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THE POLITICAL ECONOMY OF INDUSTRIALISATION IN PRIMARY PRODUCT EXPORTING ECONOMIES: Some Cautionary Tales

by

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Abstract

This paper considers the long run development policies and outcomes of 5 land abundant export economies—Argentina, Peru, Ghana, Tanzania and Thailand—in terms of three "political economy" trade-theoretic models of the "predatory state", the "factional state" and the "oligarchic state". These models seek to show how political pressures may arise for such export economies to undertake hot house import substituting industrialisation, chiefly through the agency of public enterprises.
Introduction

Ever since the collapse of primary commodity prices during the Great Depression and the attendant balance of payments problems faced by most of the primary product export economies of the Third World, industrialisation has been viewed as the major panacea for developing most of these economies. Much of the resulting industrialisation has been import substituting - some of it naturally induced as the relative profitability of domestic import substitutes rose with the terms of trade and accompanying real exchange rate changes which resulted from the inter-war collapse of primary commodity prices and the subsequent disruption of international trade during the Second World War. But in many countries both the inter-war difficulties with primary product export led growth and the rise of economic nationalism - which has been a characteristic of most of the Third World in the post World War II decades - has led to the institution of protective systems which have pushed industrialisation beyond these 'natural' levels by tariff and quota induced 'hot house' import-substituting industrialisation.

However, one of the best researched and well-established stylised facts about post-war economic development is the inefficiency and inequity associated with this hot house industrialisation. 1/ Some countries have recognised this and have established more 'neutral' trade regimes, others have had cycles in their trade regimes - with partial trade liberalisation followed by a backsliding to controls and vice-versa - whilst some, despite the accumulating evidence of the dysfunctional nature of their protectionist trade and payment regimes have tenaciously clung to them even though it is apparent

1/ See Little (1982); Lal (1983) for summaries of the evidence.
that liberalisation would help to improve both the rate as well as the quality of their economic growth.

These differences in public behaviour would seem to pose a problem for those who like Keynes believe that:

"Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back .... soon or late, it is ideas, not vested interests which are dangerous for good or ill" (Keynes, General Theory, p. 384).

Memories may be long, but there are new hungry generations waiting to tread on those whose ideas were set in the 30's and 40's. More seriously, whilst the influence of ideas on public policies is undeniable, a belief in their primacy over interests depends upon assuming a State which is moved entirely by the best arguments of the day (when its mind was formed), and with no autonomous ends of its own. This is a view of the benevolent State as a committee of ageing Platonic Guardians closeted in their studies reading and cogitating on the essays in persuasion written by their technocratic peers. It is a view which is becoming less and less persuasive.

By contrast the emerging 'new political economy' takes a more even handed view of the motives of the State and its citizens, regarding them as being equally self-regarding. Ideas clearly play a role but the interests (possibly shifting) of those who comprise the State must be equally important. Moreover, as a result of the State's conversion of certain ideas into policies, particular interest groups may be created which make it impossible to reverse policies even when the ideas on which they are based are generally recognised to be hollow. The 'irrational' policies that are then followed can be said to be ideological, where ideology is used in its literal
sense viz: "thinking or theorising of an idealistic abstract or impractical nature; fanciful speculation".

In sorting out these more subtle interactions between ideas, ideology and interests it is useful to consider the determinants and outcomes of policies in countries where 'ecological' conditions could be expected to favour the emergence of interests more conducive towards those 'outward-oriented' development policies which past research has shown aid development. In this paper therefore I consider the longrun development policies and outcomes of 5 export economies with abundant land and natural resources relative to their past and current populations. Their comparative advantage has clearly been in primary product exports. 1/ Two of these are in Latin America - Argentina and Peru, two in Africa - Ghana and Tanzania, and one in Asia - Thailand. 2/

All 5 countries have in the past been highly successful primary product export economies, but their contemporary fortunes have diverged

1/ In Lal (1985) I have attempted to analyse the political economy factors underlying the contrasting industrial policies and outcomes in two labour abundant economies - India and Korea.

2/ Three of these countries are part of a larger set being studied in an ongoing multi-country comparative study of "Poverty, Equity and Growth" in developing countries, which I am co-directing with Hla Myint for the World Bank. I owe Hla Myint a particular debt for the origin of some of the ideas which are common to the analytical framework underlying the comparative study and this paper.

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sharply (see Table 1). Three of these countries, Thailand, Ghana and Tanzania have traditionally been peasant economies. Their output of export crops grown by peasant households rose with the growth in export demand following their integration in the world economy in the last century. Argentina by contrast is a land abundant country where the main primary commodities - wool, wheat and meat - are produced mainly by medium and large scale agricultural units with hired labour. Peru is the classic dual economy, with a largely untouched subsistence peasant sector in the Sierra, co-existing with wage based farms (in the coastal plain) and mining and fishing enterprises which have produced most of the primary product exports on which Peruvian growth since about 1850 are based.

One of our major theses is that these initial 'ecological' conditions provide a strong predisposition towards a particular path of development. In this paper therefore I will tell some analytical 'political economy' stories for these different 'types' of export economies which will seek to sort out the different effects over time of the interactions between interests and ideas in explaining their development policies and outcomes. A major purpose of the paper is also to show how the new political economy can be used to analyse some important aspects of long run development. Thus the countries chosen also typify three different types of 'polity' - what I label

1/ See Reynolds (1985) for a good summary account of the evolution of these economies since the 1850's. The stylised facts used in telling the tales in the next 3 sections are based on the following economic histories of the countries: Argentina: Diaz-Alejandro (1970); Mallon and Sourrouille (1975); Peru: Levin (1960); Thorpe and Bertram (1978); Webb (1986); Thailand: Ingram (1971); Meesook et al (1986); Ghana: Killick (1978); Roemer (1984); Ansu (1984); Tanzania: Coulson (1982); Lele (1984); Collier et al (forthcoming).
respectively the predatory, factional and oligarchic state - in terms of the differing objectives subserved by the controllers of the 'polity'.

Our core analytical model is the so called specific factors Ricardo-Viner model of trade theory (see Jones (1971), Snape (1977), Ruffin and Jones (1977)) and its extensions in analyses of: (a) the Dutch Disease (see Corden and Neary (1982)); (b) the political economy of tariffs - where the political process which yields protection is endogenised - (see the series of models by Findlay and Wellisz (1982) (1983) (1984) and by Mayer (1984)); combined with the emerging literature on the political economy of fiscal policies (see Brennan and Buchanan (1980), Findlay and Wilson (1984), Lal (1984)). Another purpose of this paper is to show how an analytical framework devised from the above can be represented by three single diagrams which can be used in analysing various aspects of the political economy of long run development. 1/

Section I provides some stylised facts about the five economies. Section II deals with the cautionary tale based on the Thai, Ghanian and Tanzanian experience of the predatory state. Section III with that of Argentina and the factional state, and Section IV with Peru and the oligarchic state. As with all cautionary tales it is for the reader to draw the relevant moral. Hence it would be presumptuous to append any conclusions!

