The Political Economy of Fiscal Policy and Economic Management in Oil-Exporting Countries

Benn Eifert
Alan Gelb
Nils Borje Tallroth

The World Bank
Africa Regional Office
Office of the Chief Economist
October 2002
Abstract

Despite massive oil rent incomes since the early 1970s, the economic performance of oil-exporting countries—with notable exceptions—is poor. While there is extensive literature on the management of oil resources, analysis of the underlying political determinants of this poor performance is more sparse. Drawing on concepts from the comparative institutionalist tradition in political science, Eifert, Gelb, and Tallroth develop a generalized typology of political states that is used in analyzing the political economy of fiscal and economic management in oil-exporting countries with widely differing political systems. In assessing performance, the authors focus on issues of long-term savings, economic stabilization, and efficient use of oil rents.

The comparisons of country experiences suggest that countries with strong, mature, democratic traditions have advantages in managing oil rents well because of their ability to reach consensus, their educated and informed electorates, and a high level of transparency that facilitates clear decisions on how to use rents over a long horizon. Yet even these systems, ensuring cautious use of oil income is a continuing struggle. Traditional and modernizing autocracies have also demonstrated their ability to sustain long decision horizons and implement developmental policies. But resistance to transparency and the danger of oil-led spending and expenditure commitments becoming the major legitimizing force behind the state may pose risk to the long-term sustainability of their current development strategies. In contrast, little positive effect can be expected from the politically unstable, predatory autocracies, which typically have very short policy horizons and sometimes the characteristics of “roving bandit” regimes. Factional democracies, with weak political parties and highly personalized politics, present particular challenges because they lack a sufficiently effective political system to create a consensus among strong competing interests.

Special attention will be needed to increase transparency and raise public awareness in these countries. And oil rent makes it more difficult to sustain a constituency in favor of sound, longer-run economic management because it weakens incentives for agents to support checks and balances that impinge on their individual plans to appropriate the rents. The country comparisons further demonstrate that technical solutions—such as the establishment of oil stabilization funds and budgetary reforms—to enhance transparency and efficiency in the use of oil rents will not work well unless constituencies can be developed in support of such measures.

This paper—a product of the Office of the Chief Economist, Africa Region—is part of a larger effort in the region to improve the management of public finance, including revenues from native resources. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Joy Schwartz, room J5-284, telephone 202-473-2250, fax 202-473-8276, email address jschwartz2@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at agelb@worldbank.org, or ntallroth@worldbank.org. October 2002. (34 pages)
1. Introduction

Most mineral exporters, and in particular the oil exporters, have done far less well than resource-poor countries over the past few decades, particularly when considering the massive revenue gains to the oil exporting countries since 1973. Many studies support the "paradox of plenty" (recent examples include Auty, 2001, and Gylfason, 2000 and 2001), even though there are certainly exceptions to this pattern. Some of the high-income OECD countries are resource-abundant, Botswana stands out as a successful mineral exporter, and Malaysia has grown and diversified away from resource-based production, including oil. But why has the overall record of oil exporting countries been so disappointing?

This paper considers the political economy of fiscal policy and economic management across oil exporting countries with widely differing political systems. Politics affects economics -- how oil rents are collected, allocated and used, including often to sustain a poor policy regime (Auty, 2001). But oil affects politics also -- a large, concentrated rent source in national income can mould the social and political institutions of a producing country, into what some have termed the "rentier state" (Karl, 1999). Technical approaches to managing rents therefore need to be seen in a political context, and implemented in parallel with approaches to strengthen the constituencies needed to support them.

In comparing the performance of oil exporting countries, the paper attempts to identify factors that have helped them to manage rents well. Some caveats are in order. Political categories are not robust enough to provide a clear political-economy linkage. Political regimes also change, sometimes sharply, but at the same time existing institutions may reflect the impact of years of previous political regimes, in addition to the impact of the current one. While there is a large literature on the management of oil resources, comparative analysis of the underlying political determinants of policy is more sparse. The paper is therefore more suggestive than definitive. It also focuses on spending, rather than revenue policies, not because the latter are uninteresting but because most of
the problems of economic management relate to the use of revenues rather than to their collection.

The following section sets out some general principles for managing oil rents well, based on the experience of exporters over the last three decades. Section 3 presents an extended version of Lal’s (1995) topology of political states, which is used in Section 4 to discuss selected oil producers. Section 5 concludes with suggestions for ways to encourage good practice in managing oil rents.

2. Managing Oil Revenues

Most of the essentials for managing oil revenues well are the same as those for good budget management in general, but some issues are more important for oil exporters. These include how much to save for future generations, how to deal with uncertain revenues and avoid “boom-bust” cycles, and how to ensure that spending is of high quality, whether in the form of large investment projects, public consumption or subsidies.

Saving. Whether countries should save or borrow against anticipated future oil income to fund current consumption and investment (as Mexico did in 1979) depends on the projected profiles of oil output, extraction costs, prices, discount rates and returns on alternative investments to keeping oil in the ground. These are slippery numbers. Proven reserves are far larger today than three decades ago. New technology has widened the range of oil substitutes, including tar sands and coal gasification which are now economic at oil prices of $15 – 20 per barrel. New liberal pricing regimes have stimulated production (Mommer 1999), as has the opening of the former Soviet Union. On the other hand, the share of natural rent in the price of oil will probably fall as low-cost fields are depleted, and in some countries rent will fall further relative to development needs due to high population growth. Optimal savings rates are very sensitive to such assumptions.

Stabilizing. Oil prices have been highly variable (Figure 1): twice as variable as those of other commodities, even when changes are measured as deviation from recent trends (Dehn, 2001). Changes have also been very poorly predicted, and it has been difficult to separate out temporary fluctuations from trends. If past experience is a guide, shocks will continue to be poorly foreseen, and producing countries will be vulnerable to boom-bust cycles. Instability is very costly, as economies and budgets adjust asymmetrically. On the upside, growth increases little; on the downside, output contracts (Dehn, 2001). Over a series of cycles, countries move towards stagflation. Rapid growth in public spending, which often follows oil price increases, reduces spending quality and

---

4 The 1974 and 1979 price increases were not foreseen by consensus forecasts. By the early 1980s, high prices were widely blamed on scarcity, with projections for $50 per barrel or even higher. Instead, the spike of the early 1980s was followed by the oil slump and a sharp price decline. Prices reached an unexpected nadir in 1998 with the shock of the Asia crisis; projections envisaged a slow rebound towards $20 per barrel but failed to pick up the spike of 2000 to levels 50 percent higher.
introduces entitlements, including recurrent cost commitments, which are often not sustainable in the long-run. Efficiency often suffers from a high proportion of unfinished projects as well as from capital investments that cannot be effectively used because of shortages of recurrent resources.

Simulations using a computable general equilibrium model with a 20 year horizon suggests that optimal savings during revenue booms like those of the 1970s ought to be 60-70 percent of the gains (Gelb, 1988), far higher than the levels achieved by exporters. They also show that the costs of policies formulated on the basis of overoptimistic projections of prices and revenues during a windfall period can amount to several times the potential benefit of the windfall itself (Gelb, 1988). It is easy to turn potential gains into losses. There is therefore a strong case for making cautious revenue projections, for holding larger than normal reserves, for minimizing outstanding public debt and for using hedging techniques in order to cushion shocks and gain an additional margin of fiscal flexibility.

Using Rents Well. In almost all producers, oil rents are seen as the property of the nation. The problem is how to articulate this concept in an effective and widely-agreed way through the political process. Lack of clarity in property rights encourages rent-seeking behavior; mechanisms to distribute rent should thus be clear, and be part of a transparent budget process able to link fiscal choices to current and (conservatively) projected revenues. For any given level of use, the mix of channels to distribute rents to citizens, whether through public investment or recurrent spending, subsidies and transfers, or lower non-oil taxes, should reflect the marginal value of public resources relative to those in private hands.

Within these general areas, two potential pitfalls tend to be particularly important for oil exporters. First, the concentration of fiscal resources tends to encourage excessive and imprudent investment: the state implements large projects without sufficient participation of private co-investors to provide a screen against excessive risk (Gelb, 1988, Auty, 1999). Second, some ways of distributing rent, whether through sustained protection of favored activities or firms, or a combination of non-oil taxes and subsidies and public spending, have high deadweight costs and encourage corruption. In some cases, very low non-oil taxes might be useful as part of a rent-distribution strategy, though this approach should be combined with measures to strengthen tax administration to diversify potential revenue sources to create a buffer against oil revenue fluctuations. Cheap domestic energy could be one element of such a strategy (particularly in times of high world energy prices), but needs to be viewed in the wider context of non-oil taxation.

---

5 This conclusion agrees with the conclusion of a recent study of countries exposed to large shocks, which shows that the losses are typically far larger than the gains (Collier 2002).

6 The United States is one of the very few countries where sub-surface rent conveys with ownership of the surface land rights.

7 Small minority private participation provides little screening as partners expect to gain far more from supplying cost overruns than from profitable projects.
These prescriptions are well enough in theory. But they often confront the reality of opaque, highly politicized fiscal systems that lack the checks and balances needed to ensure that resources are well employed and to provide the fiscal flexibility needed to adjust spending in line with changes in resources. In extreme cases, when the legitimacy of the government comes to rest on the transfer of oil rent, no fiscal adjustment will be possible unless forced by a crisis. Rents weaken agencies of restraint. For any given group, they divert incentives away from ensuring efficient use of resources across the economy (including by other groups) in favor of appropriating rents unencumbered by the reciprocal scrutiny of the other groups. How this plays out in any given country will depend on whether the political process is able to support a consensus around a sound longer-run social and economic trajectory. If so, rents can provide exports, taxes and savings to open up additional degrees of freedom for economic policy. If not, they are likely to fuel a destructive process of competition that is mirrored in economic crisis and decline.

