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ZEF Bonn
Zentrum für Entwicklungsforschung
Center for Development Research
Universität Bonn

Rick Auty

Number
60

Towards a
Resource-Driven Model of
Governance: Application to
Lower-Income
Transition Economies

ZEF – Discussion Papers on Development Policy
Bonn, February 2003

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Rick Auty: Towards a Resource-Driven Model of Governance: Application to Lower-Income Transition Economies, ZEF – Discussion Papers On Development Policy No. 60, Center for Development Research, Bonn, February 2003, pp. 23.

ISSN: 1436-9931

Published by:

Zentrum für Entwicklungsforschung (ZEF)

Center for Development Research

Walter-Flex-Strasse 3

D – 53113 Bonn

Germany

Phone: +49-228-73-1861

Fax: +49-228-73-1869

E-Mail: zef@uni-bonn.de

<http://www.zef.de>

The author:

Rick Auty, Lancaster University, UK

Center for Development Research (ZEF), Bonn, Germany

(contact: r.auty@lancaster.ac.uk)

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Towards a Resource-Driven Model of Governance: Application to Lower-Income Transition Economies

Abstract¹

Many developing market economies were strongly distorted during the 1960s and 1970s by fashionable policies to force industrialisation and they experienced growth collapses when exposed to the price shocks of the 1970s. In this context, the centrally planned economies were even more highly distorted and they too experienced collapse, albeit a decade later because they were less exposed to trade shocks. Economic reform has had mixed results in both sets of countries and this paper develops a model of governance to explain the main variations among the transition countries. The model incorporates a neglected factor, namely how the scale of the natural resource rents and their socio-economic linkages condition government behaviour. It posits that resource-poor countries are more likely than resource-rich countries to engender a developmental political state, which has sufficient autonomy to pursue coherent policies and also the aim of raising social welfare. The two principal reasons for this are, first, that the governments of resource-poor countries tend to be less distracted from the task of wealth generation by the capture of resource rents and, second, the political economy of resource-poor countries tends to build greater political accountability. The basic model is adapted to explain differential progress with reform among the transition economies by adding to the resource rents two more key initial conditions identified in the literature, namely history (the length of exposure to central planning) and geography (proximity to a dynamic market economy). The model predicts that the most propitious conditions for transition reform arise among the relatively undistorted, resource-poor coastal economies of East Asia, followed by the moderately distorted higher-income (and low-rent) countries of Eastern Europe. The paper shows that the transition countries broadly support the predictions. There are anomalies, however, which require two additional factors to explain them, namely access to geopolitical rents conformity to a regional norm of political state.

¹ The helpful comments of an anonymous referee are gratefully acknowledged.

1 Context of the Study

In the context of global development during the twentieth century, the formerly centrally planned economies currently in transition to the market were more highly distorted by interventionist policies than most developing market economies were. Efforts to reform both sets of countries have produced very varied responses in terms of the speed of policy implementation and the strength of economic recovery. This paper seeks to explain these variations for the transition economies. It does so by developing a model of governance that is resource-driven and adapting it to take account of differences in initial conditions among the transition economies. The transition literature neglects natural resource rents, perhaps reflecting a preoccupation with the higher-income countries of Eastern Europe for which the primary sector (and therefore the resource rent) is no longer dominant due to structural change.

Much of the controversy regarding transition reform has centred on the pace of reform. For example, Roland (2000) attributes the sharp variation in reform outcomes among the formerly centrally planned countries to differences in policy. He concludes that gradual reform is superior to the rapid ('big bang') reform, which is favoured by the international financial institutions (Aslund et al., 1996; Fischer and Sahay, 1999; Havrylyshyn et al., 1998; Berg et al., 1999). However, the controversy over the pace of reform neglects the fact that differences in transition reform lie deeper than policy choice because initial conditions constrain policy options (de Melo et al., 2001). The literature identifies the principal initial conditions as history, conceptualised as the duration of exposure to central planning, and geography in terms of proximity to a large dynamic market economy. A long exposure to central planning weakens market-friendly institutions and distorts the economy towards inefficient heavy industry (de Melo et al., 2001). Remoteness from a dynamic market reduces the incentive to adopt market-friendly institutions and diminishes the inflow of foreign direct investment with which to accelerate economic restructuring (Kopstein and Reilly, 2000).

