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**RESOURCE IMPACT: A CURSE OR A BLESSING?**

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## **1 INTRODUCTION**

Since the 1950's, economists have been concerned that economies dominated by natural resources would somehow be disadvantaged in the drive for economic progress.

In the 1950's and 1960's, this concern was based upon deteriorating terms of trade between the "centre" and "periphery" (Prebisch, 1950 and 1964; Singer, 1950) coupled with concern over the limited economic linkages from primary product exports to the rest of the economy (Baldwin, 1966; Hirschman, 1958; Seers, 1964). In the 1970's, it was driven by the impact of the oil shocks on the oil exporting countries (Neary & Van Wijnbergen, 1986; Mabro and Munroe, 1974; Mabro, 1980). In the 1980's, the phenomenon of "Dutch Disease" (the impact of an overvalued exchange rate on the non-resource traded sector) attracted attention (Corden, 1984; Corden and Neary, 1982). Finally in the 1990's, it was the impact of revenues from oil, gas and mineral projects on government behaviour that dominated the discussion (Ascher, 1999; Auty, 1990; Gelb, 1986; Stevens, 1986).

The common thread running through these concerns is that the development of natural resources should generate revenues to translate into economic growth and development. Thus the revenues accruing to the economies should provide capital in the form of foreign exchange overcoming what was seen as a key barrier to economic progress. This could be explained both in terms of common sense (more money means a better standard of life) and development theories (the requirement for a "big-push" (Rosenstein-Rodan, 1943 and 1961; Murphy et al., 1989), capital constraints (Lewis, 1955; Rostow, 1960) and dual-gap analysis (Joshi, 1970; El Shibley and Thirwall, 1981). However, the reality appeared to be the reverse. Countries with abundant natural resources appeared to perform less well than their more poorly endowed neighbours. Thus the term "resource curse" began to enter the literature (Auty, 1993).

More recently there has been a revival of interest in the phenomenon of "resource curse". Furthermore, this has drawn the attention of a much wider audience than previously. Several factors explain.

Growing concern among a number of non-governmental organisations (NGO's) regarding the negative effects of oil, gas and mineral projects on developing countries has had several effects<sup>1</sup>. It has forced the World Bank group to consider their role in such projects. This has culminated in the

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<sup>1</sup> A good example is furnished by Ross, 2001

creation of “the Extractive Industry Review” based in Jakarta to consider whether the World Bank Group should, as a matter of principle, have any involvement with such projects. Disagreement within and between the World Bank and the IMF have further fuelled the debate over how such revenues should be managed. NGO concern has also encouraged the more responsible petroleum and mineral corporations to consider the impact of their investment in such projects on the countries concerned. This interest, already ongoing, arose because of concern over corporate reputation in a world where ethical considerations are playing an increasing role in global stock markets. There is fear that if it is perceived their projects cause a “resource curse” it then becomes the responsibility of the corporation. This is strongly reinforced if the “curse” is also associated with environmental degradation, human rights abuse and growing internal conflict<sup>2</sup>.

Among financial investors in oil, gas and mineral projects, there is growing concern that the negative effects of “resource curse” could actually threaten the economics of the projects. This could be because the presence of “resource curses” increases the political risk associated with the project<sup>3</sup>.

Finally, this renewed interest is being fuelled by the fact that a number of countries are about to receive large amounts of revenue from such projects. Hence there is real concern and policy deliberation over how these revenues might be used as a positive rather than a negative force. These countries include some of the newly independent states of the former Soviet Union such as Azerbaijan and Kazakhstan, a number of African countries such as Angola and Chad, and some in South East Asia such as West Papua and East Timor.

However, in the literature that has focussed on “resource curse”, there are references to countries that allegedly managed to avoid a “curse” and instead received a “blessing”. For example, even the report produced by Oxfam America (Ross, 2001) which is strongly negative towards such projects, states ... “There are exceptions: some states with large extractive industries – like Botswana, Chile and Malaysia – have overcome many of the obstacles ... and implemented sound pro-poor strategies” (page 16). There are similar references elsewhere to “success” stories - Botswana (Cobbe, 1999; Hope, 1998; Love, 1994; Sarraf & Jiwanji, 2001; Tsie, 1996; Hill, 1991; Hill and Mokegthi, 1989), Chile (Hojman, 2002; Mikesell, 1997; Schurman, 1996), Indonesia (Booth, 1995; Temple, 2001; Usui, 1996 and 1997), Malaysia

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<sup>2</sup> The experience of Shell in Nigeria and BP in Colombia both provide examples of such potential reputation damage.

<sup>3</sup> This is an area much neglected in the existing literature.

(Rasiah & Shari, 2001; Royan, 1999; Shamsul, 1997) , and Norway (Wright & Czelusta, 2002)<sup>4</sup>.

The focus of this paper is those allegedly “successful” countries, designated as “the usual suspects”. The paper considers what they did to secure a “blessing” rather than a “curse” and why they did what they did. However, before any such an analysis can be done, it is necessary to enquire how it can be determined that they avoided a “curse”? Thus part 2 of the paper determines the relevant criteria to determine a “curse” or a “blessing”. Part 3 empirically tries to determine whether “the usual suspects” from the literature deserve the appellation and which other countries might also be included in the list. This section concludes by arguing that the term “resource curse” should be replaced by the term “resource impact” thereby emphasising the reality that in some cases, oil, gas and mineral projects have made a contribution to economic progress. Part 4 presents four country case studies –Botswana, Chile, Indonesia and Malaysia - seeking to explain what they did and why. Part 5 tries to draw policy lessons that may be of value for countries about to embark on securing such revenues so they may enjoy a “blessing” rather than a “curse”. It argues the application of appropriate policies in the future will mean more countries benefit than suffer. Part 6 concludes by considering the implications for the investment decision from the analysis in section 5.

## **2 THE CRITERIA TO ESTABLISH THE IMPACT OF OIL, GAS AND MINERAL PROJECTS**

The literature uses a variety of criteria but two lines of approach suggest themselves in terms of economic criteria<sup>5</sup>. The first is what happens to the rest of the traded economy. Oil, gas and mineral projects involve the depletion of an exhaustible resource. One definition of sustainability requires that when the resources are depleted, other sectors of the economy have the strength to continue to generate value added. The second is what happens to people’s well-being as the project develops. Both lines of argument can produce operational criteria to assess performance.

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<sup>4</sup> Other resource rich countries regarded by some as “successful” include Australia, Canada and the USA.

<sup>5</sup> The literature defines “resource curse” in a much wider way to include issues ranging from environmental damage, to human rights abuse to greater internal conflict (Ross, 2001). This paper however focuses on the economic dimension of the “curse”.

Much of the recent literature (Auty, 1986, 1993, 2001; Bulmer-Thomas, 1994; Lal & Myint, 1996; Ranis, 1991; Sachs and Warner, 1995b, 1997 and 1998) looks at what happened to per capita GDP as a means to determine economic performance. However, this approach is potentially flawed. GDP clearly includes the value of the oil, gas and minerals. For oil economies this is crucial. There is a tendency in the literature to use periods that distort the results. For example, one source bases the argument about poor performance on per capita GDP growth between 1985-97 (Auty, 2001). Yet in this period, real oil prices (\$1999) fell from \$42.70 to \$20.04 (BP, 2000). Where oil is significant in GDP, it is hardly surprising that per capita GDP registers a fall. Given the linkages that exist between gas and oil prices, a similar argument applies to gas. In theory, GDP measured in real terms should account for this but a cursory look at real GDP patterns for major oil exporters illustrates that it does not. Thus the key variable to consider is the non-oil, gas or mineral traded GDP since it is this that must eventually sustain the economy. Such a criterion also makes sense in the context of “Dutch Disease” when it is precisely that traded sector which is expected to suffer and contract. Thus for this paper, the “traded economy criterion” is the real per capita growth of agriculture, manufacturing and services<sup>6</sup>.

There is of course no objective basis for what constitutes a good or a bad performance in terms of this criterion. However, to provide some benchmark, the same data is also used for geographic regions and income cohorts as defined by the World Bank. This gives some idea as to a good or bad performance relative to a country’s peers.

The second approach - “peoples’ well-being” - is more difficult to translate into an operational criterion. Obviously poverty levels and poverty reduction are key but poverty data are of very mixed and generally poor quality. Instead the paper uses proxy measures for standard of living, which are the components of the PQLI index – infant mortality, life expectancy and illiteracy. The Human Development Index from the UNDP is also used.

However, an obvious problem concerns the evaluation of the data on a time series versus a cross section basis. While it is clear that an OECD country at a point in time does better than a developing country on (say) infant mortality, how can improvements or deteriorations over time be measured? A reduction in infant mortality over time indicates an improvement but if one country’s rate fell from 94 to 52 per thousand between 1980 and 1997 is this a worse or better performance than a country where the fall is from 10 to 6

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<sup>6</sup> For further discussion of the data see appendix 1.

per thousand? Similarly, can increasing longevity from 55 to 58 years in a poor country compare to an increase from 76 to 82 years in a richer country?

