

THE RESOURCE CURSE AND POLICIES TO AMELIORATE IT

“the natural resource endowment strongly impacts the development trajectory by differentiating the pattern of structural change and the character of the political state. This conditions the development strategy espoused, and so determines the efficiency with which inputs are deployed and the rate of competitive diversification of the economy. Moreover, policy error is likely to persist and the economy become more distorted, the larger the rent stream in relation to GDP and the less diffuse the socioeconomic linkages of the rent stream.”

R.M.Auty (2001: 319)

“One of the great ironies of petro-states is that administrative reform, so often put forward to correct inefficiency, instead can become a mechanism, for further deterioration of state capacity.”

T.L.Karl (1997: 138)

A number of CIS countries have abundant natural resources. These take the form of energy (Russia, Kazakhstan, Azerbaijan, Turkmenistan) or of agricultural land (Ukraine). What is their implication for economic policy and the future of the countries concerned?

The natural resource curse

There is an extensive academic literature studying the influence of natural resources on economic growth. The general conclusion is that, since the 1960s, abundant natural resources are usually associated with a low rate of growth. For example, Gylfason (2001) looked at the relationship between the share of natural capital in national wealth and the annual growth of GNP per capita in 1965-98. He presented data which suggested that an increase of about 10 percentage points in the natural capital share is associated with a decrease in per capita growth by one percentage point per annum. Similarly, Sachs & Warner (2001) present a scatter diagram of exports of natural resources (in percent of GDP) against GDP per capita growth in 1970-89. This provides a similar picture. Although there are some exceptions, in general high growth is associated with relatively

low shares of natural resources in total exports, and high shares of natural resources in exports with low growth. The developed countries of Europe and East Asia are rather resource-poor, whereas many resource-rich countries have experienced low growth and remain underdeveloped. What are the causes of this paradoxical result?

Gylfason (2001) discusses four main transmission channels from abundant natural resources to low levels of economic growth. They are, the Dutch disease, rent-seeking, overconfidence and neglect of education.

The Dutch disease (Corden 1984) refers to the effects of an influx of natural resource export income on the exchange rate and the structure of an economy. The exports of natural resources (in the Dutch case natural gas) lead to a real appreciation of the currency, hurting other exports (eg manufactures). These other sectors of the economy are crowded out by the new export sector. This has immediate effects on employment, and medium and long term effects on the rate of growth of the economy. Since the natural resource exports are frequently temporary, and in any case never grow exponentially (except for short periods), crowding out sectors of the economy that do have the potential for exponential growth inevitably reduces the economy's overall rate of growth in the medium and long term. Temporary resource booms can cause a permanent loss of competitiveness if the temporary decline in the non-resource sector/s causes a permanent loss of learning by doing (Krugman 1987). Furthermore, the increased public expenditure resulting from the receipt of resource rents may finance existing or create entirely new entitlement programmes which become difficult either to finance or reduce when the flow of natural resource rents declines.

Rent seeking refers to attempts to seek a share of the rent being generated by the natural resource sector rather than earn income by productive activities. One form of this is corruption, with a significant part of the natural resource revenues being spent by the rulers on conspicuous consumption or diverted to their foreign bank accounts.

Overconfidence (or complacency) is the phenomenon that, confronted with large easily-earned export revenues, governments may not bother with policies necessary to stimulate growth elsewhere in the economy. As Gylfason (2001) graphically put it, “Rich parents sometimes spoil their kids. Mother Nature is no exception.”

Neglect of education arises if the natural resource revenues crowd out human capital formation. This seems to have happened in a number of resource-rich countries in recent decades.

Sachs & Warner (2001) drew attention to the possible crowding out of entrepreneurial activity in the high productivity sectors of the economy (eg manufacturing) by the natural resource sector. This would be another channel by which natural resources could cause low growth.

Auty (2001) drew attention to the political effects of resource riches. Resource rich countries may develop a predatory state the rulers of which are mainly concerned with appropriating the resource rents for themselves, their families, and their friends, whereas resource poor countries may be forced to create a development state which stimulates rapid growth.

