NATURAL RESOURCE ENDOWMENT, THE STATE AND DEVELOPMENT STRATEGY

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Abstract: This paper speculates that a linear causal chain runs from the natural resource endowment to the landholding system, the type of political state, the choice of development strategy and economic performance. It suggests that resource-deficient countries tend to have peasant-dominated landholding systems which foster autonomous political states and growth-promoting economic linkages. Such countries out-perform resource-rich ones which have more varied landholding patterns which emphasise conflicts over rents and foster factional political states and weaker economic linkages. The preoccupation with rents in resource-rich countries impedes beneficial land reform and creates inefficient industry in a counter-productive effort to create non-farm jobs. Resource-deficient countries cannot afford such inefficient transfers and pursue a development strategy which uses scarce resources more effectively. © 1997 by John Wiley & Sons, Ltd.

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1 INTRODUCTION

This paper speculates on the reasons for the economic under-performance of resource-rich countries (Table 1). Ranis (1991) identifies six factors which impair the achievement of sustained economic development with natural resource abundance. First, rents tend to distract governments from the need to develop human resources. Second, the rents on natural resources divert attention from the process of wealth creation and into rent-seeking activity. Third, resource rents sustain the process of import substitution industrialization long after its contribution to development has waned. Fourth, international trade in natural resources can worsen income distribution so that society equates trade with the interests of the rich. Fifth, the prices of natural resource exports tend to be more variable than the prices of manufactured goods, creating growth collapses in the absence of primary product export

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Resource endowment category	Number of countries	PCGDP growth 1960–90 (% yr)	1970 X PCGDP	1970 GDP (\$ billion)	Cropland (ha/hd)
Resource-poor ^{1,2}					
Large	7 ³	3.5	196	21.048	0.15
Small	13 ⁴	2.5	343	1.937	0.16
Resource-rich					
Large	10 ⁵	1.6	574	22.988	0.56
Small					
Non-mineral	316	1.1	250	1.406	0.57
Hard mineral	167	0.8	304	1.227	0.66
Oil exporter	88	1.7	831	2.011	0.44
All countries	85	1.6	362	5.666	0.48

Table 1.	Characteristics of	of six natural	resource categories.	(Source:	Auty (1995).)
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Notes:

¹Resource-poor = 1970 cropland/head <0.3 hectares.

 2 Large = 1970 GDP > \$6.99 billion.

³Bangladesh, China, Colombia, Egypt, Indonesia, Philippines and S. Korea.

⁴El Salvador, Haiti, Hong Kong, Jordan, Kenya, Mauritania, Mauritius, Nepal, Singapore, Somalia, Sri Lanka, Taiwan and Tanzania.

⁵Argentina, Brazil, Chile, India, Mexico, Nigeria, Pakistan, South Africa, Turkey and Venezuela.

⁶Benin, Burundi, Cameroon, Chad, Costa Rica, Cote d'Ivoire, Ethiopia, Fiji, Gambia, Ghana, Guatemala, Guyana, Honduras, Lesotho, Madagascar, Malawi, Malaysia, Mali, Morocco, Nicaragua, Panama, Paraguay, Rwanda, Senegal, Sudan, Swaziland, Thailand, Tunisia, Uganda, Uruguay, Zimbabwe.

⁷Bolivia, Botswana, Burkino Faso, Central African Republic, Dominican Republic, Jamaica, Liberia, Namibia, Niger, PNG, Peru, Sierra Leone, Suriname, Togo, Zaire and Zambia.

⁸Algeria, Congo, Ecuador, Gabon, Kuwait, Saudi Arabia, Syria and Trinidad and Tobago.

diversification. Finally, Dutch Disease effects may seriously weaken the competitiveness of the non-mining tradeables (Krause, 1995).

All six factors are plausible causes, but Ranis does not provide a model to explain the under-performance of resource-rich countries. This paper examines how such a model might be devised. It hypothesises that a linear causal chain links the natural resource endowment to economic performance via three intermediate links. The three linking factors are:

- the dominant system of land-holding;
- the type of political state; and
- the choice of development strategy.

