-run growth (Grossman & Helpman 1989). Many of the results of this research modify or overturn the conclusions of standard trade theory.

We then have to ask whether Fund Programs that have encouraged deregulation efforts in all sectors and promoted free trade have really been successful. Edwards briefly reviews the most important empirical studies on the effectiveness of past Fund programs. The evidence indicates that

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when compared with the years prior to the program, or with a control group, IMF programs have resulted, on average, in: (1) an improvement of the Balance of Payments situation; (2) an improvement in the current account balance; (3) a slight, although not necessarily a significant, reduction in inflation; and (4) a reduction in output growth. Recent experience with conditionality requirements are also reviewed by Edwards and the experience of 34 programs were examined. All the countries examined faced severe external account imbalance, and being subject to the global nature of the debt problem could not expect capital inflow to solve or ameliorate their problems. The results were that on average the current account improved somewhat while inflation increased quite significantly. Output growth was reduced at first and then there was a small improvement in 1984 and 1985.

What the work of Edwards shows is that many of the theoretical issues associated with Fund-type policies are still up for debate by the profession. The estimation of the appropriate exchange rate is itself a controversial topic (Edwards 1989d, 1989f). There is no clear consensus on all the elements in the standard reform package pushed by the Fund, let alone the speed and sequencing of the reforms. What is perhaps more disturbing is that the inertia of the Fund seems to be delaying the updating of its approach to incorporate the lessons of modern economic analysis on which there is considerable agreement (Coats 1986 chapt. 3 & 4).

Previous commentators have suggested ways that the IMF/World Bank approach can be updated or modified to improve its operation. Others argue that a drastically different approach is needed. The structuralist model advocated by Lance Taylor may be such an approach. Taylor drew upon the 18 country studies conducted on behalf of the World Institute for Development Economics Research (WIDER). These countries were all subject to similar IMF stabilization programs. However, the fact that these countries generated a variety of responses to these programmes reflects the importance of differences in institutional, social, and historical conditions between countries. According to Taylor, the central failure of IMF stabilization policies arises from the fact that they do not take account of these differences.

Even though LDCs can exhibit various responses to stabilization programmes, according to structuralists there are certain common implications of IMF policies:

i. In order to promote the role of market forces, price subsidies, especially for state-owned enterprises, are often eliminated. Yet this measure usually sets up cost pressures which are difficult to contain, especially if the state-controlled prices are for key wage or investment goods. Added to this are the extreme social costs of rising food prices and the inflationary consequences.

ii. Devaluation of the exchange rate acts to shift income distribution from workers (assumed to be low-savers) to capitalists (assumed to be high-savers). The trade balance may then well improve, particularly through reduced intermediate imports, but at a high social cost. Taylor's general point regarding austerity and devaluation is that they often do work in the sense of reducing current account imbalance, but this is achieved by reducing output and capital formation rather than through import substitution and export promotion. In other words, they are succesful in so far as they retard economic growth rather than by promoting it.

iii. Taylor contends that the various parts of stabilization programmes often contradict one another. In particular, trade liberalization seems at cross-purposes to devaluation and austerity, since it is likely to increase imports whereas the latter are aimed at reducing them. Where trade liberalization has occurred it has not led to an inflow of intermediate goods but rather increased imports of luxuries. Such a scenario means that any domestic production of luxuries is curtailed without their being capacity expansion in other sectors.

iv. Another aspect of orthodox stabilization policies is financial deregulation, which usually leads to higher interest rates. The idea behind this is that higher rates will increase domestic savings and attract foreign capital. However, even if this occurs, the reliance on imported intermediate goods means that investment will not rise so as to absorb any increase in saving. With austerity programmes reducing public investment at the same time, potential savings surpluses and capital inflow 'will vent in the form of reduced commodity purchases or speculation' (1988, p. 56). Again IMF policies seem to work at cross-purposes: high interest rates are intended to generate funds for capital formation yet austerity prevents them from being directed to productive uses through public sector expansion, and devaluation makes imported investment goods more expensive for the private sector.