3. The Political Economy of Rentier States: Towards a Typology

Just as political traditions shape the use of oil rents, rents shape the political economy of petroleum exporting nations. Revenue streams from ‘black gold’ can finance productive physical and social investment, or fuel unsustainable consumption booms and eventual fiscal crises; they can improve public welfare through transparent distributional mechanisms, create elite arenas of competition, or underpin kleptocratic governments. Karl (1999) argues that when petroleum exploitation coincides with state-building, it gives rise to a self-reinforcing “legacy of overly-centralized political power, strong networks of complicity between public and private sector actors, [and] highly uneven mineral-based development subsidized by oil rents.” (Karl 1999) Karl’s conclusions may be overly deterministic, but her observations ring true for many oil exporting states. In this section we construct a comparative analytical framework which offers insights into the political economy of oil windfall management in varying political and institutional contexts.

Political scientists have offered insights into the state which have implications for rentier economies. Mancur Olson (1986, 2000) emphasizes the importance of horizon constraints in shaping the behavior of governments. Bates (2001) stresses the way in which the relaxation of government budget constraints creates disincentives for economically rational behavior and reform. Work on the theory of rent-seeking behavior illustrates how rent reorients economic incentives towards competing for access from productive activities, especially in non-transparent environments characterized by political discretion and unclear property rights. These studies and others offer insights which can help build an analytical framework for better understanding of and improvement in the fiscal and economic management policies in oil exporting countries. Still, systems of state classification developed by political scientists remain difficult to operationalize. Some scholars question the utility of classification schemes on the grounds that individual country outcomes are tightly context-specific, and arise out of complex sociological interactions combined with leadership and other random factors.  

---

8 For example, see Haggard (1990).
Others, including a number of economists, argue that observable variations in political and institutional context have considerable predictive power and are useful.\(^9\) We side with the latter, while recognizing the limitations of any analysis.

Oil exporting countries may be classified as belonging to one of five main groups: mature democracies; “factional” democracies; paternalistic autocracies; modernizing autocracies; and predatory autocracies. These groups reflect qualitative distinctions in 1) the stability of the political framework and of party systems, 2) the degree of social consensus, 3) the legitimization of authority and the means through which governments (or aspiring governments) obtain and maintain support, and 4) the role of state institutions in underpinning markets and the distribution of rents. These political and institutional features foster differences in: the length of political horizons, levels of transparency, policy stability and quality, the political power of the sectors producing non-oil tradeables, and the power of interests directly attached to state spending (Table 1). Even though the classifications may not be exhaustive and some countries may have a blend of features from different categories, such classification does provide some insights into the policy options available to governments. They are also mirrored in comparative ratings such as those of Freedom House and Transparency International:

<table>
<thead>
<tr>
<th></th>
<th>Transparency and Corruption *</th>
<th>Political and Civil Rights*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mature Democracies</td>
<td>8.4 (0.7)</td>
<td>1 (0)</td>
</tr>
<tr>
<td>Factional Democracies</td>
<td>3.6 (1.1)</td>
<td>2.8 (0.9)</td>
</tr>
<tr>
<td>Autocracies</td>
<td>1.5 (0.6)</td>
<td>5.7 (0.7)</td>
</tr>
</tbody>
</table>

\(^{*}\) Mean and (standard deviation) of Freedom House scores (range 1-7) and Transparency International scores (range 1-10) for 2001. Sources: www.freedomhouse.org and www.transparency.org

On Freedom House’s ratings of political rights and civil liberties, mature democracies score the highest rating, factional democracies quite high, and the autocracies near the lowest ratings. On Transparency International’s ratings, the mature democracies score high, the factional democracies are in the lower half of the sample and the oil autocracies that are rated score at the bottom. The ratings suggest that democracy may have advanced further in the factional democracies than transparency, a potentially important asymmetry when considering the use of natural rent.

\(i\) Mature Democracies

Countries and sub-national units classified as mature democracies are characterized by relatively stable policies, underpinned by a broad social consensus. Politics is dominated by a few parties. Such political stability encourages long-horizon behavior, as party reputation effects and economic performance become central to competition for political

power. The resulting policy regimes are generally based on transparent information; property rights are clear and a swing in government rarely leads to sweeping redistribution. Bureaucracies are competent and relatively insulated; professional judicial systems foster de-personalized functioning of markets and reasonable stability in rules. State investment tends to complement, rather than substitute for, private investment; independent risk-ratings are taken seriously as indicating the prospects for investors. These features would facilitate the efficient use of resources, including oil rents, and help to contain rent-seeking behavior. They also give citizens the opportunity to provide a critical counterbalance against the influence of interests attached to government spending. Norway, the State of Alaska and the Province of Alberta can be seen as prototype representatives of this category of states. Botswana shares many of the features of the mature democracies, despite its lesser level of development.¹⁰

ii) Factional Democracies

Countries classified as factional democracies have several features that distinguish them from mature democracies. Income distribution is unequal and social consensus is elusive. Political parties are often weak, and formed around charismatic leaders; military intervention in politics is not uncommon. Governments are often unstable; where they are stable, single-party dominance underlies nominally democratic institutions. In either form, political support derives from systems of patronage. The short-horizon politics of competition for power and state-allocated resources gives rise to unstable policy regimes and nontransparent mechanisms of rent distribution, encouraging the development of clientelistic networks and rent-seeking behavior throughout state and society. Earmarking is pervasive in these systems, as politically powerful interests attached directly to state spending, such as bureaucratic and political elites (including local governments), public sector unions and the military, tend to capture the state. These predatory interest groups can be stronger and more continuous than political parties or governments, and try to lock in their claims on rents. Without a countervailing force, oil rents injected into the political game tend to produce Terry Karl’s “petromania”: an explosion of inefficient government spending, followed by fiscal and economic crisis. Ecuador, Venezuela, Colombia and, to a degree, Mexico can be seen as representatives of this category of countries.

iii) Paternalistic Autocracies

Paternalistic autocracies include Saudi Arabia, Kuwait, and some of the smaller Gulf states. Governments initially derive their legitimacy through traditional and religious authority, but in the process of oil-driven modernization their legitimacy also becomes attached to the mobilization of oil wealth to prop up public living standards (Auty and Gelb 2001). Such governments can be stable for extended periods; they seek consensus and have a much longer horizon than many democratic governments. Even though conventional politics provides no immediate countervailing force for fiscal restraint, their concern with the longer-run means that they may also be able to save when revenue is

¹⁰ Botswana enjoys political rights and civil liberties, has a stable party system and is rated close to the developed countries in Transparency International’s ratings.
plentiful. However, the evolving role of state spending towards sustaining political support generates rising and downwardly-inflexible expenditure commitments, including subsidies, high levels of public employment in low-capacity, overstuffed bureaucracies, and protected, inefficient enterprises, which in the long-run will constrain the scope for investments. Such commitments can eventually push such states toward fiscal crisis.

iv) Reformist Autocracies

Reformist autocracies tend to have autonomous, competent, and politically insulated technocratic elites. Their legitimacy rests on their success in attacking poverty through productive investment and economic growth, ensuring a long horizon in policymaking. Constrained by their political mandate to make real improvements in the welfare of the poor, such states may deploy natural resource rents efficiently to promote economic diversification and growth, despite the lack of transparency inherent in autocratic rule. The political economy equilibrium has to balance out the opportunities for rent-seeking against the importance of sustaining growth in important non-oil sectors, including the need to boost investment and raise employment and incomes in labor-intensive, non-oil traded sectors. Indonesia in the earlier Suharto period is one such case; Taiwan, Singapore, Korea, and to an extent China, offer non-oil examples.  

v) Predatory Autocracies

Predatory autocracies are often less stable than either of the other two types of autocratic regimes. Regimes tend to act as “roving bandits”; state power faces few constraints and the exploitation of public and private resources for the gain of elite interests is embedded in institutionalized practices with greater continuity than individual leaders. Such regimes are nontransparent and corrupt; the civil service runs entirely on patronage, as public office brings with it a host of rent-seeking opportunities. Little financial and human capital flows into productive occupations, whose returns are depressed by a dysfunctional environment. Government itself is a fundamental obstacle to fiscal restraint and reform; oil revenue fuels the status quo, perpetuating the oppression and poverty of the people. Nigeria under a succession of military rulers offers an example; and while democracy was restored in 1999, its institutions have been shaped by a longer history.

4. Managing Oil Rents: Some Country Cases

4.1 Mature Democracies: The Case of Norway

The Orderly Quest for Rent. Relative to other oil exporting countries, Norway has been successful in using its highly consensus-oriented and parliamentary institutions as well as the involvement of interest groups representing business and labor to reconcile competing claims over oil rents with long-term objectives and stabilization goals. This accomplishment is even more remarkable, taking into account that Norway has had several changes in government, and periods of weak minority government, since

---

11 Reformist autocracies are similar to the strong developmental state described by Leftwich (1995).
becoming an oil exporter. However, as a small, trade-dependent nation, Norway also has a strong pro-stabilization constituency in the form of employees, trade union and business leaders and voters dependent on the non-oil tradeables sectors for their well-being, and with a good understanding of the need for restraint in public spending. Compared to most other countries, political differences are very small, and values are egalitarian. The high level of transparency in political and bureaucratic processes reinforces the general trust in the integrity of politicians as well as in the professional skills of the civil service - - few Norwegians would question the government’s ability to manage Norway’s oil rents in an honest and efficient way. Perhaps for this reason, Norway has not moved to distribute oil dividends directly to citizens as was done in more individualistic Alaska, with the expressed aim of “getting rents out of the hands of the politicians”.