Following Boserup (1965), this paper considers how intensifying population pressure might alter the nature of the political state and the development strategy adopted. The basic premise is that states which are severely resource-constrained are more likely to be sensitive to peasant interests (Sachs, 1985) than more resource-rich states, and as a result, to stress the efficient use of resources over their dissipation in conflict arbitration.

The paper begins (after this brief introduction) in Section 2 by using the export base model to argue that the land-holding structure is the critical link between the natural

resource endowment and type of state. Section 3 then draws upon the trade policy literature to explore the relationship between the type of state and development strategy. Section 4 examines the final link in the chain, contrasting the economic performance of the differing development strategies. The findings are summarized in section 5.

2 LAND-HOLDING STRUCTURE AND TYPES OF STATE

Export base theory contrasts the economic linkages of export staples and explains the differences in terms of the character of the production function. The landholding structure emerges as an important determinant of linkage efficiency. On the whole, yeoman-dominated temperate staples have, historically, had more favourable economic linkages than plantation-dominated tropical staples have had. This paper increases the utility of the export base theory by broadening it to include the political economy.

Peasant and Plantation Economic Linkages

Export base theory suggests that peasant linkages are more conducive to economic development than those of the plantation, a view strongly supported by Binswanger (1994). Baldwin (1956) attributes this outcome to the staple production function. He develops his thesis with reference to the nineteenth-century US economy and argues that sub-tropical and tropical staples like cotton or sugar have a production function which requires large initial capital investments but thereafter offers little scope for incremental advances in productivity. The result is a plantation society with a skewed income distribution much of whose rent stream may benefit regions overseas. This engenders an enclave economy with stunted fiscal and final demand linkages whose mono-crop structure renders it vulnerable to price shocks and economic stagnation (Auty, 1985).

In contrast, temperate staples like cereals do not exhibit scale economies and they foster a yeoman farm system with an egalitarian income distribution and strong democratic tendencies. They allow incremental productivity gains in response to modest additional investments so that rising incomes yield a stream of taxation with which to steadily upgrade human and produced capital. In addition, strong final demand linkages diversify the economy into manufacturing and services, strengthening the resilience of the economy. Baldwin's model helps to explain the historically disappointing economic performance of regions dominated by capital-intensive staples such as cotton, sugar cane and minerals. But it has difficulty with coffee and cocoa whose production function more closely approximates that of a temperate staple.

A more subtle explanation emerges by also considering the political economy. If a plantocracy can command a supply of cheap labour, its incentive is diminished to upgrade the productivity and skills of the workforce. Lewis (1978) argues that by the nineteenth century the plantocracy in the US South and other colonial or neocolonial tropical regions had secured such a supply of cheap labour. This initially took the form of slave labour and later of low-cost indentured workers from labour surplus South and East Asia. Asian labour was cheap because it could be attracted by offering an income just above that which could be earned by the Asian farmer, whose productivity prior to the application of scientific techniques to tropical food grains lagged that of temperate farmers.

The wage required to attract workers to *temperate* frontier regions was higher than that of European farms. Moreover, the rising productivity of temperate farming exerted constant pressure for higher wages, causing a sharp divergence not only in the price of temperate and tropical labour but also in the linkages. The plantation owners' reduced incentive to substitute capital for labour perpetuated a skewed income distribution and stunted economic linkages. The defence of sunk investment in tropical plantations, whether the cotton gin or the sugar cane mill, creates an inertia in response to falling prices: efforts are directed to cutting costs (in line with the Prebisch thesis) rather than to switching to profitable staples. Adamson (1972) shows that the nineteenth-century plantocracy repressed crop diversification and thereby rendered the economy more prone to growth collapses. Similarly, Binswanger and Deininger (1993) show that in the twentieth century, large white-owned 'yunker' farms in sub-Saharan Africa relied on political intervention to repress the inherently more efficient peasant farms (Binswanger, 1994). But with the diffusion of selfgovernment the linkage patterns change in the erstwhile plantation economies (Auty, 1976; Graham and Floering, 1984; Thoburn, 1977).