Papyrakis & Gerlagh (2004) identified five transmission channels for the negative effects of natural resources on growth. They were, corruption, investment, openness, terms of trade, and schooling. Corruption refers to the widespread phenomenon that the

abundant rents generated by natural resources, or part of them, may be appropriated by a small number of people holding key positions in the state apparatus. This may skew decision making away from the national interest and towards the interests of those who are able to appropriate part of the rents. Investment refers to the fact that natural resources seem to have a negative effect on investment. Various reasons have been given for this in the literature. Sachs & Warner (1999) suggested that this may be partly a result of the uncertainty created by the volatility of commodity prices. Another transmission channel is the loss of economies of scale in manufacturing and hence of profitable investment in that sector resulting from the reallocation of investment to the primary sector.

The reduction in openness of the economy results from protectionist measures taken by the authorities to shield domestic manufacturing from the loss of competitiveness resulting from the growth of the primary sector. The terms of trade effect is the Dutch disease.

Schooling refers to the fact that natural resource booms lead to a decline in education. Since money just flows in, there seems little need to invest in high quality human capital.

Kronenberg (2004) looked at the natural resource curse specifically in the context of the transition economies. He found that the main transmission channels there were corruption and education. More natural resource rents led to greater corruption and reduced expenditure on education, with the results one would expect.

Writers on this subject often point out that the resource curse is comparatively recent and not inevitable. Before the First World War, resource rich countries such as Argentina

and the USA developed rapidly. More recently, resource rich countries such as Norway and the UK have developed relatively favourably. The resource curse is not a result of the existence of natural resources as such, but a result of the failure of the authorities to pursue appropriate policies.

The political economy of the resource curse

A feature of recent writing on the resource curse has been the realization that the negative impact of natural resources is not a purely technical question concerning such factors as the Dutch disease and the impact of commodity-price volatility. It is profoundly influenced by the political and institutional environment of the country concerned (Tompson 2006). Although capital-intensive point resources¹ subject to economies of scale create specific problems for economies which they dominate, various outcomes are possible. These depend on institutional-political factors such as state effectiveness, political accountability, property rights, social capital and the rule of law. Hence the origins of the resource curse have to be sought in the combination of resource riches (particularly capital intensive point resources subject to economies of scale) with a specific institutional-political environment.

The situation in the CIS countries

CIS countries such as Russia, Azerbaijan, Kazakhstan and Turkmenistan are marked by the usual adverse effects of energy riches. Corruption is rampant,² governance is poor, and manufacturing is squeezed by adverse terms of trade effects.³ Education is also squeezed by the perceived irrelevance of human capital. Not surprisingly, in a firm-level survey of more than 3,000 enterprise owners and senior managers in 22 transition countries (World Bank 2000: xvi) the country with the perceived worst level of state

capture was oil-rich Azerbaijan. It also had the highest share of bribes in business income.

A major tendency in the CIS countries has been to deplete the natural resources faster than the accumulation of financial, physical or human resources, so that the energy-rich countries have been marked by net disinvestment. The situation has been the most extreme in Azerbaijan and the least so in Russia. However, even Russia has been unable fully to transform its energy depletion into other forms of capital, so that the result of its energy extraction has been a net reduction in the capital available to its future inhabitants. On the other hand, the Netherlands, the classic Dutch disease country, currently has persistent positive net investment. Resource-poor but fast-growing China also has a persistently high level of net investment. Whereas the Netherlands and China are building up their assets so as to provide for their people in the future, the profligate energy-rich CIS countries are depleting their assets and are in danger of turning their countries – once the energy boom is over – into analogues of abandoned mining towns. Some relevant data is set out in table 1.

Table 1

Net investment as % of GNI

	1997	2000	2002	2003
Azerbaijan	-31.4	-49.5	-35.3	-41.2
Kazakhstan	-17.9	-29.6	-18.3	-22.1
Russia	-1.6	-13.4	-5.7	-10.7
<i>Memorandum</i>				
Netherlands	+20.3	+18.4	+11.3	+11.7
China	+34.9	+26.8	+30.7	+34.4

Source: Auty (2001) pp 49-54 ('Genuine domestic savings'); *The Little GREEN Data Book* 2002, 2004 & 2005 (World Bank, Washington DC) ('Adjusted net savings'). Analogous data for Turkmenistan was unavailable. Conventional national income accounting gives an entirely different impression. For example, Kalyuzhnova & Kaser (2005) state that capital formation as a per cent of GDP in 2000-2003 was 34.4% in Azerbaijan, 22.7% in Kazakhstan and 35.6% in Turkmenistan. The reason why the figures in the table differ from the conventional ones is mainly that in them energy reserve depletion is treated as disinvestment, analogous to depreciation in conventional national income accounts.

