

Iraqi Oil: A Gift from God or the Devil's Excrement?

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Introduction

The change of political regime in 2003 sets the beginning of a new era for the Iraqi economy. Certainly the United States and the rest of the world is hoping that with a fresh start the country will finally be able to unleash the considerable economic potential locked up in the nation's oil and gas reserves, in its agricultural land, abundant water and relatively well-educated labor force.

Iraq's economy has long been dominated by the oil sector, which has, since the 1950s, provided the country with about 95 percent of foreign exchange earnings. The country's petroleum resource base is truly impressive: proven oil reserves of 112.5 billion barrels and potential reserves of 200 billion barrels. Of these reserves, 75 billion have not yet been developed as a result of the political and military turmoil of the past 20 years. In addition to these huge oil reserves, Iraq has 110 trillion cubic feet of proven gas reserves with probable reserves of 150 trillion cubic feet. But only about 10 percent of the country's prospective fields have been explored and modern 3-D seismic techniques have not been widely applied. If economic and political stability can be created in Iraq and adequate investment flows into the hydrocarbon sector there is little doubt that the countries' output of oil could expand dramatically

over the next decade.

Iraq's vast hydrocarbon deposits help paint a bright future for that embattled country. President Bush best expressed this sentiment in March of 2003: "The nation of Iraq, with its proud heritage, abundant resources, and skilled and educated people, is fully capable of moving toward democracy and living in freedom." The U.S. position is that the oil wealth of Iraq is to be used "for the benefit of the Iraqi people" (U.S. Department of State, 2003). Given that the cost of reconstruction will run into tens of billions of dollars (Looney, June 2003), Iraq would be in a helpless situation without its hydrocarbon wealth.

As the title of this essay suggests, however, expanded oil production and revenues may not prove to be a panacea. Juan Pablo Perez Alfonso, a founder of OPEC complained in 1975: "I call petroleum the devil's excrement. It brings trouble. Look at all the waste, corruption, consumption, and public services falling apart. And debt, debt we shall have for years"(Economist May 22, 2003). The problems faced by oil exporters has spanned a whole literature, laden with colorful terms such as "The Dutch Disease," "the paradox of plenty," "flawed prosperity," and even "the banyan tree problem (Tsalik, 2003)."

The unfortunate fact is that most oil-rich developing countries are underperformers across a whole spectrum of economic, social, political and governance standards (Tsalik 2003). Large windfall gains associated with a rapid increase in oil prices have been a particular problem in that they "appear to create severe distortions in the working of the economy and the political system with strongly negative socio-political consequences" (Stevens 2002). In countries as diverse as Iran, Nigeria, Venezuela, and Indonesia, the combination of state infancy and revenue windfalls has proved overwhelming, undermining even the best efforts to develop each country's non-oil economy, eradicate poverty and improve living standards for broad-based segments of the population. In terms of state development and institutional formation, Iraq is beginning its reconstruction and development from a weaker position than these countries.

Previous Strategic Insights have examined possible monetary systems for Iraq (Looney, May 1, 2003), as well as the country's projected budgetary situation over the next 10 years or so (Looney June 2, 2003). Within this context, and given the government's likely make-up, is there a strategy the Iraqi authorities can put in place that offers some hope in avoiding the spectrum of problems that have plagued almost all other developing country oil exporters?

The Paradox of Plenty

A large literature (Cf. Gelb, 1988, Karl, 1997, Looney, 1982, 1996, 1997, 2001, and for Iraq, Alanasrawi, 2002) has spawned in recent years attempting to clarify some of the complex, and negative transmission mechanisms associated with oil revenues, especially those that occur during periods of rapidly rising petroleum prices. While there are many competing explanations, they are not necessarily mutually exclusive (Stevens 2002), but instead may reinforce each other resulting in a slowing of economic growth and productivity. In extreme cases, the non-oil sector of the economy even begins to contract.

The Dutch Disease Effect

The mechanism that has probably gained the most attention in academic circles is the so-called Dutch Disease. This phenomena has two effects, both of which should concern postwar Iraq. The first focuses narrowly on the exchange rate. In technical terms, the "Dutch Disease" refers to the potentially adverse effects of a booming export sector on the performance of other exports and of industries competing against imports. These effects work through a strengthening (appreciation) of the exporting country's exchange rate. In the 1960s, the Netherlands experienced a vast increase in its wealth after discovering large natural gas deposits in the North Sea. Unexpectedly, this seemingly positive development had serious repercussions on important segments of the country's economy, as the Dutch guilder became stronger (a 30 per cent appreciation), making Dutch non-oil exports less competitive.

In the case of a less-developed country such as Iraq, the exchange rate appreciation resulting from a ramp up of oil exports is likely to reduce the profitability and competitiveness of traditional agricultural exports. It would also encourage imports of food and raw materials, which may compete with domestic production; it is also likely to discourage the emergence of new manufacturing exports, essential for the successful diversification of the economy. The expansion of Iranian oil export earnings in the 1970s illustrates these effects (Looney, 1982).

The second effect of concern for Iraqi development is that during the modernization and expansion of the oil sector, the rest of the economy may be "crowded out" from access to key factor inputs—the oil sector with its financial resources would preempt these resources weakening the ability of the private sector to invest and diversify.