The more favourable linkages and greater flexibility of peasant staples compared with plantation staples is therefore sensitive to the type of state. This suggests that some redistribution of resources towards peasant farmers is likely to be justified (Lipton, 1995), but only if the efficiency of the transferred resources is safeguarded as a result of the state ensuring that peasant farmers have adequate access to the inputs required to compete effectively, *and* the incentive to do so.

Land Use Structure, Resource Endowment and the State

A fundamental hypothesis of this paper is that the political importance of peasant farmers increases geometrically as long-term population growth pushes regions from resource abundance (measured in terms of cropland per capita) to resource deficiency, if industrialization lags. As the pressure builds in land-scarce societies then peasant farms are subdivided and pushed towards the minimal survival threshold and their rulers pay greater heed to land redistribution which becomes politically harder to block. By the 1950s, cropland per capita had already fallen below 0.1 hectares in some East Asian countries. At that level, the capacity of farm rents to support unproductive transfers (whether to a landed elite or to a slow-maturing manufacturing sector) is severely constrained. The outcome is likely to be one of economic crisis, political change, land redistribution and a switch in development strategy.

A typology of the political state advances the discussion. Lal (1995) has devised such a typology based on the degree of autonomy which a government possesses and the nature of the objectives which it pursues. His classification is elaborated in Table 2. The most effective type of state from the point of view of economic development is the autonomous benevolent bureaucracy (Table 3), which conforms quite closely (albeit not exclusively) to the developmental state (Leftwich, 1995) and is most common in the peasant societies of East Asia. The various forms of the factional state, which is

Autonomy	Character		Variants	Examples
		[Monarchy	
Autonomous	Benevolent	ĺ	Bureaucratic	Indonesia Chile 1975–90
	Predatory	{	Authoritarian	
, ,	110440019	l	Bureaucratic	Peru 1968-78
]	Democratic	{	Consensual	Botswana Jamaica post-1988 Namibia post-1990
		l	Polarising	Jamaica 1972–88 PNG, Trinidad and Tobago
Fractional				
	Oligopolistic	Į	Plantocracy	Namibia pre-1990
	5.1.	l	Populist	Peru post-1978

Table 2. Typology of political states (After Lal, 1995).

State type	Resource En	PCGDP Growth		
	Deficient	Rich	1960–90 (%/yr)	
Autonomous				
Benevolent	3	1	5.4	
Predatory	1	3	2.2	
PCGDP Growth (%)	5.9	1.7	3.8	
Factional				
Democratic	3	5	2.2	
Oligopolist	3	6	0.7	
PCGDP Growth (%)	1.8	1.2	1.4	
Autonomous and Factional				
Autonomous States	4	4	3.8	
Factional States	6	11	1.4	
All States	10	15	2.2	
PCGDP Growth (%)	3.5	1.3	2.2	

Table 3. GDP Growth and Political State, 25 Sample Countries. (Source: Auty (1995).)

Note:

¹5 small resource-deficient countries = El Salvador, Kenya, Mauritius, Sri Lanka, Taiwan.

²5 large resource-deficient countries = China, Colombia, Indonesia, Pakistan, South Korea.

³5 large resource-rich countries = Argentina, Brazil, Nigeria and South Africa.

 4 5 small resource-rich mineral economies = Namibia, PNG, Peru, Saudi Arabia and Trinidad and Tobago.

⁵5 small resource-rich non-mineral economies = Costa Rica, Guyana, Malaysia, Sudan and Zimbabwe.

less effective as an agent for development, are more common in resource-rich Latin America and sub-Saharan Africa. Two basic variants of the factional state may be recognized which broadly reflect conditions in the two principal resource-rich regions, and they are described below.