To get round this problem, the paper adopts a “benchmarking” approach. For each of the indicators, for as many countries with data, a simple log equation is estimated with per capita GDP as the independent variable<sup>7</sup>. The equations are presented in appendix 1. Using these equations, it is then possible to estimate, given a country’s per capita GDP, what the indicator should be. Comparing this estimate with the actual, shows whether the country did as well as can be expected, better or worse. As might be expected, the pattern for all countries – illustrated for infant mortality in figure 1 – is that roughly half the countries do better and half do worse. The only exception is the result for illiteracy as can be seen in figure 2. The WDI statistics invariably show OECD countries with negligible illiteracy rates. Since this is a very doubtful proposition, these countries have been excluded when the general equation was estimated. The results are heavily skewed to the left because the countries that formed the Soviet Union invariably produce illiteracy rates far below the level expected by their GDP per capita.

In addition, it is also possible to consider the impact of resource abundance on people’s well-being by comparing the performance of countries by using the HDI index at a point in time compared to geographic regions and income cohorts as benchmarks.

### **3 THE APPLICATION OF THE CRITERIA TO ESTABLISH THE IMPACT OF OIL, GAS AND MINERAL PROJECTS**

The first stage is to identify those countries that may be at risk of suffering the “curse” or enjoying the “blessing”. Taking the period 1965-95, countries have been picked out where export revenues from fuels or minerals exceeded 30 percent of merchandise exports<sup>8</sup>. The list is then adjusted to remove countries (for example Singapore) where re-exports explain their inclusion. The countries are listed in Table 1 with “the usual suspects” underlined.

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<sup>7</sup> The exception is the Human Development Index, which is an ordinal measure while GDP is a cardinal measure. Thus putting both in the same equation is illegitimate unless sophisticated adjustments are made to the equation specification.

<sup>8</sup> The points for the data have been taken at five yearly intervals.

TABLE 1 THE TARGET COUNTRIES – The “usual suspects” are underlined.

Algeria Angola Australia Bahrain Bolivia Botswana Brunei Cameroon Canada Chile Colombia Congo, Dem. Rep. Congo, Rep. Cyprus Ecuador Egypt Gabon Greenland Guyana Indonesia Iran Iraq Jordan Kiribati Kuwait Lao PDR Liberia Libya Malaysia Mauritania Mexico Morocco New Caledonia Niger Nigeria Norway Oman Panama Papua New Guinea Peru Qatar Saudi Arabia Senegal Seychelles Sierra Leone Suriname Syria Togo Trinidad and Tobago Tunisia United Arab Emirates Venezuela Virgin Islands Yemen Zambia

The choice of 30 percent is entirely arbitrary<sup>9</sup>. If 20 percent is used the list includes 66 countries including the re-export countries. Interestingly, the Netherlands, which gave “Dutch Disease” its name, appears at 20 percent but falls out of the target countries at 30 percent. Also the UK which can be argued suffered a bad attack of Dutch Disease in the early 1980s (Forsyth and Kay, 1980; Rowthorn & Wells, 1987) does not make the 20 percent cut-of list<sup>10</sup>.

Figure 3 illustrates the average and range of fuel and mineral exports as percentages of merchandise exports for the target countries during 1965-95. This illustrates the very wide range both in terms of average (from 12 percent for Cyprus to 99 percent for Brunei) and in terms of the range for specific countries (the most extreme is for the Congo Republic ranging from 2 percent to 94 percent).

Figures 4 and 5 illustrate the results for non-resource per capita GDP. Figure 4 covers the absolute rise between 1965-2000 and Figure 5 from 1980 to 2000. The absence of any of the target countries in either graph simply indicates a lack of relevant data for the period. Typically, the WDI data are very weak on OECD country GDP data and in fact the Norwegian data has been taken from other sources (see appendix 1). Hence there are more countries in Figure 5 covering the shorter, more recent time period.

<sup>9</sup> For example, Nankani, 1979 used 40 percent of mineral exports as the cut-off point.

<sup>10</sup> One practical reason for reducing the countries (i.e. increasing the threshold from 20 to 30 percent) is that with too many countries as targets, it is not possible to read the results in graph form.



The results are fairly convincing that broadly, the “usual suspects” performed far better than the other target countries and also performed well in relation to the regional and income benchmarks. For example, at the extreme, Botswana outperformed the Asian Tigers in the period 1965-2000 while Chile performed better than the Latin American region and the Upper Middle Income countries.

As for the criterion of “people’s well-being”, figures 6, 7 and 8 show the results for the poverty indicators and Figure 9 show the comparison of the HDI for “the usual suspects”.

The infant mortality results in figure 6 do give support to the hypothesis that the “usual suspects” performed better and that the majority of the resource rich countries did poorly. The only glaring exception is Botswana with a very poor performance that can be explained largely by HIV/Aids related problems.

The life expectancy results in figure 7 are not at all convincing either way. However, the illiteracy results in figure 8 do suggest very poor performances by most of the target countries. Only Chile among “the usual suspects” produced an illiteracy rate below that which would have been expected given its per capita GDP, however, this result has certainly been biased by the effect of the former Soviet Union on the regression equation.

Finally, the HDI position illustrated in figure 9 does give support to the view that “the usual suspects” have put in a respectable comparative performance on well-being. Thus Norway, Australia and Canada have done better than the rest of the OECD. Chile, Malaysia Indonesia and Botswana have all outperformed their comparators with the exception of Indonesia vis a vis East Asia Pacific.

Thus this section concludes by arguing that the term “resource curse” should be replaced by the term “resource impact”. This emphasises the reality that in some cases, oil, gas and mineral projects have contributed to economic progress. A negative impact is by no means preordained.

#### **4 THE CASES STUDIES**

There is a huge literature debating what caused “resource curse” (Stevens, 2003). However the following four case studies of some of the “usual suspects” are an attempt to discern what was done in terms of economic policy to avoid a “curse” and, perhaps more interestingly, why what was done, was done. How countries avoided the “curse” has received little

attention in the literature. These case studies are in no way intended to be in each case a comprehensive description of each country's experience but rather an attempt to try and draw out the main actions and motivations.

#### 4.1 BOTSWANA

At the time of independence in 1966, Botswana was extremely poor (Modies, 1999). However, as the revenues from diamond exports began to grow, national development plans ... "were adhered to and instilled fiscal discipline." (Ibid. page 88). Also while much was spent on social services there were relatively few "prestige" projects.

The development strategy was to use the revenues to develop the physical and social infrastructure. Both the finance and development function were housed in the same ministry. The currency was then closely linked to the South African Rand, thus as the Rand depreciated during apartheid, the Pula followed. Although between 1981-89 the nominal Pula-Rand exchange rate appreciated by 24 percent, difference in inflation meant a depreciation in the real exchange rate (Love, 1994). In 1972, a Revenue Stabilization Fund and Public Debt Service Fund was created to smooth revenue impacts (Auty, 2001) a process helped by the nature of the agreement with De Beers. Also in 1972 an incomes policy was introduced specifically intended to prevent mining wages from increasing general wages. While this was partly driven by concerns over inflation, it was also aimed at preventing excessive income disparities. Indeed throughout the period, there was ... "growing concern with respect to poverty and inequality in the distribution of income and wealth between urban and rural areas." (Hope, 1998, page 543) Some 55 percent of households in rural areas were in poverty compared to 30 percent in urban areas (ibid.).

Following these various policies, it was almost as though the government was deliberately constraining its freedom of action to limit temptations arising from the revenues. Linkage to the Rand effectively sacrificed independence over monetary policy. Mineral revenues as a percentage of revenues and grants rose steadily from 25 percent in 1982-3 to a peak of 59 percent in 1988-9 thereafter averaging around 49 percent with a range of 40 to 58 percent. It has been argued that this stability of the rent stream was an important explanation of success (Auty, 2001). Also helping was the fact that expenditure was constrained because of capacity constraints in the domestic economy. However, at the same time an economic environment was created which was ... "conducive to private investment and promotes market-orientated sustainable development." (Hope, 1998, page 540).

To be sure there was a contraction in agriculture –the main non-mineral tradable sector – from 37 percent of Non-mining GDP in 1972 to 5.9 percent in 1996 (Auty, 2001). In part this reflected Botswana’s “meagre” (ibid. page 83) agricultural resources. However, it also experienced severe drought conditions in 1982-3 and again in 1987-88 that rather “confused” any “Dutch Disease” effects (Love, 1994).

Thus Botswana appeared to do all the right things in terms of macro-economic policy to avoid economic overheating and exchange rate appreciation. That said, some have argued that it is still early days to argue total success. Thus mineral rents levelled off in the 1990s and the government’s attempts to increase public sector jobs began to look unsustainable as urban unemployment, always a problem, began to rise (Auty, 2001). In addition the HIV/Aids problems presents very serious challenges in terms of poverty and well-being.

