



# Dependency theory and its relevance to problems of development in Papua New Guinea

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In the developing world there has been and continues to be a preoccupation with the fact that apparent tangible wealth in the form of natural resources is continually leaving developing countries, while at the same time material development seems to be negligible. Dependency theorists have argued that developing countries are inadequately compensated for their natural resources and are thereby sentenced to conditions of continuing poverty. This paper suggests that an understanding of the causes of development failure and 'wealth creation' will aid us in resolving conflicts between socialists and libertarians who suggest very different solutions.

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The recent East Asian economic meltdown and the associated economic woes of developing nations throughout the globe have become a fertile ground for ethical inquiry. Most often the ethical concern has drawn attention to the behaviour of Western investors, financiers and speculators. It has been argued that the actions of these agents in the context of a prevailing regime of global *laissez-faire*, have placed most developing countries at the mercy of volatile financial markets. As British philosopher John Gray noted recently in the media

The exit of huge amounts of capital from an emerging country can do more than simply savage its currency. It can

savage its economy, destabilise its government and enhance the risks of war and dictatorship (Gray 1999:13).

This criticism is fair enough and it certainly alerts us to the necessity to place the behaviour of this form of wealth generation under ethical scrutiny. However, there is a more fundamental concern than unregulated speculation and the free movement of capital across global markets. In the developing world, there has been and continues to be a preoccupation with the fact that tangible wealth in the form of natural resources is continually leaving developing countries, while at the same time material development seems to be negligible. In many



of these resource-rich countries with small economies, such as Papua New Guinea, speculative investment has not been a significant factor in its economic history. But in Papua New Guinea there is a perception that the 'wealth' produced by mines and resource development is constantly leaving without sufficient compensatory wealth for the inhabitants. Associated with this perception is the idea that 'foreigners' are stealing the country's resources or that they are cleverly misleading the indigenous people and paying far less value than the natural resources are actually worth. (These attitudes are given almost daily expression in the letters to the editor column of both national newspapers.)

It is not surprising that such attitudes can also be encountered elsewhere in the developing world and fuel the so-called lingering 'dependency theory' which posits a North–South relationship in which the North maintains the South in a dependency status, so as to exploit the latter as a cheap source of raw materials and labour. As one critic of globalisation (Herman 1997:123) recently wrote '...the New World Order (NWO) gives daily manifestations that a more sophisticated phase of imperialism has evolved in which trade, aid, loans, debt management, proxy armies, techno-wars, and international "law" are deployed to keep Third World countries in a dependent status.'

In one respect the facts appear indisputable; natural resources are being exported for hard currency which is supposed to represent incoming wealth. On the other hand, the country has little to show in terms of tangible material wealth and infrastructure on any scale which resembles the developed world. Development appears stillborn and the nation depends heavily on foreign manufacturing goods and even agricultural produce to maintain the perquisites of a small élite. This modest degree of material wellbeing is purchased at

the price of a steady export of renewable and non-renewable resources. Dependency theory suggests that this state of affairs is one of design; a condition of 'dependency' that has been manipulated and effected by the 'North'. In Papua New Guinea, this view was forcefully made by former University of Papua New Guinea academics, Amarshi, Good and Mortimer (1979) in the late 1970s. In essence, they argued that multinationals and industrial powers enter into joint ventures and other various types of partnership with interests in the post-colonial host country in order to effect relatively inexpensive means to realise their own economic interests. In doing so, the exploiting groups obtain guarantees of cooperation in their own ventures thereby reducing the risk of radical political measures being taken against them.

## Development and dependency theories

Generally the 'third world' is equated with the state of development, and many have differed as to precisely what this means. However, to understand policy and the evolution of the perceived relationship between the industrial and the developing world, we need to assume an historical perspective. In his inaugural address of 1949, President Truman announced the Point Four Program of development aid and subsequently the United States saw itself as initiating a policy to aid the efforts of the peoples of economically under-developed areas to develop their resources and improve their living conditions (Harrison 1988:8). This idealised political model was paralleled by intellectual theory realised in the 'sociology of modernisation'. This view held central prominence up until the mid 1960s. 'Modernisation' theory has been summarised along the following lines.

- Modern and tradition were regarded as antithetical.



- It was believed that economic growth resulted directly from 'modern' values, and more often than not tradition was seen as a barrier to growth.
- There was a concentration on 'change agents' or mobile personalities that were to effect change.
- The developing nations and international agencies were to identify these agents of change and try to increase their importance and influence.
- Once change had been initiated by these innovators or change agents, the direction would tend to be the same for all third world societies, much along the lines of that which had already occurred in the West.
- The causes of under-development were seen, in general, to rest within these societies and if they were to develop, attention would have to be paid to societal internal characteristics which would need to be adjusted to bring about a greater fit with industrialisation and modernity (Harrison 1988:29–32).
- all societies whether they possess a colonial history or not, are all incorporated into the capitalist system
- the system is maintained through exchange based on asymmetrical power relationships, which allow the developed nations to maintain an advantage over the others in terms of trade
- the world is divided into two main groups, those who have economic power, the developed, the North, the centre, the West or the metropolises and their polar opposites. There are also the partially developed or the semi periphery regions that are exploited by the centres but in turn exploit their own peripheries
- the transnational companies, in particular, are commonly regarded as the main agents of the neo-colonialism in that they are a vital mechanism in the transfer of surplus from the periphery to the semi-periphery or the centre
- development requires that the links between the underdeveloped and the capitalist centres be broken or weakened.