Early postwar per capita cropland levels in much of Latin America and sub-Saharan Africa, as well as parts of South and South-East Asia were three or more times those of the more pressured East Asian countries. At higher per capita cropland levels, peasant farmers show greater tolerance towards large estates and unproductive transfers. In resource-rich Latin America, the oligarchy retained power long after independence and the plantation has played a prominent role in the political economy (Lewis, 1978; Findlay, 1988, p. 83). The nineteenth-century factional oligopolies transferred land to the plantocracy, often at the expense of peasant farmers. The rents which such political systems commanded secured the military and administrative support needed to sustain them. Larger farms dominated the flow of government resources in the agricultural sector and any land reform was token in nature (Grindle, 1986). The most densely-settled sub-region, Central America, has regressed sharply from an initially equitable land distribution (Browning, 1971; Durham, 1979). The most land-scarce country, El Salvador, easily crushed peasant opposition to land accumulation until the 1980s by which time, per capita cropland had dropped to 0.13 hectares and civil society broke down.

Although peasant systems are much more common than plantocracies in resourcerich sub-Saharan Africa, the political economy which emerged has repressed the potentially dynamic peasant linkages (Sachs and Warner, 1996; Findlay, 1988). This disappointing outcome reflects ethnic conflicts within heterogeneous societies which quickly slipped from post-independence democracies into factional oligopolies with a strong tendency to regress into authoritarian regimes, invariably of the predatory type (Alesina and Perotti, 1996). Many post-independence governments in sub-Saharan Africa used crop marketing boards not to stabilize peasant incomes but rather to extract revenues initially on the grounds that the state would be a more effective saver and investor. The government revenues extracted often squeezed the rural sector so that both output and government revenues were lower than would be the case under a more rational system (Findlay, 1988). Gelb et al. (1991) model how such a system can depress the overall rate of investment below the level required to maintain per capita economic growth in little more than a decade. Sachs and Warner (1996) estimate that economic growth could be four times faster in sub-Saharan Africa (6 per cent annually), with trade liberalization, improved market efficiency and greater incentives to save.

Yet even where democracy proved more robust in peasant-dominated societies, as in Sri Lanka, Mauritius and Malaysia, the plantation sector was squeezed in order to transfer resources to a lagging peasant sector. This decapitalized the plantation sector in Sri Lanka within two decades (Bruton and Associates, 1992) and led to a protracted economic crisis in the 1970s (Athukorala and Jayasriya, 1994) by which time per capita cropland had halved to 0.14 hectares. A similar process occurred in Mauritius (Findlay and Wellisz, 1993) where per capita cropland reached 0.1 hectares by 1985. In both cases, however, the political crisis transformed a polarized democracy into a consensual democracy with a strong commitment to more efficient resource use and to a labour-intensive industrial development strategy (an outcome subsequently threatened by ethnic strife in Sri Lanka). But Malaysia cautions against drawing overly deterministic conclusions about the link between resource endowment, land holding and the political economy. It is a successful resource-rich country (with 0.28 hectares of cropland per capita in the mid-1980s) whose plantation sector subsidized a lagging peasant sector without seriously impairing economic growth.

In the most land-pressured countries of East Asia, the political outcome of economic crisis has rarely been a Western-style democracy. Rather, an autonomous state has tended to emerge which took one of two forms: either a benevolent bureaucracy (developmental state) as in Taiwan and South Korea; or a command bureaucracy as in China and Vietnam. The former realigned the development strategy with the underlying resource-determined comparative advantage: it maximized the benefits of the peasant linkages as the basis for an initially labour-intensive, export-oriented industrialization drive (Amsden, 1985; Song, 1990). But the command economies at first postponed the realignment of the development strategy by stressing autarky, until the system's lack of sustainability became critical (Rawski, 1979).