Natural resource benefits

Convenient location, with good access to the world market, is a major economic benefit from which a number of West European countries have benefited over the centuries. However, some of them in the past have used this advantage to attack and colonise other countries so that the victims have been cursed by the advantages of the well-placed. Another natural resource benefit is good natural conditions for agriculture. This has the benefit of facilitating domestic food production and frequently of providing work for large numbers of people. However, this too can turn into a curse. Under conditions of a predatory regime which seizes food to feed the towns and the army, good agricultural conditions can lead to famine, as in Ukraine in 1933.

The curse of natural resource shortages

The three main natural resource shortages in the CIS countries are water, convenient access to the world market, and a temperate climate. The shortage of water is a serious and growing problem in Central Asia, e.g. Turkmenistan. Convenient access to the world market is a problem for Central Asia, the three south Caucasus countries, much of Russia and part of Ukraine. The inclement climate in much of Russia is a serious problem for much of that country (Parshev 2001) which was worsened by the Soviet policy of locating large numbers of people in extremely inhospitable environments (Hill & Gaddy,

2003). These natural resource shortages can sometimes be reduced by appropriate policies. For example, access to the world market can be improved by increased investment in transport infrastructure (railways, ports, airports, roads, pipelines).⁴

Conventional policies to tackle the resource curse

1. Investment

An important contribution to overcoming the resource curse can be made by transforming the energy revenues into domestic physical assets such as infrastructure, manufacturing capacity, or service provision, or into human capital (e.g. by expanding education) or into social capital (e.g. by social programmes that reduce social tensions or contribute to the creation of an efficient state apparatus, for example by paying decent salaries to state officials and investing in their training and retraining). The danger here is that of creating sectors, e.g. in manufacturing, that are high-cost and only survive because of a continuous injection of state funds and/or by taxing consumers (via protection from imports). Another danger is to establish expensive social programmes that can not be sustained when the resource income begins to decline. Another possibility is to leave the choice between consumption and investment, and the choice in which firms to invest, to the citizens. This can be done by distributing (part of) the rent direct to the inhabitants (as in Alaska). Besides being popular, this has the advantage of reducing corruption.

Under the socialist system state-financed investment was often substantial, but its efficiency was low. Projects were often selected for non-economic reasons, were completed over a long period of time and at high cost, and when running were often inefficient, energy-intensive and technologically backward. The new private sector, however, is often reluctant to commit itself to large projects, especially when the returns

are uncertain. As a result, domestic non-energy investment in the CIS countries is often quite low. Even when the official data show respectable figures for net investment, these have been challenged by independent analysts. For example, Khanin and Ivanchenko (2003) have argued that in Russian official statistics depreciation has been seriously understated and hence net investment seriously overstated. Indeed, Khanin has argued that one of the barriers to sustained growth in Russia is the obsolete nature of the capital stock and the low or even negative level of net investment in recent years.

To overcome this problem, some observers rely on further liberalization and FDI. Further liberalization has its supporters. The Russian economists Yasin & Yakovlev (2004: 26) recently quoted the observation of a foreign researcher: “In the West everyone is frightened of the competition, but in Russia everyone is frightened of the authorities.”

Some people rely on FDI to provide the missing investment. But FDI mainly goes to the energy sector. For manufacturing, China with its almost unlimited supply of cheap labour, is more attractive. In Russia the substantial domestic market has attracted some non-energy-sector foreign investment (e.g. in food processing) and is likely to attract more. Nevertheless, the combination of opposition from domestic business, widespread corruption, unstable tax regulations, general mutual suspicion and lack of trust, incompetent and self-seeking government officials in numerous central and local bodies, an inadequate judicial system and widespread criminalisation, has kept non-energy FDI at a relatively low level throughout the CIS. Substantial inflows of FDI in to the non-energy sectors seem unlikely in the near future. Those who advocate FDI realize this and support a long term programme of creating the framework within which FDI will flow in. For example, the Russian liberal economists Yasin & Yakovlev (2004: 31) have argued that,

“The chief direction in cooperation with foreign investors is that of forming a favourable national regime for investors: low and transparent taxes, defence of ownership rights and the implementation of contracts, an independent judiciary, an increasingly honest and efficient bureaucracy.” Russian tax rates have in fact been reduced. This was one of the major achievements of Putin’s first term. However, implementing the remainder of this wish list, even in Russia, let alone the three other energy-rich CIS countries, is likely to be a long and difficult process – if it ever happens.

