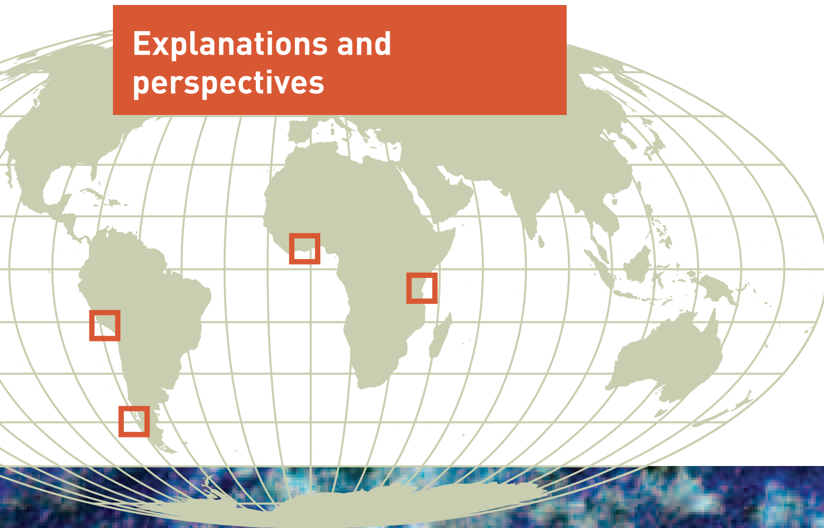
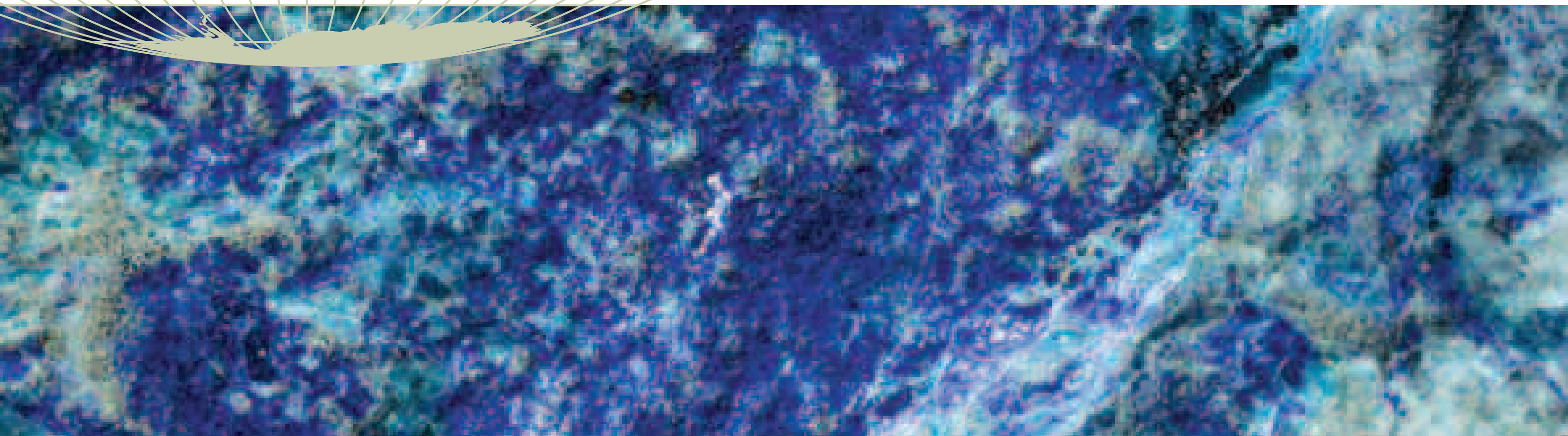
Literature Review for the Analytical Framework

The Challenge of Mineral Wealth:
using resource endowments to foster sustainable development

August 2006

Explanations and perspectives





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Preface

In the past five years, the economic, social and environmental dimensions of mining and minerals have been the subject of wide-ranging consultation, critical comment, research and analysis. The Mining, Minerals and Sustainable Development Project (MMSD) and Extractive Industries Review (EIR) respond to the unprecedented focus of public attention on the sustainable development challenges for extractives in general and mining in particular.

In May 2004, ICMM[1] initiated its Resource Endowment[2] initiative[3] to better understand how large-scale mining activity in low- and middle-income countries can enhance the socio-economic development of host countries. The initiative aims to isolate the drivers of development effectiveness in the mining and metals sector and to document the policy frameworks, operational practices and partnership arrangements that deliver sustainable outcomes on the ground. This action-research project is being done together with UNCTAD and the World Bank Group. ICMM also consulted stakeholders such as mining companies, governments, donor agencies, labor and Non-Governmental Organizations (NGOs).

Much of the 'resource curse' literature has focused on problems rather than solutions. Consequently, it is not of much practical help in designing improved policy or filling gaps in knowledge. For example, how have apparently 'successful' countries avoided problems now so widely perceived? Can such outcomes be repeated in other developing economies endowed with an abundance of mineral resources? How should the main stakeholders work together to enhance positive socio-economic outcomes from mining investments?

[1] The International Council on Mining and Metals.
[2] The Challenge of Mineral Wealth: using resource endowments to foster sustainable development.
[3] The initiative is managed by Kathryn McPhail, Principal, ICMM.

To help bridge these gaps, some of the specific questions the Resource Endowment initiative attempts to address are:
- How does the mining sector overall contributes to national development?
- What strategies have been effective in managing revenues generated by natural resources for sustainable development and poverty reduction?
- How does an individual mining project contribute to development at national, regional and local levels?
- What are the practical and policy implications for mining companies, host country governments, development institutions and NGOs?
- What might the distinct responsibilities of these development partners be to support implementation of findings and recommendations?

The three distinct phases of the initiative and related products are outlined below.

Phase 1: Analytical Framework and Tools

The initial phase of the project concentrated on the development of an analytical framework focusing on governance processes, including the underlying factors and rules of the game that affect social and economic interactions and outcomes. These aspects were incorporated into a practical toolkit to assess local, regional and national socio-economic impacts of mining. The toolkit also deals with how mining operations impact on governance structures, institutions and policy changes at different levels of government. Phase 1 involved an extensive literature review, and a 'coarse-sift' comparative analysis of the relative economic and social well-being of 33 countries with a high dependence on minerals. Initial findings were critiqued in a multi-stakeholder workshop, which helped to shape a revised approach.

Phase 1 Published reports:

- Analytical Framework: Executive summary
- Resource Endowment Toolkit.

Phase 1 Additional Online Resources:

- Analytical Framework: Main report
- Literature Review
- November 2004 Workshop proceedings.

Phase 2: Testing, Synthesis and Emerging Lessons
This involved applying the toolkit to two main and two comparator countries, Peru (with Chile as a comparator) and Ghana (with Tanzania as a comparator). In all four countries, mining had shown some evidence of having successfully contributed to economic and social improvements. The purpose was to test the toolkit, to assess whether it could be applied to a broader set of mining countries and to propose refinements. The findings were reviewed by a second multi-stakeholder workshop, which provided valuable feedback.

Phase 2 Published reports:
- Four country case study executive summaries
- Synthesis report of findings of the four case studies.

Phase 2 Additional Online Resources:
- Ghana, Tanzania, Peru and Chile country case studies
- October 2005 Workshop proceedings.

In addition, a number of other publications summarize the process or findings of both Phases 1 and 2, and signal ICMM's approach to Phase 3:
- A Spotlight series that summarizes key aspects of Phases 1 and 2 (The Prize; The Challenge; Ways Forward; and Process and Feedback)
- Resource Endowment Guide to Phases 1, 2 and 3.

Phase 3: Action Learning through Partnerships
The activities of Phase 3 will include a number of 'pilot projects' in partnership with others to encourage uptake of the Phase 2 recommendations and, as a consequence, enhance the contribution of mining to social and economic development. Phase 3 will also focus on dissemination and outreach.

For the latest information on Phase 3, including details of pilot activities and partners, visit www.icmm.com

> 'to better understand how large-scale mining activity in low- and middle-income countries can enhance the socio-economic development of host countries.'

Abbreviations

GDP
Gross Domestic Product

ICMM
International Council on Mining and Metals

MMSD
Mining, Minerals and Sustainable Development project

OECD
Organization for Economic Cooperation and Development

Introduction

1

1. Introduction

1.1 Background to the Literature Review

In May 2004, the International Council on Mining and Metals (ICMM) instigated an initiative under the banner of 'The Challenge of Mineral Wealth: using resource endowments to foster sustainable development', also referred to as the Resource Endowment initiative. The initiative was motivated above all by the perception that more needs to be done to translate the potential benefits of mining activities for broad-based socio-economic development into reality.

This literature review is a companion piece to a related Resource Endowment initiative report that summarizes the output of Phase 1 of the initiative. That report presented an analytical framework to be applied in a series of four country case studies (see The Analytical Framework). This extensive literature review formed a keystone in the development of the analytical framework and related activities during Phase 1 of the Resource Endowment initiative. In particular, it focused on the literature relating to the poor performance of resource-rich countries and considered the macroeconomic policy explanations presented. It also reviewed various perspectives on the resource curse – political economic and governance.