The interesting question is why Botswana has behaved in the way it has? Certainly the society had a number of initial advantages.

Botswana’s population was ... “small and largely homogeneous and cohesive” (Modise, 1999, page 95. Arguably, it was also used to drought conditions, and therefore saw prudence in saving for the proverbial “dry day” as a natural state of affairs. Both the political and bureaucratic elites acquired a ... “development orientation” (Tsie, 1996, page 601) and thus exhibited one of the classic characteristics of a “developmental state”<sup>11</sup>. At the same time, Botswana’s consensual democracy showed a very high level of transparency in public revenue acquisition and disposal while corruption remained well below the levels common in many other developing countries (Auty, 2001). Throughout the period, there were serious attempts to manage corruption and in 1994 a Directorate of Corruption and Economic Crime was created to very good effect (Hope, 1998).

Another important part of the story was the very high level of expertise of the senior bureaucrats. This contained a number of expatriates including a strong element of very able black South Africans denied alternative outlets at home by apartheid. In the early years of independence, most educated people were working as civil servants and these ... “technocrats worked in close coordination with political leaders” (Modies, 1999, page 88). This bureaucracy was “fairly small and efficient” and was allowed ... “a large degree of autonomy” (Modise, 1999, page 95). At the same time, the

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<sup>11</sup> The concept of “developmental states” is discussed in greater detail in section 5.

leadership enjoyed ... “the trust and unquestioning support of the people...” (ibid.), although there was also a strong civil society (Hope, 1998). Botswana in effect became a de facto one party state through the ballot box (Tsie, 1996). However, the ruling political elites were strongly involved in livestock production in rural areas. This went a long way to mute the urban bias common in so many other developing countries (Love, 1994) and did much to account for poverty reduction since resources did find their way into rural areas.

One source (Cobbe, 1999 citing Samatar, 1999) argues that the key to Botswana’s success was the evolution of the class structure and the way the merging dominant group used its power to nurture state capacity and the economy but at the same time allowed the “technocratic and insulated professional civil service” (Ibid. page 133) to get on with the macro-economic policy. However, this could be argued to be simply a case of ... “luck and the presence of the right personalities in the right places at the right times” . (Ibid.) Another source, in similar vein argues this elite was doubly blessed (Love, 1994). Thus it maintained its “hegemonic continuity” (page, 83) during the transition to independence. It then received very large revenues that allowed it the discretion to control the direction and scope of economic change without serious opposition. This elite then adopted orthodox theories of market efficiency as the main ideology and identified the national interest with their own. As will be developed in section 5, Botswana was a classic example of a “developmental state”.

## 4.2 CHILE

In 1973, Chile’s economy was highly distorted following a long period of state intervention (Auty, 1999). Prior to 1975, the “Dutch Disease” consequences of mineral revenues were dealt with by protectionist measures, which effectively were unsustainable. In addition a sharp increase in real wages in the early 1970’s introduced further distortions and fuelled serious inflation. Yet between 1986 to 1999 Chile enjoyed the longest, strongest and most stable period of growth in its history and also finally conquered the invariably high levels of inflation. Much of this was driven by growth in the export sector after the late 1970’s when exports increased from 10 percent of GDP to 35 percent (Aninat, 2000). Yet this was despite frequent and dramatic changes in policy during the Pinochet years when policies were ... “unstable and inconsistent over time” (Schurman, 1996, page 86) and often were far from the neo-liberal economic policies that might have been expected given pressure from the “Washington Consensus”. After relatively successful reform measures between 1973 and 1978 including public spending reductions and tax reform, arguably the “big bang” reform

programme of 1978-82 proved an error since it allowed the exchange rate to appreciate in an effort to break the stubbornly high levels of inflation. This led to a capital inflow which in turn triggered a balance of payments crisis which in turn threatened the domestic financial system.

Several factors explain the eventual success. A key contributor was the exchange rate policy after the 1981-2 crisis. Between 1982 and 1988, the real exchange rate devalued by 80 percent, which goes a long way to explain the strength of exports. In particular, although “Dutch Disease” effects had contracted traditional agriculture, new high value agricultural exports spearheaded the more general export revival. In addition, after 1982, capital market opening was linked to trade liberalization coupled with a stabilization policy to defeat inflation (Auty, 1999). A mineral revenue stabilization fund was created to insulate the economy from fluctuating mineral revenues driven by price volatility. In addition, after 1985, strict controls over short-term capital movements were introduced to try and manage “hot money”. Much of the growth was also dependent on indigenous rather than foreign capital, driven after 1975 by the increasing availability of domestic credit. Furthermore, domestic entrepreneurship flourished during the Pinochet years because the state got the economic environment “right”. The government ... “behaved like a developmental state ... it was state policy as well as ideology that gave rise to a new generation of entrepreneurs.” (Schurman, 1996, page 83). In the past, Chile’s industrial bourgeoisie were not at all noted for their dynamism but rather for short termism and tendencies for lavish consumption (Schurman, 1996), yet it was this group which drove the “miracle”. Furthermore, ... “a certain amount of “state developmentalism” was indeed part of the explanation for the growth of entrepreneurship under Pinochet” (Ibid. page 87). This “midwifery role” by the state was reinforced by ideological practises stemming from an autonomous bureaucracy who had been well-versed in the ideology of the “Washington Consensus” – the so-called “Chicago Boys” (Hojman, 2002). Finally, the military government that came to power in 1973 was ... “uniquely independent of either working groups or industrial interests, so that it came to function as a developmental state.” (Auty, 1999, page 70). This independence is crucially important if a “developmental state” is not to drift into being a “predatory state”<sup>12</sup>.

Chilean society itself was always characterized by an in-built frugality going back to the Basque immigrants of the 18<sup>th</sup> century (Hojman, 2002). However, in more recent times, inflation tended to mitigate against conventional savings hence there was a strong tendency of families to invest

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<sup>12</sup> See section 5 for further discussion.

in education which meant the once the economy began to take off, it was reinforced by access to good quality labour.

### 4.3 INDONESIA

Between 1950-65, the Indonesian economy failed because it was incapable of funding public expenditure growth without incurring an inflationary penalty (Booth, 1995). In 1965, a coup brought Suharto to power and triggered a long period of “developmental authoritarianism” (Ibid. page 287). Thus the new regime was ... “able to insulate themselves from pressures from powerful vested interests and pursue policies which have given top priority to the achievement of rapid rates of economic growth” (Ibid.). Following the first oil shock, the government spend the money domestically aggravating inflation and seriously damaging Indonesia’s competitiveness (Warr, 1986). This attack of “Dutch Disease” was managed in precisely the wrong way by introducing protection for domestic non-oil traded goods, a solution common in many other oil exporting countries. Although 1978 saw devaluation, inflation prevented it from impacting the real exchange rate. In addition, ... “The oil boom years saw a marked retreat from the liberal economic policies of the early New Order Period” (Booth, 1995, page 300). The result was a growing domination by the public sector. However, during the 1970’s, Suharto’s government gave considerable emphasis to agriculture (Temple, 2001), which gave rise to strong growth in the 1970’s and significant reduction in poverty levels as the rural areas received resources.

Subsequently, realizing the failure of these policies, between 1982-86 a new set of policies emerged aimed especially at micro-economic reform. Indonesia pursued a strict policy that was based upon expenditure readjustment and exchange rate realignment (Gelb et al., 1988). The consequent management of a depreciating exchange rate coupled with insulating the economy from oil revenues by running budget surpluses was a major contribution to avoiding “Dutch Disease” (Usui, 1996 and 1997). In addition, after 1985, there were a series of policy measures to expand non-oil exports helped in 1986 by a very large devaluation (Booth, 1995). Despite these attempted micro-reforms, the public sector remained an important player in the economy in the late 1980’s accounting for 30 percent of GDP and 40 percent of non-agricultural GDP (Temple, 2001). In general, while Indonesia’s macro-economic policies were successful, its attempts at micro-reforms were much less so. Indeed some have suggested that Indonesia’s positive experience was strongly influenced by luck (Temple, 2001). Thus the oil boom of the 1970’s coincided with the green revolution helping promote agricultural growth, the Pertamina scandal in the mid 1975’s ruled out wasting large amounts of revenue in the oil sector. Finally, Indonesia’s

location among the booming Asian Tigers gave it a ready made export market.

Again, as with the other case studies, the interesting question was why what was done was done. Suharto appointed a group of 5 economic advisers – the so-called “Berkeley Mafia” - who were extremely influential in directing economic policy. In general the orientation was very much towards market based solutions. Thus ... “the more technocratic ministries tended to view the role of the state as that of facilitator of market led economic development” (Booth, 1995, page 303). Thus by 1990, a large constituency in favour of market liberalization had developed. Thus Indonesia had all the characteristics of a “developmental state”. It was authoritarian but aimed to promote economic development as its source of legitimacy while suppressing any political opposition. While nominally democratic, Suharto effectively had absolute power and always lurking was the potential to turn to a predatory state in ... “ the guise of powerful vested interests who wish to use the powerful state to build a personal empire” (Booth, 1995, page 304). A key constraint on this was the role of the army who were vehemently anti-communist and therefore a natural support for market led policies. They also tended to be extremely active in domestic politics (Barnes, 1995). However, corruption remained rife in the system as the government veered between development and predation.