As far as social investment is concerned, the IFIs have been busy in recent years helping countries formulate programmes for poverty reduction.⁵ If these programmes actually lead to poverty reduction and the integration of marginalised groups (e.g. refugees and displaced persons in Azerbaijan and Russia) into the national society that would be an important contribution to using the energy riches in a way that would be positive for future growth. Sceptics will note, however, that the advice of the IFIs in the initial transition period was accompanied by a rapid growth in poverty and social disintegration.

2. A reduction in corruption

In view of the increased emphasis on governance and the quality of institutions (see above) as the key factors in generating the resource curse, it is natural that there has been growing attention to the need to reduce corruption.⁶ Some attention has been paid by the national authorities in the CIS countries to reducing corruption. However, not much progress in that direction can be observed. It seems likely that corruption today is much worse than in Soviet times. As the World Bank (2000: 1) has observed, “the experience of the first decade of transition in reducing corruption has been decidedly mixed.”

President Putin inherited a situation in which state capture was a major problem. As the World Bank (2000: 74) observed in 2000, “The challenge for Russia’s new government is to find ways to break the stranglehold of these concentrated vested interests over the functioning of the state.” President Putin did this very effectively. Two oligarchs fled abroad, one was imprisoned, the possibility of oligarchs buying political influence was reduced, and the role of the independent (from the oligarchs) President substantially increased. Tax revenue increased significantly.⁷ However, the reduction in state capture does not seem to have reduced administrative corruption significantly and Russia continues to score very badly in the Corruption Perception Index published annually by Transparency International.

In Kazakhstan there was a scandal in 2003 when it turned out that the President and Prime Minister had received 78 million dollars for facilitating oil and gas contracts with foreign companies. A Commission for the Prevention and Suppression of Corruption was set up in the Kazakh Ministry of Justice in January 2003, but significant results from its establishment are difficult to discern. It is noteworthy that the above-mentioned scandal only received publicity after the key intermediary was arrested in the USA on bribery charges.

The struggle against corruption has been a proclaimed goal of the Russian government ever since the emergence of the independent Russian state from the ruins of the USSR. Already in 1992 a decree was issued ‘On the struggle with corruption in the public administration’. This obliged all public officials when taking up office to declare their income and wealth. This requirement was repeated in a presidential decree of 1997. In 1994 a federal programme for combating criminality in 1994-95 was adopted, which

included as section 4 provisions on ‘Intensifying the struggle with economic crimes and corruption’. Just before the 1996 presidential election Yeltsin signed into law the new Russian Criminal Code. This expanded the list of activities characterised as the crime of corruption. However all this legislative activity did nothing actually to reduce corruption.

It is clear that the high-level corruption of the 1990s was associated with the redistribution of the enormous riches previously controlled by the state. To the extent that this has now taken place, and a new stable elite has emerged, the need for crude measures to buy political influence has diminished. It would be logical to expect (illegal) corruption to diminish and to be replaced by (legal) lobbying of the type familiar throughout the world. Two Russian specialists on corruption (Levin & Levina 2004: 281) have drawn attention to this possibility but simultaneously have cautioned, “However this scenario is possible only with a favourable economic and political dynamic.”

Low level corruption is largely a result of low salaries, combined with the extensive opportunities for unofficial taxation created by official regulations combined with the low chances of being caught. Increasing public sector salaries as public finances improve, as happened during the second Putin term, may under the right circumstances have some effect in reducing corruption, and is a sensible policy.

The importance of an efficient state apparatus in warding off the resource curse is well known. As Karl (1997: 239) has pointed out, “Norway, the one case that is not a petro-state, is eloquent testimony to the importance of capable bureaucracies as the essential ingredient in adjustment and transformation as well as the indispensable counterpart to private interests.”