1/ Though in this paper we have not included monetary aspects, they can be readily incorporated into Figure IV, as is shown in Lal (1986a). To have included them in this paper would have led to unnecessary complications without providing any further useful insights.
I.

Five Export Economies - Some Stylised Facts

For a number of developing countries Lloyd Reynolds (1985) has dated the beginning of what he labels intensive growth—when after a period of population and output growing at the same rate, there is a sustained rise in per capita incomes. For our five countries Reynolds' dates for these turning points are:

1850 - Thailand
1860 - Argentina
1880 - Peru
1895 - Ghana
1900 - Tanzania.

The great worldwide boom associated with the establishment and spread of the 19th century liberal trading order—from 1850—drew these primary producing economies into an expanding world economy. Their export-led growth was based in Peru on a combination of mineral and agricultural products, in Argentina on temperate zone products such as wool, wheat and meat, in Tanzania on sisal and coffee, and in Thailand and Ghana on the expansion of small-holder peasant agriculture producing rice and cocoa for export respectively.

In both Peru and Argentina there was both a sequencing and impressive diversification of primary product exports. Except for some foreign owned Peruvian mineral exports, much of the value added from the expanded production of primary commodities was retained within the country. This was particularly true of the peasant small-holder economies, where the spread effects of this export-led growth on mass levels of living were also more favourable.
For Argentina Carlos Oiaz estimated that, in the 50 years before World War I, GDP grew at about 5 percent p.a., population at about 3.4 percent, leaving a substantial improvement in per capita income. The domestic capital and labor market were increasingly integrated with world factor markets, and there was also growth in 'natural' import-competing manufacturing based on processing primary products as well as from the introduction of light industry with the expansion of the domestic market. By 1929, 19 percent of Argentinian GDP originated in manufacturing.

In Peru, Webb (1986) has estimated that between 1913-41, real GDP grew at about 3.8 percent p.a. and population at 1.5 percent p.a., yielding a per capita growth rate of about 2 percent. Exports grew at about 3.8 percent p.a. between 1900-30 and manufacturing output by 4.8 percent p.a. between 1918/19 and 1950.

In Thailand, there was a steady rise in both population and an even greater rise in rice exports from 1850. There was also a steady rise in per capita income. Population grew from 6 million in 1850 to 18.15 million in 1950, whilst rice exports increased from 990 thousand piculs in 1958-59 to 25,370 thousand piculs in 1935-39. The State shared in this prosperity through export taxes. Peasant producers on average received only half the export price. There was very little manufacturing before World War II and most of it was in handicrafts. Thus in 1937 only 1.6 percent of the labor force was employed in manufacturing. The country was ruled by an absolute monarch until 1932, when the king became an influential constitutional ruler, and the country has since been ruled in effect by an oligarchy.

1/ See Ingram, Reynolds, p. 158.
Ghana was a British colony from 1874. Exports primarily of small-holder cocoa and gold expanded rapidly, the average rate of growth being 9.2 percent p.a. between 1882-1913. 1/ The colonial government's main economic function was to provide improved infrastructure.

Tanzania developed as an export economy from 1900 first as a German and later as a British colony. The major exports were sisal grown on plantations, and coffee, rubber and cotton grown both on settler farms and by peasant small-holders. There was virtually no growth in manufacturing during the colonial period.

In all our countries the growth of the export economy was also associated with a rise in public expenditures on infrastructure (see Hymer and Resnick (....)).

Table 1 provides summary statistics on various aspects of socio-economic performance in our five countries in the post World War II period. As is apparent from Table 1(A), the growth performance has diverged sharply as between the 5 countries and for all except Thailand over time in each country. Argentina's post war performance has been much worse by its own prewar standards, as has Peru's since the mid-1960s, Tanzania's since the early 1970s and Ghana's since the early 1960s.

Each of these "slumps" in economic performance was associated with the pursuit of policies of 'hot house' industrialization, by governments keen to break out of the 'colonial' pattern of trade and development. In Argentina this 'turning point' can be associated with Peron, in Ghana with Nkrumah, in Tanzania with Nyerere's Arusha declaration in 1967.

1/ Reynolds, p. 219.
Manufacturing as a share of GDP rose in all our countries (see Table 1(B)) the largest change being in Thailand which alone of our five countries industrialized relatively 'naturally' in the post-war period after a brief flirtation with import substituting industrialization in the mid-1960s. Thus Meesoek et al (1986) estimate that, between 1960-72, the sources of growth in domestic industry were: domestic demand, 77.9 percent; export expansion, 14.3 percent; and import substitution, 7.8 percent. For the period 1972-75 the figures were: domestic demand, 90 percent; export expansion, 9.0 percent; and import substitution, 1.0 percent.

Except in Thailand and Argentina, food availability per capita declined (Table 1(C)), and except for Thailand and Peru so did the share of exports to GDP (see Table 1(D)). There was an increase in the share of public consumption in all our countries, the largest increases being in Tanzania and Peru, whilst domestic investment collapsed in Peru and Ghana—in the latter country spectacularly.

Ghana and Tanzania also saw a large increase in public employment. In Ghana, Ansu (1984) estimates that 64.8 percent of the total work force was in public employment in 1964, and this rate rose to 77.8 percent in 1978. In Tanzania there was a rapid growth in parastatals from 1969. All the growth in regular wage employment of 137 thousand between 1969 and 1974, was in parastals and the public services. (see Coulson, Table 23.2). Public servants accounted for 72% of the total of 363 thousand in regular wage employment in 1974. There were improvements in social indicators in all five countries (Table 1(C)), the most dramatic being the increase in primary school enrollment in Tanzania.
II.

The Predatory State

In our first cautionary tale the government is assumed to be controlled by a single ruler - a monarch, a dictator, or a charismatic leader. In the first two forms of government, the monarch or dictator may change, but the form of government is not altered, as we assume the changes result from mere palace coups, and not because of any change in the 'interest groups' controlling the State. Put differently, in this model, the constellation of domestic interest groups has little direct effect on the policies of the sovereign who is more autonomous therefore than in the models in the two following sections. The objective of the State is net revenue maximisation. This is thus a model of the predatory State (Lal (1984)). The model will also apply to countries ruled by a charismatic leader who may often also be a dictator; but the model will only be applicable during his/her lifetime, unless a quasi-monarchical dynastic succession can be assured. The model would also apply to a country ruled by a colonial power, which is not beholden to the interplay of domestic interest groups.

The State can be identified in this story with an absolute ruler, who provides the public goods of law and order, and possibly some directly productive inputs such as irrigation, roads, etc. The cases we have in mind are Thailand since 1850 and Ghana and Tanzania from colonial times. In Thailand the absolute monarch was replaced in 1932 by an oligarchy. The king became a constitutional ruler but with considerable influence. In Ghana and Tanzania the colonial rulers were replaced by charismatic leaders - Nkrumah and Nyerere.
All three are also peasant economies where family 'owned' peasant farms produce the major export commodities. Thus, consider a traditional peasant economy with a very favourable land-man ratio. With traditional techniques, the existing labour force in agriculture is $L_A$ working on a fixed quantity of land $N$ ($N < \bar{N}$ the total land available) and through equal work and income sharing each worker receives the (net of tax) average product of labour $y$ in agriculture as his income. There is a sovereign who imposes a fixed proportionate tax at the rate $t$ on rural output to finance his court, army, and law and order institutions. Thus, part of the revenue the sovereign receives is used to hire public servants providing public goods – the police, judges, army, engineers. The rest is used for the sovereign's own purposes – courtiers, palaces, mistresses and the accumulation of "royal" treasure. Following Findlay and Wilson (1984) we assume that the provision of public goods raises the productivity of the economy above the level that would exist without the State – viz in anarchy.

