

Patterns of Rent-Extraction and Deployment in Developing Countries: Implications for Governance, Economic Policy and Performance

Abstract

Rents tend to be relatively high in developing countries and also very fungible, so that differences in the scale of the rent and in its distribution among economic agents profoundly affect the nature of the political state and the development trajectory. This paper identifies two basic trajectories to a high-income democracy linked to the scale and deployment of rents. Low-rent countries tend to engender developmental political states that competitively diversify the economy and sustain rapid per capita GDP (PCGDP) growth, which strengthens three key sanctions against anti-social governance (political accountability, social capital and the rule of law) to achieve endogenous democratisation that is incremental. In contrast, rent-rich countries are likely to experience a slower and more erratic transition. This is because high rents tend to nurture non-developmental (predatory) political states whose deployment of the rent locks the economy into a staple trap, which carries a high risk of a growth collapse. The events presaging a growth collapse weaken sanctions against anti-social governance. However, a growth collapse may abruptly trigger democracy if exogenous factors are favourable, although such a change is likely to prove unstable and prone to regression. Very preliminary tests of the link between PCGDP growth and sanctions against anti-social governance suggest that social capital and law strengthen as predicted by the models for low-rent countries, but political accountability lags. Rent-rich countries exhibit the expected weaker link between PCGDP growth and democratization, an outcome consistent with a more erratic transition towards a high-income democracy.

Paper Prepared for the Poverty Reduction and Economic Management Unit (PREM) Seminar, World Bank, Washington DC, April 27th 2004

Richard M. Auty
Lancaster University
Lancaster LA1 4YB UK
Phone: 044-1524-593751
Fax: 044-1524-847099
e-mail: r.auty@lancaster.ac.uk
Draft: literature:PREM3.doc: 15/04/04
Word count: 9,350

Working Paper: Please Don't Cite

1. The Context

Attempts to model the political economy of the developing countries' transition to high-income democracies proliferate, despite scepticism that the process is too complex and idiosyncratic to generalise (Haggard 1990, 3-4). Many economists (Barro 1996, Barro 1999, Feng and Zak 1999) and political scientists (Lipset 1959, Jackman 1973, Burkhart and Lewis-Beck 1994) support a consensus view that per capita income is positively associated with political accountability: rising income 'causes' government to improve.

The consensus has not gone unchallenged, however. For example, Kaufmann and Kraay (2002) suggest that the causal direction may be the reverse of the consensus. Zak and Feng (2003) report that transitions to democracy can occur if economic growth falters. Elsewhere, Przeworski et al. (2000) claim that rising per capita income does not change the likelihood of transition to democracy although it does reduce the probability of regression. They explain this by the fact that the gains from a shift to democracy attenuate at high-income levels due to the declining marginal utility of the redistribution gains, whereas the losses from any associated destruction of capital stock (due to violence) strengthen with rising incomes. However, two recent studies (Boix and Stokes (2003) and Epstein et al. (2004)) convincingly challenge Przeworski et al. (2000).

The explanations proffered for these contested outcomes are rather parsimonious. For instance, Barro (1999) notes the 'surprising' lack of a theory that might inform the debate. This paper draws upon recent theoretical and empirical literature to help fill this gap and also to reconcile the contesting views. It reflects early work on a planned research programme into how the political state in developing countries is affected by differences in the scale of the economic rent and how the rent is extracted and deployed. The paper therefore presents themes for further research rather than definitive findings.

Three basic categories of rent are commonly identified in developing countries, namely natural resource rent, contrived rent (or government monopoly rent) and geopolitical rent (reflecting the revenues that states extract from the global community through strategic alliances, humanitarian concerns or terror threats). All three rents are relatively high because most developing countries still depend on their primary sectors (which boosts the relative importance of natural resource rent); they often receive sizeable amounts of external aid (geopolitical rent) and, they tend to have fallible institutions (rule of law, property rights, legislative assemblies and bureaucracies), which tendency increases both the temptation to extract contrived rent and the risk of its sub-optimal deployment. Within specific developing countries each of the three rents can measure up to tens of percent of GDP and in aggregate they not atypically range from 15-50% of GDP (and more during commodity price surges like the 1974-78 and 1979-81 oil booms). Rent on such a scale attracts competition from political and economic agents and its capture can severely distort the political economy at the expense of broad-based welfare.

This paper derives a dynamic political economy model from two rent-driven stylised facts economic models, namely the Competitive Industrialisation Model (CIM), which is associated with low rents and the Staple Trap Model (STM) linked to high rents. These

rent-driven economic models suggests that the smaller the rent relative to GDP and the more diffusely it is spread across economic agents, the greater the probability of engendering a developmental political state¹ (Table 1) that competitively diversifies the economy to sustain rapid growth in per capita GDP (PCGDP) (Auty and Gelb 2001). This economic trajectory incrementally strengthens three sanctions against anti-social governance (political accountability, social capital and the rule of law) to foster endogenous democratisation.

The CIM prediction of a developmental political state is rooted in the observation that limited rent-seeking opportunities in resource-poor countries concentrate government efforts on wealth creation through the provision of public goods and the maintenance of efficiency incentives. If government income depends wholly on taxation of productive activity rather than drawing also upon rent extraction, the political state retains strong incentives to pursue policies that encourage economic inputs to be deployed efficiently. Consequently, the economy adheres to its comparative advantage, which for a resource-poor country initially lies in competitive industrialization², which promotes endogenous democratization.

The corollary is that the larger the rent relative to GDP and the more concentrated it is on a handful of economic agents, the greater the probability of engendering a non-developmental political state that presides over a growth collapse (the STM development trajectory) and represses political accountability. However, a growth collapse may trigger an abrupt switch to democracy where exogenous factors are favourable. This exogenous democratisation trajectory is therefore likely to be erratic and unstable.

This paper focuses upon the elaboration of the political component of the political economy models. It begins in the next section, section two, by establishing a six-fold classification of political states linked to differences in the scale and deployment of the rent. The typology identifies parallel low rent and high rent variants of the basic stylised transition from an autocratic state to a democracy via an oligarchy. Section three explains the link between the CIM development trajectory and endogenous democratization. Section four links exogenous democratisation to the high-rent STM trajectory. Section five reports simple preliminary tests of the predictions of the endogenous and exogenous democratisation models. Section six briefly illustrates some policy implications while section seven summarises the findings, and suggests a research agenda.

2. A Rent-Based Typology of Political States

This section elaborates a rent-driven typology of political states from the typologies of Lal (1995), Olson (2000a), Auty (2001) and Eifert et al. (2003). Olson's (2000a)

¹ A developmental political state is defined here, after Lal (1995), as one that has sufficient autonomy to pursue a coherent economic policy and the aim of raising social welfare, and it may be autocratic.

² Industry tended to be the motor for economic transition during the nineteenth and twentieth centuries, but it is increasingly recognised that some services may perform that role, so the specific product is less important than the lead sector's capacity to rapidly accumulate all forms of capital by flexibly re-combining inputs in response to the changes in the relative prices of factors of production as development proceeds.

evolutionary typology provides a useful starting point. His basic premise is that the incentive for a government to provide public goods (and thereby reduce transaction costs and strengthen investment incentives) increases as the political state encompasses the interests of a wider fraction of society. Olson's four basic categories of political state assume a progressive improvement in governance moving from the roving bandit state (conceived as a pillaging warlord) to a democracy, via two intermediate stages, namely the stationary bandit state (an autocrat) and the oligarchic state.

More specifically, whereas the roving bandit plunders a region and moves on to the next region, the stationary bandit has a longer time horizon due to the need to ensure a sustained income stream from the region of residence, which is the region being exploited. The stationary bandit therefore maximizes his income by providing some public goods that facilitate exchange (such as law and order, income-related taxation and essential infrastructure) and leaving producers with sufficient revenue to retain an incentive to increase output. An oligarchy reflects the capture of the political state by a political group that administers patronage in a more collegiate manner than either form of autocratic state. It will tax less than a stationary bandit does and will also invest more in public goods. This is because, unlike either bandit state, the elite in an oligarchy is a producer of goods as well as a consumer of rent so it benefits directly from incentives to boost output and it is also less dependent for its income upon siphoning off rents. In other words, an oligarchy has wider encompassing interests than a stationary bandit state does. Finally, a democracy embraces even wider interests and therefore promotes conditions still more conducive to broad-based wealth creation.

Olson's system can be usefully elaborated into a six-category typology (Table 2) by recognising low-rent and high-rent variants of the three basic types of political state (autocracy, oligarchy and democracy). The typology identifies two paths from autocracy to democracy: one is likely to nurture developmental governments under the incentives conferred by low rents and the other is a high-rent path linked to more predatory governments. The six-fold typology can be further extended to enhance its flexibility by recognising sub-groups of the basic types, and some examples are given below. However, the main purpose of the remainder of this section is to explain the principal features of the six political states in Table 2.