Although there is a lot of talk in official quarters in Russia about administrative reform, the chances in the homeland of Gogol's *Inspector-General* of creating a Nordic-style civil service seem rather low. Experience of other petro-states is discouraging. Karl (1997: 151) noted that in Venezuela, "a reform of the state that was to be based on legal, institutionalized rules for increasing efficiency was replaced by greater patrimonialism, centralization, corruption and bureaucratic infighting, and by an astonishing level of disorganization." It is scarcely surprising that in Russia academic analysis focuses on second-best solutions, such as the advantages of corruption in education given the inadequate level of salaries in that sector, rather than the merits of a corruption-free education sector.⁸

3. Fiscal policy

In order to prevent world price fluctuations destabilizing the economy, countries can pursue a countercyclical fiscal policy. That means, running budget surpluses when prices are high, and deficits when they are low. Running budget surpluses has the additional advantage that it allows private sector savings to finance private sector investment rather than government deficits. It also reduces the accumulated stock of public sector debt, which reduces future interest payments. Since budget surpluses attract the attention of spending departments, lobby groups and tax cutters, one way of defending them is to transfer them to a special fund, which is one of the purposes of oil funds.

4. Oil funds

Many energy-rich countries round the world have created special funds into which a large part of their rent payments is paid.⁹ Such a policy has three goals. First, to stabilize the economy by reducing (or eliminating) the effects of destabilizing fiscal policy

resulting from commodity price volatility. Secondly, to protect domestic producers from the effects of upward pressure on the exchange rate and hence mitigate the Dutch disease. Thirdly, to accumulate assets to replace the hydrocarbons that have been used up. The accumulation goal is analogous to depreciation in company finances. In the same way that companies set aside money to offset the reduction in the value of their capital, so countries can set aside money to offset the reduction in the value of their mineral resources. This ensures that their net assets are not reduced by energy-extraction but that they just change their form, from hydrocarbons in the ground to other assets. This enables them to reinvest the oil money in new income-producing assets. It also serves the goal of inter-generational equity since it prevents the current generation enjoying all the benefits from finite resources but ensures that future generations also benefit.

As far as stabilization is concerned, the goal is to see that macroeconomic policy is not destabilizing. For countries heavily dependent on volatile commodity prices, there is a danger that an upswing in their price will lead to an increase in government expenditures and a downswing to a decrease. In this way, fiscal policy amplifies the effects of the commodity volatility. By putting aside part of the windfall income from high prices in a special fund, to be spent when energy prices fall to a lower level, fiscal policy can be stabilizing rather than destabilizing. This is entirely sensible in principle. The difficulty arises in knowing what is the long-run average level of prices, above which revenue should be paid in to the stabilization fund, and below which the fund should be spent.

As far as accumulation is concerned, a big issue is in which type of assets to invest the fund. It is conventional to invest in foreign financial assets, so as to reduce pressure

on the exchange rate and avoid entrepreneurial risk. However, the goals of accumulation and inter-generational equity may be served by a wide range of investments from domestic infrastructure to works of art purchased for domestic museums and direct ownership of foreign firms.

When the money in the oil/stabilization fund is invested in foreign assets, this reduces upward pressure on the exchange rate and hence reduces the intensity of the Dutch disease.

In Azerbaijan the State Oil Fund of Azerbaijan was created by a presidential decree of December 1999. In Kazakhstan, the National Fund was created in 2000. Russia set up in 2004 a Stabilization Fund, which transferred part of its energy receipts into foreign securities. By 1 January 2006 this had reached 1237 billion roubles or approximately 43 billion dollars. In Turkmenistan a State Fund for the Development of the Oil and Gas Industry and Mineral Resources and a Foreign Exchange Reserve Fund were established in 1996. However, these appear to have a different character from the funds in the other country being used mainly to finance domestic investment rather than accumulate foreign financial assets.¹⁰

The creation of special oil funds, for stabilization, anti Dutch disease, or accumulation purposes, such as has been done in all of the countries concerned, is a sensible policy based on international experience and on the advice of the IFIs. It is naturally desirable that the funds be accountable and regularly audited and not turn into a slush fund for the head of state. In view of the super-presidentialist political system that exists in all four energy-rich CIS countries, this is an important issue.