Thus in Figure I we depict the total agricultural output curve of the economy with respect to the given total labour force $OL$, working on a given fixed acreage. If there are no government employees ($L_g$) then the total population is in the rural private sector ($L_A$) and produces output $LY^0$. This is the 'anarchy' level of output. With some government employees being hired to provide public goods for the rural sector, the rural labour force shrinks but total output increases until the allocation of the labour force given by $L_A^*$ is reached where $LL_A^* = L_g^*$ workers are government employees and $OL_A^*$ are left in the rural sector, producing the maximal output $Y^*$ (which is higher than $Y_0$, because of the public goods provided by the $L_g^*$ public employees).
For a given tax rate $t$ on rural output, the vertical distance between the $Y$ and $(1-t)y$ curve in Figure I, gives the total revenue available for a particular level of public ($L_g$) and private ($L_A$) employment. This revenue function $R(t)$ is plotted in quadrant II of Figure I. It reaches a maximum when $L_g^* = L - L_A^*$ workers are employed in the public sector. The government must pay its employees the competitive wage equal to the supply price of rural labour, which is ex hypothesi the net of tax average product in agriculture. This is given by the slope of the ray $Oy$ when the level of rural private employment is $L_A^*$ and public employment is $L_g^*$. Thus by a similar construction for each level of $L_g$, and for the given tax rate $(t)$ a public expenditure function $E(t)$ can be derived in quadrant II.

The sovereign we have assumed is a net revenue maximiser. This means for any given tax rate $(t)$ he will seek to maximise the distance between the $R(t)$ and $E(t)$ functions that is equate the marginal cost of $L_g$ public employees with the marginal tax revenue from the output produced by the remaining $L_A$ rural workers. It is clear from the shapes of these functions that irrespective of the tax rate $t$ chosen, the net revenue-maximising sovereign will provide less public employment than the socially optimal level $L_g^*$.

The net of tax revenue will rise as $t$ is raised, as the $R(t)$ and $E(t)$ curves shift outwards. The net of tax income of labour declines with rises in $t$ as the $(1-t)Y$ curve shifts downwards. But there is an upper limit to $t$, given by the level at which the net of tax average product of labour is equal to subsistence income. Even a revenue-maximising predatory state is unlikely, however, to raise taxes to the level which reduces peasant incomes to the subsistence level, as well before that the current controllers of the

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multiproduct natural monopoly providing the public goods of 'law and order' and 'security', which is the State, will find that their industry is contestable (in the sense of Baumol et al. (1982). See Lal (1984), for this interpretation of the limits, on the behaviour of the predatory state). The contestants could be either internal or external rivals. The level of taxes which will be sustainable depends upon the barriers to entry - including physical (geographical), technological (military) as well as ideological (including religious) - which allow the maximum 'natural' rent to be extracted by any controller of the State (see Lal (1984)).

These ideas can be formalised as follows. In Figure II, we consider the State - for simplicity - as a single product natural monopoly. The demand for its 'product' - law and order say - is given by the curve D(p), which is a function of the implicit price p it charges per unit of the 'product' provided. The average costs of the incumbent sovereign are shown as the $AC_I$ curve. A large part of the costs incurred by an incumbent sovereign in capturing his/her estate will be sunk costs. Say these fixed capital costs are $K$, and the variable costs of providing the public goods and maintaining the sovereign in power are $V$. If $\alpha$ is the proportion of the fixed capital costs which are sunk, then the 'advantage' the incumbent has over a new entrant is that whereas its average cost curve ($AC_I$)

$$AC_I = f(\alpha K, V)$$

that of the new entrant (who has access to the same military and civil technology say)

$$AC_E = f(K, V)$$

and as $\alpha < 1$, $AC_E$ lies above $AC_I$. This will allow the incumbent to charge a 'sustainable' price $P_0$ for the public good output of $g_0$ it
provides, earning a pure "rent" from its natural monopoly given by the shaded area. Thus the optimal tax rate $t$ from the predatory state's viewpoint will be determined by the equilibrium point $P$ in Figure II. With $t$ thus determined so will the employment and fiscal equilibrium in Figure I.

This can be seen as follows. Assume that the average variable costs $V$, are incurred entirely on hiring public employees so that total variable costs (which are the same for the incumbent and the entrant) $TVC$ for the surplus maximizing point $P$ (in Figure II) are

$$TVC = y(L_g). L_g$$

Where $y$ is the net of tax average product = wage rate, and the number of public employees required to produce the 'public good' output $g_0$ (in Figure II) is $L_g$.

The incumbent then earns a surplus $S$ given by:

$$S = (TVC + K) - (TVC + \alpha K) = (1 - \alpha)K$$

This means that in Figure I, the vertical distance at the surplus maximizing point between the $E(t)$ and $R(t)$ curves must equal $(1 - \alpha)K$. Thus in the general equilibrium model of the fiscal and employment decisions of a predatory state depicted by Figure I, quadrant II, the surplus maximizing sovereign will set the tax rate $t$, such that the surplus generated at the public employment level $L_g$, where the marginal costs and marginal returns (to the sovereign) from public employment are equated, is equal to the net 'barrier to entry' costs facing a new entrant coveting the State.

Suppose this economy has been conquered by a colonial power. Being foreign it will face higher internal costs in terms of its legitimacy than potential internal rivals. This means that, as compared with the indigenous rulers it replaces, the colonial power will only be able to extract a smaller
net surplus, as in terms of Figure II, the net "barrier to entry" costs for its potential contestants will be lower. The R(t) curve in Figure I quadrant II will be lower and the E(t) curve higher than for the indigenous ruler it displaces, and hence its surplus maximizing tax rate (where the marginal revenue and expenditure are equal, and the surplus is equal to \((1-\alpha')K\), with \(\alpha' > \alpha\)) will be lower. More importantly the level of public good provision and public employment will be higher than for the indigenous 'predatory' state. This prediction of the model seems to conform to the stylised fact, noted in Section I that there was a marked expansion of public expenditures in colonial export economies.

Over time, this economy expands with population growth and the extension of export crop agriculture onto new lands, as in various vent for surplus type models (see Myint (1958), Caves (1965)). The foreign exchange earned by the economy will be used to import consumer goods. Depending upon transport costs, there may - as a result of the increased demand associated with the rise in national income - be a viable market for the domestic manufacture of some imported consumer goods. Such "natural" import substitution can be expected to accompany the growth of the primary producing export economy. Our main concern, however, is to provide some political economy type of reasons why the government might wish to promote industry, particularly in the public sector, beyond these natural limits.