Summarizing, the broader pattern is one in which resource-rich countries tend to be associated with factional or predatory states which may repress a potentially dynamic peasant society where a plantocracy retains its dominance or where ethic sub-groups predominate. But, as population growth shrinks the per capita cropland endowment towards 0.1 hectares, such states find it harder to sustain inefficient transfers or to resist pressure for land redistribution. As peasant interests strengthen, the preoccupation of the state shifts from arbitrating conflicts over rents, to securing efficient resource use. The literature on traditional trade policy, examined in the next section, reinforces the conclusions that peasant society has potentially superior linkages; and that efforts to realize that potential intensify in severely resource-constrained countries.

3 FACTOR ENDOWMENT, THE STATE AND DEVELOPMENT STRATEGY CHOICE

Factor Endowment and Trade Policy Theory

This section uses trade policy as an index of the degree of deviation from a country's optimum development strategy. Sachs and Warner (1995b) note that the traditional Heckscher–Ohlin–Samuelson trade theory argues that an opening of the economy favours trade in the abundant factor, generally land in Latin America and sub-Saharan Africa, and labour in Asia. They speculate that in land-abundant countries, landowners will be in favour of free trade in order to raise the export price of food-stuffs and thereby enhance their rents. In contrast, urban workers in such countries would favour trade restriction in order to prevent the export of foodstuffs (so that, by limiting farm export opportunities, domestic food prices are kept lower) and also to reduce the import of labour-intensive goods which threaten the urban workers' jobs. Consequently, if non-landowners are politically powerful in resource-rich countries, then such countries would lean against trade openness.

In land-scarce countries the inverse relationships would be expected to hold. There, traditional trade theory implies that the high labour/land ratios of most Asian countries predispose the workers in such countries, whether rural or urban, in favour

of free trade so as to benefit from the export of labour-intensive goods and the import of inexpensive food. But the minority of large (non-subsistence) landowners in landscarce countries would favour protection in order to raise the price of foodstuffs in the domestic economy. Assuming large land-owners are a minority (and that numbers are reflected in political influence), then resource-deficient countries would be expected to lean towards free trade.

Such 'rational' economic tendencies depend, however, upon the relative weighting of the various political constituencies and are, therefore, conditioned by the political economy. In fact, in resource-rich countries, many postwar governments have shown greater sensitivity to the demands of urban workers than they have to those of their rural constituents. The urban political bias has meant that land-abundant Latin America and sub-Saharan Africa have experienced formidable political opposition to trade opening. The exceptions have been when authoritarian governments have allied with powerful landed interests, as in Pinochet's Chile, or when a consensual democracy has emerged in an ethnically relatively homogeneous society of farmers/ pastoralists, as in Botswana. The anomaly of South Asia, where peasant farmers predominated but protectionism persisted may be explained by the fact that the two most important countries, India and Pakistan, had a relatively high ratio of cultivable land per capita by Asian standards; or by the urban bias thesis (Lipton, 1977).

Resource Abundance, Dutch Disease and Trade Policy

A second set of reasons for expecting resource-rich countries to diverge from an open trade policy stem from the policy response of governments to Dutch Disease effects. The Dutch Disease effects arise in resource-rich countries as a result of commodity booms which trigger both short-term and long-term shifts in prices and resources which adversely affect the competitiveness of the non-boom tradeables (other commodities and manufactured goods).

Sachs and Warner (1995a) find strong evidence of a link between reliance on primary product exports (i.e. resource abundance) and inward-oriented trade policies. They conclude that a bountiful natural resource endowment is indeed likely to lead to protectionist trade policies. Interestingly, they find an inverted U-shaped relationship between resource dependence and trade such that, as resource dependence increases, so economies at first close their trade stance but then open it again at very high income levels (among a group of countries in which the oil-exporters are prominent).

Sachs and Warner speculate that the U-shaped curve is caused by a strengthening of protectionist policies in order to sustain the manufacturing sector in the face of Dutch Disease effects. Such worries over Dutch Disease are lessened, however, at very high levels of resource abundance. For example, oil wealth is reflected in a lower priority on the expansion of domestic industry other than hydrocarbon processing (Auty, 1990). The ultimate release from resource dependence is as a rentier economy (Stauffer, 1985). Lal and Myint (1996) broadly support the conclusions on Dutch Disease in a comparative study of the political economy of 21 developing countries.