Olson assumes the stationary bandit state will be benevolent and, relative to the roving bandit this may be true, but empirical evidence suggests it is useful to acknowledge how differences in rents affect the conduct of stationary bandit states. For example, Olson's stationary bandit category includes rent-poor South Korea during 1963-87 along with rent-rich Azerbaijan and Turkmenistan. Yet whereas the South Korean elite was careful to enrich itself without allowing rent seeking to damage GDP growth and welfare gains (Khan and Jomo 2000), both rent-rich Caspian Basin governments conferred wealth in the 1990s on an autocracy even as basic services deteriorated and poverty increased. If stationary bandit states are likely to be benevolent in rent-poor countries and predatory in rent-rich ones, it is useful to formally identify benevolent and predatory variations of the autocratic state (Table 2). In this context, Olson's roving bandit state may be regarded as an extreme variant of the predatory autocracy, one of several extensions to the typology

that enhance its flexibility. Saudi Arabia provides an example of an extreme variant of the benevolent autocracy, which is paternalistic, as identified by Auty (2001) and Eifert et al. (2003, 89). The latter also recognise a reformist autocracy (benevolent autocracy in Table 2) and predatory autocracy (the same in Table 2).

It is similarly useful to distinguish more than one form of oligarchy because a *low-rent* oligarchy is likely to rely more on wealth creation and less on rent siphoning than a high-rent oligarchy is. In addition, a low-rent oligarchy will increasingly comprise industrialists rather than landowners because the low-rent CIM development trajectory diversifies early into manufacturing (as explained in Section 3). According to Acemoglu and Robinson (forthcoming) industrialists are likely to form a diffusing oligarchy, a category recognised in Table 2 (second row). This is because industrialists rely more heavily on cooperation from an urban workforce to sustain their wealth than landowners do and also the assets of factory owners tend to be more concentrated and vulnerable. A diffuse oligarchy is also likely to exhibit sufficient plurality to impose checks and balances on what any sub-group can gain from policy capture. Moreover, an oligarchy with a diffuse structure has within it the seeds of its own dissolution because the political jockeying it entails is likely to encourage the co-option of outsider groups, most likely factions of the middle class, so that the political system is one that increasingly shifts towards a democratic political state. Nineteenth century Britain provides an illustration of a diffusing oligarchy (Lizzeri and Persico 2003)³. In contrast, a high-rent oligarchy can use the rent to sustain its monopoly and by force if necessary, whether the collegiate group comprises landowners, the military or a dominant ethnic group.

Finally, it is useful to distinguish between polarised and consensual democracies (respectively, the ‘factional’ and ‘mature’ democracies of Eifert et al. 2003, 89). The STM explains why high rents polarize income distribution and society, and stimulate the formation of political coalitions for against income redistribution. Such a polarised democracy struggles to sustain economic growth because elections bring abrupt and large changes in policy, which undermine the coherence of economy policy and diminish investor confidence. Jamaica, Mauritius and Malaysia provide interesting examples.⁴ In

³ Lizzeri and Persico (2003) argue that concern for the inadequate provision of urban public goods was the dominant factor behind an incremental widening of the franchise. During the early decades of the nineteenth century, rising urban mortality fuelled demands to redirect public funds from the pork barrel patronage of an autocratic government towards improving public goods, notably urban sanitation. Lizzeri and Persico (2003) demonstrate that the 1832 electoral reform triggered this process, which did not increase its share of GDP but rather shifted it towards local government and urban public goods provision. The redirection of public funds continued for a century and the periodic widening of the franchise incrementally transformed a diffusing oligarchy into a democracy.

⁴ For instance, in post-independence Jamaica, the two leading political parties polarized the electorate because each party built a political coalition either to promote major wealth redistribution or to protect the status quo. The 1972 election triggered an abrupt swing in economic policy that promoted rapid redistribution, deterred investment and led to a spectacular growth collapse in the late-1970s. Mauritius provides a second example. Its political state exhibited a similar polarization to Jamaica prior to the 1970s when sugar plantations dominated the economy. Thereafter a shortage of land installed competitive labour-intensive industrialization as the economic motor, ushering in a phase of consensual democracy in which each party backed wealth creation over redistribution (Findlay and Wellisz 1993). Malaysia provides an interesting anomaly where the adverse effects of polarisation were recognised and avoided through an

contrast, as Section 3 now shows, low-rent economies are less likely to have a highly skewed income distribution, while in addition economic success builds a consensus in favour of an economic policy that promotes wealth creation over redistribution (Row 3, Table 2) Consequently, policy differences between political parties within a consensual democracy are modest so that elections do not bring abrupt changes and economic policy is more coherent. The next section explains why low-rent political states are likely to evolve incrementally towards a consensual democracy, in marked contrast to high-rent political states.

3. The Endogenous Democratisation Model

This section explains endogenous democratisation by linking the CIM development trajectory to three sanctions against anti-social governance (political accountability, social capital and legal institutions).

Low-Rent Growth: The Competitive Industrialisation Model

The CIM model explains why low rents limit the period of dependence on primary product exports and nurture early industrialisation (at a relatively low per capita income), which is both labour-intensive and competitive and triggers beneficial economic and social circles (Auty 2001). Focusing on the virtuous economic circle, early industrialization also entails early urbanisation, which speeds passage through the demographic cycle, lowering the rate of population growth. This improves the worker/dependent ratio and raises the rate of saving and investment in GDP (Figure 1). It also rapidly absorbs surplus rural labour so that labour costs rise and propel diversification into capital- and skill-intensive industry. This competitive diversification of the economy in turn sustains investment efficiency and strengthens the resilience of the economy, so that the CIM achieves rapid and sustained PCGDP growth.

As for the virtuous social circle, income distribution is equitable because the early elimination of surplus labour puts a floor under the wages of the poor and the rapid accumulation of human capital caps the skill premium. In addition, competitive urbanisation (as opposed to dependent urbanisation under high-rent growth) is associated with the rapid accumulation of market enhancing social capital (Woolcock et al. 2001).

In this way, the competitive industrialization trajectory rapidly accumulates produced capital (Auty and Kiiski 2001), human capital (Birdsall et al 2001) and social capital (Woolcock et al. 2001). It also sharply raises the genuine saving coefficient, implying that the trajectory is strongly sustainable (Hamilton 2001). Per capita incomes can double every ten years so that the transition from poverty to a mature economy can occur in less than two generations compared with more than five generations for the developing countries on average, according to Syrquin (1986, 232).

CIM Trajectory, Sanctions v. Anti-Social Governance and Endogenous Democratization

agreement that redistribution towards the low-income Malay majority should not be at the expense of the wealth-generating capacity of the large Chinese minority.

The CIM trajectory strengthens political accountability for two main reasons. First, competitive industrialisation rapidly restructures the economy away from its initial dependence on the primary sector so that the relative importance of natural resource rents declines early (Syrquin 1986), creating pressure to diversify tax revenue away from commodity and export taxes towards sales, income and profits taxes. This trend intensifies pressure for greater political accountability regarding how public revenue is raised and allocated. Lizzeri and Persico (2003) describe just such a self-reinforcing interaction for nineteenth century Britain.

Second, along with the swift relative decline of the primary sector, the proliferation of competitive manufacturing shrinks the scope for state intervention and rent seeking, effectively de-politicizing the economy (Ranis and Mahmood 1992). For example, Aslund (2000) reports an inverse relationship between increasing reform (i.e. greater competition) and the scale of rent seeking in the Russian Federation. After initially stalling, Russian reform briefly restarted during 1994-95 and this shrank both rents and inflation but when reform stalled a second time rent-seeking opportunities re-expanded. Li et al. (2000, 284) set out the basic insight with reference to China: 'All government bureaucrats seek rents and are reluctant to give up their power. However, without a monopoly, rents can be guaranteed only by improving the efficiency of their firms.' They show how growing competition between firms in adjacent administrative areas exerted pressure on local governments to strengthen efficiency incentives so that the governments can escape onerous charges from loss-making firms. The local governments achieved this by establishing profit-sensitive co-operatives like town and village enterprises (TVEs) in place of state-owned enterprises (SOEs) or by allowing entry of new private firms. Consistent with this thesis, privatisation of state assets in China proceeded fastest where competition was most intense, as with simple undifferentiated products or where transport costs fell sharply, as in the Southeast coastal provinces. It also proceeded faster at lower tiers of government where the absence of scale economies facilitated entry by new firms and officials had least administrative and legal leverage to protect firms.

The second sanction against anti-social governance, social capital, may continue to be effective where political accountability regresses, as recently shown in Georgia. The World Bank (1997, 81) defines social capital as the group knowledge and trust backed up by sanctions that facilitate economic exchange by reducing uncertainty and risk. In economic terms social capital manifests itself in variations in transaction costs between regions and countries (Djankov et al. 2003). In sociological terms the two principal components within social capital are civic spirit and civic associations. Civic spirit is defined as the reluctance of individuals within society to take advantage of private misfortune or public administrative error. Civic associations are horizontal networks such as membership of societies for politics, professions, environment, arts, sport and trade unions that build trust.