Reflecting these features, policies are very stable in Norway, despite changes in government, and policy formulation has a long-term horizon. However, more recently, the move from deficits to structural budget surpluses and the rapid accumulation of assets in the Government Petroleum Fund has led to mounting political pressures for increased government spending of oil export incomes and made restraint more difficult. This, together with growing expenditure commitments in coming decades, in particular for future pensions as the population continues to age, concomitantly with the projected tapering-off of oil revenues, has led to concerns over Norway’s ability to sustain its past success in managing its oil wealth.

**First Phase -- Priority to Maintaining Competitiveness.** As Norway became a significant oil producer in the 1970s, policies focussed on the overarching goal of ensuring the long-term competitiveness of “Mainland Norway’s” non-oil tradeables sectors to maintain full employment. The strength of the constituency for cautious spending of government oil revenues to avoid Dutch Disease and loss of job security should be seen against the background of the large number of employees in these sectors. Non-oil traded sectors have also traditionally led wage bargaining rounds, rather than the urban and public sector unions which have followed. The concern for competitiveness is also closely linked to the geography of the country and the very strong interest in maintaining the economic viability of small, dispersed communities separated by mountains and fiords, where small and fragmented labor markets make it difficult for workers who become unemployed to find another job. Rural interests have traditionally exerted a strong influence on politics in Norway and have ensured control over a main part of Norway’s oil rents through large allocations for regional policy, support for agriculture, heavy investments in roads, etc. The experiences of the mid-1970s -- Norway saw wages increase by 51 percent in the 1974-76 period, with consequent erosion in international competitiveness -- added to these concerns.

---

12 Annual dividends from Alaska’s Permanent Fund have recently been close to $2,000 per state resident. Alaska also increased the private share of oil rents by abolishing state tax. These measures indicate a strong populist tendency underpinned by a tradition of individualism.

13 In addition, the high educational levels of the general population together with a reality-oriented culture reinforce understanding of and receptivity to rather complex analyses of policy choices.
Subsequent developments proved these concerns well founded. Strong economic growth, spearheaded by the petroleum sector and compounded by expansionary fiscal and monetary policies in the first half of the 1980s resulted in an overheated economy with surging inflation and further loss of competitiveness in the non-oil tradeables sectors, reflected in a sharp drop in manufacturing employment. In response, the government devalued the Krone several times and increased subsidies to domestic industries, including shipbuilding, farming and fisheries. By the mid-1980s, Norway's industrial subsidies were amongst the highest in the OECD area. However, these developments can not be attributed solely to exuberance caused by the inflow of oil rents. Indeed, despite a jump in net cash revenues from the petroleum sector by over 6 percentage points of GDP (from a zero base) during 1970-1985, Norway was able to restrain the increase in government expenditures to a relatively modest 5-7 percentage points of GDP. In contrast, very strong pressures for expanded government services and transfers in Sweden and Denmark resulted in government outlays jumping by about 20 percentage points of GDP -- to nearly two-thirds of GDP in the case of Sweden and Denmark close behind during the same period. Against this background, Norway can be deemed reasonably successful in managing its oil wealth.

The sharp drop in oil prices in early 1986, hitting an economy already affected by macroeconomic unbalances, severely affected the Norwegian economy, causing an economic down-turn that lasted for several years. The government mandated a commission with representatives of all political parties, labor, business groups, economic experts and public officials, to formulate new policy guidelines. They called for fiscal policy to be used for counter-cyclical purposes with monetary policy targeted on maintaining a stable exchange rate, while labor and business leaders committed themselves to wage moderation. There is wide consensus that this new approach played a key role in the strong turn-around of the economy in the early 1990s. Thus, while Norway has seen periods of excessive spending and growth in aggregate demand like other oil exporters, imbalances have been brief and excesses relatively modest. More importantly, Norwegian stakeholders have demonstrated their ability to learn from mistakes and to reach consensus to prevent the recurrence of bad management.

A New Policy Focus -- Savings for the Future. Long-term demographic projections point to a rapid aging of the Norwegian population over coming decades, resulting in escalating pensions payments and health care expenditures for the elderly that coincide with an projected tapering off of Norway's oil export income as its reserves are exhausted. Using projected pension needs over 30 years to put the oil rents in perspective, the government succeeded in creating support for the goal of sustained budget surpluses in order to accumulate savings to fund future expenditure commitments. A Government Petroleum Fund was set up in 1990 to manage accumulated savings (Box 1). While maintaining the competitiveness of Mainland Norway remains a key priority, Norway's fiscal and economic management policies are now increasingly shaped by issues related to the appropriate level of saving current oil revenues for the future. From another perspective, while in the past, Norway's oil rents were to a large extent captured

14 In recent years, Norway has sustained public spending at lower levels of GDP than Sweden or Denmark even though public revenues have comprised a higher share of GDP.
by rural areas in the form of subsidies for agriculture, etc., retirees and pensions will increasingly receive them as the populations ages and the growing number of retirees becomes a dominant force in the political landscape. While the goal of maintaining the competitiveness and job security for employees in the non-oil tradeables sectors has constituted a strong pro-stabilization force, the future constituency of retirees enjoying indexed pensions may not have the same interest in restraint.

Box 1. The Norwegian Government Petroleum Fund

The Government Petroleum Fund, established in 1990, has two main purposes: (i) act as a buffer to smooth fluctuations in oil revenues and mitigate exchange rate pressures to avoid Dutch disease and preserve a diversified industrial structure; (ii) save part of current oil rents to help address future needs related to the aging population and the eventual decline in oil revenues. At the end of 2001, the size of the Fund corresponded to about 45 percent of GDP.

The income of the Fund consists of government net cash flow from petroleum activities plus the return on capital. Its expenditures are transfers to the government’s budget. Thus, the Fund is an integrated part of the budget: higher government spending or lower taxes from mainland activities result in smaller allocations to the Fund. The annual allocation of oil revenues between the budget and the Fund is flexible, depending on stabilization considerations.

While the detailed guidelines for the Fund’s operations are decided by the government, it always consults the Parliament before making substantial changes to these guidelines. Transfers to and from the fund need parliamentary approval, and government informs the Parliament on the Fund’s status three times a year. Comprehensive information about the Fund’s operations are available in quarterly and annual reports, and the Auditor General has the overriding responsibility for auditing its operations. The transparent rules for the Fund’s operations encourages citizens to feel confident to postpone consumption of their entitlements until reaching retirement decades later.

To protect the integrity of the budget process, the Fund’s assets must be invested abroad rather than become a supplementary source of financing public expenditures. The new guidelines for the Heritage Savings Trust Fund in the Province of Alberta, Canada, which used to invest much of its assets within the Province as part of the policy to develop the local economy, also mandate that its savings are invested outside of the Province. (Emery 2001). Since its inception, the Alaska Permanent Fund invests its savings out-of-state. The latter fund, however, differs from the Norwegian fund in that it returns part of earnings as dividends to the residents of Alaska as direct cash payments, amounting to nearly US$ 2000 per person in year 2000. The design of the Alaska dividend system reflects the strong individualistic character of the Alaskans and their sense of knowing better than the politicians how to use their money.

Saving versus Spending and Tax Relief: Towards a Balance? In the 1997 election campaign, the governing Labor Party advocated continued cautious public sector spending to avoid repeating the mistakes during the 1980s, while several smaller opposition parties called for increased spending on various social programs. Failing to garner wide support, a minority coalition government proposed increased spending on
pensions and family allowances. In 1998, the collapse of global oil prices led to a sharp decline in the budget surplus, but as oil markets bounced back in 2000 and the Petroleum Fund grew, political pressures to boost public spending resumed, especially by local governments, which are responsible for the bulk of spending on health and education. These pressures proved difficult to resist, with the visible accumulation of wealth in the Petroleum Fund blunting the concern for Norway's large, longer-term public pension liabilities. A broad national consensus for a policy change gathered steam in the run-up to the parliamentary elections in fall 2001. The governing Social Democratic Party ran on a platform favoring an expansion of expenditures only, but the elections paved the way for a new government, formed by parties favoring both an expansion of the welfare state and a redirection of policy towards reducing Norway's high tax burden. The 2002 budget incorporates a new fiscal plan which accelerates the use of oil revenues over the next ten years and stipulates that the structural deficit in the central government's non-oil budget should be within the 4 percent expected real return on the Government Petroleum Fund assets. Compared to earlier guidelines, this program raises the annual budget deficit by an additional 0.4 percentage points of mainland GDP per year, to 5 percent in 2010. While Norway's record of managing its oil wealth has generally been highly successful in building the foundation for an equitable sharing of its oil wealth with future generations, this recent turn has created some concerns for the long-term sustainability of Norway's fiscal policies, despite large current budget surpluses.

4.2 Factional Democracy: Oil Rents in Latin America

Relative to other countries, factional democracies rank quite high in terms of political participation but rather low in terms of transparency and corruption (see Tableaux p.5). Despite important differences, Ecuador, Colombia, Venezuela and, to some extent, Mexico, share a tradition of nationalist populism and patronage which has strengthened the political voice of interest groups directly attached to state expenditures. Elites have little incentive for fiscal restraint; leaders who make honest attempts to rationalize spending and stimulate private sector development face general strikes and widespread rioting, and in the case of President Febres Cordero of Ecuador, kidnap by military paratroopers. Interest groups in Ecuador, Colombia and Venezuela have been more stable than the weak and personalized, political parties. These countries also rank low in terms of policy stability, and have performed quite poorly in terms of fiscal discipline and oil revenue management.