The literature review may either be read in conjunction with The Analytical Framework, or as a separate commentary on differing perspectives on the poor performance of resource-rich countries and the related resource curse proposition – the apparent paradox whereby some countries with an abundance of natural resources have achieved less economic growth than countries without these natural resources.

1.2 Structure and Content of the Literature Review

This literature review is structured in two parts.

Chapter 2 reviews standard macroeconomic policy explanations for the poor performance of resource-rich countries. It concludes that there is no clear-cut macroeconomic answer for variances in outcomes. Instead, there is a lack of clarity on the transmission mechanism between resource outcome and macroeconomic performance and why, in particular, political elites in some countries have allowed highly qualified technocrats to advise on good policy decisions.

Chapter 3 provides an overview of different political economic and governance perspectives on the resource curse. It explains why many economic accounts of poor policy decisions have difficulties in consistently explaining differences in outcomes and why attention has shifted onto institutions and governance structures. It concludes that systematic comparison of country cases is necessary to address the many remaining open questions.

Macroeconomic Explanations for the Resource Curse

2

2. Macroeconomic Explanations for the Resource Curse

2.1 Introduction

There is a large body of literature that points to complex and intertwined explanations for the apparently poor macroeconomic performance in many mineral-based economies. This chapter considers the following explanations from that literature – long-term decline in terms of trade, revenue volatility, Dutch disease, crowding-out effects and the increasing role of the state.

2.1.1 Long-term Decline in Terms of Trade

According to development ideas from the 1950s, over time the mineral export revenue would be able to buy fewer and fewer imports of capital goods thereby inhibiting development-creating investment in an economy. The issue of declining terms of trade is controversial and both the empirical and the theoretical assertions have been much debated (Toye, 1987; Kindleberger, 1956; Maizels,1968; Mikesell, 1997); although more recent empirical work appears to support the existence of a long-term secular decline in primary product prices (Brohman, 1996), doubts remain (Bleaney and Greenaway, 1993; Pindyck, 1999). Certainly the Mining, Minerals and Sustainable Development (MMSD) report (MMSD, 2002) asserts that world prices for minerals have fallen relative to prices of manufactured goods over the last 20 years. This could be because of random shocks to the market together with innovation reducing both the costs of production with competition forcing down price, and technology reducing the demand for mineral products. Yet another explanation could be that new mines tend not to displace old mines, thus aggravating problems of over-capacity. Nevertheless, it is difficult to see why a slow decline in prices would explain the sort of deterioration in economic performance associated with the 'resource curse'. Economies constantly face changing relative prices. If they take place gradually, economies might be expected to adjust unless other factors are at work. However, some economic stresses leading to a degree of failure of the economic system are inevitable in economies undergoing large and speedy structural change.

2.1.2 Revenue Volatility

Some observers (Auty, 1998; Mikesell, 1997) offer revenue volatility as a possible explanation for the 'resource curse.' The basic argument is that mineral revenues are volatile, driven by violent fluctuations in prices over relatively short periods of time. Certainly there is plenty of empirical support for the existence of such volatility and the MMSD report (MMSD, 2002) claims that mineral prices have been more volatile than those of manufactured goods since the 1970s. For example, one study (Mikesell, 1997) found that during 1972–92, regions with high primary export shares experienced terms of trade volatility two to three times greater than industrial countries in the same period. Such volatility could cause a variety of problems. Fluctuating revenue profiles make it very difficult to pursue a prudent fiscal policy. This creates problems in the economy ranging from aggravating investor uncertainty to 'stop go' spending policies. There is also concern that windfall revenues from fluctuating export prices would be consumed rather than invested (Sachs and Warner, 1998) although empirical evidence does throw doubt on this view (Macbean, 1966; Behrman, 1987) and the 'permanent income hypothesis' would argue that windfall gains would be more likely to be saved and invested than consumed. However, there is no strong evidence to suggest that resource-rich countries have higher savings rates (Sachs and Warner, 1997).

An alternative view is that a downturn in the commodity cycle may well be of benefit insofar as it forces much needed economic reform that would not occur without pressures from declining revenues (Davis and Tilton, undated). However, intuitively it is attractive to imagine fluctuating revenues, in the absence of effective stabilizing measures, creating problems for government fiscal policy and macro-economic management more generally.

A variant on this theme is that resource abundance allows countries to engage in excessive consumption, which is not sustainable (Rodriguez and Sachs, 1999; Atkinson and Hamilton, 2003). One explanation of this phenomenon, which differs from the revenue volatility argument, is that simple measurement of Gross Domestic Product (GDP) overstates income since it neglects the reality that GDP from the sale of a depletable resource cannot be regarded as income but rather as the liquidation of assets (Neumayer, 2004). Thus GDP, which does not account for depletion, overstates income, leading to unsustainable levels of consumption.

2.1.3 Dutch Disease

Originally, Dutch disease had a very specific meaning – the appreciation of the real exchange rate as a result of inflation arising from spending the revenues leading to an overheated economy

plus an appreciation of the nominal exchange rate as the domestic currency attracted higher demand. The result was a contraction in the non-mineral traded sector. However, over time, the meaning has developed. In some cases it has taken on a much wider meaning to encompass all of the negative macro-economic effects associated with the 'resource curse'. In other cases the meaning has become much narrower. For example, one source described it as a failure of resource-abundant economies to promote a competitive manufacturing sector (Sarraf and Jiwanji, 2001).

These changes of meaning are reflected in the differing theoretical approaches (Corden and Neary, 1982; Corden, 1984). Initially, the impact was split into a 'resource movement effect' and a 'spending effect'. In the case of the former, a higher marginal product in the booming resource sector draws (mobile) resources out of other sectors. Thus factors move into the mineral sector bidding up wages and causing other sectors to contract. The 'spending effect' is when, as a result of the windfall, demand rises in both tradables and non-tradables. Since tradables have prices determined by the international market, greater demand is met by higher imports. However, prices in non-tradables rise relative to tradables and so resources shift from tradables to non-tradables. If the resource sector is an enclave and does not participate in domestic factor markets, then there will be no 'resource-movement effect' and the 'spending effect' ensures the non-tradables will expand but at the expense of the non-resource tradables.

Over time other dimensions of Dutch disease – defined simply as a contraction of the tradable sector – have emerged. One argument is that subsidies used to protect non-resource tradables that are weakened by the boom, aggravate the sector's problems and eventually become unsustainable (Auty, 1994b). Another is the 'leapfrog effect' when governments tend to miss the labor-intensive phase of industrialization and move straight to the heavy, capital-intensive phase with negative effects for the tradable sector (Sarraf and Jiwanji, 2001). Others have addressed the issue by considering learning by doing in the context of Dutch disease (Van Wijnbergen, 1984a; Krugman, 1987; Sachs and Warner, 1995b; and Gylfason et al., 1997). All assume that because learning-by-doing benefits only accrue from tradables, a contraction in that sector implies lower productivity.

'An alternative view is that a downturn in the commodity cycle may well be of benefit insofar as it forces much needed economic reform that would not occur without pressures from declining revenues.'

In much of the literature on Dutch disease, attention is focused on the effect on manufacturing (Sachs and Warner, 1997). This reflects the simple fact that much of the earlier work on Dutch disease concentrated in the developed countries (Benjamin et al., 1989). This raises the question whether a contraction of that particular sector should be an issue for concern. Sachs and Warner (1997) argue that if neo-classical competitive conditions prevail, then a declining manufacturing sector implies no harm. However, when this is not the case – which is the norm – then contraction of manufacturing through Dutch disease can lead to chronic slow growth. Thus, the natural resource sector in contrast to manufacturing lacks positive externalities. The argument is that manufacturing maximizes forward and backward linkages (Hirschman, 1958) and creates 'learning by doing' externalities (Matsuyama, 1992).

Yet another area relates to the impact of natural resources on social capital. It has been suggested that resource, poor countries accumulate social capital faster than resource-rich countries (Woolcock et al., 2001). One explanation for this is that limited natural resources promote early industrialization forcing earlier urbanization. This weakens bonding social capital (which stifles entrepreneurship) by allowing people to escape from villages into an urban environment with greater anonymity and better functioning markets. At the same time, this confers a saving dividend by

reducing the dependency ratio. However, this assumes urbanization is not based upon the state provision of rent-seeking employment. Such views about the role of industrialization are not without challenge and some claim that there is a lack of evidence that the creation of a manufacturing industry can have a positive effect on an economy (Auty, 1994a). Also, there is little statistical evidence to suggest a decline in manufacturing has a negative effect on learning by doing and growth (Stijns, 2001). However, as the condition of Dutch disease began to be attributed to developing countries, then attention did switch to agriculture as the main source of tradables (Benjamin et al., 1989).

If there is controversy over the exact nature of the theory of Dutch disease, there is also controversy over whether empirical evidence supports its existence. Some have found that growth in manufacturing and services was slower in natural resource-intensive economies (Sachs and Warner, 1997). However, while claiming tentative support for Dutch disease effects, they do acknowledge that they cannot distinguish between true effects and potential bias from measurement errors in the independent variables. A number of country studies also give support to the existence of Dutch disease. However, often the situation is complicated by extraneous factors. For example, in Botswana any Dutch disease effect on agriculture would be confused by two serious droughts in the 1980s (Love, 1994).