However, 1970s and 1980s under-development theory, also called at times dependency theory, strongly challenged this earlier view. Whereas modernisation theory had highlighted the positive aspects of development: the diffusion of values, cultures, technology, capital and expertise; underdevelopment theory stresses the undesirable elements and the imbalance of transfer or exchange.

Underdevelopment theory, or dependency theory as originally articulated by Frank (1980), Wallerstein (1979) and Amin (1976), can be summarised in the following points

- development and underdevelopment are essentially aspects of the same economic process, and the former has been able to occur by increasing the latter
- the development of potentially underdeveloped countries is thereby blocked by the capitalist system
- Usually these thinkers advocate a combination of self-reliance and socialism is the substantial answer. The long-term solution is said to be a non-exploitative socialist world system (Harrison 1988:97–9; see also Frank 1980; Heinemann 1980; Amin 1976; Wallerstein 1979).

Leaving aside the issue of the validity of the analysis, the solution—centrally planned economies dominated by government—came under strong attack. Some argued that autonomy and state planning are not appropriate in the developing world. Academically, the New Right argued that central planning in the 'Third World' has led inefficient and corrupt governments to interfere with free trade with disastrous results. Stretched to carry out even the 'essential' functions of government, they have failed. They often seem anxious to plan but are unable to govern (Bauer 1984). All



too often they accept the apparatus, symbols and rhetoric of planning but lack the discipline and forethought to carry it through (Little 1982). The consensus of these thinkers is that government should be confined to oiling the wheels of the market.

These remarks call into question the supposed solution proposed by dependency theorists: that developing nations can escape the cycle of poverty by severing links with the industrial world and instituting self-reliant socialist regimes. Socialist regimes such as Tanzania were spectacular failures, with Tanzania becoming—what it had not been in 1960—one of the poorest nations in the world. Throughout sub-Saharan Africa the heavy involvement of governments in the economy has proved to be an economic disaster giving further evidence of the inappropriateness of the solution.

In Papua New Guinea, the pre-independence Somare government in December 1972, adopted 'eight aims' based on Tanzania's official goals. But these goals were eventually given up in preference for a capitalist economy based on close relations with multinational developers (Amarshi, Good and Mortimer 1979:205).

Development theory as applied to Papua New Guinea in Amarshi et al. also suffered some very strong criticism. For example, MacWilliam and Thompson (1992) rejected the idea that the local bourgeoisie is subject to international capital. They argued for the emergence of an indigenous class of capital who, since independence, have taken over agricultural largeholdings, processing factories, trading firms and other commercial operations in competition with the prior dominance of settler and international capital. Similarly, Garnaut (1984) argued that foreign ownership in Papua New Guinea declined after independence with increases in ownership by the Papua New Guinea government and private citizens. Far from being subservient to foreign interests, the state has exhibited a marked degree of

autonomy, he claimed. Stewart (1984) found the version of dependency theory presented by Amarshi et al. 'crude' and simplistic, and the alternate proposed—the 'rhetoric' of local self-reliance and autonomy—too vague for practical implementation, even when proposed by the early Somare government.

The issue which this paper considers is not so much the viability of dependency theory as applied to Papua New Guinea, which has already received sufficient and adequate criticism, but rather the causes of lack of development in such a resource-rich nation. The issue is not so much one of autonomy, for there is ample evidence that the PNG state has challenged and pushed the multinationals to return greater shares of revenue to the state. I might add that the actions of the state in certain cases infringed on acceptable business ethics (see Lea 1999). However, given these remarks, there remains a lingering suspicion that lack of development, that is, tangible evidence of material wealth and adequate infrastructure, is traceable to the insufficiency of income. This is to say, even though the state has pushed the multinationals to the limit, the global economy remains structured in a manner that denies undeveloped resource-rich countries an appropriate share of the world's productive wealth.

### **Resource extraction and the causes of economic dysfunction**

Dependency theory more or less makes the point that the global economy is structured in such a way as to deny the developing country an appropriate share in the world's productive wealth. The premise from which this claim derives is that lack of wealth in a resource-rich country must result from a pattern of exchange that is disadvantageous to the resource-rich developing nation. In other words, an immediate causal relation is made between lack of wealth and exploitation.



However, the initial presupposition that lack of wealth has been caused by disadvantageous patterns of exchange could be open to question. One needs to be open to the possibility that lack of wealth might sometimes be independent of the fairness or unfairness of the initial transactions. One needs to examine relevant historical situations in which national poverty has been consistent with large and significant infusions of money into the economy through resource extraction. This historical exploration will also involve an examination of the meaning of terms such as 'money' and 'wealth', following an analysis originally presented by Foucault (1973).

It needs to be appreciated that history informs us that in the past, other nations have been in similar circumstances in which the introduction of purchasing power gained through the possession and sale of valuable resources did not translate into tangible sustainable wealth. A most striking example is the powerful Spanish nation during the sixteenth and seventeenth centuries. There has never been a suggestion that Spain was less than an autonomous agent who independently pursued its economic policies or that it was a victim of disadvantageous trade arrangements. One needs to appreciate that Spain's policies during this period have interesting parallels with those of the modern developing world with similar economic consequences.