Interest Groups, Instability and Earmarking. Political developments in Ecuador and Colombia have shown striking similarities in recent years. Traditional parties have lost their hegemony and politics have become more personal. The discovery of oil has caused intra-party rivalries to flare as the state becomes increasingly important as purveyor of resources (Martz 1997). Lacking a consensus on transparent budget allocation, groups have turned to earmarking to assert their interests, further weakening overall budget management. (Box 2). In Ecuador, numerous governments have launched attempts at fiscal restraint and structural reform, but none has held up to social pressure long enough to significantly alter its political economy. Urban population growth

15 In a recent analysis of business environment surveys, they all rated in the lowest 14 out of 81 countries.
accelerated during the first boom period in Ecuador, driven by incentives in the form of rising consumer subsidies, the expansion of public sector wages and employment, and a decline in non-oil taxes equivalent to 2 percentage points of GDP (World Bank 1991). Attempts to introduce fiscal discipline and structural adjustment in the mid 1980s under President Febres Cordero brought mild improvements in a number of macroeconomic indicators: however, in January 1985 Congress called an emergency session to invalidate his wage restraint measures and the trade union federation called a general strike. The collapse of oil prices in 1986, followed by disastrous earthquakes in 1987, forced the government to enact emergency measures to address large fiscal deficits, including fuel price increases of up to 80 percent and 25 percent increases in bus fares (Corkill and Cubit 1988). These measures to adjust to lower oil rents provoked widespread rioting, another general strike, assaults on members of parliament, bombardment of government buildings with Molotov cocktails, and in January 1987, the abduction of the President by air force paratroopers (Espinel et al 1994). Shamed and devoid of support, Febres Cordero reversed the process of reform and initiated enormous construction projects to benefit his coastal constituency.

Box 2: Earmarking in Ecuador

Despite weak non-oil tax administration and the resulting volatility in revenues, in 1999 about 65 percent of total tax revenues (including all oil revenues) were earmarked for specific programs or for transfers to sub-national governments. The earmarking system illustrates the strength of Ecuador's network of entrenched interests vis-à-vis the unstable central government. Its complexity and non-transparency has produced unforeseen and irrational distributions of oil revenues, major beneficiaries of which have historically included the inefficient and overstuffed bureaucracy of PETROECUADOR, the military, and the civil service (World Bank 1991). 14.5 percent of all oil revenues were earmarked directly to the military in 1989; and 67.6 percent were allocated to finance the public wage bill and other programs, notably the rural roads program, a politically important source of patronage. Earmarking reduces the fiscal flexibility of the central government, locking in spending increases during oil windfalls and forcing drastic cuts in operating and discretionary expenditures during downswings.

President Borja inherited an inflation-riddled economy with a public sector deficit of 16 percent of GDP. His first package of economic reforms included moderate measures of fiscal austerity, but it too was met with a national strike, which was particularly damaging to oil exports. The powerful bus and truck drivers' union shut down transport across the country in June 1989 (QER, No. 3 1989), and the President's support quickly eroded as continuing austerity measures reduced subsidies and restrained wages. As the Gulf conflict of 1990-91 escalated, the trade union federation, the military and the business community descended on the state, demanding a share of increased oil revenues. Despite the expected temporary nature of high prices, Borja gave in and the entire oil windfall was used to finance increases in consumption (World Bank 1991). Ecuador has

\[\text{16 However, 17 percent of the 1988 budget had no identified sources of finance and 38 percent was financed through foreign loans.}\]
fared little better in the 1990s: in eight years out of the last decade, fiscal impulses have exacerbated the oil cycle.

The discovery of significant oil reserves in Colombia in 1993 occurred in the wake of a process of political and fiscal decentralization initiated by the 1991 constitution. The confluence of these two events led to an explosion of subnational spending and borrowing as the rules of the game of competition for rents became ‘spend more to get more’ (Box 3). Politically driven government bailouts of local and regional entities and state enterprises exacerbated moral hazard problems and contributed to the doubling of state consumption expenditure in only six years. A stabilization package initiated in 1999 has moved to check the more egregious flaws in the decentralization process, but Colombia’s weak central government faces enormous arrears in pension payments and spending commitments.

Box 3: Fiscal Decentralization in Colombia

By the mid 1990s, nearly 40 percent of central government revenue (including all petroleum revenue, regardless of international prices) had been earmarked for transfer to local and regional governments. As with earmarking in Ecuador, the transfer system tied central government revenue to subnational entities through complex rules, creating a national arena for competition over rents. Under political pressure, based in part on widespread expectations about future oil revenues, central government ignored standards for transfers, making them to departments without adequate capacity while the transfer of responsibilities to sub-national governments lagged far behind the transfer of revenues. With weak supervisory practices and regulatory forbearance, moral hazard led local and regional entities to overspend and accumulate excessive debt. The government bailed out several major territorial entities and their creditors in the mid 1990s: the implicit state guarantee further reinforced the borrowing spree. Bailout costs contributed to the rapid acceleration of state consumption expenditure, which skyrocketed from 10 percent of GDP in 1993 (prior to the inflow of oil receipts to the fiscal coffers) to 23 percent of GDP in 1999. Reforms include subjecting sub-national governments to credit ratings; it is too early to tell whether recourse to independent evaluation will restore discipline to the consolidated fiscal system.

The Failure of “Sowing the Oil” Oil revenues have shaped Venezuelan politics for decades, creating a rentier state legitimized by patronage and entrenched constituencies whose continued loyalty are attached directly to state expenditures funded by oil rents. Economic performance has been influenced by oil revenue volatility and “stop-go” policies, resulting in boom and bust cycles. Transitory oil price increases have led to increased spending, often maintained even after oil revenues had fallen again. Despite Venezuela’s estimated $600 billion in oil exports since the early 1970’s, real per capita income fell by 15 percent between 1973 and 1985; since then the decline in economic conditions have accelerated with GDP per capita declining by on average 2.2 percent per year during the 1985-2000 period.

Following the sudden large oil windfalls after 1973, Venezuela embarked on a policy of extensive expansion of the state’s involvement in the economy. The oil industry was
nationalized and large-scale state investments in capital-intensive projects in steel, aluminum, iron ore, and energy were made as part of the drive to diversify the economy and reduce import dependency. However, these state enterprises were inefficiently managed by political appointees without professional expertise and expected world demand for products of the new industries did not materialize (Nissen and Welsch 1994). Large-scale increases in employment based on patronage and hefty wages increases aimed at enlarging the urban constituency further eroded the financial viability of these enterprises. Despite massive overspending, the government and state enterprises were able to obtain foreign credits without difficulty. Foreign borrowing also supported rapid increases in imports. The rents received during the 1979-82 oil boom were largely used up by budgetary subsidies to prop up these enterprises in the face of huge losses. Despite modest reforms, the country’s fiscal position became increasingly fragile and, faced with the oil price downturn of 1982-83, the government was unable to meet its debt obligations. Massive capital flight forced the Black Friday devaluation of February 1983 and sparked a deep recession. Following a series of strikes by the trade unions, most reforms were abandoned. In 1982, the appropriation by the government, without opposition from the Congress, of the US$ 5 billion saved in the investment fund of the national petroleum company PDV widened the gulf between the technocracy of the company and the political establishment and sent a clear message that it was futile to try to sterilize windfalls by (openly) saving abroad (Mommer, 1998).

Entering office in 1984, President Lusinchi introduced fiscal restraints and a multi-tier preferential exchange rate system to contain the crisis. However, continued strong pressure from organized labor and business soon resulted in another policy reversal with increased minimum wages and subsidies, stimulating economic activity but incurring large deficits and tripling inflation to over 30 percent by 1988. The agency managing the exchange rate system, riddled with corruption, effectively transferred billions of dollars into the hands of political elites (Nissen and Welsch 1994). Despite the fall in oil revenues following the 1986 price crash, Lusinchi continued to expand fiscal policy, and he left office with the highest recorded popularity of any retiring Venezuelan president.

The new government that took office in February 1989 faced a situation where Venezuelan consumers had to cope with severe shortages even of basic goods and the state was at the brink of bankruptcy. A doubling of petrol prices from their traditionally very low levels in the face of budget deficits running at close to 10 percent of GDP triggered massive riots in urban areas, in which over a thousand people were killed. The trade unions and much of the business sector united in opposition to liberalization of the economy, despite a lack of a coherent alternative, and a general strike was called. The president finally resigned, having failed to find a constituency to support a reform program, and after having barely weathered two bloody coup attempts.

17 Large employers obtained the right to repay their debt at the pre-devaluation rate of 4.3 bolivars per dollar, a scheme which Minister Matos Azocar called “the most outstanding public subsidy ever paid to the private sector”. In 1998 the market rate climbed past 30 bolivars per dollar in 1986 and 40 bolivars per dollar.
A survey by the Presidential Commission for State Reform in 1989 found that 80 percent of the population was dissatisfied with the democratic administration and that 88 percent believed that politicians did nothing but talk and were holding back the public's rightful wealth (Nissen and Welsch 1994). Such attitudes, elicited in the midst of reforms, contrast with the popularity of President Lusinchi at the end of an enormous spending binge, and indicate the disillusion that led to the election of President Chavez, backed by the working and lower-middle classes and the military, which had not traditionally participated as members of the political elite. Pressures to take on board even more government workers to create jobs for the unemployed has increased as foreign investors have increasingly fled Venezuela. The overall budget deficit has continued to fluctuate widely alongside the price of oil -- from a surplus of about 7 percent of GDP in 1996 to a deficit of 7 percent in 1998, back to a surplus of 2 percent in 2000 and an estimated 6 percent deficit in 2001. Despite Chavez's inability to bring tangible economic benefits to his supporters, he sustained the passionate support of Venezuela's poorest, as evidenced by the reaction to his temporary ouster in April 2002. PDV, faced with a decline in the ratio of operational revenue to expenses, is finding it increasingly difficult to transfer the necessary proportion of funds to the central government, slowly drying up Venezuela's rentier economy, while at the same time the power of the rent-seeking interests that the oil rents have created, has not deteriorated. As of mid-2002, it was not evident where Venezuela would find a constituency for liberal reform and the necessary divorce from oil-dependent statism.