5. Exchange rate policy

In order to avoid, or at any rate to moderate, the Dutch disease, countries with large current account surpluses resulting from the export of hydrocarbons need to prevent the influx of foreign currency leading to (excessive) currency appreciation. There are a variety of ways to achieve this. They include capital export (via an official oil fund or private sector foreign investment), the growth of domestic consumption (leading to the import of consumer goods), the growth of domestic investment (leading to the import of investment goods), and exchange rate intervention. The energy-rich CIS countries have used all these methods. A striking result of the last mentioned has been a rapid growth of foreign exchange reserves. Russia, which in 1998 was unable to meet its international commitments and defaulted, by 1 January 2006 had accumulated foreign exchange reserves of US\$ 182 billion. Substantial purchases of dollars by central banks have the advantages of monetising the domestic economy and reducing upward pressure on the exchange rate.

The accumulation of foreign exchange reserves is useful to protect the country concerned from possible future falls in energy prices or sudden exit of foreign capital. However, if they rise very high that might suggest that the country needs to stimulate domestic consumption or domestic investment. As a long run policy, it makes little sense for poor countries to lend money to rich countries at low interest rates.

Unconventional policies to tackle the resource curse

1. Conservative depletion policy

Obviously one way of limiting the impact of resource exports is to pursue a conservative depletion policy. This reduces the flow of export income and its economic effects. It mitigates the effect of commodity price fluctuations and smooths the impact of

resource rents over time. However, governments, given the desire to stimulate consumption, under the influence of their own expenditure plans, the need to pay for imports, the wish of oil companies to increase their profits, and pressure from importing countries, tend only to pursue conservative depletion policies when by so doing they can influence the world market price. This is the policy of OPEC in general and of Saudi Arabia in particular.

A problem with the use of depletion policy for macroeconomic purposes is the difficulty of knowing precisely what a country's hydrocarbon resources are. Estimates keep changing based on exploration results, technological progress, and energy prices.

2. Protection

An unconventional policy, which is opposed by the international financial institutions, is protection. In addition to its adverse effects on overall growth, natural resource riches may also have an adverse effect on employment and incomes. This is because some resource activities (e.g. oil and natural gas extraction) directly employ very few people and may displace economic activities that employ large numbers (or reduce the incomes of people in those sectors). For example, in Azerbaijan in 2000, industry (mainly the oil industry) produced 35% of the GDP but only employed 7% of the working population (41% of whom worked in agriculture). Hence an appreciation of Azerbaijan's real exchange rate that leads to an influx of competitive agricultural products is likely to impoverish a large part of the population. Where other sectors are unable to absorb at adequate wages the population threatened with displacement, one way of dealing with this situation is by protection of domestic agriculture, a policy long practiced in the developed countries. It should be noted, however, that a fall in the prices

of agricultural products is only harmful to commercial agriculture. The large subsistence sector will get no benefit from the protectionist policy (and may even suffer if it uses inputs that increase in price). Furthermore, the policy will only be socially beneficial if the benefits go to farmers and not to middlemen such as officials or moneylenders. In addition, it is necessary to compare the gains to commercial farmers with the losses to net purchasers of food such as town-dwellers. However, systems of support for domestic agriculture which subsidise agriculture while maintaining domestic food prices at world levels are possible, given an efficient administrative system, as the UK showed in the post World War II period prior to the adoption of the CAP.

There are two methods of achieving protection, quotas or tariffs, and currency depreciation. Tariffs have the advantage of generating government revenue. However, protection of domestic industry by quotas or tariffs may protect a permanently inefficient sector, and is a burden on the users of the product/s concerned, e.g. consumers or other domestic producers. Furthermore, it may conflict with the country's international obligations as a WTO member. In general, protection is strongly opposed by the IFIs, which advocate export orientation and oppose import-substitution. Currency depreciation can play a useful role in protecting domestic agriculture from the strong exchange rate generated by oil revenues, as experience in Indonesia under Suharto showed (Timmer 1994). In this context, the efforts of the Russian Central Bank to slow down the real appreciation of the rouble by intervention in the foreign exchange market, is a sensible and understandable policy. It has substantial benefits for the tradeables sector. The IFIs tend to oppose currency depreciation because of its inflationary effects but many will feel

that these are an acceptable price to pay for the protection offered to domestic incomes and employment.