Foucault's (1973) analysis of Spanish economic behaviour during this era is—perhaps unexpectedly by economists—instructive. Foucault's interest in this issue derives from a preoccupation with signs, symbols and the process of signification, representation and meaning as found in one of his most influential works, *The Order of Things*. This preoccupation led him to a consideration of the issue of money and the allegations that mercantilism confused money with wealth. On this point Foucault defends mercantilism's position and clarifies

it (see also Cousins and Hussain 1984). According to Foucault, mercantilism perceives a close relation between money and wealth, but he stresses that they remain significantly different. He points out that money is in fact the universal language of wealth in the sense that it represents and allows analysis of wealth. Foucault takes the view that wealth cannot be entirely independent of its representation but at the same time, money is not equivalent to wealth any more than natural history is equivalent to 'nature'. Wealth is the ability to satisfy wants and needs and is associated with circulation and exchange. Money, on the other hand, is a measure of wealth, which can also substitute for wealth.

Foucault's analysis is confirmed whenever an infusion of money into an economy does not instantly create wealth, as when money fails to circulate and stimulate exchange. Significant hard money may be introduced into the economy yet it is constantly dissipated so that wealth, that is, the ability to satisfy needs and wants, is never achieved. Foucault illustrates this point with reference to sixteenth-century Spain

A nation whose coinage is in a process of diminution is, at any given moment of comparison, weaker or poorer than another nation with no greater possessions but whose coinage is in a process of growth. This is the explanation of the Spanish disaster: its mining possessions had in fact, increased the nation's coinage—and, subsequently, prices—to a massive degree, without giving industry, agriculture, and population the time, between cause and effect, to develop proportionately: it was inevitable American gold should spread throughout Europe, buy commodities there, cause manufacturing to develop, and enrich its farms, while leaving Spain more poverty stricken than it ever had been. England, on the other hand, though it attracted bullion too, did so



always for the profit of labour and not merely to provide its inhabitants with luxury, that is, in order to increase the number of its workers and the quantity of its products before any increase in prices occurred (Foucault 1973:188).

Foucault's analysis of the 'Spanish disaster' strips away the assumption that economic maladroitness is inevitably conditioned by inadequacy of exchange, which in the case of developing nations, often entails a further assumption that options have been manipulated by the agents of global capitalism. As in a Greek tragedy, Foucault shows the agent's choices engendered the disaster, which befell her. He does not tell us that the agent could have chosen otherwise, but at the same time he does not cloud the analysis by suggesting that these were somehow not really her own choices or that responsibility can be shifted to others because of covert manipulation. But on a more economic plane, it means that lack of wealth or poverty cannot simply be attributed to a set of poorly chosen transactions in which one of the partners has constantly received inadequate compensation. The dynamics of wealth creation are much more complex than that, especially when we consider national economies.

It is now worthwhile to explore the parallels between the experiences of sixteenth and twentieth century resource-rich countries, in terms of circumstances, choices and consequences. In the above-cited passage, there is above all the entry of specie from exogenous sources. In the case of sixteenth-century Spain, it originates from the mines of the Americas, where gold and silver is sourced and melted down into bullion. It is through Spain's vast mining possessions that the nation's coinage increases during this period. Analogously, we note that resource-rich developing countries also experience an increase in their domestic money supply through increases in foreign reserves from the sale of natural resources. Likewise, these derive from mining

possessions (and other resource developments) the products of which are sold on overseas markets for foreign currency, which appear to feed into the country from external sources.

As in the case of increases in specie in sixteenth-century Spain, one would expect the inflow of money to the contemporary developing nation, such as Papua New Guinea, would support incremental gains in wealth. However, history indicates that in Spain this did not occur and the nation became steadily poorer. Likewise, in our case study, Papua New Guinea, gains in wealth apparent in the urban centres are paralleled by growing impoverishment in the rural sector. Foucault pointed out that agriculture and manufacturing did not keep pace with the increases in specie. Consequently, although Spanish citizens had acquired enhanced purchasing power, the immediate consequence was an increase in prices as increased purchasing power simply increased demand for scarce commodities. At the same time, citizens looked beyond Spanish borders to obtain the desired manufactured goods and agricultural produce. The chain of economic cause and effect stimulated economic growth in other European countries as they developed industries and agriculture to meet Spanish demand. As this happened, they grew wealthier and Spain became poorer until ultimately the riches from Spain's American mines ceased to flow and the nation was left destitute.

Resource-rich developing countries experience the very same leakage in wealth for the identical reasons. These contemporary nations are in receipt of increased purchasing power by means of mining possessions and other resource developments. But because of a heavy dependence on imports, specie, or in this case foreign reserves, are continually dissipated to the enrichment of overseas producers, agriculture and industry. Again, analysis of



the 'Spanish disaster' is apposite because, for similar reasons, local industry and agriculture have not emerged and developed. So long as local productivity fails to expand significantly, wealth continues to flow outwards for foreign goods to the benefit of foreign industries, manufacturing and agricultural producers. The experience of Spain in the sixteenth century, in which the world's most valuable mining possessions coexisted with a steady loss of wealth and a growing indigent population, is being repeated in the developing world, where we find lucrative resource extraction coexisting with spiraling indebtedness and expanding conditions of material want (see AusAID 1998:4-5).