Some such as Mikesell (1997) conclude that Dutch disease was not the major factor in explaining the growth pattern for more than half the countries investigated. Others have also found no substantive evidence of Dutch disease (Sarraf and Jiwanji, 2001). Clearly, some de-industrialization may be the result of adjustment towards a new equilibrium (Sarraf and Jiwanji, 2001). Furthermore, in some cases, while agriculture did contract, manufacturing tradables actually expanded (Fardmanesh, 1991). Explanations offered for this include a free trade effect (Neary and Van Wijnbergen, 1986), imperfect substitution (Benjamin et al., 1989) and a world price effect (Fardmanesh, 1991). Also a specific case study of Algeria (Conway and Gelb, 1988) actually found substantial exchange rate depreciation and an improvement in manufacturing and agriculture, counter to the Dutch disease theory. However, it is acknowledged this is very different from the experience of most oil exporters (Gelb, 1986).

> 'Little work has been done in the area in terms of mineral projects. This probably simply reflects the fact that transition economies are a relatively new phenomenon.'

2.1.4 Crowding-out Effects

This is a variation of the 'resource movement effect' described as a feature of Dutch disease and is when a mineral investment project, large relative to the rest of the economy, effectively stakes first claim on scarce resources. Thus, the rest of the economy finds it difficult to secure the factors needed to develop. This issue is especially relevant in smaller countries when the size of the investment project is large or where there are strong regional dimensions to an economy and the project is focused in one region. In particular, the concept is potentially very important in the transition economies where the process of transition has effectively destroyed the old productive base and a new and private tradable sector is struggling to emerge.

Little work has been done in the area in terms of mineral projects. This probably simply reflects the fact that transition economies are a relatively new phenomenon. What work has been done has tended to be linked into the impact of foreign investment more generally (Buffie, 1986 and 1993; Brecher and Diaz Alejandro, 1977; Brecher and Finlay, 1983; Ruffin, 1984; Srinivasan, 1983; Young and Miyagiwa, 1986). It has also tended to be highly theoretical with the analysis based on modeling rather than empirical work.

2.2 Increasing the Role of the State and Its Economic Consequences

Given that in virtually all legal regimes excluding the USA, minerals are the property of the state, the revenues in the first instance accrue to the government. This inevitably invites greater government intervention in the economy. Many of those writing on the 'resource curse' see a major part of the explanation of the phenomenon as essentially political, relating to the consequently expanded role of the government (Ascher, 1999; Auty, 1998; Auty and Mikesell, 1998; Sarraf and Jiwanji, 2001; McMahon, 1997; Ross, 1999 and 2001; Stevens, 1986). In the context of macro-economy analysis, several strands of argument have been pursued.

2.2.1 Bad Decision-making

The first strand argues that large windfall revenues lead to poor decision-making by governments. The development of minerals raises expectations among the population. The MMSD report outlines in some detail the very large number of expectations that arise from the prospects of a mineral project (MMSD, 2002, page xiv). This therefore pressurizes government to 'do something', which encourages speedy responses. Often quick, ill-coordinated decisions are bad decisions. Also, spending revenues too quickly is more likely to introduce distortions into the way the economy works, if only because there is less chance for the economy to adjust naturally (Auty, 2001). Having more money to play with also tends to weaken prudence and normal procedures of 'due diligence'. Thus, the importance of making the 'right choices' seems somehow less important. Of particular importance is when governments decide on capital spending without thought to the recurrent spending implications (Sarraf and Jiwanji, 2001). Because, in the first instance, the revenues accrue to government, decision-making is then concentrated in fewer hands compared to, say, peasant cash crops where a much greater number of economic agents are involved in the decision how to spend any windfalls (Auty, 2001).

2.2.2 Enhanced Corruption and Rent-seeking

One can draw a distinction between corruption and rent-seeking. Corruption is simply stealing resources while rent-seeking can be viewed as a normal legitimate human reaction based on self-interest. However, both lead to a diversion of resources away from the promotion of the greater good.

Proponents argue that having large amounts of money to play with is bound to increase the temptation for corruption and rent-seeking on the part of decision-makers. Also, the fact that mineral projects often tend to take place in poor countries where corruption is more prevalent anyway compounds the problem. This is compounded for the mineral industry because location is fixed by geology, which reduces the choice of companies as to where they can operate. Mineral projects also tend to involve a great deal of regulation and regulation tends to be a breeding ground for corrupt practices. However, this is a complex and controversial area. Some have argued that corruption evolves from the clash between traditional values and foreign norms (Mbaku, 1992). For example, it has been argued that in Africa, bureaucrats are under an obligation to share the benefits of their office with their kin, a characteristic common of a great many other societies (Apter, 1963; Alam, 1989). If this is the case, then because mineral projects in developing countries almost invariably involve foreign companies, this alone helps explain why resource-rich countries may experience greater levels of corruption. However, some have claimed, for example in the context of the Caspian, that levels of corruption do not vary between the resource-rich and resource-poor countries (Auty, 2001). Furthermore, corruption is widespread in many countries where it is commonplace in politics. Examples often cited include Italy and Japan, both of which can be viewed as successful economies.

Rent-seeking concerns how people compete for "artificially contrived transfers" (Tollison, 1982). Most studies examine the behavior of interest groups seeking to capture transfers created by government but the concept can also cover efforts to get the government to create transfers (Mbaku, 1992). The result is that the expenditure creates no social value and, arguably more importantly, distorts markets and hence the way the economy operates (Tollison, 1982). Several explanations can be offered why rent-seeking may be greater in countries with large mineral revenues. Most obviously, the larger the public purse, the less noticeable is the leakage to interest groups although this may not be true if the result is a "feeding frenzy" (Lane and Tornell, 1996).

Some argue that rent-seeking is greater because wealth is concentrated in the public sector or possibly in a small number of companies

(Auty, 1998; McMahon, 1997). Thus the bureaucracy, which tends to belong to the politically dominant group, controls the majority of the rents created in these economies (Mbaku, 1992).

There is general agreement that rent-seeking behavior produces undesirable results for the economy and imposes significant losses on many economies (Bhagwati, 1982). Thus, such behavior distracts attention from goals of long-term development towards maximizing rent creation and capture (Auty, 1998). Also, rent-seeking creates extremely powerful lobby groups who are able to block much needed economic reforms. It has been argued that societies face severe impediments to innovation as a result of the behavior of special interest groups. Rent-seeking also makes it more difficult for governments to adjust spending when faced with revenue fluctuations.

However, such issues are far from clear-cut. An important dimension is what happens to the rewards of corruption and rent-seeking once they have been secured. If they are used for productive investment within the economy, the outcome will be very different than if they are used for conspicuous consumption or to enhance foreign bank accounts. Arguably, the land owners who drove the development of the economy in the American West in the 19th century indulged in some very dubious business practises. At the same time they also drove the emergence of a distinct and efficient property right system (Clay and Wright, 2003) and (Umbeck, 1977).

2.2.3 The Nature of Investment Decisions

Often, the nature of investment decisions in countries that have large windfall mineral revenues creates problems for economic progress. Part of this is explained by the bad decision-making outlined earlier. However, other dimensions imply that often the investments made by resource-rich governments fail to develop the productive base of the economy. Furthermore, if this investment is funded by borrowing, then it compounds the problem, since the loan must be serviced and repaid. Often, the prospects of large mineral revenues tempt governments to borrow on the strength of this, thereby aggravating the decision problems associated with an influx of foreign exchange. Mexico is often cited as the classic example (Usui, 1997).

Thus, unproductive investment booms have characterized many countries, leading to a collapse in the efficiency of investment in resource-rich countries (Sarraf and Jiwanji, 2001; Lal and Myint, 1996). There is a tendency to invest in non-tradables, especially in the military and in projects that offer very low rates of return although this has reflected limited absorptive capacity in some of the countries (McMahon, 1997). Often, public-sector projects are associated with low investment returns. Also, in many cases there was also a temptation to indulge in prestige projects ranging from palaces to international airports, creating infrastructure that was quite inappropriate for the countries concerned.

2.2.4 Industrial Policy

A specific area that combines poor decision-making and bad investment decisions in the case of many resource-rich countries concerns the industrial policy adopted following the resource revenue windfall. It is quite noticeable that most resource-rich countries have failed to promote a competitive manufacturing sector (Krause, 1995; Mikesell, 1997; Ranis, 1991; Sachs and Warner, 1995a).

Many resource-rich countries, especially in the 1970s and 1980s, adopted an industrial policy based upon import substitution. This was driven initially because some economists saw this, plus a greater intervention from the state, as the means to break out of the circle of underdevelopment (Auty and Kiiski, 2001). Such policies also started to seem attractive when existing industries came under pressure as a result of the sort of macro-economic forces discussed under Dutch disease.

This policy invariably had two components – the introduction of subsidy and growing protectionism.

Subsidy

Very often a boom in resource revenues prompted the introduction of heavy subsidies, usually based on some sort of infant industry argument. The problem was that these subsidies became unsustainable when revenues fell. However, their creation, and the subsequent rent-seeking, created powerful interest groups who opposed their removal (Sarraf and Jiwanji, 2001). Thus, the policies become fixed because of the interest and power of lobby groups with an urban orientation pursuing rent-seeking behavior (Auty, 1994a). However, in certain circumstances subsidies can

have positive effects. Thus, the subsidy element in infrastructural support services and tax exemptions can be important in attracting foreign companies to set up plant (Rasiah and Shari, 2001).