Taylor believes that an alternative 'structuralist' model would be more suited to LDCs. Although some of the standard policies would still be used, their implementation would be different to the orthodox model. Distributional considerations and non-market interventions would be an important modification. What alternatives then, do structuralists offer to the standard IMF/World Bank program? Certain policy proposals do seem to emerge

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from the general nature of their analysis. In relation to the domestic polcies that individual countries should pursue, the following seem to be highly favoured:

i. The cornerstone of the structuralist alternative appears to be the significance of investment to the development process. Without investment absorbing capital in a productive manner, other growth-oriented policies may simply fuel a speculative bubble. There is a need for the government to finance capital expenditures. If these are directed carefully, particularly into infrastructure spending, there can be significant crowding-in effects with respect to private sector investment. Public and private investment, that is, are seen as complementary. In this situation IMF induced austerity policies will be doubly contractionary, since they will cause private investment to fall along with government expenditure. This real effect may completely swamp any monetary effects due to less pressure for funds in the financial markets. The establishment of the Public Investment Programme in PNG is therefore a pleasing development and one that should be pushed further for it recognizes that the the level of public investment is too low and needs to be increased.

ii. Structuralist stabilizations embody a strong element of price control from the side of costs - wage and exchange rate freezes and caps on interest rates - as well as attempts to keep mark-ups in line by price checks, mobilization of public opinion, and moral suasion (1988, p. 61). Taylor also supports the use of selective tariffs rather than general devaluations as a means of cutting back certain imports, such as luxuries, without affecting imports of necessary intermediate goods and without triggering inflation.

Overall, Taylor sees the standard IMF package containing large devaluations, austerity, and trade liberalization as blunt instruments whose impact on the economy is complex, often self-defeating, and almost always contractionary. He tends to favour more selective forms of state intervention: 'import quotas, export subsidies, and a differential commercial policy regime all round' (1988, p. 50).

4. Alternative Development Strategies for PNG

It is now clear that the IMF and World Bank are increasingly on the defensive about the efficacy of their standard reform packages. This can be seen in recent IMF publications such as *Helping the Poor: The IMF's New*

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Facilities for Structural Adjustment and *Ten Popular Misconceptions about the IMF*. The latter attempts to respond to claims that: The Fund applies identical remedies, irrespective of a country's circumstances; Fund-supported adjustment programs are anti-growth; Fund-supported programs impose austerity [and] harm the poor; and the Fund has a market-oriented, free-enterprise philosophy, which it applies in a doctrinaire manner.

A more serious response, beyond these public relations exercises, appears in a joint IMF/World Bank publication, *Growth-Oriented Adjustment Programs* (1987). A number of papers in this volume are very useful. Jeffrey Sachs carefully examines the distinction between export promotion and liberalization. He comments that: 'With increasing frequency and perceived urgency, the World Bank is offering detailed blueprints for deregulation, privatization, and trade liberalization, to member countries'. However, the lessons of history 'do not demonstrate the utility of trade liberalization in the midst of macroeconomic crisis' and that 'successful development might be helped as much by raising the quality of public sector management as by privatizing public enterprises or liberalizing markets' (pp. 292-294).

One of the few attempts to develop alternative adjustment strategies for PNG comes from the PNG Public Employees Association (1990 a,b). The policy proposals advocated in their main submission, *Rationalization With a Human Face*, draw on the Taylor approach to development issues. The PEA's two main documents focus on the issue of public sector reform. They are specifically aimed at the usual stabilization 'reforms' which advocate large scale reductions in government spending and deregulation/ privatisation of public enterprises. We have seen that the structuralist model favours an active public sector in the development process. There is now in the literature an increasing interest in how the level and composition of government expenditure affects economic growth. For example, Diamond (1990, pp. 35-36) finds that countries with relatively high levels of government capital expenditures on average have higher growth rates. Furthermore, capital expenditures on health, housing and welfare boosts growth in the short term while government current expenditures in directly productive sectors also exerts a positive influence on growth.

The PEA's emphasis on the constructive role of government is taken one step further by placing it in the context of PNG's institutional and social setting. Of particular concern is the employment consequences of reductions in the public sector workforce. With close to 85 per cent of the population engaged in traditional agriculture it seems highly unlikely that the displaced labour will be absorbed elsewhere, especially during a period of economic difficulties. Indeed, with the little industrial development that has taken place in PNG so highly concentrated in mining, it is very difficult to sustain the standard crowding-out argument for reductions in government spending. The social problems that will result, with unemployment already a serious concern, may require government intervention in other, less productive, forms.