Some, however, have and would disagree with this picture of lack of local development in commerce and industry. For example, MacWilliam and Thompson (1992) in the 1990s saw a class of indigenes, which had come to own most of the agricultural largeholdings, processing factories, trading firms and other areas of commerce in the post-independence period. MacWilliam (1993) argued that this class continues to exert pressure to occupy more and more spaces in industry and commerce, pressing for the privatisation of a range of state enterprises. Similarly, Garnaut (1984) in the 1980s saw indigenous people playing significant roles in the ownership of urban real estate, plantation agriculture, trading in agricultural commodities and even banking.

However, these perceptions need to be tempered by observations by others such as Stewart (1984:108) who observed that in the absence of a national bourgeoisie, the line of cleavage between indigenous élites and the masses can be seen as that line which differentiates the masses from those with access to, and some measure of control over, the distribution of the resources of the state. He observed that the state is the most important source of capital and its accumulation, and as in other developing

countries, has been obliged after independence to become the major economic force in the absence of an entrepreneurial class, thus occupying a key role in economic development. Stewart backs up this perception with reference to Berry's (1977) work on future prospects for development in Papua New Guinea. Berry identified the source of inequalities in Papua New Guinea with the structure of an economy in which government expenditure is approximately equal to half of the total expenditure of monetary GDP; this means, he states, that those with access to the resources of the state are usually the most significant beneficiaries of economic development. These statistics, which held in the 1970s, have not changed sufficiently in the 1980s and 1990s through to 2000 to overturn this conclusion as confirmed by statistics published by the Australian Agency for International Development (AusAID 1997, 1999). Over the last 20 years the ratio of GDP to government expenditure has improved from 2 to 1, to 3 to 1, but the ratio has held fairly steady in the last ten years without tangible improvement. Ultimately, despite some improvement in private-sector performance, government expenditure remains the single major component of GDP. This indicates that the growth of a national bourgeoisie has been a slow development, which means that access to the resources of the state remains the most efficient avenue to wealth acquisition.

In the second section of this paper, I indicate the importance of this factor with respect to the issue of wealth generation. But for our immediate purposes, these statistics underline that local industry and agriculture have not sufficiently emerged to meet local demand, effecting a continued loss of wealth. Also one might consider that allegedly the best indicator of improvement in public welfare through economic development is growth in GDP per capita. Gupta and Levantis (1999) note that in 1973, Papua New Guinea entered almost two decades of



decline in GDP per capita—18 per cent lower in 1990 than in 1973. It then increased until 1994, but again declined due to macroeconomic mismanagement. Overall, the non-mining per capita GDP declined 11 per cent between 1978 and 1997.

Returning to our argument, one notes that Spain's experience—and that of Portugal during the same period—was a harbinger of that of the Netherlands during the 1960s and the 1970s following the exploitation of its North Sea gas resources. There was also the influx of foreign exchange from the gas exports causing the domestic currency to appreciate and with it the price level, combining to make imports of food and consumer goods cheaper than domestic output, at the same time pricing traditional horticultural exports out of its offshore markets. This phenomenon is now known to economists as the Dutch disease, although to Foucault it is recognisable as Spanish disease (van Wijnbergen 1986).<sup>1</sup> Laplagne (1997) perceived a prevalence of Dutch disease in South Pacific countries in the 1980s, especially in states that received significant remittances from overseas migrants and foreign aid. Dutch disease is primarily a monetary effect produced in a boom period that inflates prices, leading to a loss of competitiveness and ensuing drops in productivity. However, Foucault, I believe, is referring to a conscious failure to make capital investments or infrastructure maintenance, and prolong dependence on foreign imports and commodities.

In the case of Papua New Guinea, statistics released by the central bank show that the nation's exports were greater than imports in the early 1990s. In other words, the nation, like sixteenth-century Spain, exhibited a significant trade advantage with respect to the sum of all its trading partners. In 1993, for example, imports were around US\$1.97 billion, while exports were valued around US\$2.49 billion. In 1994, although the kina was devalued, imports were US\$1.9

billion while exports were around US\$2.4 billion (Kannapiran 1998:Table A3.4). The kina was devalued on the grounds that foreign reserves had fallen to levels that could not sustain the current exchange rate. One might be extremely hard pressed to explain why the foreign reserves had fallen, if according to the statistics, exports—whose most significant component is natural resources and other commodities—were significantly higher than imports, since the surplus should have been more than sufficient to support the kina. However, the overall balance of payments plunged into deficit during 1994 because the net outflows on the capital account far exceeded the net inflows on the current external trade account. Some of the outflow on the capital account was perfectly normal in a year in which the major resource projects (copper at OK Tedi, gold at Porgera, oil at Kutibu) reached full production and began to repatriate their very large capital costs (about US\$1.5 billion each for a total of US\$4.5 billion). But these outflows would normally have been fully funded by their respective exports of copper, gold and oil. The balance of payments crisis of 1994 was provoked by outflows of specie for which there were no compensating exports, namely the flights of capital from the resident mercantile class of locally born Chinese, plus Australian, Malaysian, Singaporean and Filipino entrepreneurs and traders, and the indigenous class of politicians and public servants. The former, mostly expatriate merchant class, was influenced by the increasing evidence of political and social instability due to the unexpected mid-term change of government in August 1994.