Protectionism
Some view the trade regime as the most important element in a policy environment (Lal and Myint, 1996) and there appears to be a positive correlation between dependency on primary products and a closed trade regime (Sachs and Warner, 1995b). Another study also established that larger countries tended to be more closed to international trade than smaller countries (Perkins and Syrquin, 1989).

Once these elements of policy – subsidy and protection – were in place, then continuing resource revenues reduced the incentive to create competitive manufacturing industries. Since many development economists regarded competitive manufacturing as a principal source of technological progress, this has serious implications for economic progress. Furthermore, such protectionist policies also imposed demands for infrastructure, which strongly challenge the government's implementation capacity (Lal and Myint, 1996). Also, the resulting industries are incapable of earning foreign exchange (Auty, 1994a). The other obvious problem is that infant industries have a strong tendency not to grow up. Overall the key problem is thought to be that "the relaxation of market discipline and associated accumulation of economic distortions … retards competitive diversification and lies at the heart of the underperformance of the resource abundant countries" (Auty and Kiiski, 2001, page 28).

By contrast, a competitive industrial policy based upon a strong export orientation maintains the competitiveness of established industries and encourages entities based upon comparative advantage (Auty, 1994a).

These problems are compounded when it is remembered that mineral projects have characteristics that make them tend to enclave activities with minimal forward and backward linkages with the rest of the economy. This is reinforced because tariff and non-tariff barriers in global trade can discourage mineral producers from developing downstream linkages.

2.3 Conclusion
Economists are always looking for the 'One Big Explanation' that covers all eventualities. However, one clear conclusion from the literature is that there is no simple single explanation of what creates a 'blessing' rather than a 'curse' in terms of the economy. Nor is there any agreement on any collection of explanations. This implies the need for a case-by-case approach rather then trying to force some sort of generalization.

Another aspect is making the distinction between macro-economic policy that may aggravate or avoid the 'curse' and why that particular policy was followed in the first place. To be sure, those countries that appear to have avoided the 'curse' did possess small groups of highly qualified bureaucrats. In Chile they were called the "Chicago Boys" (Hojman, 2002), in Indonesia "the Berkeley Mafia" (Booth, 1995) and in Malaysia "the Backroom Boys" (Shamsul, 1997). In Botswana it was a mixture of expatriates and highly talented black South Africans driven north by apartheid (Modise, 1999; Tsie, 1996). These groups with their training in economics were well able to direct macro-economic policy to produce a 'blessing'.

But the more interesting question is why the various political elites have allowed them to do so, while in many other countries – for which there are no good reasons why such groups should not also exist – political and socio-economic circumstances and foresights have been less favorable. We conjecture that the answer rests with the dynamics behind a country's socio-political institutions and governance structures, and that systematic differences among these provide a crucial part of the explanation for the transmission mechanism from large-scale revenues to 'curse' or 'blessing'. It is not just what the transmission mechanism was, but why it was allowed to operate (or not, as the case may be). The present lack of clarity on the variations in transmission mechanisms presents a serious challenge. If it is not clear what causes the problem (or the success), then treatment is likely to prove equally elusive. Chapter 3 summarizes how different branches of the political economy and governance literature attempt to draw such connections.

Governance and Political Economic Perspectives on the Resource Curse

3

3. Governance and Political Economic Perspectives on the Resource Curse

3.1 Introduction

In recent years development scholars and the international financial institutions have given recognition to the role that institutions and governance structures play in shaping the prospects for economic growth and broad-based social welfare. The basic premise is that returns on private and public spending across countries vary with the effectiveness of the institutional framework and the governance structure within which that spending takes place.

It is now widely understood that institutions and governance structures are central for explaining differences in economic performance. Recent studies even show that these elements tend to override many other explanatory variables (Rodrik and Subramanian, 2003). In this spirit, good governance programs have stressed the importance of the institutional environment as a way of understanding policy-makers' incentives. Institutional prerequisites that are key for the functioning of market economies, such as clearly defined property rights, have become standard elements of economic policy reform agendas.

Not surprisingly, the emphasis on institutions and governance structures has also entered the debate on whether and when natural resource extraction has a positive or negative 'resource impact'. Cross-country comparisons of macroeconomic policy choices have only been able to deliver partial explanations for the divergence in socio-economic development outcome across resource-rich countries (Stevens, 2003). Some scholars have linked the performance of resource-rich countries with their scores on governance indicators and political institutions. They have found that the quality of institutional and political variables is decisive for explaining positive 'resource impact'.

However, many defenders of the resource curse proposition who have drawn on a political-economic explanation of the phenomenon have tended to ignore the role of institutions and governance. They have either resorted to narrow and empirically questionable microeconomic explanations for poor policy outcomes or have identified the sheer prevalence of natural resources as a structural condition for poor economic performance. Such approaches have clear limits in adding meaningful value to the real question of how natural resource extraction can enhance socio-economic development.

On the other hand, the focus on institutions and governance is not straightforward. While there is ample evidence that institutions and governance structures matter, little remains known about how efficient institutions emerge and whether and how these can be crafted (North, 2001 and 2004; Rodrik, 2003). The evidence that institutions and governance structures matter is based on *static analyses*. Understanding how institutions emerge, how these change and how they could possibly be actively built requires a more *dynamic perspective*. Unfortunately, the usual analytical tools that economists are familiar with are often not well prepared to capture dynamic interactions. But it is apparent that the current debate suffers from a limited understanding, not of what kinds of policies countries should be undertaking, but when and how countries and governments have been capable of pursuing policies that are beneficial to socio-economic development. In other words, very little is known about how to build functioning public institutions in developing countries in ways that make them legitimate and that leave something of permanent benefit to the citizens of the countries concerned.

This chapter of the literature review summarizes how different types of governance and political economy approaches have tried to explain variations in economic development outcomes, and how they draw the linkages between resource endowment, powerful stakeholders' interests and the efficiency and effectiveness of institutions and governance structures. It sheds light on the premises of rent-seeking explanations of the resource curse and demonstrates their methodological flaws. It also depicts to what extent alternative types of political economy studies try hard to find less tautological answers to the pressing issues at stake.

Chapter 3 is structured as follows. Section 3.2 poses the fundamental challenges that institutional and governance analyses of the resource curse face. Section 3.3.1 shows how the typical economic analyses of political processes arrive at the conclusions that an increased role of the state in developing economies is bad and that natural resources pose a structural impediment to economic success. Section 3.3.2 illustrates why institutional economists have realized that the quality of institutions and governance structures has something to do with positive and sustainable socio-economic development. Section 3.4 concludes

that although it is clear that institutions and governance structures matter, there is much to be done to understand how in different contexts efficient and effective institutions can be built and supported. The final section (3.5) considers the way forward.

3.2 Fundamental Challenges

A number of recent econometric studies have demonstrated that institutions and governance structures perceived to be of 'good quality' by those who are affected by them contribute positively to economic growth and development. But the question what makes for good institutions and governance structures and how these have emerged is more complex. Two sets of observations demonstrate the potential complexities involved.

- Variations in institutions and governance structures remain considerable across those industrialized, emerging and developing countries that have clearly managed to achieve 'good' governance. These variations hinge on historical, contextual and time-specific circumstances. As a consequence, simple generalizations on how to bring about and manage institutional change are hard, if not impossible, to distil.

- Institutional variations suggest that different combinations of policy and institutional choices and different governance structures can result in similarly efficient outcomes. What matters is then not 'what has been done', but how 'what has been done' has 'fit' specific circumstances. Such 'fit' seems to depend on the appropriateness and compatibility of policy and institutional change with the context of existing institutions and social structures.

It follows that policy advice on institutions and governance cannot rest on simple blueprints. It requires an analytical mindset that is concerned with how stakeholders can manage to achieve broad-based consensus around institutional and policy choices that improve rather than deteriorate institutional and governance efficiency within a given socio-political and socio-economic context. Much appears to be about the social legitimacy of and trust in domestic, regional and local institutions and governance structures and the policy choices that those with political, economic and social powers make within the realm of these boundaries.

> 'Understanding how institutions emerge, how these change and how they could possibly be actively built requires a more *dynamic perspective*.'

The main challenge is to capture what there is that can be generalized across successful countries, if it is not particular institutions, governance structures and indeed economic policy choices. The key questions to tackle that challenge are:

- In the positive sense: why have well-performing countries managed, through their public policies and institutions, to craft the incentives, structures and preconditions that lead to broad-based economic activities operating alongside the natural resource industries?

- And in the negative sense: why do those who hold power in badly performing countries lack the incentives, motives and/or the capability to change institutions and governance structures and adopt economic, social and environmental policies that would improve the broad socio-economic conditions of their countries, and by extension their own long-term welfare?

Different strands of governance and political economy literature have set out to give answers to why governments may choose bad policy choices over good ones and why they fail or refuse to adopt more favorable institutional solutions and governance structures. Economists have typically argued that politicians and bureaucrats in badly performing countries lack incentives to make good policy and investment decisions, to refrain from rent-seeking and corruption and to pursue sound industrial policies. Unfortunately, these explanations are inconclusive for explaining real-world variations in outcomes. They also rest on strong assumptions about the preconceived motives and interests of those who are in power.

The broader governance and political economy literature has moved beyond the narrow and static concepts of mainstream economists and has more to say on why some countries succeed and others fail. However, a coherent and consistent answer is yet outstanding.