However, *in lower-income countries* a second geographical factor, the natural resource endowment is important. This is because low-income countries still depend heavily on the primary sector, so the scale of their natural resource rents and the socio-economic linkages that they generate condition government behaviour in important ways. Among the developing market economies, for example, natural resource abundance has been inversely related to per capita GNP growth since the 1960s (Sachs and Warner, 1995; Auty, 2001a). Since an important objective of this paper is to set the transition economies in comparative perspective, countries are classified by their natural resource endowment according to the criteria used in a recent UNU/WIDER study of the developing market economies (Auty, 2001a). Per capita cropland and country size are the basic dimensions used in the classification. Most developing countries fall

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into the small land-rich category and include many mineral economies that are usefully distinguished separately because they tend to have relatively high rents, which are concentrated on a relatively small number of economic actors.²

This paper models in the next section, section two, how natural resource rents shape the autonomy of the political state (and therefore its capacity to pursue coherent economic policies) and also its aims. Section three builds a mechanism for change into the model by demonstrating how contrasting resource-driven economic development trajectories affect the political accountability of the state. Section four adapts the dynamic governance model to the transition economies by identifying a trinity of key initial conditions (history, relative location and natural resources), and then generating hypotheses concerning the relationships between initial conditions, the political state, the choice of reform strategy, the pace of structural change and the strength of the economic rebound. Section five tests the hypotheses against the four main groups of countries in transition. The conclusion summarises the findings.

² Land-rich countries have more than 0.3 hectares of cropland. Mineral economies derive more than 40% of their exports from minerals. Large countries have GDP in excess of \$7 billion, as an index of the scope for industrialisation afforded by the domestic market.

2 Building the Resource-Driven Governance Model

This section first outlines a basic typology of political states, distinguishing between developmental and non-developmental states and showing how their autonomy and aims are affected by the natural resource endowment. Olson's (2000a) concept of the encompassing interest of the political state is then built into the typology to provide a rationale for evolution in political accountability.

Developmental and Non-Developmental Political States

In characteristically crisp fashion Lal (1995) identifies the autonomy and aims of the political state as the two critical parameters governing its conduct. Developmental political states have sufficient autonomy to pursue a coherent economic policy and they are motivated to raise broad-based social welfare. States that lack one or both of these features are deflected from effectively maximising social welfare by the pursuit of sectional interests. They are classified as either autonomous predatory states or factional oligarchic states (Table 1).

Table 1: Typology of political states, after Lal

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

Source: Auty (2001a), p. 128

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Recent research suggests that in low-income countries the dominance of the primary sector within the economy renders the scale of natural resource rents and their socio-economic linkages as key determinants of the autonomy and aims of the political state (Auty, 2001a). A simple comparison explains the impact of the natural resource endowment. Assuming there are two sources of income available to the political state, resource rents and returns to investment, the government of a low-rent (resource-poor) country is more dependent on returns to investment. For example, if the remuneration of government leaders is, say, 1% of total output the leadership maximises its remuneration by maximising national output. The government of a resource-poor country therefore has a stronger motive for providing public goods and sustaining investment incentives. Its self-interest is therefore more likely to be aligned with that of the majority, even in the absence of democracy, as in Lal's autonomous benevolent state in Table 1 (see p. 4), which is one of the two basic forms of developmental political state along with the consensual democracy.

In contrast, governments in high rent countries can more easily finance their needs by capturing the natural resource rents than by encouraging the direct creation of wealth so that they neglect the latter. Economic actors therefore divert effort into the political process of capturing, redistributing or lobbying for rents at the expense of raising output. This cumulatively distorts the political economy, causing the efficiency of investment to fall and creating powerful vested interests benefiting from the status quo. Economic and political reform is postponed because it promotes competition and increases government accountability, both of which eliminate rents and thereby reduce the scope for rent-seeking behaviour (Aslund, 1999). Postponement merely intensifies the distortion of the political economy.

Where rents are especially high and also point source (i.e. concentrated among a few economic agents), as in the oil-exporting countries, non-developmental political states can sustain maladroit policies even longer so that the distortion of the political economy is the greater. For example, the oil-rich countries sustained the lowest per capita GDP growth among the developing market economies 1985-97 although they generated the highest rents as a fraction of GDP (Auty, 2001a). Moreover, relative to other developing countries, oil-rich governments have used rents to reduce taxation, which weakens demands for representation and democratic accountability (Ross, 2000). The corollary is that low rents in resource-poor countries strengthen political accountability by, first, aligning the interests of the government with the majority in favour of using taxation to invest in increasing wealth and, second, by reducing the tolerance of the majority for inequitable asset distribution and rent-seeking behaviour.

Dynamics of Change: Evolution of the Encompassing Interest of the Political State

How does the political economy evolve from lower to higher states? Olson's (2000a) notion of the encompassing interest of the political state provides a rationale, which is strengthened when linked to the natural resource endowment. Olson's 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. An improvement in governance occurs moving down Table 2 (column 1, see p. 7) from the roving bandit state (conceived as a pillaging warlord) to a democracy. There are two intermediate stages that are characterised as the stationary bandit (an autocrat) and the oligarchy.