With respect to the latter, indigenous group, corrupt dealing in overseas markets by public officials help to explain the drain of foreign reserves. For example, in September–October 1994, there was the Cairns Conservatory scandal involving the Public Officers Superannuation Fund Board



use of pension funds to purchase a building in Cairns for A\$18.72 million. Evidence emerged that the seller, Mr. Warren Anderson, who had close links with the Papua New Guinea's new Prime Minister, Sir Julius Chan had only paid A\$9.7 million for the building at a slightly earlier date. As I write in 2000, Papua New Guinea investigations continue into the scandal. On 3 December 1999 the Papua New Guinea Ombudsmen Commission issued recommendations indicting the former finance minister, POSFB members and Mr Andersen, and also asking that the government proceed with legal action to have the deal set aside (*PNG National*, 3 December 1999). Such events help to explain why foreign reserves had fallen dramatically, when the balance of trade was favourably tipped to exports.

It is interesting to note Australia's contrasting trade deficit combined with an Australian dollar that remained stable until the East Asian economic crisis of 1997, and even then suffered only marginal depreciation.

The combination noted above of repatriation of capital invested in resource projects with capital flight instigated by domestic merchants and politicians goes far to explain why Papua New Guinea's wealth of natural resources results only in the marginal development and generation of wealth. Recent evidence in reports from the United Nations places Papua New Guinea 129th out of 174 in a table of human development (*PNG Post Courier*, 17 September 1999:11). This ranking is based on central core development indicators such as the availability of education, health care, transportation systems, and law and order. This calculation may vary with the per capita income statistics, which are based on gross income averaged in US dollars per member of the total population. It is interesting to note that other South Pacific nations such as Solomon Islands (at least up until the political upheavals of 2000) and Vanuatu,

in which the average citizen is calculated to earn significantly less than his/her Papua New Guinean counterpart, actually enjoy a standard of welfare that is significantly higher on the United Nation's human development index. The best explanation is that the increased income Papua New Guinea earns from its superior resources is being appropriated and spent in, or moved to, foreign markets rather than circulated within the country to stimulate internal development and infrastructure, and the production of essential collective goods (see also AusAID 1998:4-5). Moreover, when one considers GNP per head as opposed to GDP (the latter includes net income accruing to non-residents, for example foreign shareholders and receivers of interest payments, such as the World Bank itself) Papua New Guinea's miserable growth performance becomes even more painfully apparent.

If we return to Foucault's original example, the contrast between Spain and England in the sixteenth century is as informative as that noted between Australia (also a resource-rich country) and Papua New Guinea. In Spain, the increase in incoming specie was used to enhance luxury, including of course, the luxury of cathedral building. In England, however, the increase in bullion was sparingly used to augment local productivity and expand employment (Foucault 1973). This meant that in England enrichment and development had a local topography. Consequently, England did not have to import manufacturing goods and agricultural produce, which would only have stimulated economic wealth and growth elsewhere in Europe. In exploring this parallel, we may regard the modern industrial world (the North) as resembling the industrialising English economy of this period, because for the most part, technological output, innovations, agriculture and usually manufacturing are supplied from within these countries. On the



other hand, developing nations, such as Papua New Guinea, resemble Spain in that economic failure of the developing world continues to occur because the hard currency gained from export of its natural resources is not utilised in renewed productivity and internal wealth creation, but rather suffers external leakages to purchase luxuries from overseas producers, which can only then be purchased by a tiny percent of the population. As in the case of Spain, these tendencies result in the enrichment of overseas markets rather than the national economy.

### The government's role in economic failure

The role of government in the diminution of developing world wealth is not to be discounted. The issue is not simply a matter of political bungling and corruption as mere associated misfortunes, which remain extrinsic to a more fundamental economic failure. Political mismanagement is an intrinsic part of a national economic dysfunction, which multiplies losses and reinforces aforementioned tendencies. If we again follow Foucault, he points to an appropriate analysis in passages from Hobbes' *Leviathan* (Hobbes 1904)

According to Hobbes, the venous circulation of money is that of duties and taxes, which levy a certain bullion upon all merchandise transported, bought and sold; the bullion levied is conveyed to the heart of the Man-Leviathan—in other words, into the coffers of the state. It is there that the metal is made 'vital': the state can in effect melt it down or send it back into circulation. But at all events it is the state's authority alone which can give it currency; and redistributed among private persons (in the form of pensions, salaries and remuneration for provisions bought by the state), it will stimulate, in its second arterial

circuit, exchanges of wealth, manufacture and agriculture (Foucault 1973:179).

Whether or not the human body is an appropriate metaphor for the reality of the state or whether the circulation of money can be wholly likened to the pulmonary system, these ideas, I believe, capture the actuality of the state's role. Foucault/Hobbes bring us back to reality; the state and government are not merely external watchmen observers in the idealised libertarian sense, who should only step into the economic arena from time to time to ensure that the market is free from force, fraud and coercion. (Note that Hobbes anticipated the famous Phillips hydraulic water pump, which was used to simulate Keynes' flow of funds model of the economy to students at the London School of Economics in the 1950s.) The state is a vital player in the circulation of money and the stimulation of transactions. It is the state that gives authority to currency and the medium of exchange that makes the train of transactions possible. In its associated function the state has a role, *à la* Keynes, to pump money through the system redistributing and recirculating taxes and duties to seed agriculture, manufacturing, and the growing industries of technology. It is also recognised that this redistribution is propelled by a primary responsibility to provide 'collective goods': health, education and the transportation systems, which underlie any successful modern economy.