3.3 Rent-seeking Behavior and the Resource Curse

Chapter 2 of this literature review suggested that corruption and rent-seeking as well as bad economic and industry policy and investment decisions are typically provided as the key political economy explanations for the existence of the 'resource curse', and a number of relevant studies were cited (see Section 2.2). Many of these arguments are derived from an economic analysis of politics and political processes. Such analysis explains political outcomes from an agency-centered microeconomic perspective. The baseline paradigm is that individuals maximize their interests and act instrumentally, rationally and strategically in pursuit of these interests. This understanding concludes that those who hold unconstrained power – typically politicians and bureaucrats – will abuse that power for their personal benefit.

3.3.1 Public Choice and Structural Explanations for the Resource Curse

One strand of this basic assumption – *public choice theory* – has been particularly critical of the role of the state in the economy (Mueller, 1979, 1989). Skepticism with respect to the effectiveness of political and state interventions rests on the theoretical analysis of allocations made by politicians compared with those that could be generated by the market as a measure of the social cost of political decision-making. Proponents have viewed states' legitimacy to employ coercive action as a matter of concern. They have emphasized the potential negative influence of state participation, warning of the potential misuse by selfish politicians. The general conclusion has been that solutions based on markets are generally superior to any form of state intervention (Ordeshook, 1990).

'Some have argued that a country's natural resource endowment explains political fragmentation and the predatory nature of governments.'

Many development practitioners have accepted these theoretical foundations and have underscored the capacity of markets to orchestrate socially desirable outcomes based on individuals' choices (Bates, 1990). The consequent macroeconomic reform agenda (summarized as the Washington Consensus) was supported by the collapse of socialist states that had pursued state-interventionist industrial policies, including subsidies and protectionism (Williamson, 2003). In the meantime, it has become clear that this liberal economic reform agenda has yielded ambivalent results and has not proved to be the sole key to economic development.

Nevertheless, studies on resource-rich countries have drawn a *structural* link between natural resource endowment and the policy conclusions of public choice theory. These essentially *structural explanations* stress structural features and conditions of countries and their societies in order to explain comparative differences in the distribution of domestic political power and development outcomes. Embarking from Krueger's (1974) seminal work on the social costs that arise if economic agents seek to capture monopoly rents, proponents have argued that large levels of natural resources relative to income generate inefficient rent-seeking behavior and hamper productive economic activities (Khan, 2000). This bold application of the rent-seeking argument has led to the conclusion that if states are well endowed with natural resources, those who hold political power will inexorably capture these monopoly rents. It is implied that those who benefit from the structural characteristics dominate the political sphere and achieve outcomes that favor their position.

Some have argued that a country's natural resource endowment explains political fragmentation and the predatory nature of governments (Auty and Gelb, 2001; Karl, 1997; Reno, 2000). Resource abundance is seen as a structural *curse* that results in patronage politics, fractional and predatory governments and policy outcomes that restrain growth. Predatory governments maximize the exploitation of the resource base and neglect to formulate and support policies that nurture industrialization and economic development. Furthermore, the state's monopoly rents also permit it to silence strong domestic interest groups who might otherwise question government's legitimacy. The conclusion is that a vicious circle of rent-seeking behavior causes and perpetuates long-term policy failure.

Collier and Hoeffler (2001) have tested whether natural resource abundance results in policy failure in the form of domestic conflicts. They find that there is a correlation between states' natural resource endowments and the risk of domestic conflicts. Similarly, Isham et al. (2005, page 1) present evidence which argues that it shows that "countries that are abundant (scarce) in point-source natural resources [such as mineral or oil projects] have weaker (stronger) institutional capacities; and that the endogenously determined institutional capacities are significant and large determinants of growth since the oil shock". Others have refined the basic rent-seeking model and combined it with ethnic diversity and fractionalization as further structural features to explain political conflict (Easterly and Levine, 1997; Hodler, 2004).

Others have pointed out that if a state gains a large proportion of its revenue from resource rents, state decision-makers are less dependent on levying domestic taxes on citizens. If state revenue is not generated from taxing citizens, political leaders are less dependent on citizens and therefore less accountable to them. If leaders do not have to be accountable, states are more likely to be predatory and distributional conflicts are likely to be more intense. For example, Moore (2000) has introduced the independence of state elites from ordinary citizens as a more refined explanatory variable and has argued that bad policy outcomes and governance problems arise if state elites are too independent from their citizens. This condition hinges not only on the possibility of extracting unearned income from natural resource endowment, but on the extent to which state elites can rely on strong external financial and military support and have the capability to control commodity exports.

Moore argues that this condition of 'political underdevelopment' is the source of weak legitimacy and of unresponsiveness in the part of developing countries' leadership to citizens' demands. Differences in state–society relations can be assessed via the degree of dependence of states from their citizens. States are independent of their citizens if they can lay their hands on sources of public funds other than tax revenue. Vice versa, if states rely more heavily on taxing their population to generate revenue, they are more effective, responsive and accountable and less arbitrary and despotic. Drawing on the historical emergence of taxation systems in Western Europe, one could thus argue that states are more accountable to tax payers than to non-tax payers. In this sense, 'political underdevelopment' is a historical problem that relates to how states were created in the developing world and how they relate to the Western world. As a consequence, 'history' in combination with resource endowment has facilitated the establishment of predatory states.

Much discussion along similar lines has revolved around the nature of *rentier states* (Beblawi and Luciani, 1987; Boone, 1990; Mahdavi, 1970; Okruhlik, 1999; Shambayati, 1994). Rentier states are defined as societies in which there is no connection between reward and effort and largesse flows as if manna from heaven. The argument is that easy access to riches bred idleness and provided no incentive to accumulate or innovate. This explanation is attractive, but it is not conducive to analytical rigor. How precisely can one determine whether people are idle and feckless and how idle and how feckless? And unfortunately, such stereotyping rather condemns the recipients to a life with no hope of redemption.

Other structural strands relate to the nature of regimes, for example the categorization of states along the lines suggested by Lal (1995). To explain the few cases of more successful natural resource rich countries in comparison to those that fail, Auty and Gelb (2001), for example, define "developmental states" as states that have "a determined developmental elite, in a weak and subordinated civil society, which confers relative autonomy, that is deployed by a powerful,

competent insulated bureaucracy in the effective management of non-state interests, while political legitimacy is conferred first by repression and then by performance".[4] These include Indonesia, Malaysia, Botswana and Chile – countries that have avoided the 'curse' and secured a blessing.

In contrast to these "development states", Auty (2001) links "predatory" and "fractional governments" associated with poor economic performance to countries' dependence on primary exports for any length of time. Thus, "the economy is locked into a staple trap in which burgeoning slow-maturing industry and bloated public service depends on transfers from commodity producing sectors with waning competitiveness whose share in GDP declines due to both diminished incentives and ongoing structural change" (page 4). The staple trap is defined as "a dependence upon one out of a handful of commodity exports with declining viability and shrinking size relative to GDP" (ibid., page 8).

While these concepts of developmental versus predatory states offer some ground for further analysis, there is the danger that defining states in a descriptive manner simply leads to tautology. However, some argue (Mkandawire, 2001) that despite having all the necessary elements in place for being a 'developmental state', a country may simply not make it because the hill to climb is too steep or there is some form of exogenous shock that blocks progress. In short, with the best will in the world, the capacity to develop is simply not enough given the circumstances. The conclusion is that those countries that avoided the 'curse' were developmental states that simply got lucky. As has been described in Botswana, their success was "a consequence of luck and the presence of the right personalities in the right places at the right times" (Cobbe, 1999, page 133).

The interesting issue about the dividing line between a 'developmental state' and a 'predatory state' is the following. In the development state, the ruling elite faces some form of constraint that inhibits it from ransacking the economy for its own purposes. This can be some form of "social anchor" linking the elite into society more generally (Mkandawire, 2001) or might be some other constraint. For example, in Indonesia arguably it was the army that provided limits on the ability of Suharto to ransack the economy (Booth, 1995). If this difference holds, it would be interesting to explore in more detail for each of the more successful cases how and to what extent local, regional, domestic or international interest groups or elites have been able to provide such a constraint to limit the ability of a developmental state to become a predatory state.

Finally, it is tempting to attribute poor performance by resource-rich countries to a lack of democracy. Lal (1995) has suggested a positive relationship between growth and the political system and has pointed out that resource-rich countries tend to be oligarchies rather than democracies. However, the argument is debatable. Thus, "democracy does not insure good government, nor are all oligarchies poorly governed" (Mikesell, 1997, page 198). Furthermore, the democratic credentials of Malaysia, Indonesia, Pinochet's Chile and indeed Botswana (which is a *"de facto one party state through the ballot box"* (Tsie, 1996, page 600)) are highly debatable and yet these countries avoided the 'curse'.

There are many general criticisms to the economic analysis of politics and structuralist explanations. For example, proponents neglect to inquire how those with political and economic power form their interests and decide on alternative strategies. Second, the structural and institutional framework within which strategic actions take place remains exogenous and underexposed. Proponents do not attempt to explore the sources of initial institutions and generally underrate the positive role state institutions can play in facilitating market exchange and in inducing political leaders to pursue policies that are consistent with improving broad-based welfare. Third, while it is recognized that basic sets of rules and procedures are important, their social bases are not investigated. Much emphasis has been placed on proving that strategic actions of rational individuals can lead to socially undesirable outcomes and that state interventions can be negative.