Evidence is emerging that the rate of social capital formation traces an S-shaped curve with rising per capita income, accumulating slowly at first before accelerating through mid-income levels as urbanization peaks and then decelerating at high-income levels. At low-income levels transaction costs are high because many markets are missing due to

the low density of *economic* activity and absence of the physical infrastructure that facilitates exchange.⁵ In these circumstances, most transactions occur over short (i.e. local) distances (Woolcock and Narayan 2000) and are facilitated by bonding social capital because it provides individuals with insurance against risk, although the community as a whole is not protected from unforeseen shocks. However, bonding social capital can stifle innovative and entrepreneurial activity, thereby impeding development at low-income levels (Stiglitz 1995). This is because bonding social capital often requires any gains accruing to an individual, whether from luck or unusual diligence, to be shared among the group, hampering wealth accumulation and thereby depressing individual incentives to innovate.

As development proceeds, however, urbanization allows individuals to reduce their dependence on local groups by extending social links beyond the individual village or town through regional associations. Such *linking* social capital provides an alternative means of risk reduction to bonding social capital but imposes fewer redistributive claims than bonding social capital. Moreover, expanding spatial horizons also allow scale thresholds to be crossed to create viable markets and increase the division of labour. Social capital therefore accumulates fastest in low-rent countries because urbanization occurs earlier than in resource-rich countries, and is characterised by atomised transactions negotiated out of mutual self-interest, as opposed to the dependent social capital associated with rent-driven urbanization. Consequently, low-rent countries accelerate both the emergence of an integrated settlement hierarchy (of villages nesting in the hinterlands of towns, which in turn nest in those of cities) that promotes competitive markets and the formation of a resilient linking social capital.

At high-income levels, however, the rate of social capital formation may decelerate or even regress because institutions and pressure groups become so specialized and powerful as to *raise* transaction costs (Killick 1995) by pursuing single-issue interests at the expense of the broader social interest, which is more diffuse and less vigorously defended. These 'Olson effects' are particularly associated with countries that enjoy prolonged periods of stability like the USSR prior to the late-1980s (Olson 2000b) and the legacy can persist (Jones Luong 2002).

Finally, formal legal institutions increase in importance as economic development proceeds, relative to social capital because; 'large anonymous markets are more effective than [informal] networks because the 'best' buyer or seller may not be part of the network,' (Serageldin and Grootaert 2000, 213). Such markets require the creation of effective institutions, notably a legal system and property rights. Clague et al. (1997, 67) concur, and argue that 'societal differences in property rights and contract enforcement

⁵ Rural India in the 1960s provides examples of market failure. The basic unit of socio-economic organisation, the village, was too small to support competitive banking, crop markets and an all-weather road (Johnson 1970). In the absence of these facilities, little progress could be made in specialising in high-productivity crops, whether the response required to boost incomes where land is becoming scarce and labour relatively abundant. Meanwhile, real interest rates might reach triple figures (Johnson 1970) and a location more than 4 kilometres from an all-weather road render transport costs too high to allow villages to adopt green revolution technologies (Owen 1967).

mechanisms are an important part of the explanation of why some countries prosper while others do not'.

There is evidence that increasing competition (and decreasing rent dependence) with rising PCGDP along the CIM trajectory strengthens demands from businesses to improve property rights and the rule of law. For example, SOE managers in China demanded strengthened legal guarantees for transactions and property rights as they assumed more responsibility for becoming self-funding (Li et al. 2000). The process acquired a self-sustaining momentum as competitive markets proliferated.

4. The Exogenous Democratisation Model

We now examine the link between the STM development trajectory and sanctions against anti-social governance, but first we summarise the main features of the STM.

High-Rent Growth: The Staple Trap Model

In the resource-rich developing countries, the presence of resource rents, which typically ranged between 13-21% of GDP in the mid-1990s (Table 3), increases the attraction for governments of capturing and distributing the rents and thereby diverts effort away from promoting wealth creation. It also extends the period of reliance on primary product exports, which delays competitive industrialization (Lal and Myint 1996). Under a non-developmental political state the virtuous economic and social circles of early labour-intensive industrialization are omitted so that competitive diversification of the economy is aborted and incomes polarise. The resulting staple trap development trajectory accumulates human capital and social capital more slowly and erratically than the competitive industrialization trajectory. A caveat is in order, however, where governments of resource-rich countries are motivated to generate wealth in order to placate a large low-income rural constituency, as for example in Malaysia and Indonesia. In such circumstances, the political state may remain developmental so that competitive industrialization is merely retarded, rather than aborted (Auty and Gelb 2001).

More usually, however, the incentive to boost rural welfare has been rare in resource-abundant countries in recent decades, so that the capture of natural resource rents has more typically deflected the political state from nurturing wealth creation and into predation. Moreover, the longer reliance on primary product exports under a predatory political state does not merely retard *competitive* industrialization, but instead postpones it indefinitely. This is because in the absence of rapid labour-intensive industrialization, surplus rural labour persists and prompts the government to use the rents to create employment directly and inefficiently instead of indirectly by nurturing efficient wealth creation. Consequently, diversification occurs into an over-expanded government bureaucracy and protected industry, which is not only inefficient but also, ironically, capital-intensive (Auty and Gelb 2001).

Far from achieving competitive diversification, the staple trap trajectory renders an increasingly large sector of the economy dependent on subsidies from the rent. This

expanding parasitic sector absorbs a greater share of resources so that the economy-wide efficiency of investment is depressed and GDP growth slows. Yet the rent recipients form a powerful vested interest and block economic reform. Therefore, as the rents shrink relative to GDP, either because of ongoing structural change or falling prices for the leading commodity, a non-developmental government finds it politically attractive to sustain transfers to the parasitic sector by extracting the returns to capital as well as the rent from the commodity sector. But this depresses incentives in the primary sector and erodes its competitiveness. This is the essence of the staple trap model: a predatory political state uses rent to subsidise employment and thereby aborts competitive diversification so the economy is increasingly vulnerable to shocks and a growth collapse (Figure 2).

STM and Sanctions Against Anti-Social Governance

Ross (2001) notes that oil-rich governments have the highest rents among the developing countries, which they have used to reduce taxation, which in turn weakens demands for representation and democratic accountability. As the GDP growth rate decelerates along the staple trap trajectory, competition for the rent stream intensifies so that, far from depoliticizing the economy, the staple trap trajectory increases government intervention. Krueger (1993, 61-73) attests that the resulting system of overt and covert levies and subsidies becomes too complex for either policy-makers or economic agents to understand the cause and effect relationship. In addition, the diversification of public finances stalls and 'taxation' may extract a sizeable fraction of the return to capital and labour in the primary sector to meet the demands of the parasitic sector when these demands outstrip the rent-generating capacity of the primary sector. This is especially likely in the presence of natural resource extraction that is characterised by high sunk costs (McMillan 1997). Far from strengthening, therefore, political accountability regresses as the collision between the expanding patronage system that hitherto sustained the authority of the government and shrinking rents renders the political state brittle so that it concentrates rent on key supporters and resorts to repression to maintain its control.

Social capital formed under rent dependence, as with the parasitic urban sector that is characteristic of most rent-rich countries (Gelb et al. 1991), is likely to prove distinctly less effective as a sanction against anti-social governance compared with the more autonomous civic associations produced by competitive urbanisation. A second cause of atrophying social capital under dependent urbanisation is the fact that a growth collapse reduces per capita income and thereby increases corruption and rent seeking (Treisman 2002). The fact that most developing countries are rent-rich may explain why Barro (1999) finds little evidence that (dependent) urbanization is more strongly associated with voice and political accountability than rusticity.

Corruption also weakens institutions like the rule of law. This is partly because a growth collapse depresses public sector revenues and is associated with declining real wages in the public sector. The resulting under-remuneration provides an incentive for public officials at all levels of government to augment their incomes by abusing the government monopoly of public service provision. Atomised corruption therefore undermines the integrity of the legal system and sharply raises transaction costs (Mauro 1995). In the

absence of effective formal institutions, able people may find rent-seeking much more lucrative than work in legitimate channels. Social sanctions such as shaming also appear to be ineffective in such circumstances so corruption plays a central role in corroding social capital.