Mexico too launched an ambitious program to "sow the oil". As PEMEX began to exploit the new-found petroleum reserves in the south of the country, Jose Lopez Portillo entered with a vision of oil-led industrialization. Spurred on by an exceptional case of petromania fuelled by very optimistic price projections, the Mexican government launched enormous investment projects, designed to diversify the economy and reduce dependence on oil. By 1981, capital and intermediate goods imports had driven Mexico's trade deficit to US $3.7 billion, and the peso had become significantly overvalued. Not only had an enormous oil windfall been spent, but the state had simultaneously borrowed heavily. The politicization of oil had driven state expenditures far past sustainable levels; a slight downturn in oil prices in 1982 and ensuing capital flight drove Mexico into its second debt crisis in six years, despite still high export prices. The Mexican government's management of oil revenues improved during the early 1990s, as hedging techniques were successfully used to buffer the expected temporary windfall from the Gulf conflict period (Box 4). This perhaps reflects a learning process within the PRI as a whole, built on its regular experience of six year crisis cycles driven by populist expenditure patterns.

18 The director of PEMEX assured Congress that oil prices would continue to rise until the year 2000, and described state-led industrialization as 'a race against time' (Morales et al 1998, pg. 91) Simulations suggest that such massive forecasting errors can be very costly when used as a base for fiscal policy (Gelb, 1988).
Box 4  Hedging Oil Shocks

In 1990-91 Mexico bought put options, sold oil futures and used oil swaps to hedge price risk, as well as establishing a special contingency fund against oil price declines. The objective of the strategy was to ensure that it received at least $17 per barrel, the basis for its 1991 budget. Mexico's experience shows that such strategies can be successful, but they are rarely used by exporting governments. One reason is asymmetric political risk: governments will be blamed for losses of potential revenue if oil prices rise but will receive little credit for hedging if prices fall. This suggests that any hedging strategy should be integrally built into the budget and clearly presented with the budget, more as a forward purchase of revenues than as a forward sale of oil.

Oil Rents and Incentives in Factional Democracies. Especially in patronage-based political systems without the tradition of strong national institutions and the transparency required to establish a clear national consensus, oil revenues encourage rent-seeking behavior as populist competition for resources expands unchecked. In Ecuador, central government authority is weak and unstable, as electoral rules all but ensure the lack of a stable congressional majority; between 15 and 18 parties, largely ad hoc institutions assembled to back the candidacy of charismatic individuals, were represented in congress during the 1980s. Short, intense political cycles give rise to unstable policies and a very short policy horizon. Ecuadorian politics have a strong tradition of direct interference by dominant economic interests with the formal democratic process and weak delegation of representation by organized groups to political parties and congress. As a result, "interest groups are highly divided and parochial in their demands, pursuing predatory ends with little co-operation in the quest for net social gains [...] in a rent society, corporate interests are better prepared for defensive action than creative participation in the policy process." (Espinell et al 1994, p19). The ability of Congress to resolve interest group pressures is severely limited; tensions between the executive and the legislature are extraordinary, as the one-house legislature is empowered to act rapidly and unilaterally to impeach technocrats, raise minimum wages without consideration of productivity or inflation, and earmark revenues directly to various interests. Thus, while oil rents did not create Ecuador's political institutions, they do exacerbate their weaknesses, which, at the same time, reduces the ability to use rents well.

Colombia's central government is similarly weak vis-à-vis subnational governments and social interest groups. The Constitutional Court, formed under the 1991 constitution, has established a dominant position in wage and expenditure policy, under the auspices of protecting fundamental individual rights. One recent ruling overturned a public sector wage freeze, requiring that wages be adjusted upwards every year by at least the level of inflation\(^9\). The judicial branch therefore holds veto power over reforms and fiscal restraint measures. Political cycles have also become very extreme in Venezuela, with the labor movement, large, state-subsidized firms and small employers as well as, more recently, the military, competing for oil rent (Nissen and Welsch 1994). Even the

\(^{9}\) Another judgment mandated increased expenditures on prisons, basing this on "prisoners' rights. Colombia Constitutional Court Judgments T-296/98 and T-153/98
formally independent central bank has no ability to check politically motivated spending, as presidents can remove the central banker at will.

Mexico faces a very different set of political constraints. Until the last decade the PRI dominated the state. It claimed legitimacy in revolutionary nationalism, and tightly controlled the labor unions, the military, and other social interests (Klesner 1997). However, the PRI was far from a unitary actor; within its clientelist networks and in the greater political arena, political support was allocated by the promise and delivery of patronage. Presidents won office on promises of high wages, employment and subsidies, as well as on quieter commitments to the allocation of rent-seeking opportunities to supporters among the political elite. The allure of politically allocated rents drew many bright minds away from productive enterprise and into the fold of the PRI. Time will tell whether political aperture in Mexico will lead to democratic maturation or back to populist politics. After the historic fall of the presidency to Vicente Fox of the PAN, a political struggle in Congress resulted in the earmarking of expected oil revenues for increased social expenditure—revenues ‘expected’ due to a substantial upward revision in oil price projections.20

4.3 Traditional Autocracies: Saudi Arabia and the Gulf.

The Gulf states depend heavily on rents from the exploitation of state-owned petroleum reserves to fund their development efforts and generous welfare policies. Over the past 25 years they have gone through a far-reaching social and economic transformation while maintaining social stability. Despite ample reserves, new development challenges over coming decades will test their ability to reconcile traditional institutions with the requirements of a modern economy in an increasingly competitive global environment.

The Years of Plenty. In the years following the first oil boom, the Gulf governments embarked on massive investment programs with priority to basic infrastructure, aiming to transfer part of the windfall to the population at large as well as to future generations. Substantial investments were also made in the social sectors. The population at large benefited from generous welfare schemes in the form of access to housing grants, as well as basic foodstuffs, fuels, water and electricity at highly subsidized rates. Expansion of the government sector served the dual purpose of providing public services for the population and job opportunities for Gulf nationals. Most of the Gulf states also initiated programs to build up domestic industrial capacity, boosted by very generous subsidies. These programs envisioned using abundant hydrocarbon resources as feedstock, and aimed to diversify economies away from extreme reliance on oil rents. After 1973, limited absorptive capacity to formulate and implement development programs -- coupled with a small, if rapidly growing, population and the sheer magnitude of the rent transfer -- initially led to a huge accumulation of official foreign reserves. Local businesses amassed fortunes on lucrative government contracts. Since the development programs designed by benevolent governments ensured that everybody gained from the newly acquired fortunes, the programs received broad popular support.

20 "Recortos al gasto publico, anticipa Ernesto Zedillo" in El Financiero, Jan. 6 2000 pg. 8
In many ways, the programs initiated during the oil boom years have met with considerable success in raising living standards, including a massive expansion in education. However, the Gulf states generally have not been able to translate the huge investments in infrastructure and human development into vigorous, self-sustained private sector growth. Instead, the efficiency of investment has been steadily declining, reflecting poor screening of the economic viability of projects. (Auty 2001). At the same time, the socioeconomic implication of the “welfare-state” strategies followed by the Gulf states -- with focus on the distribution of oil wealth through public programs rather than on developing new sources of wealth — also created severe unintended structural anomalies in the form of persistent dependence on oil for export earnings and fiscal revenues, overgrown public sectors whose omnipresence in the economy stifles the private sector, distorted incentives to work, and extreme dependence on government to provide jobs for Gulf nationals.

The End of the Boom. As oil revenues fell dramatically after the mid-1980s, the Gulf governments resorted to large-scale draw-down of accumulated foreign assets to fund the completion of the infrastructure investments initiated during the boom years. However, long-term expenditure commitments also grew due to the expansion of public services, including education, health, and growing public sector employment. Petroleum revenues remained broadly flat, resulted in growing fiscal strains over the coming years. 21 Faced with persistent fiscal deficits since the early 1980s, the Saudi government initiated domestic borrowing in 1988, and domestic debt now significantly exceeds usable reserves. As fiscal pressures continued to mount, recurrent expenditures for maintenance and subsidies as well as capital outlays were cut back, while efforts were initiated to raise non-oil revenues. As non-oil sector growth stagnated while the number of new entrants to the labor market escalated throughout the 1990s, the tightening fiscal constraint constrained the scope for continuing to use the public sector to absorb job-seeking nationals. In the case of Saudi Arabia, annual non-oil sector growth is estimated to have been a minuscule 1.2 percent during the 1990s, relative to a labor force growth rate of over 4 percent, reflecting high fertility rates during the oil boom years. Only some 40,000 of the 120,000 Saudi nationals who entered the labor market in 1999 were able to find jobs in the non-oil private sector. 22

Cautious reforms aimed at addressing the underlying structural problems behind these trends were initiated during the 1990s. The collapse of oil prices in early 1998 in the wake of the Asian Crisis severely affected the fiscal situation of the Gulf countries and strengthened the political awareness of the need for structural and institutional reform. Local discontent has been growing over unemployment and reductions in per capita incomes while privileged “groups” are seen as basking in conspicuous consumption inconsistent with traditional values, and funded by the capture of an undue share of the

21 The Kuwaiti government – which already employs 93 percent of all nationals in the labor force – saw its payroll cost grow by well over 6 percent per annum in the 1995-2000 period, even as total and recurrent budgetary expenditures remained constant in nominal terms, resulting in crowding out of other expenditures, in particular, capital outlays.
remaining subsidies. At the same time, the eternal but elusive hope of recovery in oil revenues together with resistance from groups that see their interests threatened have thus far limited the scope of reform. The strong consensus culture of the Gulf countries – while an asset in terms of solid support for decisions once made – also retards the pace of reform.