Those with a wider social science perspective have argued that proponents pre-empt political agents' interests too rigidly, and thus they neglect the fact that distributive conflicts that have resulted in collectively positive outcomes have often been solved through complicated bargaining processes structured within the context of formal or informal institutions (Udehn, 1996).

[4] For a more general discussion of the issue in the context of Africa see Mkandawire (2001).

'States underpin social and political institutions, which are a functional necessity for market economies.'

There is particular criticism relating to the application of rent-seeking theory to natural resource-rich countries. DiJohn (2002) argues that although the conclusions drawn from rent-seeking models have brought issues of taxation and resource mobilization back into the discussion on state capacity and accountability, proponents are unable to explain the differences that occur across resource-endowed states. Rent-seeking theory implies that political leaders are a priori predatory. But the predatory behavior of leaders has to be explained, because leaders could equally pursue more lucrative, broad-based and legitimacy-enhancing developmental aims. They have done so in the East Asian countries and, historically, in Western Europe and North America. Thus, the strategies that political actors pursue may depend on the political conditions that induce the struggle over resources in the first place as well as the relative power of competing groups. This necessitates addressing more fundamental issues such as the nature of state capacity, and of political legitimacy and the distribution of the rights and assets sanctioned by the state.[5] Rent-seeking theory is too simplistic and deterministic to capture the wide range and interactions of factors potentially at work.

Khan (2000) offers an elaborate criticism of the theoretical underpinnings of rent-seeking theory. He advocates that rent-seeking be viewed as a process where not only the input costs of rent-seeking matter, but also the rent-outcomes. Depending on the social value of the rents created, the net effect of rent-seeking can be negative or positive. Analyzing the role of rents and rent-seeking in the process of capitalist development in East Asia, Khan argues that the social value of rents depends on institutional structures and the differences in the political power of competing groups and on their ability to resist change (also MacIntyre, 2000 and Ness, 2002). The outcomes hinge on the interdependent effects of technology, institutional strategies and the distribution of bargaining power in society. Rent-seeking costs and processes vary from country to country due to different political conditions, pre-existing institutions and technological trajectories.
Rents can be critical for the development process. To imply that all rents can or should be eliminated is unrealistic. But rent-seeking systems can either be developmental or crippling. The challenge is then to identify the conditions that create value-enhancing rents and are thus conducive to growth. From the policy perspective, this implies that domestic institutions and governance structures ought to be constructed and reconstructed in a way that sustains developmental rents and rent-seeking, while attacking value-reducing rents and rent-seeking.

3.3.2 Institutional Solutions to the Resource Curse

Concerned with the question how rational individuals' preferences can be aggregated without leading to socially undesirable outcomes, game theorists have come to the conclusion that states play a positive role in making markets work. States underpin social and political institutions, which are a functional necessity for market economies. Thus, the state's legitimate monopoly over the use of coercion is instrumental for setting the rules that are necessary to govern economic exchange (Eggertsson, 1990).

For example, states' capacity to impose coercive taxation and to distribute the costs overcomes the collective action problem that otherwise undermines the provision of essential public goods. Individuals and economic entities such as companies need state institutions to solve the collective action problems that overshadow agents' interactions to prevent individually rational preferences leading to collectively undesirable social outcomes (Udehn, 1996). Thus, this positive economic theory of the state provides the conceptual underpinnings from which institutional economists have embarked. It relates directly to the recent emphasis on governance indicators and political institutions (Keefer, 2003). The next few paragraphs set out the key premises of institutional economics before these are related to the resource curse debate.

[5] For America see Skrowronek (1982), for Australia as well as Chile and South Africa see case studies summarized in the main report.

In general, institutional economists emphasize that economic and political activities take place within an institutional framework. Institutions constrain individuals and define the strategies with which they pursue their self-maximizing interests in an instrumentally rational fashion. The historical starting point is that complex exchange relationships among unrelated individuals require sophisticated institutional structures. These are associated with highly developed specializations in production and large markets. Institutions govern economic exchange and are crucial for enhancing or restraining economic growth. The state plays a special role because it possesses particular enforcement powers and legitimacy. It supplies an institutional framework that provides economic agents with appropriate incentives to engage in growth-enhancing economic activities.

The basic proposition is that economic and social policy outcomes depend on the institutional settings that govern economic and social exchange. The question then is how alternative sets of social rules and economic organizations affect the actions of self-maximizing individuals and thus the allocation of resources. What is the economic logic behind the fundamental social and political rules that govern economic production and exchange?

A dominant branch of institutional economics focuses on the role of property rights for economic development. Property rights are a fundamental set of rules for the allocation and use of resources. Studies analyze the historical development of how long-distance trade, credit and other inter-temporal and inter-spatial markets were created and how the property right systems of pre-state societies emerged (Eggertsson, 1990). The property rights literature, for example, tries to understand how the lack of defined or stable property rights may have hampered agrarian production and industrial development, but also the exploitation of minerals, for example in the California gold rush (Demsetz, 1967; North and Thomas, 1977; Eggertsson, 1990).

Other prominent work combines the centrality of property rights with an analysis of transaction costs (North, 1981 and 1987). Historical analyses of economic development examine how institutions facilitate economic growth through the reduction of opportunistic behavior in transactions among people unrelated to each other. Institutions provide a mechanism for multilateral reputations to develop, supported by frameworks of credible commitment, enforcement and coordination that reduce transaction costs and thus facilitate economic interaction. This work stresses the interplay between strategic interaction and institutions that prohibits certain options and facilitates others. It recognizes the role of relative bargaining power for investigating variations in state actions and policy outcomes. The state is viewed as crucial for overcoming the high transaction costs that paralyze complex production systems and hamper long-term relationships for economic exchange. The role of the state is essential for economic growth, but at the same time could also be the source of economic decline.

North (1990) sees political systems and bargaining processes over who bears the costs and who gains the benefits to be crucial if societies are to achieve institutional configurations that are conducive to economic growth. Institutions are not simply the result of efforts to lower the transaction costs of market exchange, but are also a function of political and social interests and differences in the allocation of power.

Bardhan (2000a and 2000b) notes that institutional economists hold divided opinions concerning the institutions that affect the process of development, how they do so and, in particular, what kinds of institutional configurations impede development. Two strands of institutional economics have been influential in the development literature. One focuses on the theory of imperfect information. It explains the underlying rationale of institutional arrangements in terms of asymmetric information between the different parties involved. The other concentrates on the comparative historical analysis of development processes and the inherent trade-offs in historical growth processes between economies of scale and specialization and transaction costs. It emphasizes the roles of the state, the political system and internal bargaining processes for preventing excessive transaction costs and thus allowing productivity gains to be realized from greater scale economies and improved technology.

Both strands have provided major insights into the micro-foundations of institutional arrangements in developing countries and in the understanding of underdevelopment as institutional and political failure. They underline the possibility of multiple equilibria as a result of strategic interactions.

Historical conditions and cultural beliefs that coordinate agents' expectations influence the selection of a particular equilibrium over another.

The policy concerns drawn from institutional economics have been to inquire which institutional settings are best suited to deliver efficient economic and social outcomes. This has prompted a reform agenda that focuses on introducing the 'right' institutions as a necessary and sufficient step to foster economic growth. The bold assumption has quickly been made that institutions that have proven efficient in the context of one country will also be appropriate for others. Efforts to quantify the quality of institutions and to investigate correlations with good economic performance have been numerous and have delivered valuable insights.

This is essentially where the current debate on natural resource management for positive and sustainable socio-economic development stands. A substantial number of empirical studies have shown a statistical relationship between economic performance and the quality of institutions and governance structures. Proxies for the latter have typically included the World Bank's governance indicators (Kaufmann and Kraay, 2003) or the database of political institutions (Beck et al., 2001). To name but a few, these studies include Robinson et al. (2003), Korhonen (2004), Mehlum et al. (2002) and Sala-i-Martin and Subramanian (2003). Similarly, Acemoglu et al. (2001) argue that differences in income across natural resource abundant countries can be explained by the effectiveness of institutions. They link the latter to the legacy of colonialism.

3.4 Are Institutional Solutions Sufficient?

The common difficulty that the above strands of literature have in explaining real-world variances in outcomes is demonstrated in a recent review undertaken by the World Banks Development Research Group (Keefer, 2003). Although underdevelopment is now typically seen as a problem of some sort of government, institutional or political failure, Keefer concludes that empirical studies based on different pillars of political economy literature are unable to link differences in outcomes to particular institutional choices. Government, institutional or political failures may in general be caused by the adoption of inefficient policies, for example caused by collective action problems, imperfections of the political market

'The bold assumption has quickly been made that institutions that have proven efficient in the context of one country will also be appropriate for others.'

(i.e. the process through which political decisions are taken), or the inability of a government to make credible commitments. But there are no quick answers to explaining and understanding variations in governance performance and thus in economic outcomes. Out of a long list of political and institutional variables, merely one type of institutional arrangement – that of elections cum checks and balances – appears to matter for economic growth and development. However, that variable can be achieved through particular institutional choices and countries' experiences vary widely in that respect. Thus, the overarching conclusion to draw is that much work remains to be done to understand how efficient institutions and governance structures emerge in different contexts and how they then translate into better and more sustainable economic performance.