Summarizing, the traditional trade literature shows why resource-rich countries are more likely to favour inward-oriented policies. Such policies may reflect the political power balance arising out of a preoccupation with the diversion of rents to the benefit of narrow interests within factional states and/or fears over Dutch Disease effects. The adoption of inward-oriented trade policies creates its own momentum by facilitating the creation of rents to maintain political coalitions. In this way, resource-rich countries are prone to be deflected from their optimum development strategy. The next section examines the trade theory literature for systematic patterns in rent-driven (resource-rich) growth and skill-driven (resource-deficient) growth (Wood and Berge, 1994).

4 DEVELOPMENT STRATEGY AND ECONOMIC PERFORMANCE

Lal (1995) argues that the transition from rent-driven growth to skill-driven growth runs most smoothly in resource-deficient countries. This is because, as capital accumulates in resource-deficient countries, wages also rise and there is therefore likely to be little political opposition to structural change which is in line with the country's changing comparative advantage. This means that even an autonomous *predatory* state may find it advantageous to enhance the country's principal resource, its human capital. Factional democracies should similarly encounter less opposition to skill-boosting policies, unlike factional oligopolies and despotic states, which are distracted by other goals.

The Industrial Transition in Resource-Deficient Countries

The optimum development strategy for resource-deficient countries is summarized in the East Asian development model which is characterized according to Kuznets (1988) by high investment, outward-oriented trade, a small public sector, a competitive labour market and prudent state intervention. The model has four distinct stages. An initial highly protective stage of industrialization (referred to as 'primary import substitution') is supported by transfers of foreign exchange and subsidies from the primary sector. In resource-deficient economies, this soon outstrips the capacity of the primary sector to transfer resources (Auty, 1994a). The first stage is therefore quickly abandoned in favour of the second stage of export-led growth, often encouraged by fiscal and financial assistance to exporters. Access to world markets is essential because the domestic market is too small to support many sectors on an efficient scale.

Two important pre-conditions for the East Asian development model are relatively high levels of primary education and significant land redistribution. Both of these characteristics are consistent with a political economy with a relatively high sensitivity to the basic interests of peasant farmers. The two characteristics also maximize the opportunity for widespread participation in the developmental process. They are associated with a relatively equitable distribution of income which appears to minimize the likelihood of socio-political instability and so reduces political pressure for the redistribution of capital which would likely depress investment and lower the long-term growth rate (Alesina and Perotti, 1994).

The exports, which emerge during the second stage of the East Asian model, tend to be light manufactured goods that are labour-intensive, in line with the comparative advantage of land-scarce countries. But the export expansion eliminates the surplus labour within a decade and demands a shift into higher productivity employment. This triggers the third stage in which the competitive advantage strengthens in heavy and chemical industry (HCI), such as steel and engineering. The fourth stage of the East Asian model shifts investment towards research-intensive goods. The economy is liberalized because it becomes too complex for previous forms of state intervention to be effective.

Overall, the East Asian model has proved capable of closing the per capita income gap between traditional peasant society and the industrial countries within forty years. Meanwhile, the widespread diffusion of the fruits of economic success consolidates the political legitimacy of the state and sustains policy consistency in a self-reinforcing virtuous circle.

The Resource-Rich Countries' More Difficult Transition

In contrast to the resource-deficient East Asian model, the resource-rich countries must make a potentially more difficult transition from rent-driven to skill-driven growth. By definition, the resource-rich countries experience a longer period of growth which is rent-driven. As a result, the supply-price of labour in such economies tends to be high relative to the industrial skills (productivity) of the workforce compared with the resource-*deficient* economies. One important consequence of this is that the resource-rich countries' comparative advantage shifts earlier into sectors of manufacturing which are capital-intensive. For example, Pack and Page (1993) contrast the capital-driven industrial growth of the resource-rich Malaysia, Indonesia and Thailand with the productivity-driven growth of the resource-deficient East Asian NICs.