Suppose at some stage the absolute ruler is replaced by a government subject to more popular pressures. This can be said to have happened in Thailand with the 1932 coup and the conversion of the King from an absolute to constitutional monarch, and in Ghana and Tanzania with the ending of colonial rule. To the extent these changes increase the legitimacy of the new
incumbents controlling the state, they will *ceteris paribus* increase the costs of rival entrants seeking to capture the State. Hence in Figure II the $A_{Ce}$ curve will shift upwards, and with it the 'optimal' sustainable tax the new incumbent can levy, as well as the 'natural' rent it can extract from the populace. In Figure I, the $R(t)$ curve will shift upwards and the $E(t)$ curve downwards till a new equilibrium at a lower level of $L_g$ is reached where the 'surplus' is equal to $(1-a^1)K$ - the higher 'net barrier to entry' costs as $(a^1 < a)$.

However unlike the absolute ruler, the new 'constitutional' rulers -- albeit dictators -- will find it difficult to openly appropriate the net surplus for themselves. They may seek to expand their patronage instead by hiring more retainers. If in addition, as in post independence Ghana and Tanzania, the new leaders seek to 'modernise' their countries by social engineering through a technocracy, they may have ideological reasons for expanding the bureaucracy beyond the net revenue maximising point $L_g$ in Figure I.

Finally, as is argued by the recent rent-seeking literature (see Krueger (1974) and Buchanan et al (1980)) the professional bureaucracy and its hangers on will themselves seek to garner the state's surplus by exerting pressure to expand government expenditure. Findlay and Wilson (1984) describe this as the Parkinson-Niskanen law that "Government expenditure expands to absorb all the resources available to finance it." Public employment will
expand to $L_g^1$, well beyond the socially optimal level $L_g^*$ in Figure 1. But in this process with the increase in the provision of public goods, output could be higher than when the State is run by an absolute monarch or colonial power.

So far we have implicitly assumed that the relative prices of the commodities in our model economy have remained unchanged. Now suppose export prices and that portion of the government's revenue derived from export taxes fluctuate. Once it has hired public servants pari passu with the past rise in its revenues, it will be very difficult for the government to either cut current wages or the numbers of public employees when revenues fall. It is thus likely to face a fiscal crisis with every fall in export prices (as $R_t$ shifts downwards and $E(t)$ remains unchanged in Figure 1).

One way for the government to insulate itself from the incipient fiscal crises that the periodic collapse in export prices generates is to put some of the revenues at good times in foreign financial assets--reserves--to be used to finance fiscal expenditures when times are bad. But for most Third World states this has proven virtually impossible because of the pressures

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1/ Thus Coulson writes of the adverse effect on economic performance of the recent expansion of the bureaucracy and its de facto takeover of the State in Tanzania: "The contradiction which has not been recognised is that of implementing a radical programme with a 'bureaucratic bourgeoisie' - the servants of the State (with an obvious interest in expanding its services) in the paradoxical position of controlling the State. Either a section of the bureaucracy will have ... to pursue a more ruthless capitalist accumulation or else the workers and peasants will have to use Nyerere's ideology to take control of the State through democratic organisations .... By 1980 it was clear that Nyerere and the Tanzanian leadership would countenance neither alternative, and that the contradictions and stagnation of the 1970s were likely to continue" (p. 33).

2/ (See Levin (1960) for a detailed discussion of this aspect of the export economy).
that arise for the State to spend the windfalls, most often by hiring the relatives of its retainers. To the extent that this increase in public employment also exerts upward pressure on the economy-wide wage rate, the benefits from such spending could be quite wide and hence popular. But the dangers of succumbing to these pressures is the fiscal crisis during the downside of the export cycle.

An alternative policy for the government to escape its fiscal bind would be to insulate the financing of public employment from fluctuating export price induced changes in revenues. It could use the export tax proceeds in good times to import capital goods to set up import substitute industries (beyond the "natural" extent that has occurred because of the income growth associated with export led expansion). As long as the domestic demand for the products of these industries is relatively stable, and the products can be sold at a domestic price sufficient to cover variable costs (including above all of the public laborers employed), the government will have succeeded in providing a stable form of financing public employment from the fluctuating export tax revenues. It being noted that as efficiency per se is not a goal of this net revenue or bureaucrat-maximizing state, there is no presumption that the government will choose to maximize the profits of these public enterprises. As far as it is concerned the capital imports financed by the export taxes may well be a sunk cost, and as long as the public employees are paid out of the net revenues (taking account of other variable costs), the State would have achieved its predatory objectives. Though by conventional or social accounting criteria most of these public enterprises could well be making losses.
Alternatively, the government may seek to augment its revenues by providing tariff protection to private sector manufacturers. The revenue from the tariff supplements that from the export tax. As long as there is a subsistence sector in the economy which fixes the supply price of labor to the rest of the economy, the introduction or expansion of import substituting industries will merely mean a reduction in output and employment in the subsistence sector, with no change in the wage rate (or in the rents accruing to landlords in the export sector -- if agriculture is commercially organized rather than being based on peasant household labor). 1/ Thus the State may face no "costs" in the short run from this policy of promoting some "hot-house" import substituting industrialization through a combination of both public and private enterprises and the institution of some non-prohibitive revenue tariffs.

This seems to be the story (by and large) of the economic development of Thailand since 1850, of Ghana till about 1961 during the Nkrumah regime, and of Tanzania from colonial times to Nyerere's regime until the Arusha Declaration in 1967. Though introducing well-known inefficiencies in production, the mild protection to promote (in particular public sector based) industrialization could have been justifiable from a net revenue and public employment maximizing government's viewpoint. This is true even if account is taken of the indirect effects on government revenue from the well-known Lerner symmetry theorem whereby an import tariff is equivalent to an export tax. The revenue tariff is likely to effect export output and hence export tax revenue adversely. But this loss in mean export revenues (in the face of fluctuating

export prices) has to be balanced from the public employment maximizing government's viewpoint, against the stability (reduction in the variance of tax revenues) thereby bought in the financing of public employment--essentially by substituting a more stable form of "revenue" generation through public enterprise based industrialization. There will be some optimum level of public enterprise based industrial employment provision at which these costs and benefits will be equal.

Suppose, however, that on the basis of current ideas (Ghana under Nkrumah) 1/ or ideology (Nyerere's Tanzania after the Arusha Declaration) 2/ the State seeks to promote public sector based industrialization beyond this "optimal" level. That is in terms of Figure I, it seeks to increase public employment beyond the level $L_g$. As tariffs on final consumer goods become prohibitive and most intermediate and capital goods are allowed into the country at low or zero tariffs to provide high effective protection to public sector industries, tariff revenue is likely to fall, as is the revenue from export crops, with the increase in the direct and indirect tax burden on the sector.

Then given the inter-relationship between export taxes, export output, the rural-urban terms of trade, and the subsistence based supply price of peasant household laborers, there could be a complete elimination of the peasant export crop, as the peasants move to the untaxable subsistence sector. They may still be willing to exchange domestically produced manufactured

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1/ See Killick for an interpretation of irrational dirigiste economic policies under Nkrumah which emphasizes that they were influenced and based on the development economics current at that time.