The stationary bandit has a longer time horizon than the roving bandit and maximises 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 have an incentive to increase output. A widening of the elite to create an oligarchy produces a political state that will tax less than a stationary bandit does and 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 so the elite is less dependent on siphoning off rents and it also benefits directly from incentives to boost output. In other words, an oligarchy has wider encompassing interests than a stationary bandit does, while a democracy encompasses even broader interests.

Incorporating natural resources usefully refines Olson's typology. For example, the stationary bandit state can be either predatory or relatively benevolent, but given the resource-driven imperatives, the resource-rich stationary bandit state is more likely to be predatory than its resource-poor counterpart. Stationary bandit states include energy-rich Azerbaijan and Turkmenistan, whose governments confer wealth on an elite even as poverty increases. They also include resource-poor South Korea during 1963-87 and Indonesia 1965-95, whose political economy was acutely sensitive to the needs of peasant farmers in resource-poor Java. Both East Asian countries achieved rapid per capita GDP growth, equitable income distribution and sharp reductions in poverty while the elite still enriched itself by carefully managing rent-seeking in order to limit damage to GDP growth (Macintyre, 2000). As a second example, resource-rich and resource-poor *democracies* also differ. High resource rents create pressure for redistribution that tends to polarise society so that changes in government bring abrupt changes in policy, diminishing the coherence of economic policy and depressing wealth-creating incentives.³ However, in resource-poor countries government interest tends to align with the majority to yield a consensus around wealth-generation so that economic policy is more consistent and economic growth is not compromised by the pursuit of income redistribution (Auty, 2001).⁴

³ Malaysia provides an interesting anomaly where the adverse effects of polarisation were recognised and avoided through an 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.

⁴ Consistent with this, for example, Mauritius swung from polarised to consensual democracy in the 1970s as the cessation of plantation expansion gave way to the manufacturing-led growth.

Table 2: Dynamic typology of the political state incorporating natural resources and sanctions against anti-social governance

Olson typology	Governance model typology	Autonomy of state	Aims of state	Strength of sanction	against anti-social	governance
				Political accountability	Social capital	Rule of law
Roving Bandit						
Resource-rich	Predatory violent state	Locally high, but transient	Destructive rent extraction	None: repressed by violence	Weak: Bonding v. common foe	Anarchy: Violent enforcement
Resource-poor	Predatory violent state	Locally high, but transient	Destructive rent extraction	None: repressed by violence	Weak: Bonding v. common foe	Anarchy: Violent enforcement
Stationary Bandit						
Resource-rich	Predatory authoritarian state	High	Sustainable rent extraction	Low: Feudal obligations	Weak: Bonding v. oppression	Arbitrary application
Resource-poor	Benevolent authoritarian state	High if welfare rises	Public goods + rent extraction	Modest: Token parliament monitors welfare	Expanding linking social capital	Channelled application
Oligarchy						
Resource-rich	Ethnic/Military/ Landed faction	Moderate	Sustainable rent extraction + modest wealth creation	Modest: manipulated parliament	Clientelistic	Application favours elite
Resource-poor	Ethnic/ Military/ Industrial faction	High if welfare rises	Public goods + low rent extraction	Moderate: growing parliament power	Strengthening civic associations	Widening application
Democracy						
Resource-rich	Polarised democracy	Weak from extreme power swings	Redistribution > growth	Independent parliament	Polarised civic associations	Independent judiciary
Resource-poor	Consensual democracy	High for consensual polcies	Growth with redistribution	Independent parliament	Independent civic associations	Independent judiciary

3 The Mechanics of Evolving Political Accountability

From the above discussion, it follows that as the encompassing interest of the government widens moving down Table 2 (see p. 7) it does so at a faster rate for the resource-poor country than for its resource-rich counterpart (column 2 and 3) and is reflected in the strengthening of the three key sanctions against anti-social governance (columns 5-7). This section uses two resource-driven economic models, the competitive industrialisation model associated with resource-poor countries and the staple trap model associated with resource abundance to provide a mechanism for differential progress in extending the encompassing interest of the political state as economic development proceeds.

Dynamics of Change in Political Accountability

Low rents provide wealth-generating incentives that encourage the emergence of a developmental political state; they also encourage such states to correct maladroit poor policies early, thereby limiting the cumulative distortion of the economy. This, together with a necessarily shorter dependence on natural resource rents causes them to embark on competitive industrialisation at a lower per capita income than resource-rich countries do (Auty, 2001a). Competitive industrialisation triggers virtuous interlocking economic and social circles that sustain rapid and equitable economic growth and accumulate all forms of capital faster including the social and institutional capital, which strengthen political accountability (Auty and Gelb, 2001).