Essentially, all schools of thought depicted above suffer from one problem. Their analyses are static, implying equilibria and linear relationships. They are thus inherently ill-equipped to capture the more dynamic and messy aspects of how efficient and effective institutions and governance structures are built and crafted over time. This fundamental problem has been recognized by a number of prominent scholars who have called for a fundamental rethink of the question what drives economic development and prosperity. For example, Rodrik (2003) concurs that "there remain serious gaps in the existing research" and that neither cross-national growth literature nor existing country studies have made adequate progress in answering many fundamental questions (pages 2, 3). Against the background of this rather bleak finding, Rodrik and his collaborators offer a series of analytical and interdisciplinary country

narratives to try to provide some new answers to growth puzzles. On the institutional side, his conclusions are that while the quality of institutions is key, acquiring good institutions often requires experimentation and the willingness to depart from orthodoxy, paying attention to local conditions. Others who have argued along similar lines include North (2001), Bates (2001) and Acemoglu (2003).

This suggests that a simple and prescriptive institutional focus is not a panacea. Reform programs that focus rigidly on engineering a transfer of the 'right' institutions are based on an unrealistic view of the public sector as the mere provider of institutions and public services. This takes insufficient account of political processes and the social underpinnings of state capacity. States require power and legitimacy to enforce formal rules and rights and to extract and mobilize resources that are required to sustain development and growth. Institutions are often the outcomes of strategic distributive conflicts among different interest groups. Inequality in the distribution of power and resources can block the rearrangement of institutions in ways that would facilitate development. Such criticism questions whether institutional templates functioning elsewhere can simply be transferred. If the distribution and disposition of political power is a key determinant of the state's capacity to enforce growth-enhancing institutional reforms successfully, a government's institutional and political capacity to enforce institutional change hinges on the match between internal political settlements and the institutions and interventions through which it attempts to accelerate transformation and growth (Khan, 2002). The key policy issue is, then, how it could be possible to establish growth-promoting political coalitions that are able to prevent the consolidation of unproductive (merely rent-seeking) socio-political groups and elites.

Along these lines, DiJohn and Putzel (2000) have argued that states do not simply supply and enforce institutions. Such supply involves political and bureaucratic state officials and organizations with specific social support bases. State institutions are reactions to particular demands for institutions put forth by particular officials and their support bases in society. Focusing on interactive processes of state formation and revenue production from a historical perspective, these authors regard state capacity to be the crucial variable determining a country's economic performance.

'The impulses that shape major policies and actions by state elites can sometimes be fueled not only by self-maximizing motives but also by larger organizational goals and nation-building missions.'

The preoccupation with state capacity requires taking a close look at power, political constraints and agents' strategies. Simply assuming that individuals act instrumentally rationally with a given institutional context is insufficient and neglects the political processes that underlie the power and legitimacy of a state to enforce rights and to extract and mobilize the resources required to sustain development and growth. To explain variations in state capacity appears to require a historical and non-equilibrium-based understanding of political processes.

Similarly, Khan (2002) argues that improving *institutional capacity* is not sufficient to enforce growth-enhancing institutional change. It also requires *political capacity*. The latter hinges on a match between domestic political settlements and the proposed institutional reform agenda. Khan stresses the importance of the dynamics of existing political settlements and the questions of when and how political coalitions with influence over the state do or do not formulate their interests so as to promote and enforce growth-enhancing institutions. In the East Asian countries, the state has played a critical, but also problematic, role in the transformation of pre-industrial societies into dynamic industrial societies, precisely because it is the only entity that holds a monopoly over legitimate violence.

Bardhan (2000a) also points out that it is insufficient to recognize the importance of states in supplying institutions in too narrow a context; that states ought to use their monopoly over coercion to enforce necessary contracts and property rights but that state interventions are to be limited to this involvement. In the successful East Asian countries, the state has played an active role in capital markets to encourage the development of nascent parts of financial markets, and in pushing firms to upgrade technology and to move into sectors that are in line with strategic development goals (Aoki et al. 1997). States have enhanced market efficiency by inducing private coordination and by providing various kinds of cooperation-contingent rents (Khan, 2000). A more nuanced theory of the state is needed to avoid the trap of either assuming that the state is captured by special interests or is predatory *per se*. The impulses that shape major policies and actions by state elites can sometimes be fueled not only by self-maximizing motives but also by larger organizational goals and nation-building missions. The question therefore is: what factors contribute to the making of a strong state while creating incentives for state or political coalitions alike to manifest genuine interest in domestic economic development?

3.5 The Way Forward?

We know that institutions and governance structures matter but the common tools of static analysis do not allow us to capture important aspects of how efficient institutions and governance structures emerge and are built over time. Thus, the aim ought to be to bring into our analysis a more dynamic perspective. Such a dynamic perspective requires that the relationship between economic activities and the emergence of effective institutions and governance structures is viewed in a more dialectic and iterative way. Under certain political-economic circumstances, private-sector activities can be a lever for the creation of more effective governance structures, which in turn improve private-sector coordination and enable an increase thereof leading to sustainable economic growth.

Case studies on resource-rich and other countries, both for today's industrialized countries and emerging and developing economies, deliver rich descriptions of how dynamic interactions between different stakeholders in a given institutional and political context have led to the development and adoption of more efficient institutions and governance structures. Examples of these are given in various chapters and sections of the main report of this study. It is acknowledged that in some of today's developed countries mining and metals activities have featured highly at earlier stages of development and in fact for state-building processes (Skrowronek, 1982). The experiences of the more successful natural-resource-rich developing countries point in the same direction (Acemoglu et al., 2003). These processes have not always been frictionless, and have sometimes carried high political and social costs. One would hope that learning from these experiences could help to circumvent (some of) those costs, and allow concentration on reaping the benefits.

But the key problem with case studies is that they are 'case-specific'. Thus, they provide little systematic advice on general lessons and how to distil among the many variables those that may have mattered most. Case studies are often not comparable in a way that would allow systematic contrasting of those cases that feature most similar variables but show different outcomes with variables that appear most different but show similar outcomes. However, with a limited number of real-world cases at hand, such contrasting is vital to infer more generally which of the many variables and their (non-linear) combinations matter most and to draw policy conclusions from these.

The method of systematic comparison is much akin to a further set of political economy and governance literature, however mostly applied within the context of OECD countries. The general objective of such comparative political economy is to seek explanations for observed variations in political institutions and policy processes across nation-states (Thelen and Steinmo, 1992; Lichback and Zuckerman, 1997; Hall and Taylor, 1996; Harris, 2002). Furthermore, recent advances in comparative political analysis have developed new methods to reduce the high level of complexity that the comparison of a limited number of cases invariably poses, including the development of new analytical software (De Meur et al., forthcoming).

In general, proponents share institutional economists' basic postulate that institutions are crucial to economic and social policy outcomes. But there are significant conceptual differences. Institutions are not simply constraints to the

rational pursuits of agents' preconceived interests. They provide the context within which stakeholders formulate and define their interests and strategies. Thus, comparative political economy pays close attention to the connections between structural conditions, overarching institutional structures and the activities of multiple stakeholders. It inquires how interaction between different variables impacts on the formation of agents' preferences, interests and strategies.

In essence, there are three key aspects. First, interconnectivity is not deterministic and static, but dynamic and dialectic. Second, interconnectivity can take various, non-exclusive dimensions. For example, institutions can impose sanctions and provide incentives, as conceptualized by institutional economics. But they can also reflect asymmetries of power and have an impact on individuals' power to influence decisions, providing opportunities for some and constraining others. Furthermore, institutions can work in more subtle ways through common knowledge and shared understandings of, for example, the private and public sphere. Third, political and social developments are path-dependent and follow trajectories. Pre-existing institutions affect and partly pre-determine institutional change in subsequent periods. In contrast to the approaches summarized in Section 3.3, comparative political economy emphasizes historical processes rather than equilibria and views institutions in the historical social and political contexts from which they arise (Thelen and Steinmo, 1992). Thus, it is recognized that the process of formulating and implementing public policies resembles a multiple player game with multiple iterations and therefore multiple possible outcomes (Hall and Soskice, 2001; Ahrens, 2002).