It therefore seems plausible that all three sanctions against anti-social governance will stagnate or regress along the STM trajectory as PCGDP growth decelerates and governments dependent on dispensing rent to maintain their authority resort to repression. However, a growth collapse may abruptly trigger democracy, if exogenous factors are conducive. One such favourable external factor is the conditional provision of geopolitical rent by high-income democracies, which is most likely to occur after a growth collapse and this is also when it is at its most effective (Mayer and Mourmourus 2002). Relative location, in the form of a regional neighbourhood effect, is a second exogenous determinant of political evolution according to the political science literature. For instance, O'Loughlin et al. (1998) document global regional fluxes between democratic and autocratic regimes since 1946, which point to a strong regional demonstration effect. They link this to shared contextual constraints: 'At the meso-level [global regional level], certain types of regionally clustered states are more susceptible to democratization than other regions due to 'snowballing' or contagion effects from neighbours. The internal conditions in neighbouring states are typically similar and they provide similar impetus toward regime transition.....' (O'Loughlin et al. 1998, 549).

De Soysa (2003) finds further evidence to support the spatial diffusion of democracy, based on the regression of institutional, economic and social factors on the Polity III index of democracy. He shows that levels of PCGDP and urbanization are positively associated with democracy, whereas negative associations arise for growth collapses, oil dependence and Muslim religion. The addition of regional dummies deflates the importance of PCGDP as a determinant of democracy, however, and strengthens regional conformity. It therefore seems likely that democracy diffuses geographically and survives where neighbours are not hostile to it.

The exogenous democratisation path may therefore explain the fact that the shift towards democracy has historically often required external pressure to come to fruition (O'Loughlin et al. 1998, 552). For example, Whitehead (1986) finds very few instances of democratization that can be attributed to purely endogenous factors. He concludes that outsiders have heavily influenced the vast majority of democratization episodes, but he makes no attempt to qualify the generalisation according to growth experience or resource endowment.

In summary, the link between exogenous democratization and growth collapses in rent-rich countries, which can occur at almost any income level, yields a less predictable and more erratic pattern of political evolution for high-rent countries compared with low-rent countries. It also suggests that there is more likelihood that high-rent countries may regress or that, at least, a prolonged period of consolidation of democracy may characterise such rent countries, especially at lower income levels. Such an outcome is consistent with the recent finding of Epstein et al. (2004) who usefully identify a category

of ‘consolidating democracies’ as a neglected sub-group of political state among developing countries.

5. Simple Tests of the Model Predictions

This section reports some very preliminary tests of the political economy models. Table 4, drawn from a paper by Woolcock et al. (2001), provides a rough and ready test of the evolution of political accountability. It uses a country’s export dependence as a proxy for its natural resource endowment, so that low-rent developing countries are identified as exporters of manufactured goods. Table 4 (main column 1) confirms that political liberty is significantly higher among manufacturing exporting (low-rent) countries. The differences are not large, however, given the full range of that particular scale and the fact that, as a group, the low-rent countries have a higher PCGDP than the high-rent countries. These doubts about the endogenous democratisation model’s predicted strengthening of political accountability with increasing PCGDP are reinforced by a second test, based on the World Bank (2002) perceptions index of voice and accountability (Table 5). Moreover, the correlation coefficient for PCGDP and voice and accountability is not significant for the resource-poor countries (Table 6). It is also relatively weak for the resource-rich countries, but this is not inconsistent with the exogenous growth model.

Regression analysis for PCGDP and voice confirms the absence of the predicted significant relationship among the resource-poor countries (Table 7), but the scatter plot helps show why (Figure 3). The voice indices of all three Chinese territories are significantly below the expected levels, given their PCGDP and if they are excluded from the regression, the R^2 quadruples to 0.59 and becomes significant. The fact that South Korea, as well as Hong Kong and Singapore, among the higher income resource-poor countries also has a lower voice index than is predicted by the adjusted trend line suggests that political accountability may lag in high-growth low-rent countries, even when they espouse democracy. One possible reason for this is that historically justified expectations of continued sustained rises in welfare ease pressure for more political accountability. Finally, among the resource-rich countries, the R^2 for voice and PCGDP is significant but only 0.22 (Table 7), indicating that as expected with exogenous democratization, voice has little connection to PCGDP. However, the scatter about the trend line narrows at higher income levels for these countries.

Column 3 in Table 4 tests the social capital thesis using a social development indicator, which is based on a factor analysis of a range of variables determined by Adelman and Morris (1967). The index suggests that social capital does accumulate faster in those developing countries that export manufactured goods (i.e. low-rent countries) than in rent-rich countries, in line with the competitive industrialization model. The social development index is by far and away highest for the low-rent countries.

Corruption affords a second (proxy) index of the social capital endowment, being higher where social capital is weaker (Treisman 2002). Table 5 shows that the resource-poor countries have less corruption, measured by the World Bank (2002) index of graft than

the resource-rich countries. The correlation coefficient for graft and PCI in Table 6 confirms a significantly stronger inverse relationship between per capita GDP and corruption for the low-rent countries compared with high-rent countries. Finally, consistent with the endogenous democratisation model, regressing graft upon PCGDP provides a strongly significant and high R^2 of 0.831 for the low-rent countries compared with 0.368 for the high-rent countries, which as expected exhibit much more variation around the trend line (Figure 4).

Finally the index for rule of law in Table 4 (column 5) suggests that exporters of manufactured goods (low-rent countries) enjoy markedly stronger rule of law than the three resource-rich groups. In addition, Table 5 shows that low-rent countries have stronger legal institutions than low-rent countries. The correlation coefficients in Table 6 for this same relationship reinforce this pattern: the correlation coefficient for low-rent countries is strongly significant ($p = .000$) and 0.897 compared with 0.683 for the high-rent countries. Finally, the R^2 for the regression of law on PCI is strongly significant in each category of rent endowment and a very high 0.804 for the low-rent countries compared with only 0.467 for the high-rent group (Table 7 and Figure 5).

Summarising, in the cases of social capital and law, but not political accountability, the data support the prediction of the endogenous democratisation model that sanctions against anti-social governance strengthen with rising PCGDP for low-rent countries. The low reading for political accountability is strongly affected by limited freedom in all three Chinese-speaking low-rent territories, but even when these territories are removed it remains significantly weaker than the other two sanctions. This lag may reflect the readiness of citizens in developmental states to trade-off political freedom for sustained growth in PCGDP.

6. Some Policy Implications

The development of a strategy for reforming the *political economy* of collapsed high-rent countries will provide an example of the policy implications of the models developed here. Although successful economic reform can reinforce democratic consolidation by triggering rapid GDP growth, the reform of collapsed high-rent economies over the past two decades has proved disappointing, with growth often two-thirds or half the targeted rate, so that PCGDP growth rates were often negative (Table 3). Within the reform packages, programmes for economic stabilisation have been more successful than those for economic restructuring. However, slow or negative PCGDP growth undermines stabilisation efforts, trapping economies in a slow-growth trajectory that also undermines the political consolidation of reforming regimes. A principal cause of failed restructuring is opposition from vested (rent-capturing) interests that stand to lose from reform, which either block reform or capture the policy and bend it to their advantage (Auty 2002).

In the face of blocked reform, geopolitical and/or natural resource rents might be directed towards supporting a dual track reform programme. The essence of the dual track reform strategy is to grow a dynamic market sector in early reform zones (ERZs) equipped from

the very outset with post-reform (world class) infrastructure, economic incentives and institutions. The dynamic market sector not only creates conditions conducive to rapid GDP growth, but just as importantly it also builds a pro-reform political constituency while initially leaving the rest of the economy (termed the 'lagging sector') and its anti-reform political interest groups, to be reformed gradually.

This dual track reform strategy has been systematically applied by China since the 1980s. But other successful structural reformers have stumbled upon a variant of the strategy by encouraging competitive export zones, like Malaysia and Mauritius in the 1970s, or by permitting highly efficient domestic enterprises to capture the bulk of the rents provided by 'infant' industry policies, as in Indonesia (Flatters and Jenkins 1986). Ireland also pursued a variant of this policy when it nurtured a dynamic market sector from the late-1980s, which saw FDI quadruple (to 2.8% of GDP annually) and grew to produce half the country's manufactured exports within a decade (Gorg. and Ruane 2000). As it emerges from incubation the dynamic market sector strengthens in terms of its capacity to absorb under-employed workers from the lagging sector and generate foreign exchange and tax revenues.

The Irish economy was similar in size to that of Algeria in the late-1980s (Auty 2002), implying that a dynamic market sector may take a decade to reach a scale sufficient to favourably impact the lagging sector of a mid-sized developing country. Such a time period is not dissimilar from the period during which competitive manufacturing sectors in Malaysia and Indonesia grew before being required to assume the role of growth locomotive when oil prices collapsed in 1985. This suggests that a highly rent-rich country like Algeria might use a fraction of its rents to support this incubation period not by subsidies but by correcting market failure through the provision of modern infrastructure and maintenance of an enabling macro-economic environment. In other countries, geopolitical rent might be targeted to similar effect.

Meanwhile, reform of the lagging sector can proceed more cautiously until the dynamic sector's economic and political impacts render its acceleration feasible. The long-term objective of reform of the lagging sector is to align it with conditions in the ERZs in terms of infrastructure, incentives and institutional quality. More immediately some modest restructuring can be achieved by encouraging private construction firms within the lagging sector to substitute employment for that erstwhile provided by the state-backed parasitic subsector so that the government can focus its social expenditure on those least able to fend for themselves (Auty 2002).