The virtuous economic cycle triggered by an early start on industrialisation accelerates the rate of urbanisation and this also speeds passage through the demographic cycle. As population growth slows the number of dependants (children and pensioners) that each worker supports falls. This increases the rate of saving and investment, typically pushing the latter above 25% of GDP. Moreover, global competition reinforces incentives for efficient domestic investment so that economic growth is rapid and per capita GDP can double each decade. Early industrialisation also means manufacturing is initially labour-intensive so that it rapidly absorbs surplus rural labour, causing pressure for wage increases. Diversification into skill-intensive and capital-intensive industry is therefore required to raise worker productivity and raise wages. Meanwhile, the resulting *competitive* diversification of the economy strengthens its resilience to shocks. More importantly for the political state, the associated increasing complexity of the economy requires governments to reduce their intervention and concentrate upon creating an enabling environment, thereby depoliticising economic policy (Ranis and Mahmood, 1992).

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In contrast, the non-developmental political states that tend to be nurtured by resource-abundance combine with a longer dependence on natural resource rents to retard competitive industrialization and push the economy into a staple trap, characterised by increasing dependence on one or two primary commodities with declining competitiveness. This later industrialization slows the demographic transition and it also tends to be more capital-intensive (Lal and Myint, 1996) so that labour remains in surplus in rural areas. Fears about unemployment encourage governments to force industrialisation and over-expand the bureaucracy to provide jobs. The result is a burgeoning parasitic sector that absorbs transfers from the primary sector that outstrip the natural resource rents. The transfer recipients oppose economic and political reform. Consequently, far from liberalizing the economy, the government intensifies its intervention and begins to tax away returns to capital in the primary sector. The net effect is to reduce the efficiency of investment, repress incentives and cut per capita rents. Competition for shrinking rents intensifies, increasing the politicisation of the economy at the expense of broader political accountability even as growth slows, diversification regresses and the economy becomes increasingly vulnerable to external shocks and a growth collapse.

An S-Shaped Curve for Social and Institutional Capital as Per Capita Income Rises?

The diverging success between resource-poor and resource-rich political states in depoliticising the economy and building political accountability is reinforced by the virtuous social cycle, which is triggered by competitive industrialisation in resource-poor countries. Urbanisation plays a key role in accelerating social capital formation and, because it occurs earlier and faster with competitive industrialisation in resource-poor countries, this may explain why social and institutional capital accumulate faster in resource-poor (manufactured goods exporting) countries as shown in Table 3 (see p. 10). Competitive industrialisation also eases social tension by giving a relatively equitable income distribution because the early emergence of labour shortages puts a floor under the wages of the poor, while the rapid accumulation of skills puts a ceiling on the skill premium.

Table 3: Social and political institutions among different socio-economic linkage configurations

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

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

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.

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There is emerging evidence that the rate of social capital formation may trace an S-shaped curve with rising per capita income, accumulating slowly at first before accelerating through mid-income levels and finally regressing at high-income levels. More specifically, 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). Bonding social capital dominates 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 non-conforming activity of an innovative and entrepreneurial nature thereby impeding development at low-income levels (Stiglitz, 1995).

The earlier urbanisation of resource-poor countries accelerates 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 *linking* social capital, which provides an alternative means of risk reduction in towns and cities where negative aspects of bonding social capital are weaker. Urbanisation allows individuals to reduce their dependence on local groups by extending social links beyond the individual village or town through regional associations. Moreover, it also allows scale thresholds to be crossed to engender viable markets and increase the division of labour.

Interestingly for the transition economies, after accelerating through the middle stages of development, the rate of social capital formation may decelerate or even regress. This is because at high-income levels, institutions and pressure groups may become so specialised 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. These 'Olson effects' are particularly associated with countries that enjoy prolonged periods of stability like the FSU countries prior to the late-1980s or Britain in the mid-twentieth century (Olson, 2000b). Raiser (2001) identifies the corrosion of social capital as a feature of faltering central planning that weakens a critical support for political accountability.

Rising incomes sharply increase the importance of formal institutions, the third sanction against anti-social governance (Table 2, see p. 7), 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, p. 213). This requires the creation of effective institutions, notably a legal system and property rights. Clague et al. (1997, p. 67) concur, and argue that 'societal differences in property rights and contract enforcement mechanisms are an important part of the explanation of why some countries prosper while others

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).

do not'. In the absence of formal institutions, able people may find rent-seeking much more lucrative than work in legitimate channels. They may therefore opt for that route and deny their skills to more productive channels such as the enhancement of productivity.