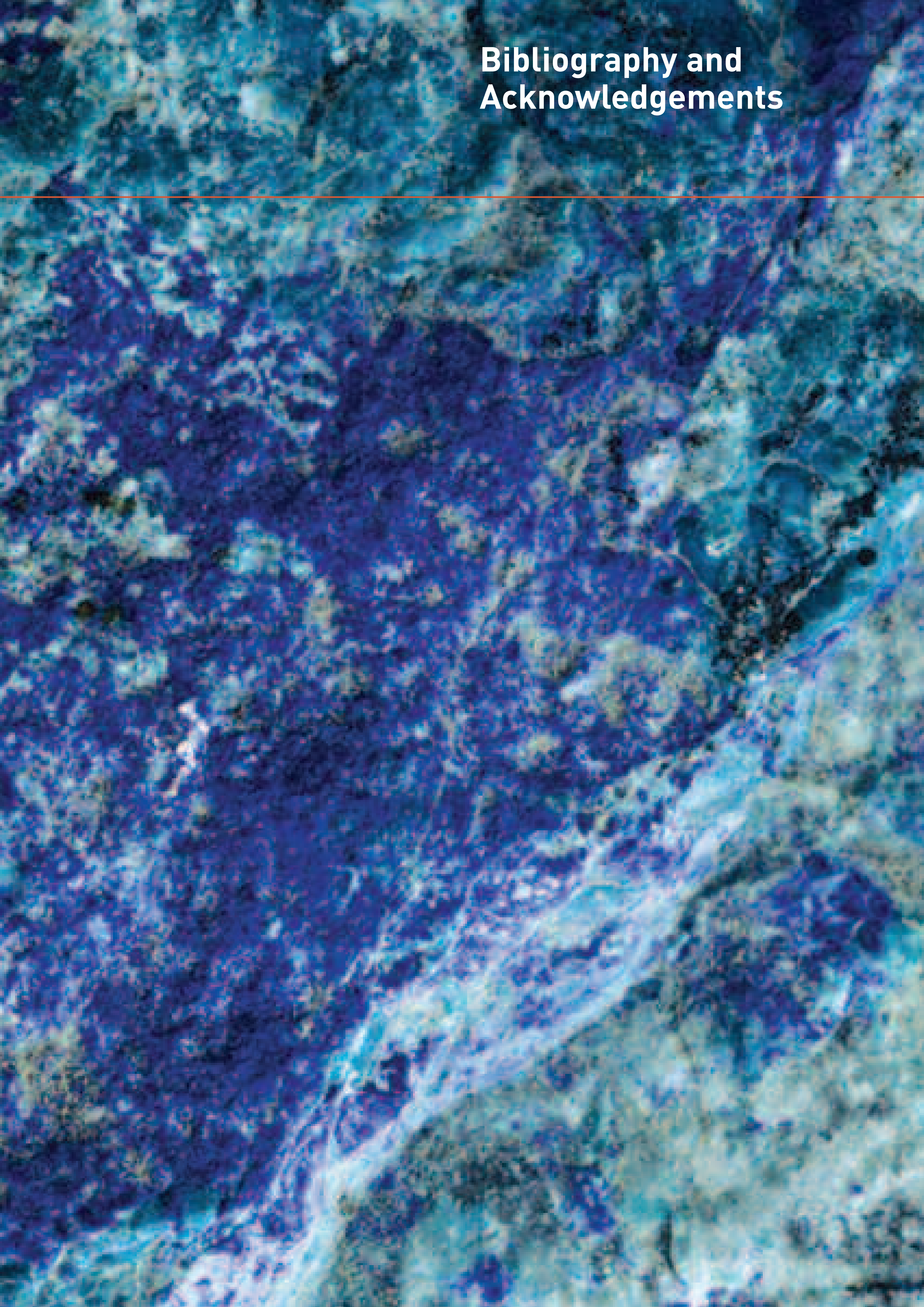
A recent example of this sort of study is Hall and Soskice (2001). They analyze the institutional differences and similarities among industrialized countries, giving center stage to how business behavior and strategic actions are affected by countries' institutional governance structures. This study highlights the different roles that business associations and other types of relationships among firms play in the public policy-making process against the background that institutional structures and regulatory regimes are the usual preserve of nation-states. The study finds that broad differences in basic coordinating institutions offer firms particular sets of opportunities, which they can use to their advantage. Because of institutional complementarities, nations with particular coordinating institutions in one sphere tend to develop complementary practices in other spheres, for example with respect to financial systems and markets for corporate governance, industrial relations, education and training systems and inter-company relations. Comparative institutional advantages are crucial for explaining why particular industrialized nations tend to specialize in specific technologies and products. Thus, the key to an efficient institutional and governance structure is that policy-makers are able to achieve better forms of coordination among private-sector actors.

But there are also an emerging number of systematic comparative studies concerning developing country issues (Herbst, 2000). For example, Bratton and van de Walle (1997) employ this methodology for their analysis of the democratic experience in Africa. They emphasize the institutional characteristics of preceding political regimes and the patterns of behavior during transition periods. Institutional heritage characterized by neo-patrimonial rule has shaped regime transition in much of Africa, but the relative strength and cohesion of contending forces in determining whether political change was likely depended on the constraints embedded in inherited political institutions. In turn, economic and international factors had an impact on democratic change only if mediated through existing domestic institutions and political considerations. Houtzager and Moore (2003) have worked with a number of collaborators applying a polity-centered approach that focuses on the political capacities of social and state actors to negotiate large-scale collective solutions. They focus on how political capabilities of different stakeholders develop over time and how institutions, state actions and other factors influence this development. They highlight that there are various possible strategies to fostering socio-economic development.

In sum, comparative political economists are rather skeptical of too broad generalizations across time and between countries, such as are often the outcome of cross-national econometric studies. Instead, they seek to understand institutional differences as the results of historical choices by specific societies and thus as national features. Differences are not seen as deviations from best

‘comparative political economists are rather skeptical of too broad generalizations across time and between countries, such as are often the outcome of cross-national econometric studies.’

practice that will dissolve as nations catch up, but are the distillations of more durable historical choices that reflect the architecture of a nation’s social cohesion (Hall and Soskice, 2001). However, proponents recognize that retrospective analysis of actual outcomes does not necessarily address future policy challenges, and that some form of generalization is therefore necessary. They have attempted to develop tools with which to predict policy outcomes and broad conceptual guidelines as the basis for thinking creatively about the formulation and implementation of country-specific reform strategies (Ahrens, 2002; Hall and Soskice, 2001). In the main part of this study we have made use of their insights to build an analytical framework for a systematic comparative analysis of mining countries (see The Analytical Framework).



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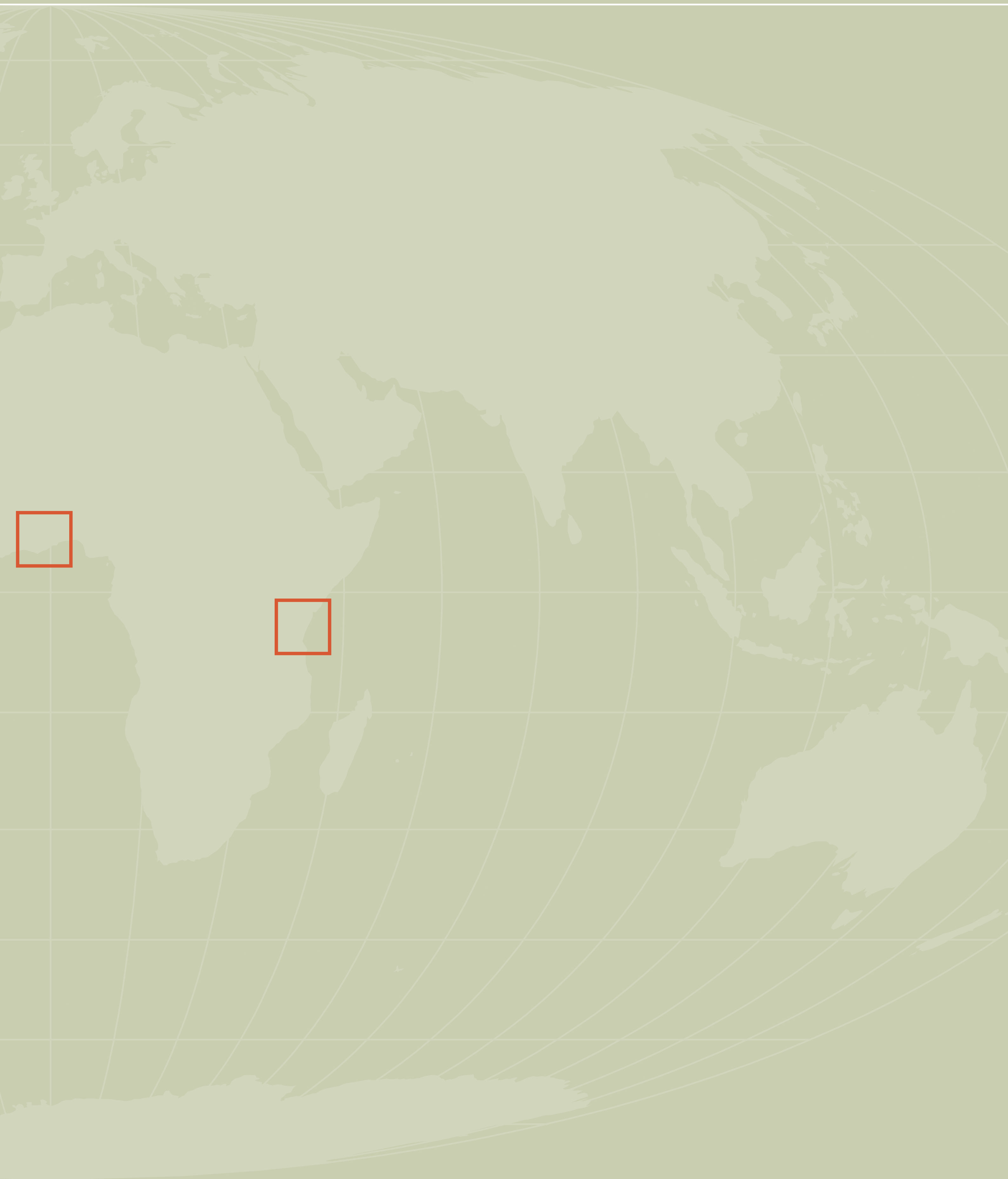

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