Bolder policy initiatives might be feasible in the wake of a growth collapse, using geopolitical rent to strengthen government incentives to support pro-poor policies. For example, geopolitical rent might be provided on condition that commodity rent is distributed equitably among the population in the form of an annual dividend, as currently carried out in Alaska, and recently proposed for Iran (World Bank 2001). This diffuse deployment of the rent should both improve economic efficiency (Baldwin 1956, Bevan et al. 1987) and help consolidate a developmental political state.

7. Conclusions and Some Policy Implications

In connection with the initial stages of designing a research programme, this paper has presented some initial speculations regarding the manner in which economic rent affects the evolution of the political state in developing countries. The political economy models described here imply that low-rent countries have superior prospects for democratization as well as for economic growth compared to high-rent countries. The models are motivated by the insight that the lower and more diffuse the rents the greater the likelihood that the political state will be developmental and sustain rapid PCGDP growth that strengthens sanctions against anti-social governance.

The paper identifies two basic routes to democracy. The first route, endogenous democratization, is associated with high-growth, low-rent countries and tends to be incremental and stable. Simple tests suggest that two of the three basic sanctions against anti-social governance (social capital and rule of law) do strengthen with rapidly rising PCGDP in low-rent-countries. Political accountability lags the model predictions, however, and this may reflect the trade-off by citizens of sustained rising welfare for less political freedom.

High-rent countries are more likely to experience exogenous democratization. The exogenous factors can be systematic (like geopolitical rent and relative location) or idiosyncratic (like leadership change). High-rent countries are likely to trace the staple trap development trajectory, which corrodes all sanctions against anti-social governance, and the more so the higher and more concentrated the rents. Consequently, countries with rents that are unusually high relative to GDP and concentrated like the oil-exporting countries are especially vulnerable. However, a growth collapse creates scope for democratization, which can occur at almost any level of PCGDP and may regress and/or require a prolonged period of consolidation. Moreover, the significance attached to exogenous factors in the process of recovery from a growth collapse (which is in any case likely to be protracted and take more than a generation, given the deterioration of all forms of capital ahead of such a collapse) suggests that geopolitical rent is as an important instrument for consolidating shifts towards developmental regimes and for discouraging regression.

These speculations motivate a proposed research programme that is planned to proceed in three stages. The first stage will involve in-depth country case studies designed to tighten and refine the evolutionary typology of political states by, for example, adding more detail regarding political relations within each category. Stage two will test the capacity of the typology to explain current measures of the quality of governance in developing countries, providing further scope to hone up the basic typology and fine-tune the rent-based models that drive it. Finally, the dynamic component of the models will be strengthened with time series data, using early socio-political data sets, such as that of Adelman and Morris (1967) for the early-1960s to construct the required indices of the initial political economy conditions.

References

- Acemoglu, D. and Robinson, J.A. (forthcoming) Political Origins of Dictatorship and Democracy, Cambridge MA: MIT Press.
- Adelman, I. and Morris, C.T. (1967) Society, Politics and Economic Development, Baltimore MD, Johns Hopkins University Press.
- Aslund, A. (2000) Why has Russia's economic transformation been so arduous? In: Pleskovic, B. and Stiglitz, J.E. (eds.) Annual World Bank Conference on Development Economics 1999, Washington DC: World Bank DC, 399-424.
- Auty, R.M. (2001) Resource Abundance and Economic Development, Oxford: Oxford University Press.
- Auty, R.M. (2002) Integrating Industrialising Oil-Exporting Countries into the Global Economy: Egypt and Algeria. Washington DC: MNSIF, MENA, World Bank.
- Auty, R.M. and Gelb, A.H. (2001) Political economy of resource-abundant states, in: Auty, R.M. (ed.) Resource Abundance and Economic Development, Oxford: Oxford University Press, 126-44.
- Auty, R.M. and Kiiski, S. (2001) Natural resources, capital accumulation and welfare, in: Auty, R.M. (ed.) Resource Abundance and Economic Development, Oxford: Oxford University Press, 19-35.
- Baldwin, Robert E. (1956) Patterns of development in newly settled regions, Manchester School of Social and Economic Studies 24: 161-79.
- Barro, R. (1996) Democracy and growth, Journal of Economic Growth 1, 1-27.
- Barro, R. (1999) Determinants of democracy, Journal of Political Economy 107 (6), S158-183.
- Bevan, D.I., P. Collier and J.W. Gunning (1987) 'Consequences of a commodity boom in a controlled economy: Accumulation and redistribution in Kenya', World Bank Economic Review 1, 489-513.
- Birdsall, N., Pinckney, T. and Sabot, R. (2001) Natural resources, human capital and growth, in: Auty, R.M. (ed.) Resource Abundance and Economic Development, Oxford: Oxford University Press, 57-75.
- Boix, C. and Stokes, S.C. (2003) Endogenous democratization, World Politics 55 (3), 517-545.
- Burkhart, R.E. and Lewis-Beck, M.S. (1994) Comparative democracy: The economic development thesis, American Political Science Review 88, 903-10.
- Clague, C., Keefer, P., Knack, K. and Olson, M. (1997) Institutions and economic performance: Property rights and contract enforcement, In: Clague, C. (ed.) Institutions and Economic Development, Baltimore Md: Johns Hopkins University Press, 67-90.
- De Soysa, I. (2003) Why George W. Bush may become champion of democracy, Working Paper, Bonn: ZEF.
- Djankov, S., Glaeser, E., La Porta, R., Lopez-de-Silanes, F. and Shleifer, A. (2003) The new comparative economics, Journal of Comparative Economics 31, 595-619.
- Eifert, B., Gelb, A.H. and Tallroth, N.B. (2003) The political economy of fiscal policy and economic management in oil-exporting countries, In: Davis, J.M., Ossowski, R. and Fedelino, A. (eds.) Fiscal Policy Formulation and Implementation in Oil-Producing Countries, Washington DC: IMF, 82-122.

Epstein, D.L., Bates, R., Goldstone, J., Kristensen, I. and O'Halloran, S. (2004) Democratic transitions, CID Working Paper 101, Cambridge MA: Centre for International Development.

Feng, Y. and Zak, P.J. (1999) Determinants of demographic transitions, Journal of Conflict Resolution 43, 162-77.

Findlay, R. and Wellisz, S. (1993) The Political Economy of Poverty, Equity and Growth: Five Small Open Economies, New York: Oxford University Press.

Flatters, F. and Jenkins, G. (1986) Trade policy in Indonesia, Mimeo, Cambridge MA: Harvard Institute for International Development.

Gelb, A.H., J. Knight, and R. Sabot (1991), 'Public sector employment, rent seeking and economic growth', The Economic Journal 101: 1186-99.

Gorg, H. and Ruane, F. (2000) European integration and periphery: Lessons from Irish experience, The World Economy 23 (3), 405-21.

Haggard, S. (1990) Pathways from the Periphery: The Politics of growth in the Newly industrializing Countries, Ithaca NY: Cornell University Press.

Hamilton, K. (2001) The sustainability of extractive industries, in: Auty, R.M. (ed.) Resource Abundance and Economic Development, Oxford: Oxford University Press, 36-56.

Jackman, R.W. (1973) On the relationship of economic development to political performance, American Journal of Political Science 17, 611-21.

Johnson, E.A.J. (1970) The Organisation and Use of Space in the Developing Countries, Harvard University Press, Cambridge MA.

Jones Luong, P. (2002) Institutional Change and Political Continuity in Post-Soviet Central Asia: Power, Perceptions and Pacts, Cambridge: Cambridge University Press.

Khan, M.H and Jomo, K.S. (eds.) Rents, Rent-Seeking and Economic Development, Cambridge: Cambridge University Press.

Killick, T. (1995) The Flexible Economy, Routledge, London.

Krueger, A.O., (1993) The Political Economy of Agricultural Pricing Policy: A Synthesis of the Political Economy in Developing Countries, Baltimore MD: Johns Hopkins University Press.

Kaufmann, D. and Kraay, A., (2002) Growth without governance, World Bank Working Paper 2928, Washington DC: World Bank.

Lal, D., (1995) 'Why growth rates differ. The political economy of social capability in 21 developing countries', In: Koo, B.H. and Perkins, D.H. (eds.) Social Capability and Long-run Economic Growth, Basingstoke: Macmillan, 310-327.

Lal, D. and Myint, H. (1995) The Political Economy of Poverty, Equity and Growth: A Comparative Study, Oxford; Clarendon Press.

Li, S., Li, S. and Zhang, W. (2000) The road to capitalism: Competition and institutional change in China, Journal of Comparative Economics 28, 269-292.