However, institutions such as the rule of law appear to be products of political accountability, rather than determinants of it, and they therefore reflect the extent to which political accountability and social capital effectively constrain anti-social governance (Table 2, see p. 7). When those two checks are weak corruption thrives and undermines the integrity of the legal system. Corruption also harms economic growth because it discourages investment (Mauro 1995). Bribery typically requires an initial payment and thereafter calls for a percentage of the returns, so corruption becomes a form of illicit tax, lowering the real rate of return on projects and lowering the level of investment. Firms may find that in addition to formal taxes, they are burdened by illicit taxes levied by both prominent officials and under-paid minor bureaucrats. In addition, where the state fails to guarantee law and order, the costs of doing business may be further raised by the need to enforce contracts through recourse to the 'private' sector in the form of the Mafia. Mauro (1995) presents evidence that corruption represses economic growth. A movement of two points up a corruption scale based on country risk studies where 0 is most corrupt and 10 least corrupt, would increase investment by 4% and annual per capita GDP growth by 0.5%. To the extent that natural resources feed rent-seeking and corruption they corrode political accountability and social capital and thereby undermine formal institutions (Leite and Weidman, 1999).

Summarising, resource-driven economic models suggest that by engendering a developmental political state and embarking upon competitive industrialisation earlier resource-poor countries tend to build political accountability and social capital more rapidly than resource-abundant countries, expanding the encompassing interest of the government faster, and that this is reflected in stronger institutional checks against anti-social governance (Table 2, see p. 7). It should be noted, however, that the 'resource curse' mechanism is probabilistic and not deterministic because local circumstances can over-ride the influence of the natural resource endowment. The resource curse also tends to diminish in significance as incomes rise and structural change causes the primary sector to shrink dramatically in relative importance.

4 Adapting the Model to the Transition: Initial Conditions and Hypotheses

The transition economies as a whole differ from the developing market economies in terms of their generally higher degree of macro-economic distortion, their stronger repression of market-friendly institutions, including civic society, and their higher levels of human capital and reliance on social entitlements. However, the strength of these features varies among the transition economies, reflecting differences in the three key initial conditions: the degree of exposure to central planning, proximity to large dynamic market economies and dependence on natural resources. Table 4 identifies three geographically defined clusters of reform experience, namely dual-track (gradual) reform in East Asia; rapid reform in Eastern Europe and faltering reform in the FSU, Romania and Bulgaria. The Caspian Basin countries are separately identified as lower-income countries within the FSU group and, like the low-income countries of East Asia, they can be subdivided into mineral-rich and resource-poor (Table 5, see p. 14).

Table 4: Initial conditions and transition trajectories

Pre-condition Outcome	Index	CEE Rapid reform _a	NCIS + SEE Faltering reform _b	Caspian Basin Faltering reform Resource-poor _c -rich _d	East Asia Gradual reform _e	
History	Years central plan	45	59	71	71	34
	Macro distortion (1 high)	-0.70	0.29	0.92	1.12	-0.96
	Over-industrialised (% GDP)	10.2	11.7	8.0	-0.3	-2.0
	Farm employment (% all)	14	26	30	34	63
	PCGNP (1989 US\$ at PPP)	7,495	5,592	4,328	4,180	950
Geography	Per capita cropland (ha)	0.46	0.59	0.21	0.73	0.18
	Political state _f	CD	PD	PD	APS	ABS
	Near dynamic market (1 near)	1	2	3	4	2
	Institution quality (10 high)	5.0	-3.6	-7.4	-8.8	-5.8
	Social cohesion (3 strong)	2.88	0.54	1.86	0.62	n.a.
Reform Outcomes	Reform index (4.0 complete)	3.3	2.5	2.5	2.1	2.1
	89/99 GDP ratio	0.90	0.87	0.42	0.67	1.61
	92/98 Govt. expend. Ratio	1.04	0.74	0.49	0.57	0.93
	Mid-90s Income gini	0.31	0.37	0.49	0.51	0.38
	True saving (% GDP)	10.9	1.4	5.0	-12.6	10.8

Source: Auty (2001c)

Note: a. Croatia, Czech Rep., Estonia, Hungary, Latvia, Lithuania, Poland, Slovak Rep., Slovenia

b. Belarus, Bulgaria, Moldova, Romania, Russia, Ukraine c. Armenia, Georgia, Kyrgyzstan, Tajikistan

d. Azerbaijan, Kazakstan, Turkmenistan, Uzbekistan, e. China and Vietnam

f. CD consensual democracy; PD polarised democracy; ABS autonomous benevolent state; APS autonomous predatory state

Table 5: Classification of transition economies by natural resource endowment¹

Category	Mean GDP (\$ Billion)	Cropland per capita (hectares)	Mineral exports (% total)	GDP 1997 as % 1989	Countries
Large resource poor	929.0	0.08	6	2.18	China
Small resource poor	15.25	0.21	15	0.89	Armenia, Croatia, Czech Rep., Georgia, Kyrgyz Rep., Laos, N. Korea, Slovak Rep., Slovenia, Tajikistan, Vietnam
Small resource rich	29.8	0.51	10	0.75	Belarus, Bulgaria, Cambodia, Estonia, Hungary, Latvia, Lithuania, Moldova, Poland, Romania, Ukraine
Mineral rich	78.4	0.73	57	0.65	Azerbaijan, Kazakstan, Mongolia, Russia, Turkmenistan, Uzbekistan