This dependence on more capital-intensive industrialization carries the risk that the rate of capital accumulation may be too slow, relative to the growth in the workforce, to generate adequate employment so that real wages fall (Lal, 1995). Governments intervene in order to restore wage levels through, for example, HCI Big Pushes or populist booms (Sachs, 1989), encouraged by protectionism and fiscal incentives. Such protectionism is often justified on the grounds of *temporary* assistance against the Dutch Disease effect of an over-valued real exchange rate. But the intervention persists and distorts the economy and leads to growth collapses (Lal, 1995). It creates a slow-maturing infant industry which places a substantial and growing economic burden on the primary sector of the economy (agriculture and/or mining) for transfers of revenue and foreign exchange. Such transfers become unsustainable as the relative size of the primary sector shrinks *vis-à-vis* that of the expanding protected, manufacturing sector (Auty, 1993; 1994b).

Yet the economic reforms required to restore growth are of a duration and severity which mean that even autonomous states, let alone weaker factional states, may not be able to maintain power long enough to capture the benefits of reform (Mahon, 1992).

5 CONCLUSION

This paper speculates that the natural resource endowment is linked by land-holding structure to the political economy, choice of development strategy and economic

performance. As population growth pushes the resource-deficient countries towards a threshold of around 0.1 hectares of cropland per capita, in the absence of labourintensive industrialization, increasing land subdivision prompts political crises which ultimately strengthen peasant interests. Such resource-constrained, peasantdominated societies are conducive to the emergence of an autonomous/developmental state, a form of political economy which is not common in resourcerich countries, and which stresses resource use efficiency over the arbitration of resource use conflicts. But the required adjustment may be associated with a period of prolonged real wage decline and its consequent political difficulties (Sachs, 1996).

Resource-rich countries exhibit a higher tolerance for conflicts over rents, whether between large and small landholders or within ethnically split peasant societies, which foster factional and authoritarian states that promote sectional interests. The resulting 'government capture' in the resource-rich countries is associated with the adoption of inward-oriented trade policies. The rent conflicts repress peasant society where the plantocracy dominates; and they decapitalize plantation/mine enclaves where ethnic or urban dominance stresses redistribution at the expense of long-term economic growth.

Overall, the lower tolerance of resource-deficient countries compared with resource-rich countries for inefficient resource use, together with their more constrained choice of development strategy, leads to more effective forms of government. Such governments pursue a skill-enhancing development strategy within a more open trade regime that is in line with the optimum development strategy. The resulting greater efficiency of resource use enhances economic performance to complete a selfreinforcing virtuous circle.

REFERENCES

- Adamson, A. H. (1972). Sugar Without Slaves: The Political Economy of British Guiana 1838–1904. New Haven, CT: Yale University Press.
- Alesina, A. and Perotti, R. (1996). 'The political economy of growth: A critical survey of the recent literature', World Bank Economic Review 8, 351–371.
- Amsden, A. (1985). 'The state and Taiwan's economic development'. In Evans, P. B. (ed.) Bringing the State Back In. Cambridge: Cambridge University Press, pp. 78–106.
- Athukorala, P. and Jayasuriya, S. (1994). *Macroeconomic Policies, Crises, and Growth in Sri Lanka, 1969–90.* Washington, DC: World Bank.
- Auty, R. M. (1976). 'Caribbean sugar factory size and survival', Annals Association of American Geographers, 66, 76-88.
- Auty, R. M. (1985). 'Export base theory, staple flexibility and tropical regional growth', *Singapore Journal of Tropical Geography*, **6**, 13–22.
- Auty, R. M. (1990). *Resource-Based Industrialization: Sowing the Oil in Eight Exporting Countries*. Oxford: Clarendon Press.

Auty, R. M. (1993). Sustaining Development in Mineral Economies. London: Routledge

Auty, R. M. (1994a). 'Industrial reform in six large newly industrializing countries: the resource curse thesis', *World Development*, **22**, 11–26.

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