The crucial point that the PEA makes is that PNG's development has been reliant on a few major resource projects and developers. Therefore a strong public sector is needed to ensure that these are operated in a manner which is beneficial to PNG as a whole. If the government sold off public assets, it is likely that new public agencies will spring up in order to regulate private activity, defeating the purpose of the sell-off in the first place. Privatization will simply mean that any income generating assets are sold, leaving behind all the residual''unproductive' activities, plus a new layer of watchdog agencies to regulate the newly privatized activities. In addition, the PEA believes that public assets will be sold off below their real value in order to find a buyer and to generate quick cash-flow, and will loose their public accountability 'with serious externalities, particularly in terms of environmental factors' (1990, p. 17).

The PEA also emphasises the fact that the public sector has played an important unifying role in PNG nation-building. The ethnic and cultural diversity - over 700 languages and dialects have been identified - requires the development of institutions which can overcome these differences. 'Rather than seeking to 'wind back' the public sector at this stage of our development, PEA argues that continued development depends upon an extension and improvement of democratic institutions' (1990 p. 5). The adverse political ramifications of market-oriented policies are well discussed by Sheahan (1980, 1987).

The underlying argument of the PEA's submissions is the principle of 'Equality of Sacrifice' regarding the adjustment burden. They accept that in light of the current problems facing the PNG economy there needs to be some cutbacks and reductions in income. However, the brunt of these should not be totally borne by the public sector. This argument gains support from the structuralist approach in that any abrupt change in the distribution of income could lead to inflation as different groups attempt to pass on the burden.

Some of their specific proposals relate to the *temporary* use of selective tariffs on luxury import goods and non-essentials and raising (and enforcing) the top marginal taxation rates for individuals and companies. The rationale here is to change the structures of demand and production but not necessarily decrease the levels of consumption or investment. Getting public sector employees to participate in identifying and eliminating waste and the misallocation of public money and setting up a price surveillance unit are other suggestions. In conclusion, the reports do not deny the need for public sector reform, indeed they acknowledge that the Australian-style public sector in PNG is misshapen for development goals. They do object to indiscriminate retrenchments, or cuts on the basis of political patronage, and the over simplistic view of the role of government in development.

The official response in PNG to public service reform has been a combination of retrenchments and 'more training' for the remaining public servants. Turner (1990, pp.11-12) has noted the prevalence of a widespread faith in the efficacy of training for solving administrative problems in PNG. The 1980s were declared as 'the decade of training' by the Public Services Commission. A comprehensive national training policy received cabinet's approval in 1989 and the World Bank expressed interest in financing a US$40 million public sector training project.

Turner, however, notes 'the results of public service reforms have been disappointing. Traditional measures such as training and restructuring have not produced the anticipated benefits. Subsequent and more novel initiatives such as the Public Service (Management) Act and the Resource Management System have likewise failed to make significant impacts on public service performance' (pp.18-19). Some of the problems identified include that 'the training system is fragmented, inefficient and sometimes poorly targeted . . . the quality and relevance of training has been queried . . . there has been poor coordination, planning and delivery of inservice training . . . [and] females are still underrepresented on many training courses' (p.12). Restructuring has also been employed as a method of administrative reform. Turner notes that as a result 'top bureaucrats have regularly been shifted, sacked and reassigned in this public service version of musical chairs . . . engendering insecurity and lack of continuity in leadership and institutional arrangements' (p. 13).

In a recent monograph, Paul McGavin (1990) is also sceptical about ambitious and complex from-the-centre training programs. While his study is concerned with private sector training issues, a number of his conclusions regarding the need for decentralized training and that the focus be placed on the evaluation of training as part of human capital formation appear highly applicable for the public sector.

Two other apects of the reform package should also be commented on. The first relates to trade liberalization. The problems of leaving trade to the (imperfect) international market place are clearly illustrated in the recent World Bank (1989) report on the PNG Forestry Sector. Japan directly or indirectly controls 80% of all log exports from PNG and there is clear evidence of the extensive transfer pricing of exported logs (pp.35-41). As a result of these transfer pricing strategies, it is estimated that the total loss of PNG exports in 1987 alone was between US$14 million and US$30 million, depending on the method used to calculate the extent of the transfer pricing. Similarly, the Barnett three-year Inquiry into the Timber Industry in PNG produced over 20 volumes of information about transfer pricing practices, corruption, and the activities of Malaysian and Singaporean multi-national logging companies. Given these structural imperfections in the international trading system, extreme cautious needs to be applied about asserting the benefits of free trade for countries such as PNG.