The Challenge to Overcome: Obstacles towards A New Development Paradigm. Over the next decade, the Gulf states will face mounting fiscal pressures to expand public services because of population growth -- on top of high payroll costs. While remaining oil and natural gas reserves may last for up to 100 years at current levels of production for several of the Gulf countries, the scope for boosting oil revenues beyond current levels is constrained by OPEC agreements and the realities of competition from other suppliers with liberal oil tax regimes. The public sector can no longer be used to absorb the rapidly increasing number of new entrants to the labor market. These trends generate an urgent need to accelerate non-oil private sector growth to create new job opportunities for Gulf nationals. However, to realize this objective, Gulf governments will have to abandon development strategies pursued over the past quarter century and overcome severe political hurdles towards a sustainable strategy.

Despite stable macroeconomic conditions, the dominance of petroleum and the strength of the local currencies continues to frustrate progress on developing the non-oil tradeables sectors. The notable exception is the United Arab Emirates – spearheaded by the Dubai Emirate (which anticipates the depletion of its oil reserves over the next decade) that has followed a liberal, business-friendly and market-oriented strategy aimed at diversifying the economy. However, given the generally high import content in private consumption in the economies of the Gulf states, exchange rate adjustment to promote economic diversification and create non-oil private sector jobs in the long run would meet strong resistance from the general population facing immediate price increases and reductions in real per capita incomes, and creating social discontent that could be exploited by powerful groups. At the same time, the prospective gains, in terms of future job opportunities in the non-oil sectors for Gulf nationals, are likely to be too abstract to create a strong constituency. Influential groups with interest in investing abroad to raise returns or avoid real or perceived political risks would also probably oppose an exchange rate adjustment of the required magnitude. Gulf governments would see net gains from an exchange rate adjustment, but their expenditure commitments are now such as to preclude the option of sterilizing part of these gains in savings funds with assets held abroad to sustain the adjustment -- a viable option until some 10-15 years ago.

Opposition to the reform of widespread producer and consumer subsidies will also have to be overcome if a more rational price structure is to support efficient investments in line with comparative advantage. Saudi Arabia has made progress by eliminating budgetary transfers to fund subsidies for agriculture, industry, and housing in recent years – thus limiting subsidized credits to what is available through repayment of old loans. But the Gulf countries will still have to overcome strong consumer resistance (and worries that some groups might exploit consumer discontent) to rationalizing charges for water and electricity with the aim of enhancing the private sector’s interest in investing in these
sectors as well as curtailing waste. Entrenched interests are also likely to delay education reform to make curricula more relevant to the needs of a modern economy.

Strong and deeply entrenched interests have also largely frustrated attempts to address the perceived lack of transparency and predictability in legal and regulatory frameworks that continues to constrain private sector take-off in the Gulf. The judiciary is widely seen as lacking appreciation for the requirements of modern business legislation and the need for a level playing field, while suffering from capacity problems that results in extremely long delays in settling commercial disputes. Red tape, in the form of requirements for permits and licenses, still persists in varying degrees and contributes to a generally poor competitive environment, slowing structural change while creating handsome rents for well-connected business interests. As the world increasingly moves towards an integrated, information and knowledge-driven economy, the general lack of even basic statistical information and easy access to rules and regulations – making, for example, market analyses and feasibility studies hard – will become an even more severe drawback.

4.4. Predatory and Modernizing Autocracies: Nigeria and Indonesia

Like the Gulf States, Nigeria and Indonesia have both had autocratic governments over most of the last three decades, and both rank very low in terms of transparency. Yet they offer contrasting experiences in the management of oil rents, with much of the difference traceable to political factors.

From Predatory Autocracy to Factional Democracy? Oil represents an estimated 37 percent of GDP in Nigeria, and 63 percent of consolidated government revenues. Management of this resource has historically been driven by political economy considerations. Oil resources are controlled by the public sector and have traditionally greased the functioning of an extensive machinery of rent seeking and political patronage. Oil has also been used, with some success, to hold together a fragile “political coalition” of diverse ethnic and religious interests. Not surprisingly, public expenditures have always ratcheted out of control during oil booms, creating considerable macroeconomic instability. Forced and painful adjustment has typically followed. Desire for and ability to achieve reforms have also been low or non-existent. During the past 20-30 years, it is estimated that some $300 billion in oil revenues has enriched a small group of politically and socially influential elite, while the majority of Nigerians have become impoverished. Growth has been stagnant and per capita income is estimated to have fallen from about $800 in the early 1980s to about $300 today.

Under Nigeria’s periods of military dictatorship, the federal executive alone determined how the oil cycle was managed. After an initial lag in 1973 and 1974, when large surpluses were accumulated abroad, public capital spending accelerated so strongly that by 1976 it alone accounted for more than the entire increase in oil revenue. Current

---

23 A beginning to reform has been made with the recent adoptions of new investment laws and other institutional reforms in Kuwait, Oman and Saudi Arabia.
spending too rose sharply, with a doubling of pay for civil servants, following the review of the Udoji Commission, a decision widely interpreted as an effort to rally support behind the announcement by General Gowon that the country was not ready to return to civilian rule. Even the second oil price rise was not sufficient to bring the budget back into surplus, so that after 1975 the country faced growing fiscal and current account imbalances, and after 1981 a rapid accumulation of external debt, accompanied by capital flight. Increased government spending did not accelerate growth; neither is it easy to find evidence of the massive, if temporary, increase in overall welfare that would have been expected during the period of sharp real appreciation that followed the spending binge. One explanation is that Nigeria's potential gains were absorbed in the sharply growing inefficiency of a corrupt and progressively more wasteful and distorted economy (Gelb, 1988). Agriculture and manufacturing atrophied, and the country has steadily de-electrified.

In Nigeria's emerging democracy there are more actors and consequently things are more complex. But fiscal policies following the oil price boomlet of 2000-2001 were not much different from those during previous periods. States and local governments now control a larger share of oil revenues, mainly because constitutional provisions on revenue sharing between the three tiers are now being strictly adhered to. Over the past year, state and local government demands — backed by constitutional mandates that shares of all oil proceeds be distributed to them to fund their rapidly expanding spending programs — have frustrated federal government efforts to institute a savings mechanism for oil windfall revenues which would have sterilized revenues corresponding to 10 percentage points of GDP in 2001. Following recent decisions, states receive almost half of all Federal income, while the Federal government faces massive pension obligations and domestic debt service. At the federal level, the legislature, absent for 18 years, is again a player with a strong belief it has constitutional powers to change the executive's budget to reflect its own (or multiple members') agenda for spending. The 2000 and the 2001 appropriations bills have both been much larger than the executive's proposals. Finally, there is increased tension between demands for "derivation of revenues to the oil producing states" and "redistribution across all states". Oil producing states have been successful in getting 13 percent of oil revenues to be paid to them as derivation since 2000.

No effective agents of restraint have emerged from this larger number of actors. The federal executive's efforts in this regard were neither credible nor successful. Between 1999 and 2001, as Nigeria's oil receipts rose from $7.8 billion to $15.3 billion, consolidated government spending increased from $12.2 billion to $21.7 billion. The fundamental drivers of the process—the politics of patronage, support of a large bureaucracy (in May 2000 public sector wages were more than doubled), and keeping a diverse and often fractious polity together—remain the same. Over the years, this has created a dynamic that has not only led to huge levels of government spending but to a widely-shared belief in Nigeria that large public programs and spending are normal and desirable. The most recent factor—the need to deliver "democracy dividends"—is unfortunately seen as a call for larger public sector spending and thus perversely continues the same approach. Overall, it is estimated that the general government may
itself absorb some 70 percent of Nigeria’s oil income, leaving little over for the rest of the impoverished population. Efforts to contain spending through “value for money” audits and compliance with due process in spending appear to have little impact on its effectiveness.

Outcomes in the management of Nigeria’s oil cycle in the new democracy are thus so far not much different from the past pattern, illustrating the fact that political institutions are shaped by a longer history than the current political regime. The key feature remains excessive and unsustainable increases in public spending on the upswing, with considerable macroeconomic instability, and little to show in growth and economic development. This was a central factor in the recent agreement between Nigeria and the IMF not to pursue a formal monitoring program. Faced with mounting resource shortfalls, Nigeria’s 2002 budget proposed to significantly raise non-oil revenues to 19 percent of GDP or 45 percent of total revenue, despite the likely adverse effect on an already costly and unattractive investment environment and the ineffectiveness of state spending (Box 5).