Hobbes sees government spending as the second arterial circuit of money, which affects a new wave of transactions and wealth creation. In many parts of the developing world (and unfortunately Papua New Guinea has been following this trend), we find an economic condition that can be likened to arteriosclerosis. In many developing nations, the bullion, to use Hobbesian terminology, is metaphorically melted down rather than sent back into circulation. By this we mean that the distribution of taxes and duties from the



public domain back to private individuals is minimal. Much is done to ensure that a maximum amount of government revenue remains stuck and attached to the hands of public officials, rather than spread outwards to private individuals and into the circulation of the general economy. In this way, the flow of revenues back to private individuals and the economic market reduces to a trickle, so that the vital tissues of economic growth are starved and wither away before they can bear any fruit.

The economic history of Papua New Guinea is rife with examples. Institutions such as hospitals, health departments, universities, research institutes and transportation systems are stripped of funding in order to pour millions into political slush funds cleverly labelled rural development or electoral development funds, or into the grossly inflated salaries of the heads of statutory bodies and the upper ranks of the civil service.<sup>2</sup> (To be fair, however, apart from the big five heads of departments, public servants as such are not all that well paid unlike the heads of statutory bodies such as the Bank of Papua New Guinea, the Papua New Guinea Banking Corporation (PNGBC), Mineral Resources Development Commission (MRDC) and OROGEN Minerals Ltd.) Also one notes the allocation of K135 million—about US\$50 million—to discretionary spending of members of parliament (also available for transfer abroad if desired) in the 1999 budget exceeded total spending on any one of the health, police and higher education departments. These domestic outcomes are exacerbated by the extent to which much of the income of public-sector corporations (such as the central bank, the state-owned commercial bank, PNGBC, the still state-owned mineral corporations, OROGEN Minerals Ltd, and MRDC), as well as the airways, harbours, telecommunications and electricity corporations, is concentrated in the hands of their chief executives, who all too often divert funds

offshore for investment, speculation or just to establish second residences in Australia.

Consequently, discretionary spending out of resource revenues has been concentrated in relatively few hands, and where spent at home instead of being remitted abroad, is often spent on lavish displays of wealth. Effective demand of the general population has thereby been reduced and that diminishes incentives to develop indigenous secondary industries. Meantime, the state manages only the feeblest support for basic 'collective goods'. Existing schools, roads, clinics, hospitals and aid posts deteriorate because of lack of maintenance (see Kolma 1999; Commonwealth Information Services 1998:34–5).<sup>3</sup> Furthermore, as the education and health systems are allowed to deteriorate because of lack of funding, the élite increasingly seek personal health care and education for their children in Australia. Again, significant revenue that could have been used to support the local education and health industries, not to mention circulate in the local economy, is diverted offshore and provides revenue and stimulation for overseas markets.

It is interesting to note that back in 1984 Garnaut (1984:78) commented that successful capitalism requires some groups of society, 'most importantly the owners of capital, to be motivated by pecuniary self interest.' At the same time, it demands of others, 'most importantly the controllers of the state, to refrain from making the most of their opportunities for personal gain.' He remarked that if the controllers of the state indulge a passion for increased ownership they drift into conflict of interest attenuating the capacity to effect nationalistic and egalitarian policies, while losing respect and credibility in the national polity and encountering difficulties maintaining order in a liberal democratic society. Mortimer (Amarshi, Good and Mortimer 1979) claimed in his work on dependency theory that this was indeed happening in Papua New



Guinea through the corrupting effect of the global capitalist economy. Garnaut's remarks above must be read in light of Mortimer's claims, but Garnaut goes on to question the claims and sees them as a possible prognosis of things to come. At the same time, he reserves judgment as to whether the prediction would eventually prove to be the case. Through the 1990s and particularly in 1998, there seemed little doubt among either expatriates or the mass of nationals, that this description had proved to be accurate. On the other hand, some confidence has been restored through the government of Sir Mekere Morauta who came to power in mid 1999. On the other hand, his ability to reverse the trends of previous years still needs to be substantiated.<sup>4</sup>

One concludes that through the 1990s, Papua New Guinea exhibited a pattern repeated elsewhere in the developing world, as in the reported case of over US\$20 billion currently in the Swiss bank accounts held by African leaders (Cragg 1997:5). During the past two decades many of Papua New Guinea's wealthier citizens acquired substantial bank accounts and properties in Australia. As in the case of the African leaders who are enriching the Swiss state by contributing to the success of Switzerland's renowned banks, Papua New Guinea's politicians and associated élites have provided significant support to Queensland's real estate and finance markets.

These tendencies also contribute to dwindling foreign reserves and devaluations, which may occur even during periods in which foreign reserves entering the country from exports have been alleged to be greater than the foreign reserves purchased for imports. The fact of devaluation during such periods points to a reality in which the currency is constantly diminishing as it is moved offshore into foreign bank accounts, foreign investments and foreign markets.