3. OPEC membership

Another possible policy which is opposed by the IFIs is membership of OPEC. Where shortrun demand is inelastic, as in the case of oil, a cartel which reduces production when prices are relatively low, and increases it when prices are relatively high, is entirely rational for producers. It maximizes their income while discouraging alternative sources of supply or substitution of oil by alternatives. Up till now none of the CIS countries has joined OPEC. They have preferred free-riding and avoiding the hostility of the largest importer, the USA. Whether or not they become formal members of OPEC, close cooperation with OPEC is already in the interests of Russia – the world's second largest producer and exporter of oil and largest producer and exporter of natural gas – and will become increasingly so for Azerbaijan, Kazakhstan and Turkmenistan. Although free-riding is cheap and US friendship is valuable, neither aggressive price competition nor very high or very low prices, are in the interests of exporters.

4. Democratisation

Recent research has drawn attention to the merits of institutional and political reforms leading to a more democratic political system. Robinson et al (2002) developed a model which suggested that the consequences of a resource boom were crucially governed by the quality of institutions, in particular by the limits they place on politicians to prevent them distributing the fruits of resources booms in an inefficient manner. It follows that if a country has institutions in place that constrain the redistributive actions of politicians then it has a better chance of benefiting from the resources boom.

Building on this result, Korhonen (2004), using a large and reasonably detailed dataset showed that a greater level of democracy in a country's political institutions can alleviate the resource curse. This suggests that policies to reduce the resource curse should include an expansion of civil and political freedoms and some control by the public over the state apparatus, e.g. by means of regular elections which are free and fair and with real choices for the electors. In addition, free media and the rule of law can play a useful role in limiting arbitrary action by the authorities.

Korhonen's results suggest that the policies being pursued in contemporary Russia are likely to make the country increasingly vulnerable to the resource curse. The strengthening of the 'power vertical' under president Putin has failed to create an efficient state apparatus able and willing to implement policies in the general interest. As a Russian political scientist has concluded (Afanas'ev 2004: 206), "The Putin reforms not only did not correct the chief dysfunctions of the Russian state – parasitic bureaucratism, the fusing of political power and oligarchic capital, clientelism and corruption – but did not even touch their bases. To cure these congenital ailments of Russian power by administrative centralization, is like fighting a fire with oil. In the 'early Putin' era, as in the 'late Yeltsin era', the private appropriation of the resources of public power to receive administrative rent was an openly articulated norm of the rulers' social behaviour and the chief criterion of their success. What the rule of Putin has introduced is a harder and more cynical style of public politics, some rejuvenation of the top, and the replacement of some 'authorities' and 'connections' by others. This is clearly inadequate for a real strengthening of the state. To achieve that, what is necessary is not only and not so much

the ‘presidential vertical’ as the ‘citizens’ horizontal’, that is an institutionalization of society at the micro and macro levels.”

Korhonen’s results also suggest that the present political system in Turkmenistan, Azerbaijan, Kazakhstan, and Russia, sometimes known as ‘superpresidentialism’, is a major obstacle to avoiding the resource curse.

Why are some anti-resource-curse policies so difficult to implement?

There seem to be two main reasons why it is so difficult to implement anti-resource-curse policies such as democratisation and corruption reduction. They are, path dependence and the self-interest of ruling elites. As far as democratisation is concerned, a major problem with such policies in the CIS countries is that they run counter to the political traditions and political culture in those countries (Hedlund 2005). These are based on a long history of autocracy, absence of the rule of law, and limited rights for citizens. This tradition was entirely rational – and successful – given the international environment in which it emerged (Poe 2003). However, it greatly constrains the policies which rulers and subjects today think appropriate.