#### 4.4 MALAYSIA

Malaysia’s economic success was the result of the New Economic Policy (NEP) that operated between 1970-90. This was an eclectic mix of ... “interventionist policies as well as market coordination” (Rasiah & Shari, 2001, page 57), which explicitly moved the economy away from dependence on an import substitution policy. A key element was the relatively high savings rate. The naturally frugal nature of the society was encouraged by compulsory saving schemes for employees. This provided ample investment which was then supplemented by capital inflows from abroad. Much of this went into public investment on social overhead capital (Abidin, 2001).

This mixture of intervention and markets went a long way to making ... “export orientated industrialization a success” (ibid. page 58). In particular, the subsidy elements in infrastructure together with tax advantages were key ingredients in attracting the foreign investment that formed the backbone of the industrialization drive. Thus the share of manufacturing in GDP rose from 3 percent in 1970 to 33 percent ... “now”<sup>13</sup>, while manufacturing

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<sup>13</sup> Probably defined as 1995

exports rose from 11.9 percent of merchandise exports in 1970 to 80 percent in 1995 (Royan, 1999).

A key advantage that Malaysia did have was the fact that the country's primary exports were highly diversified including tin and rubber but also oil and gas. Indeed a central pillar of government policy was aimed at promoting diversification (Royan, 1999). A key consequence was that this insulated the economy from individual commodity price shocks (Abidin, 2001). However, it was not all plain sailing. The push for trade liberalization in the 1970's was successful but the "big push" into heavy and chemical industry in the first half of the 1980's on the back of the second oil shock, driven largely by public sector companies and accompanied by protectionist measures, was not a success. By the mid 1980's, the policy switched back to greater openness and the emphasis was again placed on the development of the private sector, underpinned by a privatization programme (Ibid.).

The source of the NEP was the so-called "Backroom Boys" comprising a mixture of ... "bureaucrats, academics and technocrats" (Shamsul, 1997, page 251).

Again, Malaysia was characterized as a strong state which was able to control opposition to its policies while ensuring ... "political stability and collaboration in solving theft and other problems" (Rasiah & Shari, 2001, page 67). As with Indonesia, the potential for predation remained a constant threat and many areas saw ... "the growth of unproductive cronyism" (Ibid. page 58). However, the ruling elites accepted the "plural society model" as the basis for the state and the constitution was seen as essentially a "social contract" between different groups (Shamsul, 1997, page 243). In addition, the deliberate policy of trying to improve the position of the indigenous Bumiputera contributed to the reduction in poverty and improved welfare since this group dominated in the rural areas and constituted 55 percent of the population (Abidin, 2001). Again, as with both Botswana and Indonesia, significant resources found their way into rural areas.

## **5 THE POLICY LESSONS**

Two questions are key. What was done in terms of policy to help the "usual suspects" enjoy a "blessing" rather than a "curse"? And even more important, why was any particular policy followed?

A key point on what was done is that no country got it all right, all of the time. There were frequent occasions when the policy direction failed. For



example, the heavy industrialization drive in Malaysia in the early 1980's, the over-expansion of public employment in Botswana, the protectionist response to the Dutch Disease attack in Indonesia in the 1970's, the "big bang" reform programme of 1978-82 in Chile, etc. However, there was a willingness to learn from mistakes and to adopt policies to rectify error. A second point is that the countries did not simply adopt the conventional textbook solutions associated with the "Washington Consensus". Their responses were much more complex. Thus the government intervened extensively in the economy and the revenues were spent.

Finally, while there were commonalities which will be discussed below, there were also individual responses to the challenges. Clearly, there was no "one policy fits all" solution.

However, certain commonalities can be identified. In all cases fiscal prudence tended to dominate. This had two dimensions.

First, the rest of the economy, to a degree, was insulated from the inflow of revenues. In part this was often because the economies were sufficiently diversified to help overcome revenue volatility. In part it was also because of policy, often involving the creation of stabilization funds and/or linking the revenue flows into the overall budget strategy to provide some degree of neutralization. It was also in some cases the result of the nature of the agreements determining government revenue take.

Second, when the money was spent, it tended to be spent on productive activities. Conspicuous consumption and gigantomania were to a great extent constrained. Also much of the revenue did trickle down into the private sector. This is important in terms of boosting savings and investment. Even if revenue trickle-down is driven by rent seeking or corruption, if it is then invested domestically, this will do much for economic growth even if it does little for the distribution of income. It is when rent and the fruits of corruption accrue to the politicians and bureaucrats that the problems begin since these resources tend to get dissipated in consumption or overseas bank accounts.

Also, in all cases, the exchange rate policy (again for most of the time and not all the time) was orientated to avoiding exchange rate appreciation. Indeed in most cases there were significant exchange rate depreciations as a result of deliberate policy. This was despite the obvious point that exchange rate depreciation tends to be highly unpopular because of their effect on the price of imports.

There were also commonalities with respect to the development strategy. In all cases, governments did intervene in the economy but with very clear intentions. First, the intervention policy was geared towards developing market mechanisms in the economy with a strong bias towards an export orientation. Second, the policy was geared to the promotion and encouragement of private sector involvement in the economy which resulted in strong levels of private sector investment. Third, the policy was aimed at pursuing trade openness which encouraged the discipline of competition on domestic economic activities. In particular, (and again not all of the time) the policy avoided import substitution and protectionism as the basis for the industrialization strategy. Finally, in many cases, the strategy had a very strong orientation towards promoting the rural sectors of the economy and much of the resources arising from the oil, gas and mineral exports found their way into rural pockets. Apart from any other economic benefits of this strategy, it went a long way to address issues of poverty since in most cases the majority of the populations lived in rural areas<sup>14</sup>.

The second issue of why certain policies were adopted is even more complex to disentangle. The four cases studies represent very different countries. Their population differs. Based on World Bank data, Indonesia in 1990 had 178 million compared to Botswana's 1.3 million. Indonesia's area of 1.905 million square kilometres compares to Malaysia's 0.33. Botswana and Chile both had very homogeneous populations while Indonesia and Malaysia had a great multiplicity of ethnic groupings. Nor is there any commonality associated with democracy, government accountability or transparency.

However, as with the policies pursued, there are commonalities to explain actions taken. Arguably, all four countries had strong elements of frugality built into the national psyche. All four certainly had long lived governments that for the most part were extremely strong either as a result of voting support or military control. All four also had highly competent bureaucrats who were well versed in the requirements of economic policy although this begs the question of why these groups of technocrats were allowed to get on with their jobs and pursue what were often unpopular policies.

The answer to the last question lies in the fact that all four were "developmental states" and it is this that provides a key part of the

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<sup>14</sup> In 1990, according to World Bank data, the percentage of population in rural areas was 72 percent for Botswana, 69 percent for Indonesia and 57 percent for Malaysia. Only in Chile did the urban population dominate with 86 percent in urban areas.

explanation<sup>15</sup>. A “developmental state” has two elements - an ideological component and a structural component. The ideological component is when the ruling elite adopt “developmentalism” as their prime objective. Thus their legitimacy is derived from the ability to deliver economic development implying both growth and poverty reduction. This elite then establishes a form of ideological hegemony –via the ballot box or less desirable means – over the rest of the society. The structural component involves the capacity to implement policies “sagaciously and effectively” (Mkandawire, 2001 page ??) which will deliver development. Apart from the obvious technical capabilities this also requires a strong state which can resist pressure from strong, short-sighted private interests and/or some form of “social anchor” which restrains any temptation to use its autonomy in a predatory manner. The difference between a “developmental” and a “predatory” state is often very thin as Indonesia clearly shows.

However, a key part of the analysis must be the realization that a “developmental state” can still fail<sup>16</sup>. While the “right” ideology might be there and the limits of predation in place, the capacity of the state to implement effective policies might simply not be enough to manage certain problems. Such problems may be driven by exogenous shocks, mistakes or just good old fashioned bad luck. The last point is especially important when it is remembered that much of the literature on the four cases studies does suggest to varying degrees the fact the countries were “lucky”.

## **6 CONCLUSIONS**

The analysis in section 5 raises a fundamental problem over whether oil, gas or mineral projects should be undertaken. If a state where the project is to be done is a “developmental state”, then negative impacts might be avoided. Several options are available. The companies implementing the project, together with help from International Financial Institutions (IFI’s), can help develop technical capabilities to build capacity to implement policies to ensure the promotion of development. In addition, it is possible to argue that the pace of development of the project can be slowed down to allow more time for the capacity to develop to manage the challenges<sup>17</sup>.