2/ See Coulson for a discussion of the ideological factors underlying Tanzanian policy.
import substitutes for some subsistence output. But this reduced domestic
demand for import substitutes may no longer be sufficient to employ all the
existing "entitled" public sector workers. Furthermore, the collapse of
domestic export supply following its increased direct and indirect taxation,
will have led to a reduction in the supply of foreign exchange required to
finance even the imported intermediate inputs required by domestic industry.
The State will have a fiscal, foreign exchange and domestic output crisis.
The predator will have a problem of surviving as it has virtually destroyed
its prey! This seems very much to be the story of Ghana after 1961 and
Tanzania in the 70s and 80s. 1/ But this denouement is not inevitable as the
more favourable outcome in Thailand illustrates, which, however, requires a
pragmatic and non-ideological State! 2/

III.

The Factional State

The second analytical story is roughly based on the Argentinian
case. It is of a land abundant economy without a subsistence sector.
Agriculture produces for both domestic consumption and exports, and is
conducted on medium or large scale commercial farms making use of hired
labour. In addition there maybe a small import-竞争ing manufacturing
sector, as well as a non-traded goods services sector.

1/ See Ansu in Harberger (ed.) (1984), and Collier et al (forthcoming).
2/ Not seeking to expand public employment beyond the 'sustainable' level Lg
   in Figure I (quadrant II).
Unlike the 'absolute' rulers who controlled the State in the story in Section I, we now have a State which serves the interests of that coalition of pressure groups which succeeds in its capture. The method of capturing the State need not be majoritarian democracy, even though this form of government would be compatible with our story. The interests served are narrowly defined to be the economic self-interests of the constituents of the government. The income effects induced by the economic policies adopted and hence of concern to a particular government will depend upon the returns to the primary factor endowments of its constituents. A recent model of endogenous tariff determination in a voting polity due to Mayer (1984) is helpful in providing an analytical framework for the behaviour of what we may call the factional State.

The basic idea can be explained fairly simply. Suppose that there are only two factors of production, capital (K) and labour (L) and that all individuals in the economy can be described by their respective capital-labour endowments $k_i = K_i/L_i$. The mean of the distribution of these individual $k_i$ endowments will be the aggregate capital-labour endowment $\frac{K}{L} = \bar{k}$ of the economy.

Next we define the set of individual's who are decisive, in the sense that they can compete for the capture of the State and thus the determinants of economic policies subserving their interests. Suppose initially that all economic agents in the population form part of the decisive set of the polity and the political mechanism is democratic -- with 'one man one' vote, and the majority capturing the State. All voters vote their economic interests. Then from the well known median voter theorem, the median voter's capital/labour endowment $(k_m)$ will determine the interests that will be served by the...
coalition of majoritarian interest groups who capture the state. If the
distribution of individual factor endowments is symmetric so that its median
and the mean are the same, the median endowment will be identical to the
average for the economy as a whole \( \bar{k} = k_m \). Then from the law of
comparative advantage we know that the income of the median individual will be
maximized by free trade. If, however, the median individual endowment is more
(less) capital intensive than the average, the median voters income generating
interests will be in a tariff (subsidy) on capital intensive imports or a
subsidy (tariff) on labor intensive imports. Thus in this form of the
pressure group model what we need to know is the mean of the national factor
endowment and median of the distribution of the income generating factor
endowments of the set of decisive individuals. \( \frac{1}{1} \)

The economic model we use to tell our story of the factional state is
the simple Ricardo Viner version of the Hecksher-Ohlin model of trade theory
with three goods: an agricultural export, non-traded services, and import
competing manufactures. Initially the output of the latter is negligible. We
are interested in medium and long term changes, and so we assume that all 3
goods use mobile labor and 'capital' for their production. The land which is
in surplus and is specific to the production of the agricultural good \( X \) can
only be made "effective" with complementary capital (see Kennen (1965)) and
hence the output of the agricultural commodity too depends upon the mobile

\( \frac{1}{1} \) In this paper the set of decisive individuals and the distribution of
their factor endowments is taken to be given exogenously. However, it
should be possible using simple growth economics and results from the
literature on changing wealth distributions to generate the distribution
of individual factor endowments endogenously.
capital and labour used in its production. The agricultural sector is the most capital intensive. The capital-labor ratio in manufacturing (M) is higher than that in services (S). A large part of the latter consists of government services. (This stylised economic structure seems to correspond pretty well to Argentina's. See Diaz-Alezandro (1970) Essay 1).

This 3 factor-3 commodity model can be depicted in Figure III (see Corden and Neary (1982)), where \( L_S \) is the demand curve for services, \( L_M \) for manufactures, and the difference between the \( L_T \) (the curve for both the traded goods) and \( L_M \) the implicit curve for agriculture \( L_X \). These curves in quadrant I are drawn for a given set of relative prices between services, agriculture and manufacturing, and for given stocks of land 'cum capital' in agriculture and capital in the manufacturing and services sectors. We take the domestic price of manufactures as the numéraire.

Initially, the State levies export taxes which it uses to finance non-traded government services. Apart from this trade cum fiscal intervention there is free trade. The economy is linked to both world capital and labour markets, such that (apart from a given constant risk cum transport premium) there is a perfectly elastic supply of both capital and labour at given world interest (\( r \)) and wage (\( w \)) rates to the economy. Full employment at the given world wage rate of \( \bar{w} \) is constantly maintained through immigration (and emigration), whenever aggregate domestic labor demand exceeds (falls short) of supply. Thus the domestic labor supply \( O_S O_T \) in Figure III varies with the level of aggregate demand for labor.

1/ See Lal (1986) for the application of a similar model to explain postwar real wage movements in the Philippines.
We start our story in the heyday of the 19th century's liberal trade regime. There is no manufacturing sector. Agricultural export led growth shifts the \( L_T \) schedule to the left. This increased demand for labor is met at the unchanged wage rate of \( w_0 \) by an expansion of the labor supply by OT' (not drawn). As both the wage and rental rates are ex hypothesi constant, the factor proportions in producing both services and agricultural goods remains unchanged, and hence there will also be a capital inflow into the economy, which will lead to an expansion in the outputs of both sectors. With factor prices fixed, the domestic relative price of services and agriculture (the real exchange rate - \( e \) in our model) is also fixed. Thus the requisite amounts of foreign capital and labor flowing into the economy, will be such as to shift the production possibility frontier between the tradeable-agriculture, and non traded service sectors in a balanced manner. 1/

During this period, corresponding to the second half of the 19th century to the early 1920's, the 'decisive' individuals in Argentina are the landlords. As a large proportion of both capitalists and labourers are foreign, they do not form part of the "polity". The median endowment of 'land-capital'/labor of the set of decisive landlords is likely to be greater than the average endowment for the economy as a whole. This implies that the interests of the median 'decisive' individual in the polity will be best served by maintaining free trade.