The second aspect relates to wages policy and has already been examined in Lodewijks (1988). There it was noted that recent attempts by the government to lower urban minimum wages have been buttressed by several influential consultancy reports suggesting real wage cuts of 20 to 30 per cent. Over the 1977-88 period, using 1977 prices, real rural minimum wages have in fact fallen by 15 percent, while real urban minimum wages have fallen by about 7.5 per cent. The 1989 World Bank report on PNG still noted a need for a reduction in real wages.

However, while a case can be made for moderation in wage growth, the quantitative effects on employment are not likely to be large. Wages do not appear to be a major constraint in the development of the types of activities in which Papua New Guinea has a comparative advantage e.g. smallholder agriculture, mining. Even a significant cut in wages is not likely to increase Papua New Guinea's competitiveness in manufactured goods - there are just too many other non-wage constraints. Hence, policies operating on lowering supply and enhancing labour demand are more likely to provide employment opportunities than drastic cuts in wages (Mannur & Islam 1990).

On general development strategy, the PNG Government has rightly argued that given that the mining sector will have few direct linkages with the rest of the economy, it wants to pursue a broader based development strategy. The priority area will now be the rural-based agricultural sector. However, if we look closely at the sectoral outlays in the budget we see that there has been no significant redirection of government expenditure over the 1981-89 period. The only prominant change is a reduction in outlays for the social services sector (down 4 percent) and a significant increase in the debt servicing component (up 9 percent). Attention then needs to be placed squarely on rural development. The greatest gains in employment can be found in small-scale agriculture, which can be highly labour-intensive. The focus of the PNG government, and the main aid agencies, continues to be urban-based. There is a genuine need for more village based development and a strengthening of the indigenous non-governmental organizations.

There are several further vital pre-requisites for long-term growth and adjustment in Papua New Guinea. One is the need to unify the various fragmented regional markets into a national market which links the population centres. Secondly, substantial amounts of capital will be required. This could partly come from foreign investment, but there is considerable scope for greater internal financing of business development and generally for the mobilization of domestic funds. Corresponding with efforts to mobilize latent saving potential is the healthy growth of nationally-owned companies venturing into new areas. What this suggests is that rather than depending on foreign investment a sustainable basis for private sector development exists in Papua-New Guinea.

Finally, something might be said about the choice of technology in PNG. There is rarely a serious attempt to evaluate the technical aspects of investment proposals with respect to whether alternative labour-intensive production processes could be used. The Papua New Guinea building industry is an interesting case study. It is highly capital-intensive yet much of the capital equipment is underutilized. Labour costs in the industry are one-sixth to one-eighth of Australian labour costs while Papua New Guinea labour productivity is only one-third of Australian labour, so Papua New Guinea labour should still be an attractive proposition. It is then hard to understand why capital-intensive methods are used when they are demonstrably more expensive than labour-intensive methods. Also, why does the building industry concentrate on high-rise modern construction and not on tropical low- cost housing? Why is timber imported from New Zealand when Papua New Guinea has abundant forests? Why are most building inputs imported? One possible hypothesis is that there is a bias in technology choice when the technology-provider comes from a high income country.

These issues also relate to the choice of consumption technology. Are the types of products produced in Papua New Guinea, which are often based on Australian consumption patterns, appropriate for local conditions? How can a switch-over to locally produced and high labour-using products be brought about? The issue is not restricted to consumption goods. Health and education services, housing and infrastructure standards and the structure of the public service have all been shaped by Australian standards and not local conditions. A move away from Australian standards of consumption and production would contribute significantly to a more balanced development process.

This paper has attempted to outline some of the theoretical problems, and the development experiences, with the standard adjustment packages suggested as applicable for developing countries. In the context of the large adjustment program undertaken by PNG these issues need to be more fully discussed and considered than they have been. In the final section of the paper a number of specific issues were raised - such as technology policy, domestic capital formation, village-based development, non-wage factors, trade imperfections, the efficacy of training and the composition of government expenditures - which need to be more fully incorporated in any PNG 'reform' package.

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