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<sup>15</sup> The following draws heavily on Mkandawire, 2001. See also Auty and Gelb, 2001; Lal, 1995.

<sup>16</sup> Otherwise the concept becomes a tautological hypothesis i.e. a “developmental state” is a state that develops!

<sup>17</sup> At first sight, this solution appears unattractive from the commercial viewpoint of the investing company since delay reduces the present value of revenue flows. However, if speedy development induces a bad attack of

However, if the state is not a “developmental state” what is to be done since as things stand, developing the project will almost certainly promote “resource curse”?

**NOTE – THIS NEEDS MORE THOUGHT ON WHAT CONSTITUTES A DEVELOPMENTAL VERSUS A PREDATORY STATE AND WHAT ARE THE OPTIONS IF IT IS PREDATORY. HOW DO COUNTRIES MOVE FROM ONE STATE OF AFFAIRS TO ANOTHER**

One option is not to invest in the project. The weakness with that argument however, is simply that someone else will. Thus if responsible companies withdraw from certain countries, irresponsible companies will be more than willing to fill the gap. They almost certainly will worsen the extent of the consequent “curse”, if only because such companies are likely seriously to aggravate the problems of corruption. Another option is that the investing company together with help from the IFI’s try and persuade the ruling elite into the “right” ideology. Of course, such a proposal is extremely dangerous and smacks of unwarranted interference in a nation’s sovereignty. It also begs a key question as to what constitutes the “right” ideology. Another solution is for the companies and IFI’s to try and strengthen civil society in the country in an effort to constrain attempts at predation by the ruling elite. Again this assumes that elite would tolerate such civil society. It also smacks of unacceptable interference and begs the question as to what “strengthen civil society” actually means in practise other than simply throwing more money at NGO’s<sup>18</sup>.

However, these are not simple and straightforward issues. They are complex, difficult and highly contentious but the fact remains they are issues which must be somehow managed by all those involved.

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“resource curse” this could ultimately threaten the viability of the project and hence the company’s investment.

<sup>18</sup> It is also controversial since some authors (Leftwich, 1995) view a weak civil society as a feature of “developmental states” since this strengthens the ruling elite allowing it to impose its ideological hegemony.

## APPENDIX 1 THE DATA

Except where specified, all the data used in this paper have been drawn from the World Development Indicators from the World Bank. Both the 2001 CD-ROM have been used together with the online series for 2002.

**Export Data** – This covers “fuel exports as a percentage of merchandise exports” and “ores and metals exports as a percentage of merchandise exports”. The data has been taken at five-year intervals starting in 1965 up to 1995.

**GDP Data** – Per capita GDP at constant 1995 dollars is taken converted at official exchange rates. Also used is the value added in agriculture, manufacturing and services as a percentage of GDP. Unfortunately, the OECD GDP data is extremely poor in the World Development Indicators. Thus for Norway, the GDP data has been taken from “Official Statistics of Norway 1978-97” – “National accounts: - Production uses and employment.

**Infant mortality** – Infant mortality per 1000 live births for 1995. The equation for all countries is

$$\begin{array}{l} \text{IMLOG} = 3.2947 - 0.56729 \text{ GDPLOG} \\ \text{SE} \quad \quad 0.078126 \quad \quad 0.023315 \\ \text{t-ratio} \quad \quad 42.1716 \quad \quad -24.3310 \\ \text{R-Squared} = 0.77285 \end{array}$$

**Life expectancy** – Life expectancy in years for 1995. The equation for all countries is

$$\begin{array}{l} \text{LELOG} = 1.5186 + 0.08839 \text{ GDPLOG} \\ \text{SE} \quad \quad 0.018474 \quad \quad 0.0055058 \\ \text{t-ratio} \quad \quad 82.2008 \quad \quad 16.0541 \\ \text{R-Squared} = 0.59975 \end{array}$$

**Illiteracy** – Illiteracy rate, adult total, (percentage of people aged 15 and above for 1995. The equation for all countries is

$$\begin{array}{l} \text{ILLLOG} = 2.7913 - 0.52639 \text{ GDPLOG} \\ \text{SE} \quad \quad 0.24487 \quad \quad 0.077263 \\ \text{t-ratio} \quad \quad 11.3992 \quad \quad -6.8129 \\ \text{R-Squared} = 0.76356 \end{array}$$