Lipset, S.M. (1959) Some social requisites of democracy: economic development and political legitimacy, American Political Science Review 53, 69-105.

Lizzeri, A. and Persico, N. (2003) Why did the elites extend the suffrage? Democracy and the scope of government with application to Britain's Age of Reform, Working Paper, University of Pennsylvania: Philadelphia.

Mauro, P. (1995) Corruption and growth, The Quarterly Journal of Economics 90, 681-712.

Mayer, W. and Mourmourus, A. (2002) Vested interests in a positive theory of IFI conditionality, IMF Working Paper 02/73, Washington DC: International Monetary Fund.

McMillan, M. (1997), 'A dynamic theory of primary export taxation: Evidence from sub-Saharan Africa', Working Paper, New York: Columbia University.

O'Loughlin, J., Ward, M.D., Lofdahl, C.L., Cohen, J.S., Brown, D.S., Reilly, D., Gleditsch, K.S. and Shin, M. (1998) The diffusion of democracy 1946-94, Annals Association of American geographers 88 (4), 545-574.

Olson, M. (2000a) Power and Prosperity: Outgrowing Communist and Capitalist Dictatorships, New York: Basic Books.

Olson, M. (2000b) Dictatorship, democracy and development, In: Olson, M. and Kahkonen, S. (eds.) A Not-so-Dismal Science: A Broader View of Economies and Societies, Oxford: Oxford University Press, 119-37.

Owen, W. (1967) Distance and Development, Brookings Institution, Washington DC.

Przeworski, A., Alvarez, M.E., Cheibub, J.A. and Limongi, F. (2000) Democracy and Development: Political Institutions and Well-Being in the World 1950-1990, Cambridge: Cambridge University Press.

Ranis, G. and Mahmood, S. (1992) The Political Economy of Development Policy Change, Oxford: Blackwell.

Ross, M. (2001) Does oil hinder democracy? World Politics 53/3 , 325-61.

Serageldin, I. and Grootaert, C. (2000) Defining social capital: an integrating view, In: Picciotto, R. and Wiesner, E. (eds.) Evaluation and Development: The Institutional Dimension, Transaction Publishers, New Brunswick, NJ, 203-217.

Stiglitz, J.E. (1995) Social absorption capability and innovation, In: Koo, B.H. and Perkins, D.H. (Eds.) Social Capability and Long-Term Economic Growth, Macmillan, Basingstoke, 48-81.

Syrquin, M. (1986) Productivity growth and factor reallocation, In: Chenery, H., Robinson, S. and Syrquin, M. (eds.) Industrialization and Growth: A Comparative Study, New York: Oxford University Press, 228-262.

Treisman, D. (2002) Post-communist corruption, Working Paper, Los Angeles: Department of Political Science, UCLA.

Whitehead, L. (1986) International Aspects of Democratization', In: (eds) O'Donnell, G., Schmitter, P.C. and Whitehead, L. Transitions From Authoritarian Rule: Comparative Perspectives. London: Johns Hopkins University Press, 3-46.

Woolcock, M. and Narayan, D. (2000) Social capital: implications for development theory, research and policy, World Bank Research Observer 15(2), 225-249.

Woolcock, M., Pritchett, L. and Isham, J. (2001) The social foundations of poor economic growth in resource-rich countries, In: Auty, R.M. (ed.) Resource Abundance and Economic Development, Oxford: Oxford University Press, 76-91.

World Bank (1997) Expanding The Measure of Wealth, Environmentally Sustainable Development Studies and Monograph Series 17, World Bank, Washington DC.

World Bank (2001) Trade and Foreign Exchange Policies in Iran: Reform Agenda, Economic Implications and Impact on the Poor, Washington DC: World Bank.

World Bank (2002) Estimates of Governance Quality, Washington DC: World Bank.

Zak, P.J. and Feng, Y. (2003) A dynamic theory of the transition to democracy, Journal of Economic Behavior and Organization 52, 1-25.

Table 1 A typology of political states based on aims and autonomy (after Lal 1995)

Autonomy + Type	Aims	Basic Type	Markets Role	Country Examples
<i>Autonomous Predator</i>	Maximise rent siphoning	Military elite	Soft constraint	Nigeria 1966-79 + 1983-99, Ghana 1970-83,
		Central planning	Soft constraint	Algeria, Turkmenistan, USSR
<i>Autonomous Benevolent</i>	Maximise social welfare	Growth with equity	Hard constraint	Chile 1975-89, Hong Kong, Korea, Taiwan
		Paternalistic monarchy	Relaxed constraint	Brunei, Kuwait, Saudi Arabia, UAE
<i>Factional Oligarchy</i>	Maximise rent siphoning	Landed/indust. captures policy	Soft constraint	Argentina, Brazil, Mexico, Bolivia
		Public officials capture policy	Soft constraint	Azerbaijan, India, Kazakstan, Russia, Uzbekistan
		Ethnic alliance captures policy	Soft constraint	Kenya, Sudan, pre-1993 South Africa
<i>Factional Democracy</i>	Maximise social welfare	Consensual: growth + equity	Hard constraint	Malaysia, Botswana
		Polarised: equity > growth	Relaxed constraint	Costa Rica, Sri Lanka

Table 2 Evolution of political accountability, under political states with differing autonomy and aims

Autonomy of state	Basic aims of state	Critical features	Rent pattern	Strength of sanction Political accountability	against anti-social Social capital	governance Rule of law
<u>Developmental</u>						
<i>Benevolent Autocratic Nation Builder</i>	Secure rapid GDP growth to sustain compact elite + build social unity	Low rent; external threat; poor have low opportunity cost	Low rent siphoning: efficient diffuse rent raising + dispersal	Weak; but predation curbed by priority for social unity	Bonding socap. dominant; slow expansion of bridging + linking	Nominal; elite dispense justice, at times arbitrarily
<i>Diffuse Factional Oligarchy</i>	Expand elite to deter policy capture and sustain rapid GDP growth	Low rent; Intra-elite (land/ethnic/army) rivals; rapid equal GDP growth	Low diffuse rent extraction for public goods + (skewed) wealth creation	Moderate: growing parliament power v. executive	Competitive urbanisation builds autonomous linking + bridging socap.	Strengthening legal protection; common law fairer > civil law
<i>Consensual Factional Democracy</i>	Growth then equity via providing basic social entitlements	Low rent; middle class growth saps elite + shrinks poor	Diffuse extraction + dispersal for growth > redistribution	High: independent parliament + second chamber	Autonomous linking + bridging socap.; risk of Olson effects	Legal independence cuts transaction costs + risk
<u>Non-Developmental</u>						
<i>Predatory Autocratic Dictator</i>	Maximise elite rent siphoning through force if necessary	High rent; violent predation; staple trap trajectory	Point rent extraction by elite slows GDP growth	None: power held by violence, which only elite contest	Weak: intense elite rivalry; weak bond socap.of poor v. elite	None: elite controls by force; poor rely on custom
<i>Concentrated Factional Oligarchy</i>	Dominant faction captures policy to sustain rent + power	High rent; unequal asset share; staple trap trajectory	Point extraction but some public goods benefit mainly elite	Minimal; puppet legislature run by oligarchy;	Dependent on elite; repressed civic associations	Skewed to favour elite > poor
<i>Polarised Factional Democracy</i>	Capture policy to benefit tribal clients even if slows long-term GDP growth	Democracy polarised on tribal lines; retarded GDP growth	Rent extraction + skewed distribution to tribal clients > GDP growth	Fragile: parliament liable to wild policy swings + some dictator risk	Polarised civic associations feed polarised democracy	Judiciary subject to capture + biased to tribal clients

Note: Moving down the table, political accountability strengthens incrementally and endogenously under developmental political states (associated with low rent). It is retarded for non-developmental political states, but after a growth collapse exogenous democratisation can occur abruptly if neighbourhood effects are accommodate

Table 3 Share of rents in GDP 1994 and GDP growth 1985-97, by natural resource endowment

Resource Endowment	PCGDP growth 1985-97 (%)	Total rent (% GDP)	Pasture and cropland rent (% GDP)	Mineral rent (% GDP)
Resource Poor^{1,2}				
Large	4.7	10.56	7.34	3.22
Small	2.4	9.86	5.41	4.45
Resource Rich				
Large	1.9	12.65	5.83	6.86
Small, non-mineral	0.9	15.42	12.89	2.53
Small, hard mineral	-0.4	17.51	9.62	7.89
Small, oil exporter	-0.7	21.22	2.18	19.04
All Countries		15.03	8.78	6.25

Source: Auyt and Gelb (2001), 131

¹ Resource-poor = 1970 cropland/head < 0.3 hectares, mineral economies draw > 40% of exports from mining

² Large = 1970 GDP > \$7 billion

Table 4 Exports, socio-economic linkages, social capital and political institutions

	Total	Political liberties	N	Civil liberties	N	Social development index	N	Bureaucratic quality	N	Rule of law	N
All countries	90	3.06	88	3.19	88	-0.07	62	2.26	80	2.19	80
(minimum, maximum)		(1, 7)		(1, 7)		(-1.86, 1.59)		(0, 6)		(0, 6)	
Manufactured goods	9	3.63	8	3.19	8	0.23	5	3.75	8	3.88	8
Resource: diffuse	18	2.94	18	3.31	18	0.17	12	2.06	17	1.94	17
Resource: point source	45	3.09	44	3.17	44	-0.14	31	2.24	40	2.08	40
Resource: mixed (coffee and cocoa)	18	2.83	18	3.14	18	-0.25	14	1.73	15	1.87	15

Notes: The first row lists the means of five indicators of social and political institutions and their available sub-sample sizes (among the larger sample of 90 countries); the second row lists the minima and maxima of the indicators. The other rows are the means and sub-sample sizes of the indicators among four classifications of socio-economic linkages. In all cases, higher values indicate a more desirable social or political outcome.