The behaviour of the government and its minority beneficiaries then has profound repercussions with respect to the nation's money supply. As the foreign revenues coming into the country through resource extraction are continually moving out of the local economy back into overseas economies, there is a continuing need for hard currency to meet demand for the products which the internal market cannot deliver. In other words, real money exits the country too quickly, creating a continuing deficit. To accommodate this gulf between a growing demand for foreign products and available foreign reserves, the country can only make up the difference through dependence on foreign aid in the form of loans and grants. The result is an ongoing cycle of indebtedness. The fallacy, of course, is that pumping more money from external sources into the economy will eventually stimulate growth. In commenting on the African experience and especially that of Tanzania, one popular commentator recently noted

Tanzania is said by African scholar Sanford Ungar to be 'the most aided country in all of Africa'. In the period immediately after independence, Tanzania was getting half a billion dollars a year in aid. Between 1970 and 1989, the CIA estimates, another 10.8 billion arrived. According to the World Bank, \$5.4 billion more was given between 1990 and 1994 (O'Rourke 1998:176).

The point is that the infusion of foreign dollars did nothing to accelerate the national economy or make Tanzanian any wealthier; and the tangible result of its policies is a US\$7.4 billion debt.

## Conclusion

Although political corruption and governmental economic mismanagement have been central factors in the economic dysfunction of developing nations such as



Papua New Guinea, the solution is not a simple libertarian proscription against government interference. In any successful economy, government involvement is needed to provide the essential foundations for the economic endeavours of the population at large, including: law and order, a functioning judicial system, health and education services, and all necessary public goods type infrastructure (roads and bridges which the private sector rarely has an interest in providing) essential to make things a success. In itself, government involvement is not the issue, it is in fact necessary, as Hobbes points out, in the stimulation and redistribution of wealth as the second 'arterial circulation' of money. Government involvement is not a take it or leave it option, but absolutely necessary to legislate for the arterial circulation of money by means of ensuring the value of the currency and the minimum degree of income redistribution through the tax and spending functions needed to maintain social cohesion.<sup>5</sup>

Unfortunately, the Papua New Guinea government's performance over the last ten years has tended to confirm Mortimer's (Amarshi, Good and Mortimer 1979) belief that access to global capital was corrupting Papua New Guinea's leaders and weakening the capacity and credibility of the national polity. Successful capitalism as Garnaut pointed out, requires the controllers of the state refrain from indulging self-interest and making the most of opportunities for personal gain. It is not the intrinsic features of the global network of transaction and exchange we loosely call global capitalism that necessarily cause corruption, but global capitalism does supply the opportunity and the temptation. Nevertheless, this does not undermine the argument of this paper, which holds that successful capitalism is possible if the controllers of the state monitor the market appropriately, and those with access to capital (within both public and private

sectors) concentrate investment in productive enterprises within the country. The issue is not state involvement in the affairs of the economy, but rather that it involves itself in inappropriate relationships, which remove money from circulation in national and local markets. When the public sector substitutes private for public interests, money often finds its way into the hands of foreign advisors and foreign markets, to the enrichment of the latter.

## Notes

- <sup>1</sup> 'Dutch disease' is a term coined by van Wijnbergen.
- <sup>2</sup> For example, in the 1999 Skate government budget, funding for health, education and research was drastically reduced, while the rural development fund for each member of parliament was substantially increased to K1.5 million. Rural development funds are discretionary funds in which the member's spending is effectively unsupervised—in other words, slush funds.
- <sup>3</sup> Illustrative of this state of affairs are the recent remarks of the outgoing Australian High Commission Mr David Irvine. In a farewell statement last August 1999, he predicted that this year Australia would spend two and half times more than the PNG government on development spending within Papua New Guinea. (Commonwealth Information Services predicted that Australia would spend A\$320.9 million on aid to Papua New Guinea. A\$227.5 million would constitute program aid while A\$15.9 million would be budget support with A\$22.4 million remaining for other forms of aid, [Commonwealth Information Services 1998:34–5].) He also mentioned in the same speech that over the last three years Australia spent K2.7 billion or over A\$1 billion on development within Papua New Guinea (*PNG National*, 5 August 1999). Furthermore, because of the perceived tendency of money to become lost in the hands of politicians, Australia has been steadily moving away from direct budgetary support to project development aid, that is,



monetary commitments targeted to specific projects, such as aid posts, transportation systems, prisons and schools—'collective goods' which are one of the primary responsibilities of government. These are the areas of Australian expenditure, that Irvine highlighted in his speech. However, although direct budgetary aid was to be phased out in 1999, the present Australian government has committed itself to providing direct budget support in 2000. It is also likely that Mr Irvine's account of development aid did not include the A\$30 million direct commitment to the PNG budget made on 30 July 1999 (*PNG National*, 30 July 1999) or the US\$80 million that was committed to the central bank in early October, 1999.

<sup>4</sup> On the anniversary of the government, Manning (2000) of the Institute of National Affairs noted modest progress.

<sup>5</sup> It is worth noting that I think the minimalist solutions now adopted by Hong Kong since 1983, Argentina since 1991, Estonia, Bulgaria and others since the late 1990s, whereby these governments have established currency boards at fixed parities against the US dollar have much to commend them. The fixed parity prevents Dutch—or Spanish—disease-type appreciations of the domestic currency. Local money supply is tied precisely to the country's net external earnings and this prevents both inflation and deflation. For example, there had been virtually no inflation in Hong Kong and Argentina since they adopted currency boards. New Zealand and the United Kingdom are among various OECD countries that have also moved in this direction by giving autonomy to their central banks to manage money supply to contain inflation.