Human Development Indices – HDI for 1999 from UNDP

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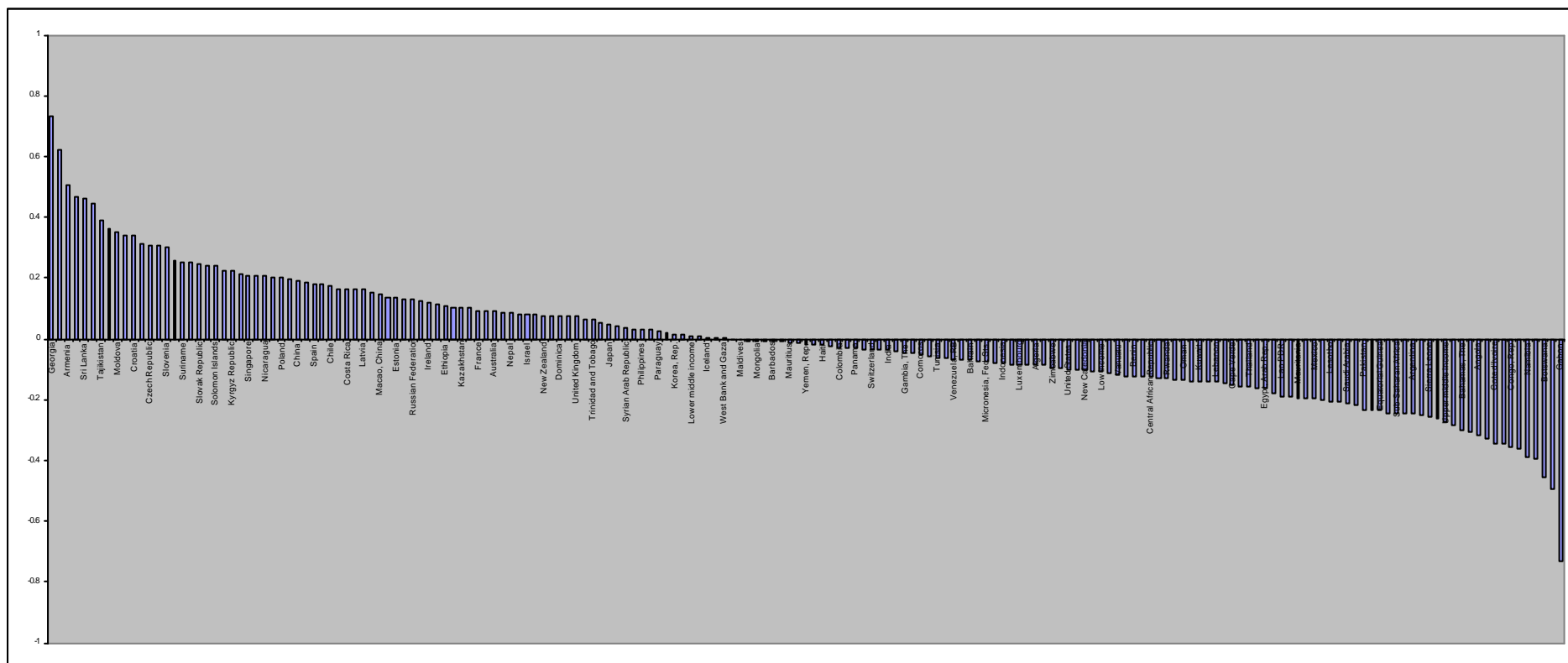
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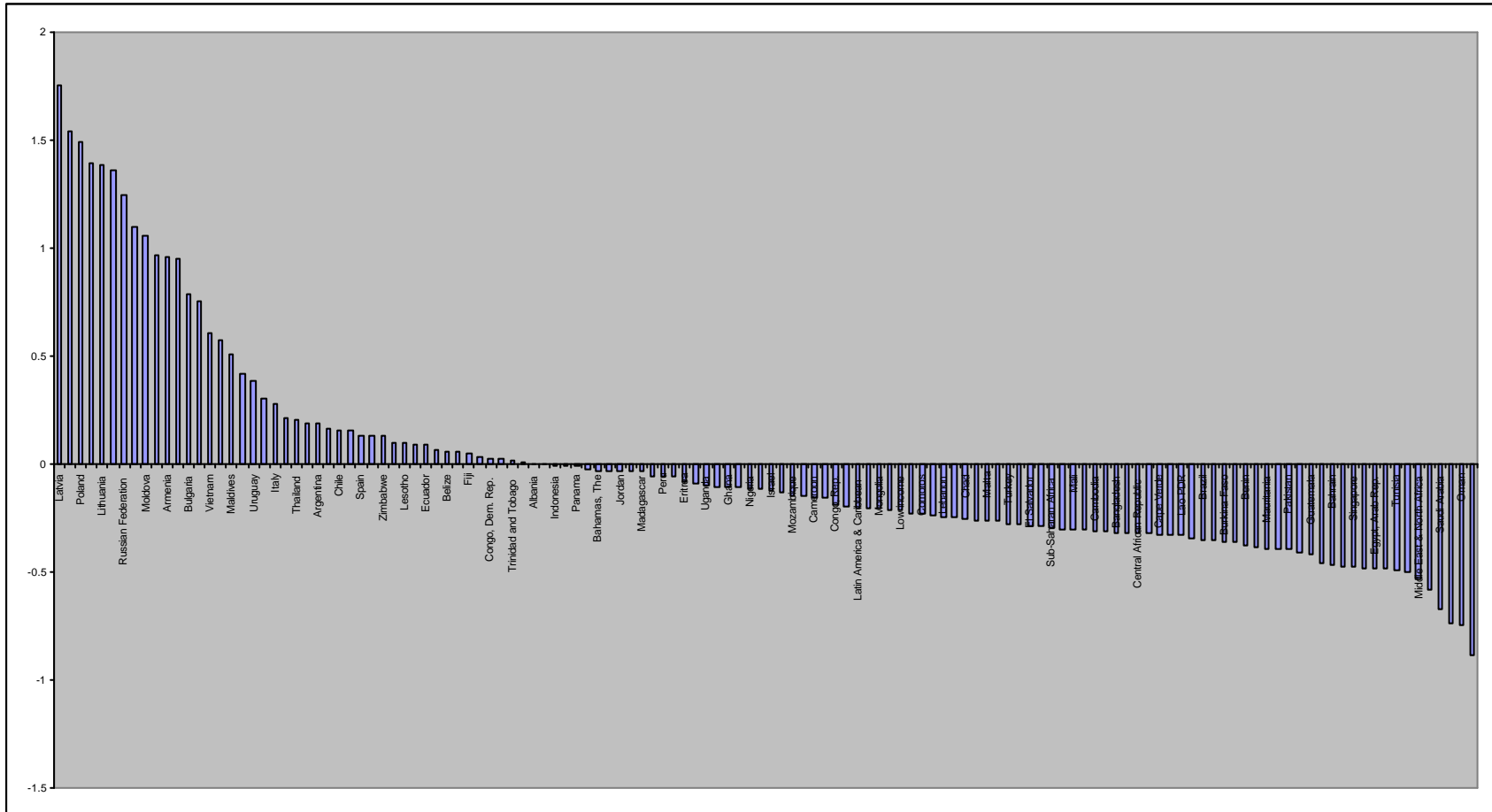
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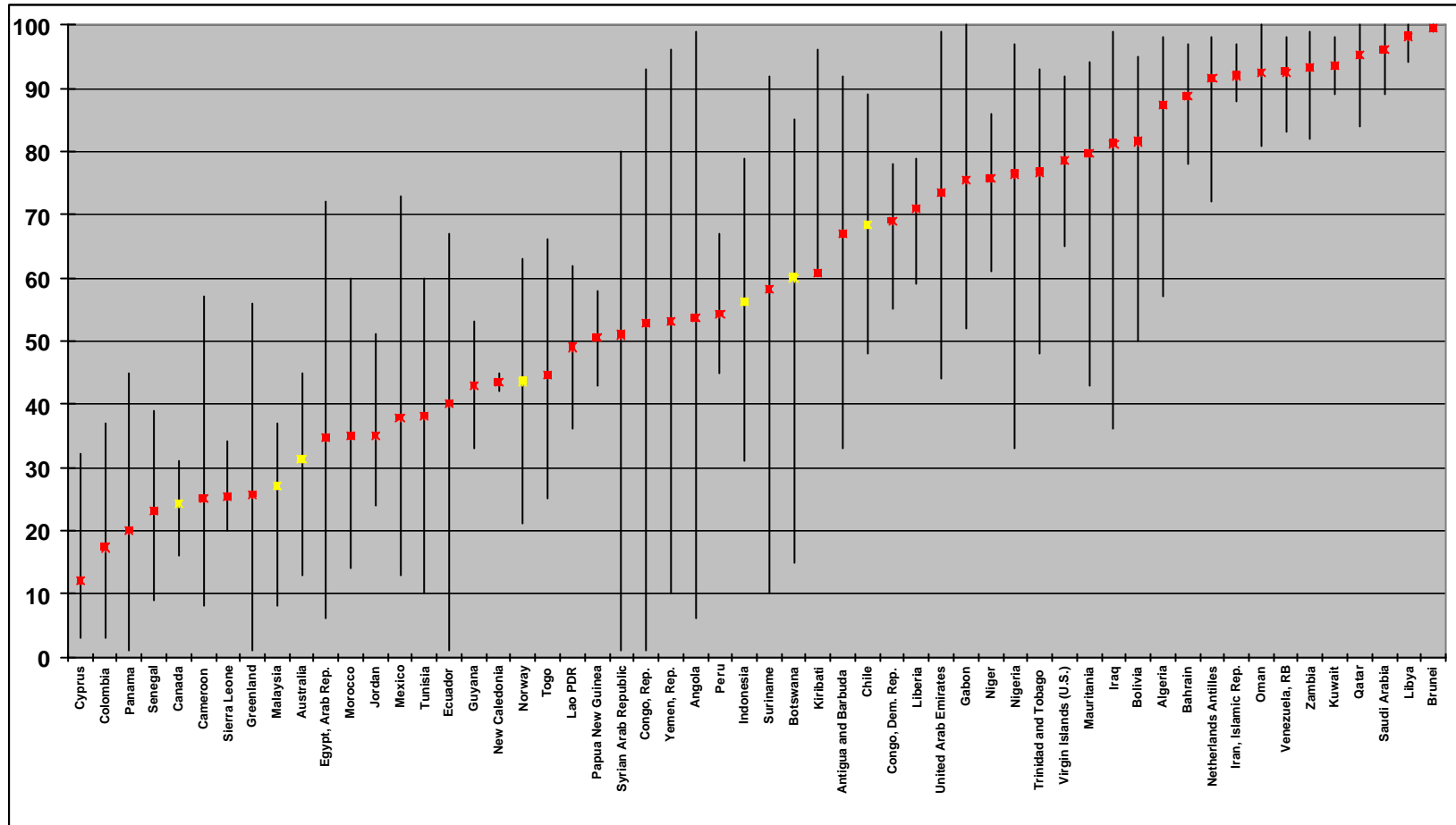
**FIGURE 1 THE PERFORMANCE OF COUNTRIES WITH RESPECT TO INFANT MORTALITY.**



NOTE The countries above the base line had levels below that expected by their GDP per capita and therefore can be said to have done better. Those below had higher levels of infant mortality than expected by their GDP and therefore can be said to have done worse. Source: See appendix 1