Source: World Bank (2000), except WRI (1998) for cropland and Cambodia and Myanmar (IMF 1999 and 2000b) Mongolian exports 1996

Note 1. Large economies (defined as 1998 GNP of over \$200 billion) can diversify into a wide range of manufacturing at a lower per capita income because they capture the economies of scale. Resource-rich countries have more than 0.35 hectares of cropland per capita and/or 40% or more of their exports from fuel and minerals.

The following hypotheses can be distilled from the literature concerning the impact of initial conditions on choice of reform strategy and subsequent development trajectory.

1. The longer the exposure to central planning then the:
 - more distorted the economy (de Melo et al., 2001),
 - stronger the vested interests opposed to reform (Aslund, 1999).
 - greater the corrosion of market-friendly institutions and social capital (Raiser et al., 2001),
2. The greater the remoteness from a large dynamic market democracy then the:
 - weaker the political accountability and social capital (Raiser et al., 2001),
 - lower the foreign investment for restructuring the non-mining economy (Kopstein and Reilly, 2000).
3. Among the lower-income countries, the greater the resource abundance the:
 - more predatory the political state and the lower the incentives to provide public goods and invest efficiently (Auty, 2001b),
 - greater the rent-seeking and corruption (Mauro, 1995; Leite and Weidmann, 1999),
 - later and more reluctant the reform (Esanov et al., 2001),
 - stronger the Dutch disease effects/ slower the economic restructuring (Rosenberg and Saavalainen, 1998).

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Combining the three sets of hypotheses suggests that the least propitious conditions for executing reform and restoring sustainable growth arise in countries of the FSU because they have had the longest exposure to central planning and are the most remote from dynamic markets. The mineral-rich Caspian Basin countries may be especially disadvantaged. The most propitious conditions occur in the coastal states of East Asia due to their relatively short exposure to central planning, proximity to large dynamic markets and limited natural resource rents.

5 Applying the Governance Model to Transition Economies

Table 6 indicates that the East Asian countries as a group experienced the shortest exposure to central planning and the least distortion. This left a smaller legacy of obsolete state industry compared with the FSU countries so that state industry required less by way of subsidies. In addition, a much higher fraction of the workforce was employed in labour-intensive agriculture, which could respond swiftly to modest changes in incentives and strongly impact GDP growth. The coastal states (and provinces in the case of China) in particular were well placed to attract sectors of declining competitiveness from the adjacent dynamic market economies.

Table 6: Indices of initial conditions

Country/Group	PCGDP (\$ PPP) 1990	Per Capita cropland (hectares)	Years under central planning	Macro- economic distortion ¹	Industry % GDP 1990	Agriculture % 1990 workforce	Liberalis- ation index 1990
C. + E. Europe	7,495	0.46	46	-0.70	0.46	0.14	0.17
Northern CIS + SEE	5,592	0.66	59	0.29	0.49	0.23	0.05
Central Asia	4,443	0.45	71	1.02	0.40	0.31	0.04
Resource-rich	4,408	0.68	71	1.12	0.36	0.34	0.04
Resource poor	4,478	0.21	71	0.92	0.43	0.30	0.04
East Asia	1,126	0.25	29	-0.54	0.32	0.63	0.20
Resource rich	1500	0.38	37	0.29	0.26	0.60	0.00
Resource poor	880	0.11	24	-0.96	0.36	0.65	0.33

Source: IMF (2000a) except 1 (de Melo et al. 2001); Myanmar from ADB (2000) and North Korea from Lee (2001)

As the resource-driven governance model predicts, the resource-poor coastal states of China and Vietnam engendered developmental political states (of the autonomous benevolent variant) that reformed earlier than the predatory resource-rich states of Cambodia and Myanmar, with Laos occupying an intermediate position. With the notable exception of North Korea, the resource-poor countries took advantage of their favourable initial conditions to opt for gradual or dual-track reform (Table 7, column 7, see p. 17). This policy lowered political risk because gainers in the emerging dynamic market sector (initially agriculture and then increasingly manufacturing) to compensate losers in the lagging plan sector. It also facilitated economic restructuring, which minimised GDP loss and sustained rapid economic growth (Table 8, see p. 17).