## References

- Amarshi, A., Good, K. and Mortimer, R., 1979. *Development and Dependency: the political economy of Papua New Guinea*, Oxford University Press, Melbourne.
- Australian Agency for International Development (AusAID), 1997. *Economic Survey of Papua New Guinea*, AusAID, Canberra.
- , 1998. *PNG Program Profile*, AusAID, Canberra.
- , 1999. *The Economy of Papua New Guinea: macroeconomic policies: implications for growth and development in the informal sector*, International Development Issues No. 53, AusAID, Canberra.
- Bauer, P., 1984. *Reality and Rhetoric: studies in the economics of development*, Weidenfeld and Nicolson, London.
- Berry, R., 1977. 'Some observations on the political economy or development in Papua New Guinea: recent performance and future prospects', *Yagl Ambu*, 4(3):147–61.
- Commonwealth Information Services, 1998–99. *Australia's Overseas Aid Program*, Canberra.
- Cousins, M. and Hussain, A., 1984. *Michel Foucault*, Macmillan, London.
- Cragg, W., 1997. Business, globalization and the logic and ethics of corruption, Paper presented at Trent University, Ontario, Distinguished Lecturer Series.
- Foucault, M., 1973. *The Order of Things: an archaeology of the human sciences*, translation of *Les Mots et Les Choses*, trans. R.D. Laing, Vintage Books, New York.
- Garnaut, R., 1984. 'The neo-Marxist paradigm in Papua New Guinea', in R. May (ed.), *Social Stratification in Papua New Guinea*, Research School of Pacific Studies, The Australian National University, Canberra:63–79.
- Gray, J., 1999. 'A warning to the rich', *Guardian Weekly*, 30 September–6 October:13.
- Gupta, D. and Levantis, T., 1999. 'Comparative economic performance in Papua New Guinea and Fiji', *Pacific Economic Bulletin*, 14(1):47–62.
- Harrison, D., 1988. *The Sociology of Modernization and Development*, Unwin Hyman, London.
- Herman, E.S., 1997. *The Triumph of the Market: essays on economics, politics and the media*, London.



- Hobbes, T., 1904 (1991). *The Leviathan*, Cambridge University Press, Cambridge.
- Kannapiran, C., 1998. *Analyses of Economic Efficiency and Macroeconomic Impacts of Export Fluctuation and Price Policy in the Tree Crops Industries in Papua New Guinea*, University of New England, Armidale.
- Kolma, F., 1999. 'Australia spent K2.7b on growth', *PNG National*, 5 August:1.
- Laplagne, P., 1997. 'Dutch disease in the South Pacific: evidence from the 1980s and beyond', *Pacific Economic Bulletin*, 12(1):84–92.
- Lea, D.R., 1999. 'The infelicities of business ethics in the Third World: the Melanesian context', *Business Ethics Quarterly*, 9(3):421–38.
- Little, I.M.D., 1982. *Economic Development: theory, policy and international relations*, Basic Books, New York.
- MacWilliam, S., 1993. 'The politics of privatization: the case of the coffee corp in Papua New Guinea', *Australian Journal of Political Science*, 28(3):481–98.
- and Thompson, H., 1992. *The Political Economy of Papua New Guinea*, Journal of Contemporary Asia Publishers, Wollongong.
- Manning, M., 2000. 'The government's first birthday', *PNG Post Courier*, 21 July:11.
- O'Rourke, P.J., 1998. *Eat the Rich*, Picador, Sydney.
- Stewart, R., 1984. 'Autonomy, dependency and the state in Papua New Guinea', in R. May (ed.), *Social Stratification in Papua New Guinea*, Research School of Pacific Studies, The Australian National University, Canberra.
- van Wijnbergen, S., 1986. 'Macroeconomic aspects of the effectiveness of foreign aid', *Journal of International Economics*, 21:123–36.

### Acknowledgment

The author would like to acknowledge substantial contributions and assistance from Tim Curtin (currently a Visiting Fellow at The Australian National University and former advisor to the PNG Department of Finance) in the writing of this article.

Papua New Guinea East Asia and the Pacific. Low human development World. HDI = Human Development Index. a Central Intelligence Agency. A Critical Analysis of Agriculture Extension Services in Papua New Guinea: Past, Present and Future. Paper presented at the Consultative Implementation and Monitoring Council National Agriculture Conference. Lae, PNG. 24-25 May. 10 ADB. 1997.

Technical Assistance to Papua New Guinea for Improving Provincial Agricultural Support Services. Manila (TA 2980, for \$150,000, approved on 22 December 1996). 11 ADB. Papua New Guinea "comprising the eastern half of the island" plans to nearly double its national road network (from 8,700 to 15,000 km) over the next three years, to spur economic growth. We assessed these plans using fine-scale biophysical and environmental data. Planned road development in PNG will substantially reduce current forest connectivity by decreasing both connectivity forest and core forest (Fig 3). Connectivity forests are crucial to maintain connectivity between different forest patches in a landscape whereas core forests maintain unique forested habitat for biodiversity in a landscape. Conservation in Papua New Guinea: Custom and tradition (Monograph 16) . Port Moresby: Institute of Applied Social and Economic Research. Google Scholar.

School science and the development of scientific culture: A review of contemporary science education in Africa. International Journal of Science Education, 19 (1), 1-20. Google Scholar.

Kelontii, B.T. (1996). Ethno-science and the "force" concept in Papua New Guinea upper secondary school physics. Unpublished Master of Science (Science Education) Thesis, Curtin University of Technology, Perth. Kiki, A.M. (1963).