Box 5. Should Nigeria Cut Non-Oil Taxes?

| Viewed in the context of other countries, Nigeria’s proposed non-oil tax ratio of 19 percent of GDP seems not unreasonable. Yet it may be excessive in a context where the marginal value of public resources is surely lower than that of income circulating in the private economy, and where the fiscal problem has been mainly on the spending, rather than the revenue, side. Some have proposed a drastic cut in tariffs and taxes as a mechanism to reduce the state’s role, to decrease corruption and to transfer income to private agents. Others have suggested investing heavily in electrification so that cheap power can help the re-industrialization of the country. Political realities suggest that efforts to radically scale back the weight of the state in Nigeria are unlikely to be successful. Yet the economic record also suggests that fiscal deficits do not constitute a sound argument to increase non-oil taxation. |

From reformist autocracy to -- what?? Like Nigeria, Indonesia was a poor, largely rural economy, and its initial response to the oil windfall of 1973-74 was to rapidly increase development spending. Half of the rent earned during the first oil boom was devoted to a wide variety of programs especially in agriculture, and to economic infrastructure, largely in rural areas. Assessments of these programs, such as BIMAS, INMAS and other efforts at agricultural intensification suggest that, despite some problems, they laid the foundation for agricultural growth at rates well exceeding the average for developing countries let alone oil exporters. INPRES, the labor-intensive public works programs, also appear to have been successful, creating 1.5 million person-years of work in 1982. Among other achievements, primary school construction helped boost enrollment from 77 percent in 1970 to 100 percent by 1978. Fertilizer subsidies averaged 11 percent of development spending, and Indonesia’s abundant gas reserves were harnessed to provide a supply of low-cost agricultural inputs to complement the introduction of high-yielding rice varieties.
Concern over real appreciation of the rupiah led to a devaluation in November 1978, but this came just before the second oil price spike. A less cautious government might have encouraged greater foreign borrowing by public firms or increased its own borrowing: it might at least have maintained its balanced budget rule which had been applied by the Suharto government since 1967, albeit somewhat flexibly. But although the budget was balanced in a formal sense, spending controls were applied to create a substantial *de facto* surplus that was not widely known, including to the parliament. Claims of the banking system on government fell sharply, and reserves doubled to $5 billion. As oil prices fell after 1981, Indonesia also moved aggressively with a drastic re-phasing of its development plan, canceling investments and cutting subsidies and spending, as well as stabilizing its real exchange rate through progressive devaluations. Growth, high during the boom years, was sustained far better than in other oil exporters, and non-oil exports, notably manufacturing and, after 1979, LNG, continued to grow.

**The shaping of political economies.** Why did Indonesia manage so much better than Nigeria during this period, both in terms of fiscal and macroeconomic control and in terms of the effectiveness of public spending? A large part of the answer lies in their different political economies. Since independence, political power and economic strategies in Nigeria have tended to be defined in regional and ethnic, rather than in occupational or class terms. This has led to continuous search for a constitutional formula to hold together the Nigerian Federation and to an ongoing battle over the regional allocation of public revenues. In none of the dominating parties prior to military rule were farming interests well represented; neither was there active commitment to increasing equity. Pressures from poor farmers were blunted by ethnic cleavages (Bates, 1981, Bienen 1985) and the widespread desire to leave the agricultural sector, while pressures from the urban elite — with interests increasingly tied to spending decisions funded by oil revenues — grew sharper.

History shaped Indonesia's politics differently. The condition of its economy when the Suharto regime came to power in 1967 could hardly have been worse. The increasingly chaotic "Guided Democracy" of the Sukarno government had been more destructive, in economic terms, than many conflicts. Inflation had reached 600 percent; shortages of food, especially rice, contributed to political instability and to a huge drop in GDP, the magnitude of which will never be known because of the demise of the statistical system. Economic stabilization and reconstruction, especially in rural areas, was crucial for the survival of the new regime. A team of economic advisers was constituted, which proved to have both exceptional influence and continuity. Food security was the prime objective of the new development policy (Tracee Baru), together with exports, macroeconomic stabilization and financial sector reform, and an impressive turnaround.
bolstered the credibility of the new government. The remarkable Pertamina Crisis—the failure of the economic fiefdom constructed around the national oil company to service its debts in 1975—both strengthened the hand of the technocrats and reinforced the cautious elements in government.

Good economic management was further encouraged by two features. First, the power base of the government—in addition to the army—was GOLKAR, a coalition of diverse functional groups with a strong representation of farmers, women, workers and youths, rather than a narrowly based political party. This provided a vehicle for developing consensus, and reduced rivalries over how oil revenues were to be spent. Second, Indonesia’s economy was overwhelmingly rural—in 1970 only 17 percent of the population lived in urban areas, most with strong rural ties—and stabilization of the rural population, especially in land-scarce Java, was a critical policy priority. Even in an autocratic setting, the non-oil tradeables, agriculture and increasingly, labor-intensive industry, therefore constituted a major political interest group with a direct concern for the quality of public spending as well as for avoiding extreme appreciation of the real exchange rate. Unlike Nigeria, Indonesia therefore had the benefit of effective agents of restraint through the first oil windfall. Its political challenge would only emerge later.

5. Conclusions

This study has reviewed the political economy of fiscal and economic management in a number of oil exporters with widely differing political systems, emphasizing the issues of long-term savings, short-medium-term stabilization and the effective use of rent income. While these are different objectives, they are all part of good economic and fiscal management, and countries that have been able to do well in one area have typically been able to well in others. Not all objectives are reasonable for all countries; in particular, it may not be realistic to expect poor exporters still dependent on official development assistance to save for extended periods.

Oil rents widen the set of policy choices: in principle, countries can do better than they would have done without rents. However, as has been demonstrated in numerous studies, oil exporters’ economic performance has, with few exceptions, been poor. Since the first oil booms, evidence has accumulated on better technical approaches towards managing resource rents, especially “point-source” rents from oil and hard mining, as well as on the high cost of “stop-go” and failure to use rents well to support a broader process of development. Looking forward, the main factors determining the success of mineral exporters are less likely to be technical and more likely to relate to the political economy of managing rents.

More and less successful cases offer some suggestions. Mature democracies clearly have some advantages because of their ability to reach consensus, their educated and informed electorates and a level of transparency that facilitates clear decisions on how to use rents over a long horizon. Yet even in these systems (with institutions that were

---

28 Non-oil traded sectors were also important constituencies for stable economic management in Malaysia, in particular tin, rubber, and increasingly assembly operations (reference).
shaped well before oil rents became large), conservative management is a continuing struggle. Reformist or traditional autocracies can also sustain long decision horizons and implement developmental policies. But their resistance to transparency and the danger that oil-led spending becomes the major legitimizing force behind the state raises problems of “lock-in”, mounting corruption and political transition. Little positive can be expected from predatory autocracies, which sometimes have shorter horizons and the characteristics of “roving bandit” regimes.

Factional democracies present particular challenges, because they lack a sufficiently effective political system to create a consensus among strong competing interests. Special attention will be needed to increase transparency and raise public awareness. There may be a threshold of democratic maturity, below which political competition will not help in managing oil incomes well. And oil income makes it more difficult to sustain a constituency in favor of sound, longer-run economic management, because it weakens incentives for agents to support checks and balances that impinge on their individual plans to appropriate the rents.

Constituencies in favor of cautious management can include: a well-informed civic society (“keep it out of the hands of the politicians”, as in Alaska); parliament (effective consensus-building underpinning a transparent budgetary process as in Norway); those dependent on the non-oil traded sectors (agriculture and fisheries, which lead wage-bargaining in Norway, rice in Indonesia, and tin and rubber in Malaysia). These constituencies will benefit from public information and education programs.

Similarly, attempts must be made to get the political debate to span longer horizons. Oil euphoria can be dampened by comparing rents to long-run obligations, such as the present value of pension obligations or to debt service: paying off Pertamina’s debt while oil prices were high was a great stabilizer for Indonesia.

Norway’s experience also suggests a case for integrating the treatment of special funds into the budget -- technical rules will not prevail against lack of political will, and this also can provide a check against manipulation. Surpluses should be invested abroad, to reduce the risk of politicization. Integration of oil funds with the regular budget avoids the risk of competing decisions on spending and facilitates accountability and oversight.

Hedging has been little used by exporters but can help buffer export price risk. However, it will be more politically saleable if integrated into budget formulation, and recast as buying a slice of government spending forward, or buying debt service forward, rather than selling oil forward. There may be a role for international agencies in guaranteeing hedging contracts to neutralize part of the risk.

External agents of restraint may also have a role in strengthening management. For large-scale industrial projects, private investors can only be agents of restraint and risk-sharing if their shares are large enough to make their profits depend on performance of the investment rather than supplying inputs. Credit ratings for sub-national governments offer possible indicators of management effectiveness. If there is a lack of trust between
federal and state governments, possibly international agencies could help by offering certified savings facilities for states wishing to retain control of their own surpluses. In extreme cases, such as Chad (Box 6), the government can commit to be restrained by the rules set by external agents. Such cases are likely to be very rare, but may suggest approaches to exporters which are still aid-dependent.

**Box 6 Chad – Management of oil revenues**

Chad will become an oil exporter in 2003 under unique arrangements, designed in consultation with the principal private investor in the project and international donors, and aimed at addressing the risk of fiscal and economic mismanagement when a poor and institutionally very weak country suddenly sees a large inflow of oil income. The key elements of the law that will govern the management of Chad’s oil revenues are:

1. Net incomes (dividends and royalties) shall be deposited in an offshore escrow account.
2. Direct net incomes shall be allocated as follows:
   - 10 percent in a savings account (Future Generations Fund) to be opened in an international financial institution;
   - 80 percent of the remaining amount to be used for expenditures in priority sectors (public health and social affairs, education, infrastructure, rural development, environment and water resources);
   - 5 percent of royalties to the development of the producing region (Doba);
   - remaining 15 percent for Government operating and investment expenses.
3. An Oil Revenues Control and Monitoring Board is charged with the responsibility to ensure that commitments from the accounts meet the requirements of the Finance Act, and to authorize and monitor disbursements. The Board comprises nine members, four of which are representatives from the civil society (one NGO, one trade union representative, one religious leader, and one representative for the human rights associations) and one is a parliamentarian from the opposition in the Parliament.