In time, with the expansion of incomes resulting from primary product export led growth, there will be a sufficient domestic market for the products

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1/ This implies that the tangency between the new production possibility curve and the highest attainable indifference curve occurs at the same unchanged real exchange rate \( e_0 \).
of some light industries. Competitive domestic import competing industries will be established. The $L_M$ demand curve for labour will then emerge in the economy as shown in quadrant I of Figure III. Given our assumptions about the elastic supply of foreign capital and labour, the factor proportions of all three industries remain unchanged and they expand pari-passu in line with increased domestic incomes (and hence demands).

During the succeeding decades of primary product induced growth there will also be an increase in the economy's endowments of manufacturing specific capital as 'natural' import substituting industrialization begins. Some of this capital will be owned by the landlords, and some by domestic capitalists who will increasingly also become part of the 'decisive' set of individuals whose interests may need to be taken into account by the State.

Now suppose there is a collapse in the world price of the country's export good, and the economy also gets delinked from world labour and capital markets. This happened to Argentina during the Great Depression. We use Figure III to analyse the outcomes. The second quadrant of this Figure shows the unit cost curves of the three industries drawn in wage-rental space. As exportables ($X$) are assumed to be the most 'capital' intensive good the slope of their unit cost curve (which shows the capital-labour ratio) at every wage-rental ratio is steeper than for importables ($M$) which are of intermediate capital intensity and services ($S$) which are the least capital intensive commodity. The initial equilibrium is depicted for given commodity prices and factor supplies by points a and a' in the two quadrants.

With the fall in the price of exportables the $C_X$ curve in quadrant II shifts downwards, as does the $L_T$ curve in quadrant I as labour demand in exportables ($L_X$) falls whilst that in importables ($L_M$) remains unchanged.

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For factor market equilibrium the new equilibrium must be at the intersection of the $C'_x$ and $C'_m$ curves, viz $b'$. This must imply that the unit cost curve for services $C_s$ must shift upwards to intersect the other two curves at $b'$. Hence the price of services and the real exchange rate (the relative price of non-traded to traded goods) must rise. The real wage rises, and the rental on capital falls. In quadrant I, employment and output in the agricultural export sector will fall and in the import substituting manufacturing sector and services will rise, as will the real wage. (see Corden and Neary (1982) for a formalisation of such a model). Thus, in this process of what may be termed neo-classical adjustments to the collapse of agricultural export prices, further 'natural' import substituting industrialisation will be promoted as part of the adjustment. This happened in Argentina during the Great Depression (see Diaz-Alejandro). The only 'losers' from this adjustment are the landlords, but as protection does not serve their interests, they will not oppose the continuation of free trade.

Over time the set of decisive individuals in the economy has however been expanding with individuals who have nontraded (services) sector specific capital and/or labour as their primary endowment increasingly entering the political process. At some stage the median of the distribution of endowments (of 'land-capital' to the other factors), of this expanded set of 'decisive' individuals is likely to become less than the economy wide average. The state will then seek to subserve the interests of the landless, particularly those with 'non-traded' good capital as they will increasingly have become the 'median' voters. This sector might also come to include those import-competing industries which have succeeded by using arguments based on economic nationalism to obtain the imposition of either import quotas or prohibitive tariffs to convert their outputs in effect into non-traded goods.
With the median of the distribution of the endowments of decisive individuals shifting towards those employed in home goods production there would be political pressures for a squeeze on tradeables and in particular on export agriculture. The resulting pressures for a relative expansion of non-traded goods will require an appreciation of the real exchange rate. Diaz-Alejandro provides some estimates which suggest that the combined effects of various domestic policies was a sustained real exchange rate appreciation from about 1929 to well into the post war period with the extent of 'overvaluation' varying over time.

If, however, the fundamentals of the macroeconomic situation do not require such an appreciation of the real exchange rate there would be a balance of payments problem. As noted above, given the factor intensities of the three goods, the full adjustment to the collapse of primary product prices during the Great Depression would have required some real exchange rate appreciation. However, now consider the situation in the late 40's or early 50's when with another turn in the primary product cycle, there is a rise in primary product exportable goods prices. The whole process of adjustment analysed in Figure III goes into reverse.

We continue to examine the medium to long term adjustment pressures that arise. In Figure III, given that exportables are the most capital intensive, and services the least with import substituting manufactures in between, the rise in the price of exports shifts the $C_x$ curve upwards (not drawn). Its new intersection with the $C_m$ curve, at $c'$, is the new long run equilibrium point. For factor market equilibrium the $C_s$ unit cost curve must also pass through this point, which means that the price of services must
fall, that is there needs to be a real depreciation. The money and real wage will fall in the new long run equilibrium.

This required cut in real wages accompanying the real exchange rate depreciation, will obviously be resisted by those whose factor endowments are dominated by labour, and also by the owners of capital in the import competing (or tradeable) manufacturing sector. For, with the postulated factor intensities, the new equilibrium will entail an expansion in the output of exportables and non-traded goods at the expense of importables.

Given the shift in the distribution of factor endowments of decisive individuals towards a median value which is biased towards labour and non-agricultural capital, the state will be captured by those whose interests lie in preventing the real exchange rate depreciation and hence the real wage cut. This seems to provide an explanation of the rise of Peronist populism, which interestingly as our model suggests should have been expected to occur as it did when Argentina's external terms of trade improved in the late 40's, and not when they collapsed during the Great Depression!

However, the attempt to maintain an overvalued real exchange rate is not sustainable. With given reserves, the ensuing balance of payments deficit will need to be cured. This inevitably requires the usual expenditure-switching and reducing remedies, and the accompanying distributional shifts in real incomes. If the later are not however accepted by the workers, then after stability is restored, they would seek to restore their status quo ante real wages. Domestic price inflation which raises the domestic price of non-traded goods would validate this for a while, but as the resulting real exchange rate appreciation once again leads to a crisis, it is not sustainable. We then get the post World War II cycles of Argentinian economic
history where devaluation becomes the major focus for the distribut
deadlock which is due in our stylized model to a polity which is in inherent
conflict with the consequences of its comparative advantage. 1/

This dynamic distributional conflict can be depicted in Figure IV 2/
in which LL shows the combinations of the real tradeable wage (that is the
money wage deflated by the price of traded goods - which is a composite of the
importable-exportable goods) and the real exchange rate (which is the relative
price of non-traded to traded goods) which equates the demand for labor. It
must be upward sloping as a rise in the real wage at a constant real exchange
rate will generate unemployment whilst a rise in the real exchange rate at a
constant real wage will lead to excess demand for labor. The slope of the
curve must be less than unity (the slope of a ray from the origin). For

1/ A recent historian has summarised this deadlock which focuses on
devaluation as follows: "At best devaluation was a short-term expedient,
one that invariably prompted urban recession and increased political
friction. After each devaluation food and import prices rose and
consumption fell, which caused manufacturing output to fall and urban
unemployment to increase. Recession, in turn, provoked a decline in
government revenues, as the tax base narrowed and tax evasion spread.
Government spending then declined, helping to hasten and deepen
contraction throughout the economy. When spending did not drop quickly
enough, the economic depression was accompanied by inflation. As events
in 1954 first showed, political responses to devaluation were usually most
potent in the aftermath of recession, once the balance of payments was
improving, manufacturing again reviving, and unemployment falling. At
this point, as the labor market tightened, the trade unions led strike
campaigns to restore the predevaluation wage share in national income.
But then as wages rose, too did production costs and soon prices. The
mounting inflation again channeled exportables into the home market.
While manufacturers increased production, imports were also rising, which
renewed the balance-of-payments crisis and required another devaluation.
Through this chain of intersectoral income shifts, changes in relative
prices, and inflation, each devaluation thus carried the seedling of its
successor". p. 327-8 of Rock.