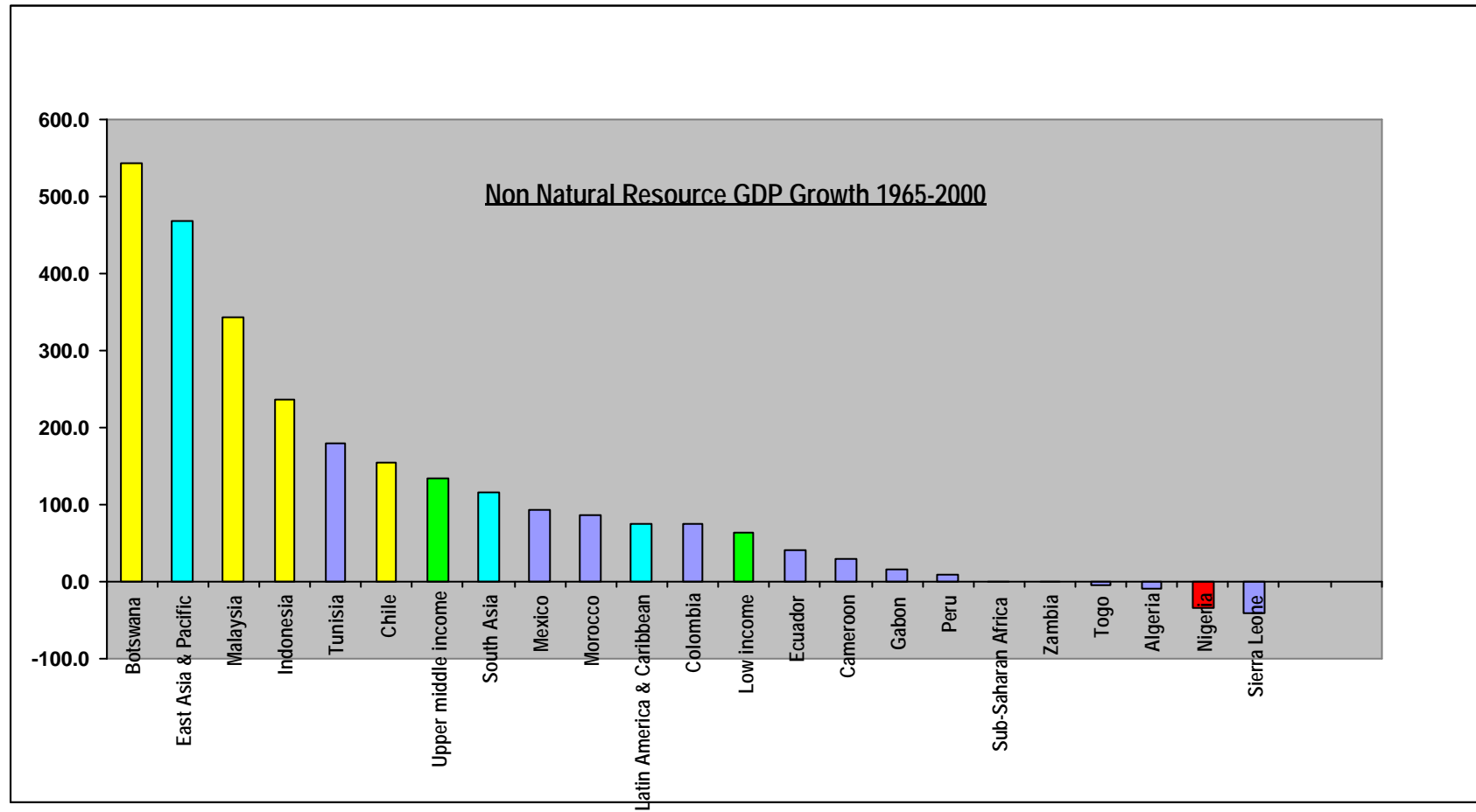


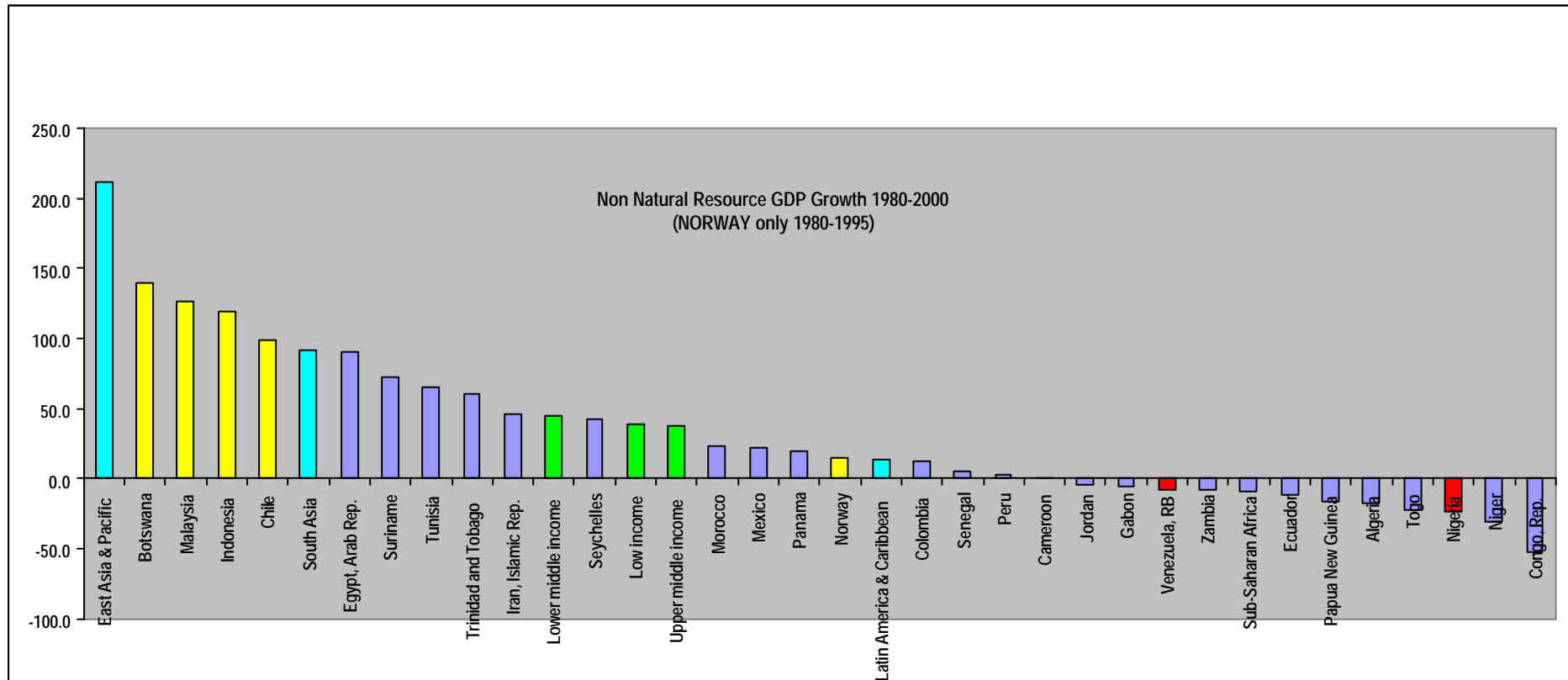
**FIGURE 2 THE PERFORMANCE OF COUNTRIES WITH RESPECT TO ILLITERACY.**