The main purpose of the offshore accounts is to ensure proper accounting, including annually published audits, of the revenues. Donors will undertake annual public expenditure reviews to monitor the use of oil revenues. While oil will represent a very large boost to Chad’s development options, adding 50 percent to annual budgetary revenues, the country will still need to attract other private investment and foreign aid. The level of future donor assistance will depend on the Government’s compliance with the above agreements.

Transfers can be a mechanism for both distributing oil rents and economic stabilization. Only a few countries can implement a transparent “Alaska-style” system of direct rent check transfers to individuals, but there may be potential for using rents to make transparent transfers to communities or schools as in Uganda (Renikka and Svenson, 1999).

Particularly in countries with poor tax administration and low-quality public spending, the combination of high non-oil taxes and oversized government suggests the existence of large deadweight losses. There can be also strong arguments for a combination of very
low non-oil tax rates plus a heavy focus on improving tax administration to provide greater fiscal flexibility.

In the end, no single mechanism is likely to provide a silver bullet: oil-exporting governments will need to use a combination of approaches. They should hedge more; hold larger reserves; adopt more conservative, transparent and flexible budgeting, and transfer part of the rents to individual citizens during boom periods to reduce pressure for explosive spending followed by lock-in and fiscal crisis during the downturn. Some countries are well-placed to learn from experience; others, unfortunately, appear to have a long way to go.
REFERENCES


General Accounting Office, United States (November 1999) *Budget Surpluses: Experiences of Other Nations and Implications for the United States.* Report to the Chairman and ranking Minority Member, Committee on the Budget, U.S. Senate.


Kuwait, State of (June 2001), *Energizing the Private Sector;* World Bank in Collaboration with Kuwait University.


-”- The Long-Term Programme 2002-2005 (April 2002).


OECD, Economic Outlook (numerous issues) and Economic Survey (numerous issues).


QER (The Economist, Quarterly Economic Reports), various numbers.


Saudi Arabia, National Development Plans; various issues.

Saudi American Bank, quarterly reports, various issues.


Sotelo, Luis Carlos (1999), Los derechos constitucionales de prestación y sus implicaciones economic-políticas, Mimeo, Colombia National Planning Department.


Table 1: Crude Petroleum Prices, Constant 1990$/bbl
Table 2. Political Economy Classification of Oil Exporters

<table>
<thead>
<tr>
<th>Political Features</th>
<th>Institutional Implications</th>
<th>Economic Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mature Democracy:</td>
<td>* long horizon *</td>
<td>* savings likely *</td>
</tr>
<tr>
<td>stable party system</td>
<td>* policy stability, transparency *</td>
<td>* expenditure smoothing, stabilization *</td>
</tr>
<tr>
<td>range of social consensus</td>
<td>* high competitiveness, low transactions costs *</td>
<td>* rents transferred to public through government-provided social services and insurance or direct transfers *</td>
</tr>
<tr>
<td>strong, competent, insulated bureaucracy</td>
<td>* strong private / traded sector, pro-stabilization interests vis-à-vis pro-spending interests *</td>
<td></td>
</tr>
<tr>
<td>competent, professional judicial system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>highly educated electorate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Factional Democracy:</td>
<td>* short horizon *</td>
<td>* savings very difficult *</td>
</tr>
<tr>
<td>government and parties often unstable relative to interest groups</td>
<td>* policy instability, nontransparency, high transactions costs *</td>
<td>* procyclical expenditure; instability *</td>
</tr>
<tr>
<td>political support gained through clientelistic ties and provision of patronage</td>
<td>* strong state role in production *</td>
<td>* rents transferred to different interests and to public through subsidies, policy distortions, public employment *</td>
</tr>
<tr>
<td>wide social disparities, lack of consensus</td>
<td>* strong interests attached directly to state expenditures; politically weak private non-oil sector and pro-stabilization interests *</td>
<td></td>
</tr>
<tr>
<td>politicized bureaucracy and judicial system</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paternalistic Autocracy:</td>
<td>* long horizon *</td>
<td>* procyclical expenditure, mixed success with stabilization *</td>
</tr>
<tr>
<td>stable government; legitimacy originally from traditional role, maintained through rent distribution</td>
<td>* policy stability, nontransparency *</td>
<td>* risk of unsustainable long-term spending trajectory leading to political crisis *</td>
</tr>
<tr>
<td>strong cultural elements of consensus, clientelistic and nationalistic patterns</td>
<td>* low competitiveness, high transactions costs *</td>
<td>* little economic diversification *</td>
</tr>
<tr>
<td>bureaucracy provides both services and public employment</td>
<td>* strong state role in production *</td>
<td></td>
</tr>
<tr>
<td></td>
<td>* strong interests attached directly to state expenditures; weak private sector *</td>
<td></td>
</tr>
<tr>
<td>Reformist Autocracy</td>
<td>* long horizon *</td>
<td>* expenditure smoothing, stabilization *</td>
</tr>
<tr>
<td>stable government, legitimized by development</td>
<td>* policy stability, nontransparency *</td>
<td>* state investment complementary to competitive private sector *</td>
</tr>
<tr>
<td>social range of consensus towards development</td>
<td>* drive for competitiveness low transactions costs *</td>
<td>* active exchange rate management to limit Dutch disease *</td>
</tr>
<tr>
<td>constituency in non-oil traded sectors</td>
<td>* strong constituency for stabilization and fiscal restraint *</td>
<td></td>
</tr>
<tr>
<td>insulated technocracy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Predatory Autocracy</td>
<td>* short horizon *</td>
<td>* no savings *</td>
</tr>
<tr>
<td>unstable government, legitimized by military force of arms</td>
<td>* policy instability, nontransparency *</td>
<td>* highly procyclical expenditure *</td>
</tr>
<tr>
<td>lack of consensus building mechanisms</td>
<td>* low competitiveness, high transactions costs *</td>
<td>* very high government consumption, rent absorption by elites through petty corruption and patronage, capital flight *</td>
</tr>
<tr>
<td>bureaucracy exists as mechanism of rent capture and distribution; corrupt judicial system</td>
<td>* spending interests strong vis-à-vis private sector or pro-stabilization interests *</td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td>Author</td>
<td>Date</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------------------------------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>WPS2881 Returns to Investment in Education: A Further Update</td>
<td>George Psacharopoulos</td>
<td>September 2002</td>
</tr>
<tr>
<td></td>
<td>Harry Anthony Patrinos</td>
<td></td>
</tr>
<tr>
<td>WPS2882 Politically Optimal Tariffs: An Application to Egypt</td>
<td>Dorsati Madani</td>
<td>September 2002</td>
</tr>
<tr>
<td></td>
<td>Marcelo Olarreaga</td>
<td></td>
</tr>
<tr>
<td>WPS2883 Assessing the Distributional Impact of Public Policy</td>
<td>B. Essama-Nssah</td>
<td>September 2002</td>
</tr>
<tr>
<td></td>
<td>Florencio Lopez-de-Silanes</td>
<td></td>
</tr>
<tr>
<td>WPS2885 Poverty, AIDS, and Children's Schooling: A Targeting Dilemma</td>
<td>Martha Ainsworth</td>
<td>September 2002</td>
</tr>
<tr>
<td></td>
<td>Deon Filmer</td>
<td></td>
</tr>
<tr>
<td>WPS2886 Examining the Feasibility of Livestock Insurance in Mongolia</td>
<td>Jerry R. Skees</td>
<td>September 2002</td>
</tr>
<tr>
<td></td>
<td>Ayurzana Enkh-Amgalan</td>
<td></td>
</tr>
<tr>
<td>WPS2887 The Demand for Commodity Insurance by Developing Country Agricultural Producers: Theory and an Application to Cocoa in Ghana</td>
<td>Alexander Sarris</td>
<td>September 2002</td>
</tr>
<tr>
<td></td>
<td>B. Essama-Nssah</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Issouf Samaké</td>
<td></td>
</tr>
<tr>
<td>WPS2889 Environmental Performance Rating and Disclosure: China's Green-Watch Program</td>
<td>Hua Wang</td>
<td>September 2002</td>
</tr>
<tr>
<td></td>
<td>Jun Bi</td>
<td></td>
</tr>
<tr>
<td></td>
<td>David Wheeler</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Jinnan Wang</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Dong Cao</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Genfa Lu</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Yuan Wang</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eugene Kouassi</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Eugene Kouassi</td>
<td></td>
</tr>
<tr>
<td>WPS2892 Productivity or Endowments? Sectoral Evidence for Hong Kong’s Aggregate Growth</td>
<td>Hiau Looi Kee</td>
<td>September 2002</td>
</tr>
<tr>
<td></td>
<td>Andrew Powell</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ivanna Vladkova Hollar</td>
<td></td>
</tr>
<tr>
<td>WPS2894 Telecommunications Sector Reforms in Senegal</td>
<td>Jean-Paul Azam</td>
<td>September 2002</td>
</tr>
<tr>
<td></td>
<td>Magueye Dia</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Tchéché N’Guessan</td>
<td></td>
</tr>
<tr>
<td>Title</td>
<td>Author</td>
<td>Date</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------------------------</td>
<td>-----------------</td>
</tr>
<tr>
<td>WPS2895 Telecommunications Reform in Côte d'Ivoire</td>
<td>Jean-Jacques Laffont Tchétché N'Guessan</td>
<td>September 2002</td>
</tr>
<tr>
<td>WPS2897 Gender Dimensions of Child Labor and Street Children in Brazil</td>
<td>Emily Gustafsson-Wright Hnin Hnin Pyne</td>
<td>October 2002</td>
</tr>
</tbody>
</table>