2/ See Neary (1985), Prchawony (1981), Lal (1986a) for further details about
this diagram.
suppose there is a movement along the ray from the origin, this means an equiproportionate rise in both the tradeable real wage and real exchange rate (say with the nominal wage and price of non-traded goods rising in equal proportions). The real product wage in non-tradeable production remains unchanged and hence its output remains unchanged, but traded good producers face a rise in their real product wage and will reduce their demand for labor, creating excess supply, and these points must then lie below the equilibrium LL locus.

The NN locus shows the combinations of the real tradeable wage and real exchange rate for which the non-traded good market is in equilibrium. This curve will slope upwards as a rise in the real exchange rate (keeping the real tradeable wage constant) leads to excess supply of the non-traded good, which is cured by a rise in the real wage to discourage production and thereby restore equilibrium in the non-traded good market. The NN curve must have a slope steeper than a ray from the origin (greater than unity), as an equiproportionate rise in the real tradeable wage and the real exchange rate leaves output of the non-traded good unchanged but leads to a reduction in its demand and hence to excess supply. These points must therefore lie above the NN locus.

The intersection of the LL and NN loci determines the equilibrium values of the real tradeable wage and real exchange rate. The arrows show the direction of movements in the two variables when the economy is not in equilibrium.

With the rise in the price of exportables, there will be excess supply of labor at the initial equilibrium point a, as the labor use per unit
of output falls in all three sectors, with the capital intensive sector--exportables--expanding. Hence LL will shift downwards.

Furthermore as depicted in Figure III, panel II, the relative price of services must fall in the new equilibrium, implying that there will be excess supply of non-traded goods at the old equilibrium point a in Figure IV, and hence the NN curve must shift to the left.\textsuperscript{1} At the new equilibrium point b both the real tradeable wage and the real exchange rate will be lower.

However, suppose that labor resists the real wage cut. Then there will be a short-run equilibrium at c, with the real exchange rate appreciating. This appreciation will lead to a worsening of the balance of payments, and at some stage as part of a package to resolve the stabilisation crisis real wage cuts and a devaluation (to lower the real exchange rate) will become inevitable. The economy will then move towards b. If however, subsequently an attempt is made to restore the old real wage, the economy would move back towards c, and the crisis would be resurrected.

We thus get the paradoxical result that a combination of: the natural industrialisation induced by export led growth; the successful neo-classical adjustment during the Great Depression with the further natural growth of both non traded good services and import substituting industries; and the delinking from world capital and labour markets, has created a polity in Argentina where the interests of the median 'decisive' individuals no longer coincide with those which would subserve development along the lines of its comparative advantage. Equally important our model illustrates how a polity entirely determined by the changing interplay of factional interests may be worse for

\textsuperscript{1} See Corden & Neary (1982), p. 836.
the social weal than a different form of polity where, as in our previous model of the predatory state, there is a non-ideological 'absolute' ruler with autonomous self-serving ends.

IV.

The Oligarchic State

Our third story is based on the Peruvian case. The State is controlled by an oligarchy, directly or indirectly representing resource intensive export interests. The general outline of the story can be told in terms of the growth of the export sector between 1830 and 1980 (see Chart 1). The economy consists of a subsistence and relatively untouched peasant sector in the Andes (S), export agriculture on wage based farms (on the coastal plain) and mining (X), and an urban sector which provides various non-traded goods and services (N) as well as some import competing manufactures (M). We assume labour is mobile between all four sectors whilst capital (including that complementary with land used in export agriculture) is mobile between non-traded services, import competing manufacturing and export agriculture. In the peasant subsistence sector there is equal income and work sharing, and it provides a fairly elastic supply of labour to the other sectors at the subsistence income equal to the average product of labour in peasant agriculture ($y_s$).

1/ The earlier phase of the Argentinian study can also be taken to be one of the 'oligarchic state'.
The model can be depicted by Figure V, which is identical to Figure III, except that there is $L_N, L_s$ of labour in the subsistence sector, and the wage (expressed in terms of importables) is determined by the subsistence sector's average product $y_s$.

The Peruvian story since 1830\(^1\) is of a series of export booms in natural resource (including land) intensive commodities, which collapse after about 20-30 years (see Chart I). Thus there was the guano boom\(^2\) from 1830 to 1870 with export quantities growing at about 7 percent per annum. An export boom of a diversified set of commodities - sugar followed by copper, cotton, rubber and petroleum - extending from 1890-1929, with exports growing in both value and volume by about 7% per annum, and the most recent boom from the 1940's to late 1960's with extractive industries, and sugar, cotton and fishmeal providing the major exports, which together grew in value terms at the rate of 10% per annum from 1942-1970.

The periods when exports were booming were also those "of greatest political stability and conservatism in Peru's history... whilst the years of political flux - 1882 to 1895, 1930 to 1948, and since the late 1960's - correspond to periods in which the export economy had entered into crisis and ceased to generate clear guidelines for policy"\(^3\). During these periods of crisis, populist voices advocating protection were raised at the same time as some natural import substitution of manufactures (in the 40's behind tariff

\(^1\) See Thorp and Bertram.

\(^2\) See Levin for a detailed discussion.

\(^3\) Thorpe and Bertram, p.4.
walls which were subsequently dismantled and more recently under QR regimes which are still in place) always occurred.

Towards the end of each export boom, governments tried to keep the domestic boom going by increasing public expenditures - most often financed by foreign borrowing. This happened in the 1870's, 1920's and in the period from the mid 60's to mid 70's. This foreign financed public pump priming ended in defaults on the foreign debt in the 1870's and 1920's, and arguably too in the current cycle, with President Garcia playing a 'cat and mouse' game with his foreign creditors. But foreign investors memories seem to be short and foreign direct investment has come in during the middle of each new boom, as memories of past defaults fade and economic recovery is evident. Thus 1901-29 and 1950-68 were high periods of foreign investment in Peru.

The effects of the boom and subsequent slump on the incomes of 'decisive' individuals in the polity can be illustrated by Figure V. We assume that the peasants - mainly Indians - are not part of the 'decisive' set. As they are also, in large part, the mobile migrant labour used in the other sectors, the only 'interest' that will be represented in the polity is that of mobile 'capital', which coincides with the requirements for development in line with the country's comparative advantage. This seems to have been the case in Peru till fairly recently (see Webb (1986)). Over time with the growth of the export economy and the absorption of labour in the 'modern' sector, the average product and hence incomes and supply price of labour in the subsistence sector will rise (y_s in Figure V will shift upwards). With the tradeable wage and the relative price of importables to exportables fixed exogenously, the internal adjustments required during the
export cycles will come about through changes in the rental rate on capital and the price of non-traded goods.