**FIGURE 3 THE TARGET COUNTRIES –AVERAGE AND RANGE OF FUEL AND MINERAL EXPORTS AS A PERCENTAGE OF MECHANDISE EXPORTS**

**FIGURE 4 GROWTH IN PER CAPITA NON-FUEL AND MINERAL GDP 1965-1995**





**FIGURE 5 GROWTH IN PER CAPITA NON-FUEL AND MINERAL GDP 1980-1995**

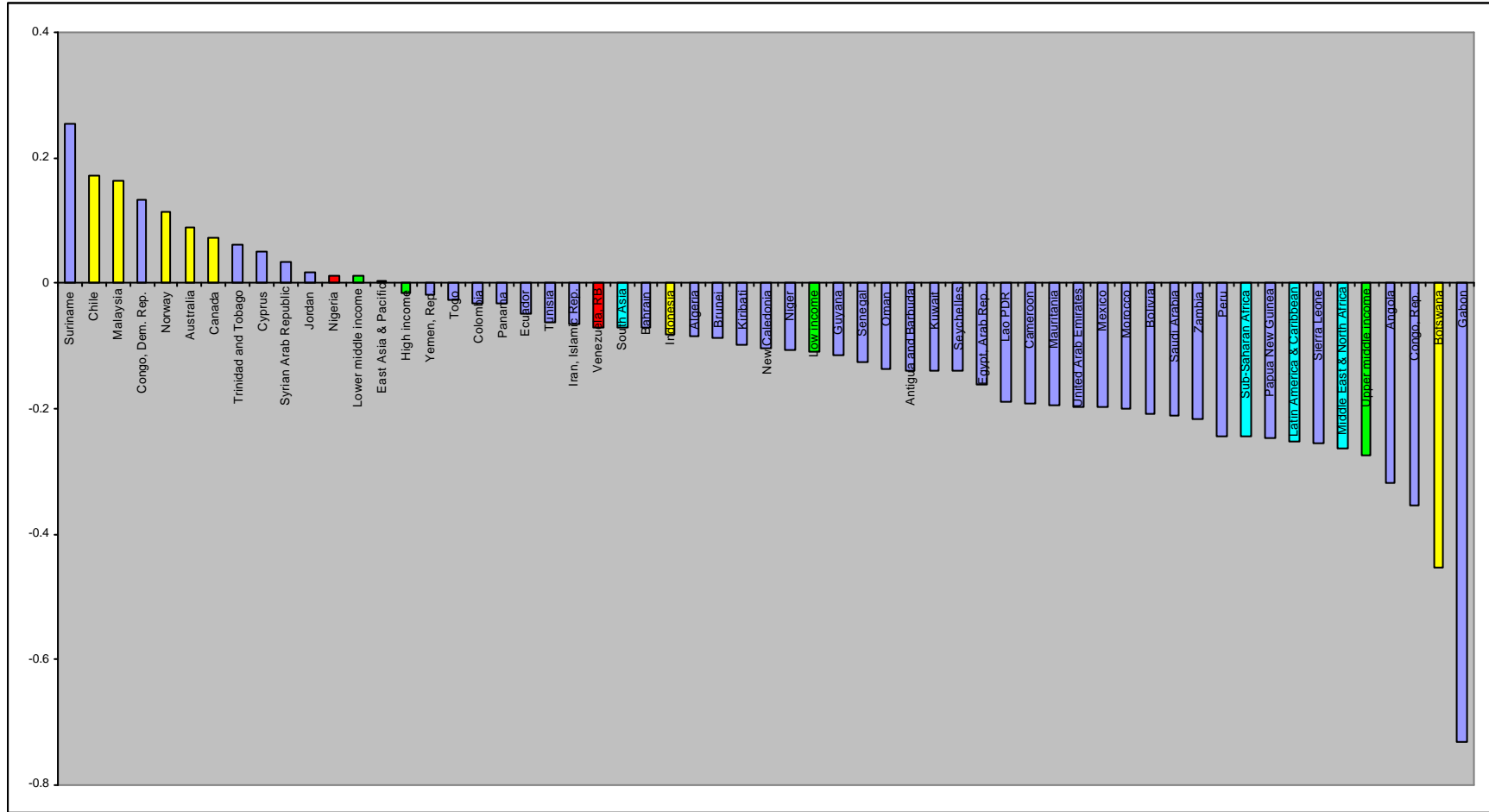


FIGURE 6 INFANT MORTALITY PERFORMANCE



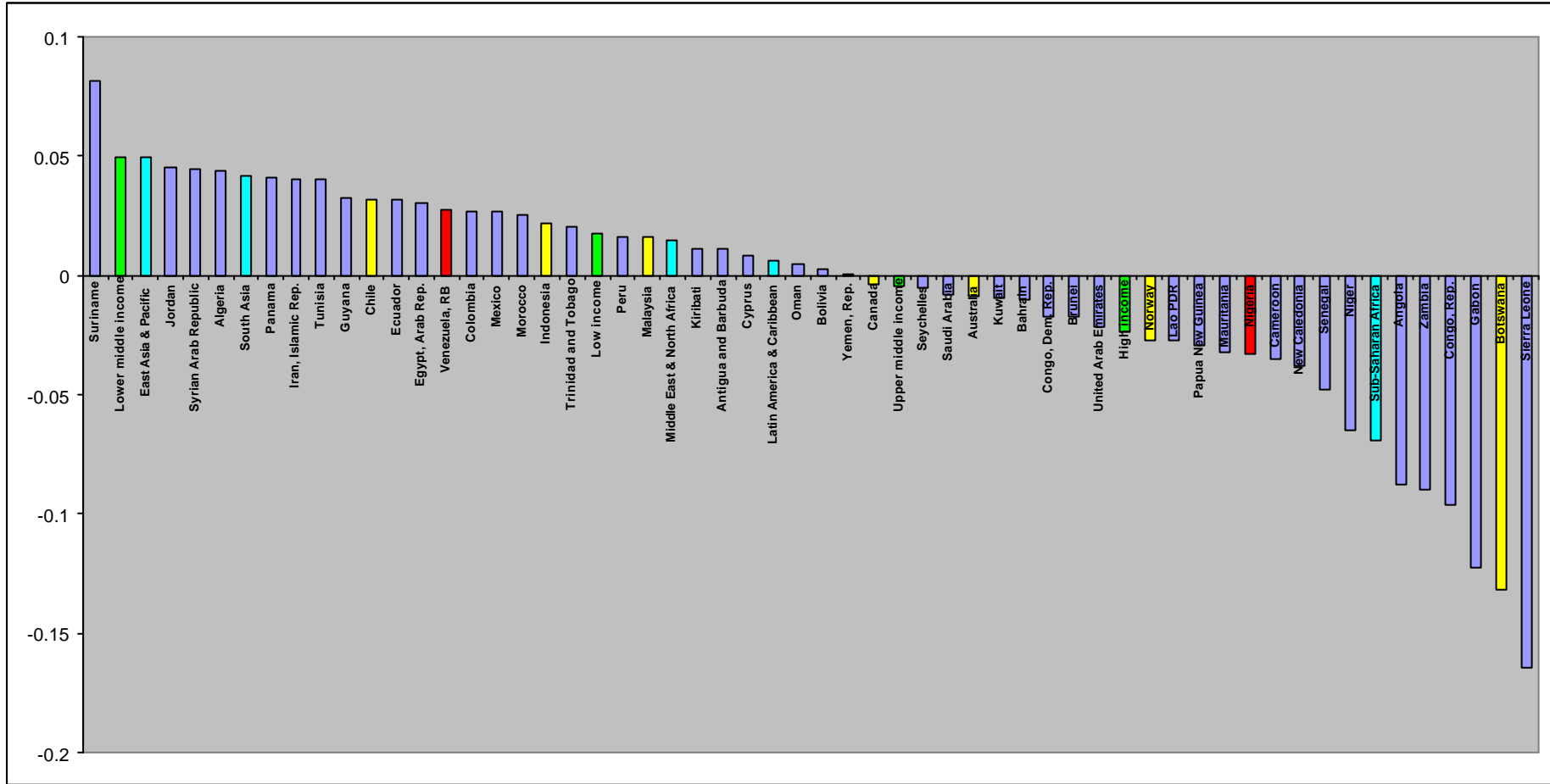
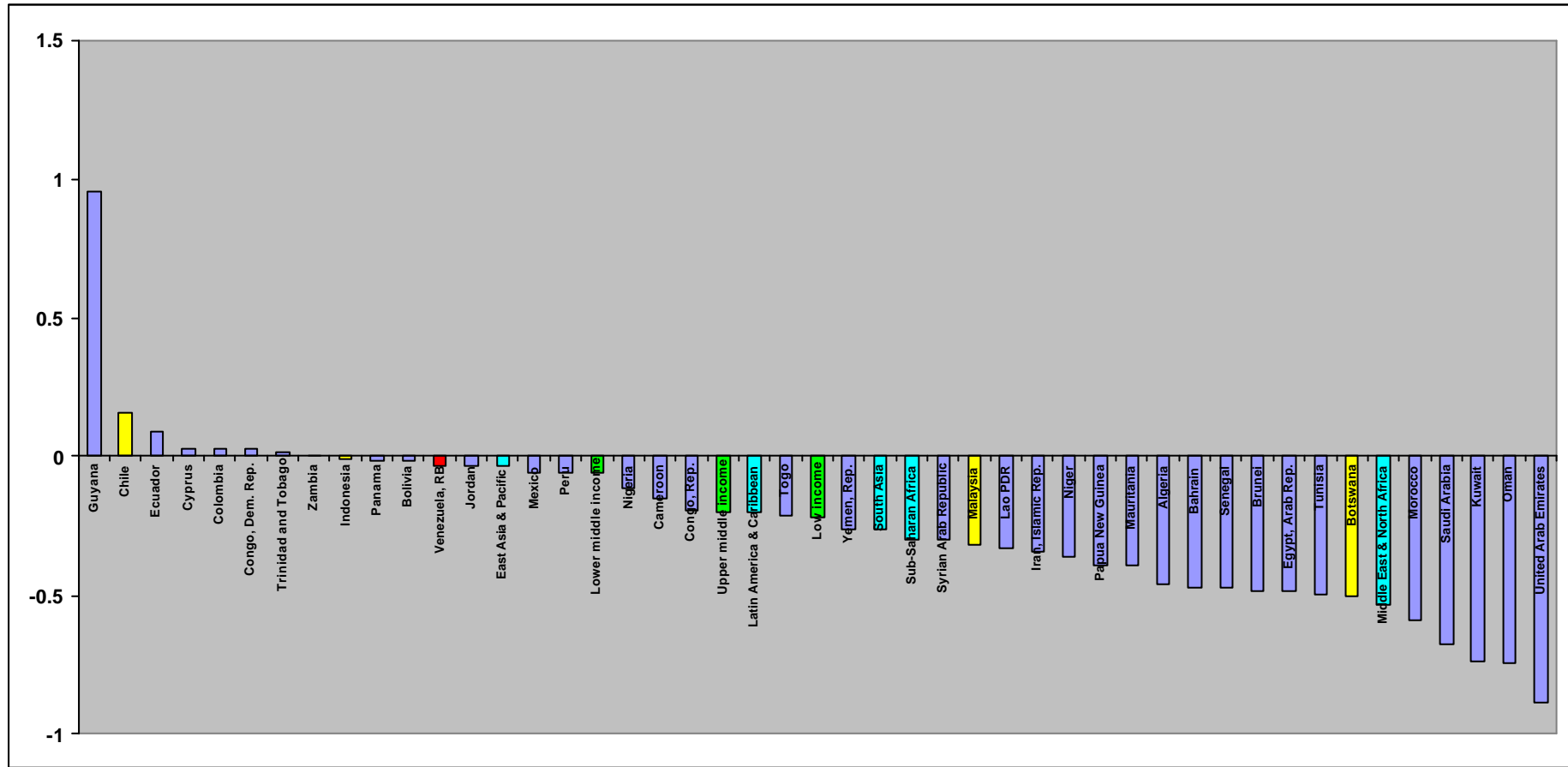


FIGURE 7 LIFE EXPECTANCY PERFORMANCE

**FIGURE 8 ILLITERACY PERFORMANCE**



**FIGURE 9 HDI PERFORMANCE**

### HDI RANKING 1999