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Table 7: EBRD transition indicators, 1999

Country/Group	Priva- tisation	Govt + firm restructure	Price liberalis- ation	Trade liberalis- ation	Competition policy	Financial reform	Overall index
C. + E. Europe	3.9	2.9	3.1	4.3	2.7	3.0	3.3
Northern CIS + SEE	2.9	1.8	2.7	3.2	2.1	2.0	2.5
Central Asia	2.9	1.9	2.8	2.9	1.7	1.7	2.3
Resource rich	2.6	1.9	2.5	2.1	1.5	1.7	2.1
Resource poor	3.2	1.9	3.0	3.7	1.8	1.7	2.5
East Asia	2.3	2.1	3.0	2.9	1.7	1.7	2.2
Resource poor	1.8	2.1	2.8	2.0	1.9	1.4	1.9
Resource rich	3.2	2.2	3.3	4.6	1.5	2.1	2.7

Source: IMF (2000a), 134

Note: The privatisation and financial reform indices are collapsed into one reading, but the aggregate index is derived from equally weighting all the original eight readings.

Table 8: Transition reform: Comparative economic performance

Country/Group	Transition start	Stabilisation start	Real GDP 1999/ 1989	Inflation 1989-99 (%/Yr)	1999 EBRD transition index	1999 PCGDP (\$ PPP)
C. + E. Europe	1991	July 1990	0.90	33.8	3.3	9,644
Northern CIS + SEE	1992	Oct 1993	0.57	96.8	2.5	4,839
Central Asia	1992	July 1994	0.55	182.0	2.3	2,923
Resource poor	1992	May 1994	0.42	208.9	2.5	2,471
Resource rich	1992	Sept 1994	0.67	155.0	2.1	3,375
East Asia	1986	n.a.	1.61	23.0	2.1	1,949
Resource poor	1984	n.a.	1.75	20.7	1.7	2,303
Resource rich	1989	n.a.	1.42	26.3	2.4	1,417

Source: IMF (2000a), 89.

Note a: World Bank (2001) and IMF (2000b) b: Lee (2001) and Financial Times (2000).

However, the contrast between resource-poor and resource-rich East Asian countries is blurred by anomalies in the form resource-poor North Korea, a late reforming predatory state and mineral-rich Mongolia, which spawned a consensual democracy that espoused rapid reform (Auty, 2002a). Moreover, the resource-rich anomalies increased to two out of three when resource-rich Cambodia abruptly espoused democracy and rapid reform in the early-1990s. Consequently, Table 9 (see p. 18) shows that by the late-1990s the resource-rich East Asian countries experienced higher political accountability, less corruption and more effective

institutions than the resource-poor countries. All three anomalies can be explained, however, by the ability of governments to override the initial conditions by extracting geopolitical rents from the international community. Resource-poor North Korea extracted terror rents by halting missile sales in exchange for food (to ameliorate starvation) and financial and technical assistance (to build two nuclear reactors). Mineral-rich Mongolia espoused democracy and reformed rapidly by exploiting the country's strategic location (and small size) to attract western aid in excess of one-fifth of GDP through the 1990s. Cambodia emulated Mongolia after Vietnamese troops withdrew and reformed rapidly with western assistance.

Table 9: Index of institutional quality, 2001

Country/Group	Voice + Account- ability	Political stability	Effective Governance	Regulation burden	Rule of law	Graft	Overall index
C. + E. Europe	0.97	0.60	0.43	0.50	0.55	0.40	3.45
Northern CIS + SEE	-0.08	-0.15	-0.69	-0.99	-0.46	-0.90	-2.90
Central Asia	-0.71	-0.68	-0.92	-0.86	-0.74	-0.89	-4.78
Resource poor	-0.39	-0.98	-0.92	-0.84	-0.69	-0.86	-4.66
Resource-rich	-1.03	-0.37	-0.91	-0.89	-0.78	-0.92	-4.90
East Asia	-1.03	0.14	-0.30	-0.73	-0.46	-0.47	-2.85
Resource poor	-1.32	0.54	-0.40	-0.89	-0.56	-0.57	-3.20
Resource rich	-0.66	-0.20	-0.17	-0.53	-0.33	-0.34	-2.25

Source: World Bank (2002)

The heavily distorted, land-locked low-income transition economies of the Caspian Basin were late reformers and both political and economic reforms subsequently stalled or regressed (Table 8, see p. 17). Oil-rich Azerbaijan and Kazakhstan initially appeared more amenable to reform than the resource poor countries, three of which were ravaged by civil strife, yet they remained autonomous predatory states. Moreover, after attracting foreign investment to rebuild their energy sectors, their commitment to political and economic reform decelerated (Table 8, see p. 17) in line with Vernon's theory of the obsolescing bargain (Esanov et al., 2001). Resource-rich Turkmenistan and Uzbekistan, with access to a wider range of natural resource rents were less dependent on external capital (Jones Luong and Weinthal, 2001) and reformed slowly if at all, as the model predicts.