Thus with an export boom, the $C_x$ curve in quadrant II of Figure V shifts outwards. As the wage is fixed, a differential is opened up in the rental rates in capital used in the export sectors (pt b) and the import competing manufactures and non-traded good sectors (still given by point a). As the price of the import competing sector is fixed, $C_M$ cannot shift; so at the given real wage $y_s$, capital will begin shifting from the import competing sector into exportables. As the import competing good cannot be produced at its exogenously fixed price with the same real wage and higher rental rate, the industry will shut down. (The curve $L_M$ disappears in quadrant I).

What of the non-traded good? The rise in real income and hence in the demand for the non-traded good, as well as the factor price changes represented by point b, imply that the $C_N$ curve will have to shift upwards to intersect the $C_x$ curve at b. The price of the non-traded good must rise, and the real exchange rate appreciate. This seems to have happened in each of the Peruvian export booms (see Thorpe and Bertram for the evidence on real exchange rate movements).

There will thus be a rightward shift in the $L_M$ and $L_N$ curves in quadrant I, with the $L_M$ curve disappearing, and its labour being partly absorbed by the expanding exportable and the non-traded good sector. As the rental rate has risen, the 'decisive' capitalists in the polity will be content with export led growth, as will labour to the extent there is an increase in the demand for labour of the modern sector, which by reducing the labour force in the subsistence sector raises $y_s$.
With the collapse of the export boom the above process will go into reverse, but if the 'slump' is not long lasting the next export cycle can begin without any damage to the process of export-led growth. The main difference between the most recent 'slump' of the Peruvian economy and earlier ones is that it seems 1/ the sources of future primary product based export led growth seem to be drying up: as a result of the exhaustion of natural resources that could be exploited relatively cheaply, as well as the limits being reached for extending irrigation and hence the extension of the land frontier on the coast (which has produced most of the agricultural exports). Taken together with the growth of population, the factor endowments of the economy could be altering, so that the incremental comparative advantage of the country may lie in manufactured exports. However, if this is so, the import substituting bias of the industrialisation induced during past downturns of the export cycle as well as the rise of economic nationalism and the recent appeal of the 'dependencia' ideology, could militate against the adoption of the appropriate policies which would be needed to foster labour intensive manufactured exports. As manufactured export led growth would greatly benefit labour, bringing the subsistence sector into the 'decisive' set which determines the polity may be important for the future growth of the Peruvian economy. However, the effects on economic performance of the rise in

1/ See Bertram and Thorpe, and Webb.
populism 1/ that the integration of 'labour' might entail - as outlined in the second of our cautionary tale of the factional state - could give one cause to pause!

1/ It could be argued that populism has already captured the State in the form of President Garcia. But it is doubtful whether the Andean peasants have been integrated into the polity by APRA, whose 'populism' is therefore likely to be rhetorical, and similar to the rhetoric which has been dominant at each downturn in past Peruvian export cycles.


Table 1

(A) Per Capita GDP Growth Rates 1950 – 1980

<table>
<thead>
<tr>
<th>Country</th>
<th>50-60</th>
<th>60-70</th>
<th>70-80</th>
<th>Average of Decades</th>
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<tr>
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<td>3.3</td>
<td>5.1</td>
<td>4.2</td>
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<tr>
<td>Argentina</td>
<td>1.2</td>
<td>2.8</td>
<td>1.0</td>
<td>1.7</td>
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<tr>
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<td>5.0</td>
<td>2.0</td>
<td>2.8</td>
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<tr>
<td>Peru</td>
<td>2.9</td>
<td>1.9</td>
<td>0.4</td>
<td>1.7</td>
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<tr>
<td>Ghana</td>
<td>2.4</td>
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<td>-2.1</td>
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(B) Output by Sector of Origin (% of GDP)

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<tr>
<th>Country</th>
<th>Agriculture</th>
<th>Industry</th>
<th>Manufacturing</th>
<th>Services</th>
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<tr>
<td></td>
<td>50</td>
<td>80</td>
<td>Δ</td>
<td>50</td>
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<tr>
<td>Thailand</td>
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<td>35</td>
<td>8</td>
<td>-77</td>
<td>24</td>
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<tr>
<td>Ghana</td>
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(C) Change in Welfare Indicators

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<tr>
<th>Country</th>
<th>Food Availability (per capita calories/day)</th>
<th>Primary School Enrollment (% of age going)</th>
<th>Life Expectancy At Birth (Years)</th>
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<td>Ghana</td>
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<td>-298</td>
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### (D) Export Performance

<table>
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<td>+7.6</td>
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<tr>
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<td>32.2</td>
<td>10.4</td>
<td>-21.8</td>
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</tbody>
</table>


### (E) Output By End Uses (% of GDP)

<table>
<thead>
<tr>
<th></th>
<th>Gross Domestic Investment</th>
<th>Public Consumption</th>
<th>Private Consumption</th>
<th>Resource Balance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>51-60 80 %Δ</td>
<td>51-60 80 %Δ</td>
<td>51-60 80 %Δ</td>
<td>51-60 80</td>
</tr>
<tr>
<td>Thailand</td>
<td>14 27 +93</td>
<td>10 12 +15</td>
<td>77 66 -15</td>
<td>-2 -5</td>
</tr>
<tr>
<td>Argentina</td>
<td>na</td>
<td>na</td>
<td>na</td>
<td>na</td>
</tr>
<tr>
<td>Tanzania</td>
<td>14 22 +57</td>
<td>9 14 +56</td>
<td>72 78 +8</td>
<td>+5 -14</td>
</tr>
<tr>
<td>Peru</td>
<td>24 16 -33</td>
<td>8 13 +55</td>
<td>70 68 -3</td>
<td>-3 +3</td>
</tr>
<tr>
<td>Ghana</td>
<td>15 5 -66</td>
<td>8 9 +18</td>
<td>75 86 +14</td>
<td>+2 0</td>
</tr>
</tbody>
</table>

DLR-030:12/10/86
Output

Revenue/Expenditure

\( Y \)

\( (1-t) Y \)

\( Y^* \)

\( Y_0 \)

\( Y^{**} \)

\( L \rightarrow L_g \)

\( L^*_A \)

\( L_g^* \)

\( L_g^k \)

\( L_g' \)

\( R(t) \)

\( E(t) \)

\( \{ L, L_g^k \} \)

\( \{ L_g, L_g^k \} \)

Fig. 1

Implicit price

\[ \text{Public Good Output} \]

From II
Fig. IV

Real Tradeable Wage $W/P_T$

Real Exchange Rate $P_N/P_T = e$
Chart 2: Exports 1830 to 1975: Indices of volume and dollar value (1900=100)

Source: Figure 1.1, Rosemary Thorp and Geoffrey Betram, Peru 1890-1977, Growth and Policy in an Open Economy, New York, Columbia University Press, 1978, p.5.
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