Source: After Woolcock et al. (2001), 86

Table 5 Quality of institutions 2001, by natural resource endowment

Resource Endowment	PCGDP 2000 (US\$PPP)	Voice and accountability	Control of corruption	Rule of law	Average institution index-
All Countries	4740	-0.24	-0.33	-0.32	-0.30
Resource Poor	7060	-0.13	-0.16	-0.21	-0.17
Resource Rich	3970	-0.28	-0.40	-0.38	-0.35

Source: Auty and Gelb (2001), 131 and World Bank (2002) Note: institutional quality ranges from 2.5 high to -2.5 low.

Table 6 Correlations, PCI (PPP\$) and voice, graft and law, by natural resource endowment

Resource Endowment	Voice	Graft	Rule of law	PCGDP 2000 (US\$ PPP)
Resource Poor				
PPP\$ Pearson correlation	.385	0.912**	.897**	1
Significance (2 tailed)	0.141	.000	.000	.
N	16	16	16	16
Voice Pearson correlation	1	0.417	.451	.385
Significance (2 tailed)	.	.108	.079	0.141
N	16	16	18	16
Graft Pearson correlation	0.417	1	.936**	.912**
Significance (2 tailed)	.108	.	.000	.000
N	16	16	16	16
Law Pearson correlation	.451	.936**	1	.897**
Significance (2 tailed)	.079	.000	.	.000
N	48	16	16	16
Resource Rich				
PPP\$ Pearson correlation	.469**	.607**	.683**	1
Significance (2 tailed)	.001	.000	.000	.
N	46	46	48	48
Voice Pearson correlation	1	.612**	.577**	.469**
Significance (2 tailed)	.	.000	.000	0.001
N	49	47	49	46
Graft Pearson correlation	.612**	1	.742**	.607**
Significance (2 tailed)	.000	.	.000	.000
N	47	47	47	46
Law Pearson correlation	.577**	.742**	1	.683**
Significance (2 tailed)	.00	.000	.	.000
N	49	47	49	48

Source: World Bank (2002) Note: institutional quality ranges from 2.5 high to -2.5 low.

** significant with a two-tail test

Table 7 Regression of voice, graft and law on PCGDP (US\$ PPP)

Dependent variable	R ²	Significance
Low Rent		
Voice	.148	.141
Graft	.831	.000
Law	.804	.000
High Rent		
Voice	.220	.001
Graft	.368	.000
Law	.467	.000

Source: World Bank (2002)