Since the ruling elites are the main beneficiaries of corruption, it is against their self-interest for them to strive to reduce it. Furthermore, giving free reign to corruption creates a body of functionaries who are loyal to the boss because of the opportunities he gives them for enrichment. This enables the boss to exercise the ‘power vertical’. Without officials who will carry out his orders the boss is powerless. In the absence of terror, military or party discipline, and of a civil service ethos, corruption is an alternative way of ensuring that officials will implement the boss’s wishes. To reduce corruption requires a powerful civil society that can control politicians and officials. But this is precisely

what these countries lack. To some extent pressure from the G7, their international economic organizations, and international NGOs can be an effective substitute. But their influence is necessarily diminished at times of high energy prices when Western loans are unnecessary, and good relations with energy exporters are very important for energy importers. Hence the creation in the near future in these countries of an efficient state which serves the general interest seems unlikely.

CONCLUSION

The curse of natural resources is a serious economic problem effecting a number of CIS countries. Important transmission channels are an increase in corruption, a reduction in educational expenditures, a reduction in physical investment, and an increased real exchange rate. The three energy-rich CIS countries for which data is available all appear to be following an unsustainable growth path with negative net investment. This will inevitably lead to future growth collapses. The most extreme case is Azerbaijan and the least extreme Russia.

There are a number of conventional policies to overcome the resource curse. These include, non-energy investment, a reduction in corruption, the creation of special oil funds, and an exchange rate policy which slows down the real appreciation of the currency. Of these the one which is currently being applied most actively is the creation of special oil funds. Under the right conditions this can contribute to stabilization, limiting the spread of the Dutch disease, and accumulation, but on its own will not overcome the curse.

There are also unconventional policies to overcome the resource curse. These include

conservative depletion policy, protection, OPEC membership, and democratization. None of these are being applied at the present time.

Important reasons why such policies as corruption reduction and democratization are not being pursued are path dependence and the self-interest of the ruling elites.

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NOTES

¹ By ‘point resources’ is meant resources concentrated in a small geographical area (a point) rather than widely scattered. For example, mining and oil and gas extraction are point resources, whereas agricultural land, forests and fish are not. This is an important reason why Ukraine’s rich agricultural land does not generate a resource curse. (Another reason is the relatively low prices of its products.)

² Transparency International regularly publishes a Corruption Perception Index which measures corruption perceptions on a scale of 10 to 0, where 10 is perfectly incorrupt and 0 is perfectly corrupt. In the 2005 survey, which covered 159 countries, Italy came 40th (along with South Korea) with a score of 5.0 and China (along with Morocco, Senegal, Sri Lanka & Surinam) came 78th with a score of 3.2. For the four energy-rich CIS countries the outcomes were as follows. Kazakhstan came 107th with a score of 2.6, Russia came 126th (along with Albania, Niger & Sierre Leone) with a score of 2.4, Azerbaijan came 137th (along with Cameroon, Ethiopia, Indonesia, Iraq, Liberia and Uzbekistan) with a score of 2.2 and Turkmenistan came 155th (along with Haiti and Myanmar) with a score of 1.8. Only Bangladesh and Chad did worse (with a score of 1.7).

³ An empirical study of Kazakhstan found Dutch disease effects there after 1996. See Kuralbayeva, Kutan & Wyzan (2001).

⁴ For example, a 2004 IMF Working Paper - Loukoianova & Unigovskaya (2004) – on the CIS-7 suggested that “measures should be taken to facilitate the development of

physical infrastructure conducive to trade. For instance, access to world markets could be facilitated through the development of regional transport networks.”

⁵ For one such programme see *State Programme on Poverty Reduction and Economic Development 2003-2005 (final draft)* (Baku 2003).

⁶ For an overview of measures necessary to reduce corruption, with special reference to the Russian situation, see Ahrend & Tompson (2005) pp. 47-49.

⁷ As Sergei Medvedev (2004) has observed, “an ‘oligarchy’ of the kind seen in Russia in the mid 1990s no longer exists. As a result of Putin’s centralization, and especially after the attack on YUKOS, supported by the majority of the population, the oligarchs ceased to be an independent political force and were placed under the state bureaucracy.”

⁸ This was argued in an interview on Russian tv in the spring of 2005 by prof.M.Levin, a leading Russian specialist on the economics of corruption.

⁹ For a survey of the international experience with such funds, with special emphasis on the lessons for the Caspian countries, see Tsalik (2003).

¹⁰ For the Turkmen situation see Kalyuzhnova & Kaser (2005: 5-6,7-8).