In fact, the mineral-rich countries do exhibit lower political accountability, weaker institutions and higher corruption than the resource-poor countries in the Caspian Basin, but the differences are modest (Table 9). However, three of the resource-poor countries made a slow start because of severe civil strife and yet, consistent with initial conditions, the resource-poor Caspian Basin countries have still reformed faster. The fact that strife-free Kyrgyzstan moved fastest with political and economic reform is consistent with civil strife having retarded reform in the other three resource-poor countries. Table 8 (column 3, see p. 17) indicates the especially

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sharp loss of GDP in the resource-poor Caspian Basin countries, while government revenue shrank still more, exerting massive compression on public goods provision (EBRD 1999, p. 58). The governance model suggests that the associated rise in poverty, in the absence of resource rents might increase the pace of *political* reform, especially influenced by geopolitical rents from western governments. However, the mineral-rich countries have most influence and they appear to be establishing the predatory political state as a regional norm (Auty, 2001b).

Elsewhere within the Soviet bloc, the relatively high level of distortion left in the northern CIS, Bulgaria and Romania (NCISBR) an onerous legacy of obsolete heavy industry (and strong opposition to reform) whose demands for transfers threatened macro stability. Moreover, remoteness from western market economies reduced the appeal of west European institutions. These countries exhibit low social cohesion (Table 4, see p. 13), and most have developed into polarised democracies that display lower political accountability, less effective governance, weaker institutions and higher corruption than the east European countries (Table 9, see p. 18). Most NCISBR countries did attempt rapid reform in exchange for western finance but faltered (Table 7, see p. 17) and experienced a greater loss of GDP than the east European countries (Table 8, see p. 17). In the dominant Russian Federation, mineral rents fed rampant rent-seeking that impeded reform (Auty, 2002b). Nevertheless, the overall quality of institutions in the NCISBR is superior to that of the remoter Caspian Basin.

Finally, the countries of eastern Europe were exposed to central planning for a shorter period than other countries associated with the former Soviet bloc so that macroeconomic distortion (Table 6, column 4, see p. 16) and to some extent the degree of over-industrialisation (Table 6, column 5, see p. 16) are less. Moreover, proximity to Western Europe raised the prospect of accession to the EU and conferred a high level of social cohesion (Table 4, line 10, see p. 13) based upon a pro-democracy consensus (EBRD, 1999, p. 108). Political accountability is also significantly higher (Table 9, column 1, see p. 18) and is reflected in institutions whose quality was orders of magnitude superior to that of the other groups of countries in transition (Table 9, final column, see p. 18) and came to match those of the EU by the late-1990s (Weder, 2000). Natural resource rents have not played a significant role in the political economy of Eastern Europe (de Melo et al., 2001) and although on average these countries were relatively well endowed with cropland (Table 5, see p. 14) agricultural employment was already low (Table 6, column 6, see p. 16). This combination of initial conditions engendered consensual democracy that facilitated rapid reform (Table 7, see p. 17). Manufacturing proved more easily re-oriented to western markets than in the FSU; and GDP loss, while higher than the reformers expected, was significantly less than in the rest of the Soviet bloc countries (Table 8, see p. 17).

6 Conclusions

Lower-income countries rely heavily on the primary sector, so the scale of their natural resource rents and the nature of the socio-economic linkages that they generate condition government behaviour in important ways. For such countries differences in the scale and socio-economic linkages of the natural resource rents shape government autonomy and aims. The political states of low-income resource-poor countries are more likely than their resource-rich counterparts to be developmental for two main reasons. First, low rents limit the distraction of rent-seeking and strengthen the motivation of the state to provide public services and maintain incentives to invest to increase social welfare. Second, the political state in resource-poor countries expands its encompassing interest faster because early reform together with a shorter dependence on primary product exports triggers competitive industrialisation that depoliticises economic policy and accelerates the accumulation of all forms of capital, including social capital. The resulting greater political accountability strengthens legal institutions (notably the rule of law and property rights).

A resource-driven model of governance predicts that the political state in resource-poor countries will tend to outpace its counterpart in resource-rich countries in widening its encompassing interests. For the countries in transition, the governance model predicts that reform will commence earlier and the economy will be restructured faster the briefer the exposure to central planning, the closer to a large democratic market economy and (in low-income countries) the lower the natural resource rents. This implies that the most propitious conditions for reform are encountered in the moderately distorted, resource-poor coastal countries of East Asia and most problematic in the strongly distorted remote resource-rich Caspian Basin countries. The experience of the transition countries as a whole broadly supports the predictions but there are anomalies because the model is not a deterministic one. Two additional factors help explain the anomalies, namely the extraction of geopolitical rents from the global community and conformity to a regional norm of political state.

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