Figure 1 Competitive Industrialization Model

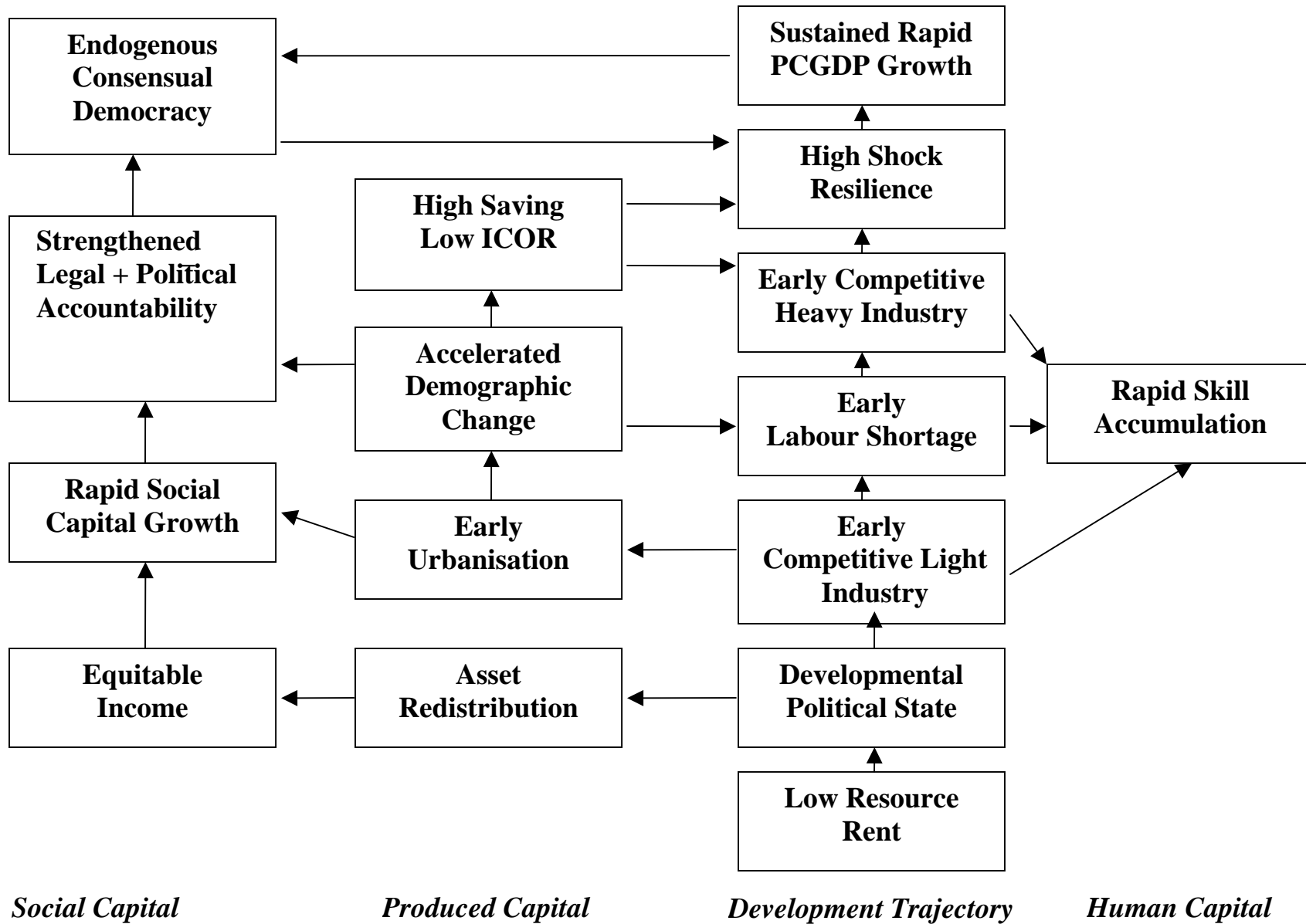


Figure 2 Staple Trap Model

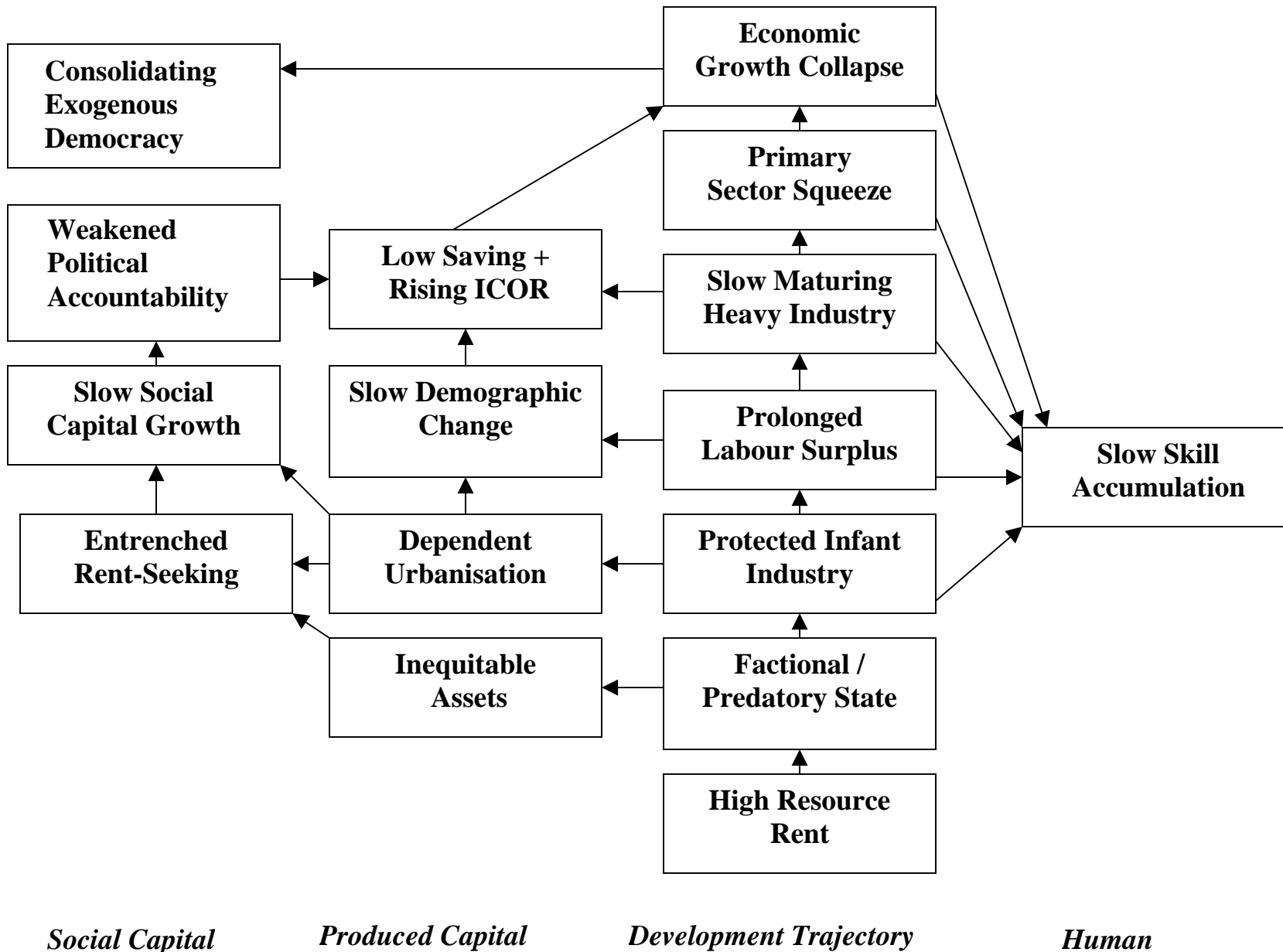


Fig. 3 Relationship Between PCGDP (PPP \$US2000) and Voice

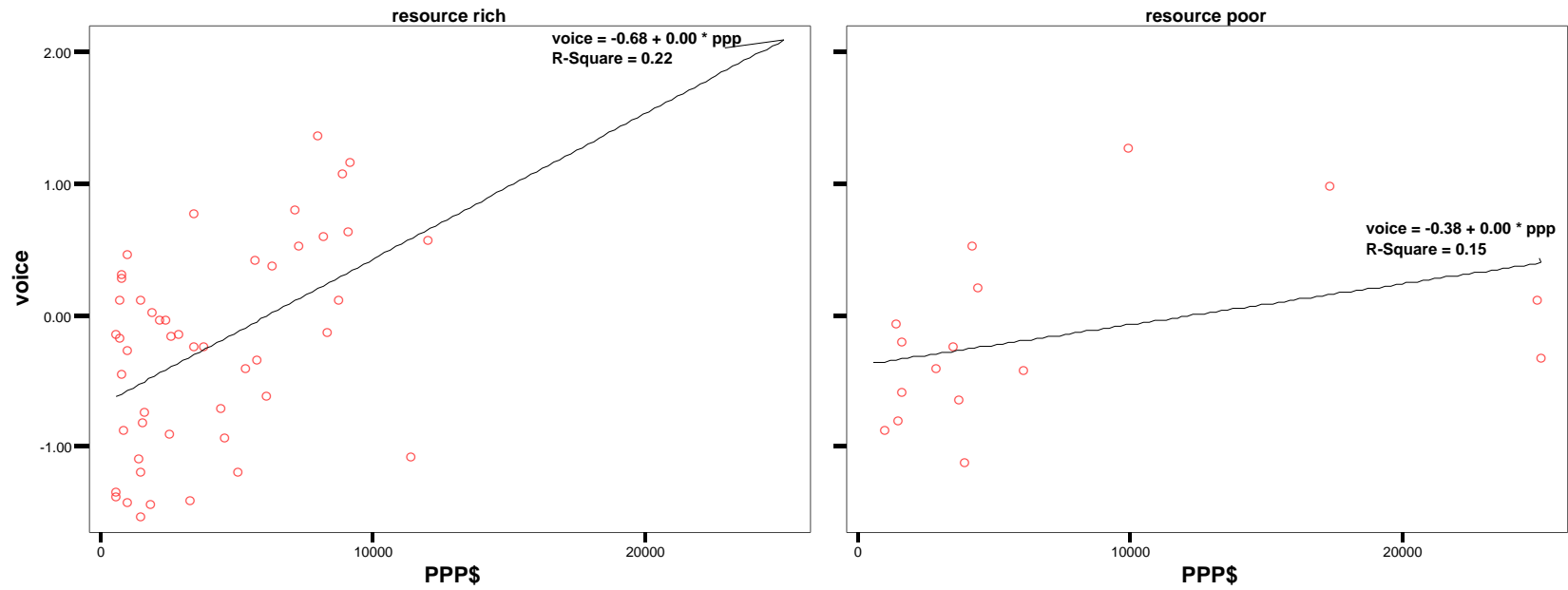


Fig. 4 Relationship Between PCGDP (PPP \$US2000) and Graft

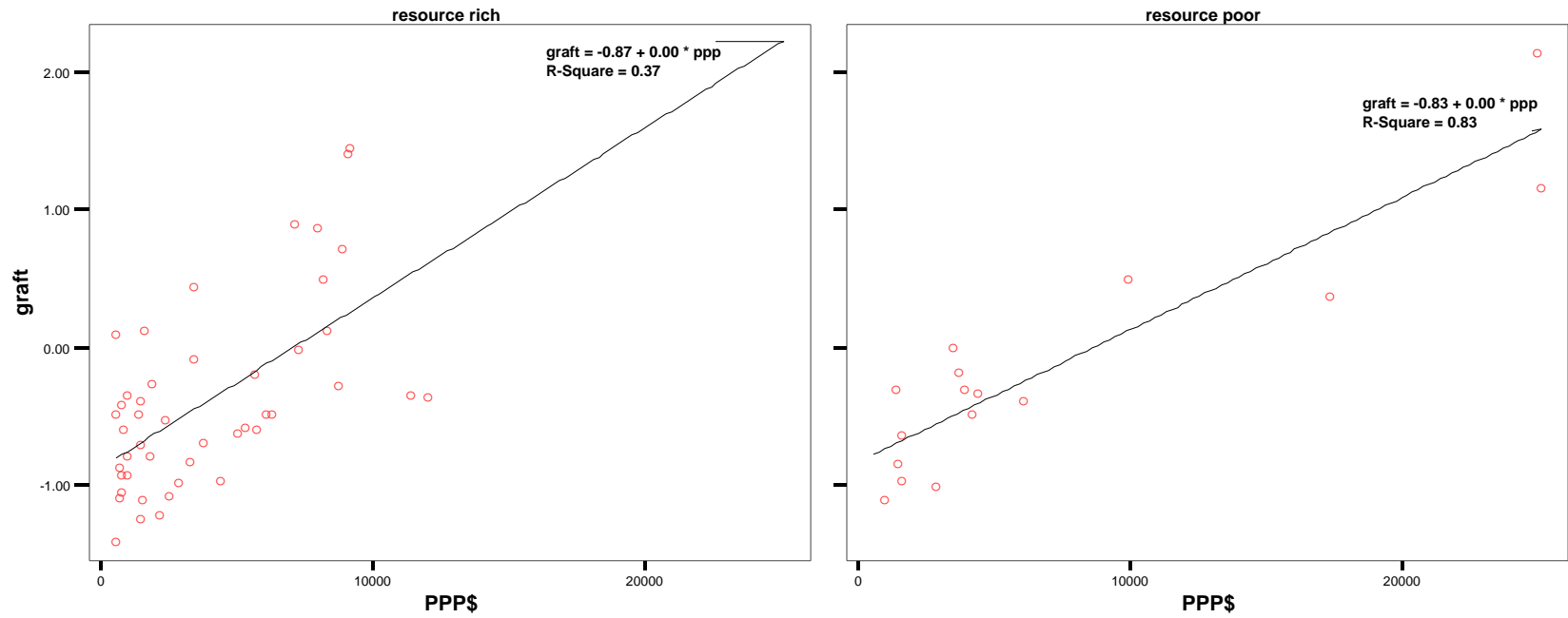


Fig. 5 Relationship Between PCGDP (PPP \$US2000) and Law