The Dutch Disease also tends to result in increased poverty, but here the links are more difficult to establish (Stevens 2002). The price distortions created by the

appreciating exchange rate can be looked as a tax on exports, and if the country has a trade pattern based on comparative advantage this would likely involve labor intensive activities. Rates of economic growth in these areas would decline, inhibiting any tendency for benefits of oil-based expenditures to "trickle down". Under these circumstances, the economy would likely become more vulnerable to external shocks from which the poor cannot protect themselves. Finally, the inflation stemming from expanded oil financed expenditures again, would again likely harm the poor disproportionately.

Although the disease is generally associated with a natural resource discovery, it can occur from any development that results in a large inflow of foreign currency, including a sharp surge in natural resource prices, foreign assistance, and foreign direct investment, all distinct future possibilities for Iraq.

The Rentier Society/Authoritarian Effect

The second dimension of negative oil-related effects has to do with governmental decision-making. The relatively "easy" availability of foreign exchange arising from large-scale oil exports is likely to take the pressure off necessary institutional and other policy changes. It also can lead to the development of a rentier society where there is a disconnect between effort and reward. A common result is the creation of a dualistic economy where a vibrant oil, and gas sector coexists with a weak, poorly performing non-oil economy.

Along these lines, Fred Halliday has noted that "the uniqueness of oil resides...in the peculiar form of payment resulting from it, a rent to producer states that does not entail the forward and backward linkages within the local economy that are characteristic of other primary production in the third world. The collection of this 'rent' enables the producer state, and those controlling it, to amass enormous sums of money without engaging in any form of production; it is this which has generated such major social tensions within the producer states. These tensions include growing income inequality, rampant corruption in the state, grandiose development projects, and the neglect of productive activity and skills, especially in agriculture.

As in Iraq (al Khafaji, 2002) because oil infrastructure can be controlled easily by a few, it leads to a concentration of political power—rentier states tend to be authoritarian (Table 1). There are several reasons for this development (Ross 2001). First, an oil rich government can provide vast social services without taxing the public. "Because there's no taxation, there's less demand for representation." Rentier governments also tend to buy off the opposition and amass large internal

security forces capable of crushing dissent. Second, the skewed development of oil dependent states means that they lack the working and middle-class citizens who historically have been a force pushing for democracy. In short, while oil-exporters fall into a number of political categories, lack of accountability and transparency is a common characteristic of the group. The net effect of these factors has led (to one degree or another) to corruption, mismanagement and a colossal waste of resources.

The Fiscal Uncertainty Effect

The final dimension of oil-related problems stems the fiscal implications of fluctuating and uncertain revenues. While one cannot say that oil revenues create a certain political system, it is a fact that for the most part, the political systems adopted by most of the oil-exporting countries (Table 1) are short-sighted and pursue a pro-cyclical stabilization policy. The net effect is to intensify the detrimental impact that fluctuations in oil prices have on the domestic economy.

Oil exporting countries' budgetary patterns tend to be an extreme version of the fiscal rules used in many developing countries facing fluctuating revenues. Many of these countries initiate expanded capital expenditures during periods of rising revenues, on the assumption that these revenues are sustainable. When revenues decline, budgetary cuts occur, but in a fairly predictable manner (Hicks and Kubisch, 1984). In general, social sectors are less vulnerable to cuts than defense and administration, which in turn are considerably less vulnerable than production and infrastructure.

Of course these patterns can be affected by the willingness of countries to assume increased governmental debt in an attempt to maintain programs during periods of declining revenues. Another complicating factor, especially for Middle Eastern oil exporters is their large budgetary commitment to defense expenditures. These factors combine to produce a budgetary pattern typified by Saudi Arabia, a country that consistently allocates around thirty percent of its budget to defense. In Saudi Arabia:

- Typically increases in planned defense expenditures come largely at the expense of economic services. These reductions carry over to transportation/communications and infrastructure as well.
- Economic services, transportation/communications and infrastructure are also reduced when the government experiences fiscal stress in the form of unanticipated increases in the fiscal deficit.

- On the other hand, the country's extensive subsidy program is often funded with unanticipated increases in the fiscal deficit.
- Allocations to human resource development are increased along with expanded defense expenditures.
- In addition to economic services, the government tends to reduce allocations to municipal services and public lending programs during periods of expanded defense expenditures.(Looney, 1996)

The net effect of these budgetary priorities has been a decline in the strength of government expenditures in stimulating growth of the non-oil domestic economy. In part, this stems from the stop and start nature of many infrastructural projects and the generally low priority given economic expenditures during periods of austerity. In addition, increased levels of public indebtedness have no doubt come at the expense of increased private sector investments.

Patterns of Productivity and Growth

The three dimensions of the Paradox of Plenty: Dutch Disease, Rentier State, and Fiscal Uncertainty have combined to produce the non-oil exporters' dismal performance noted above. This pattern has been confirmed in a recent study (Bair, Dwyer and Tamura, 2002) examining the sources of economic growth in various parts of the world. At issue is how much of the growth in output per worker is associated with growth in physical and human capital per worker and how can it be attributed to other factors: increased efficiency, technology, and institutional change. This latter category is often referred to in the literature as total factor productivity (TFP). The importance of total factor productivity stems from the fact that in its absence, economic growth eventually slows and stagnates due to diminishing returns to capital formation. Within this context, Bair et al find striking differences in the manner in which oil and non-oil economies grow (Table 2):

- Looking at the Middle East as a whole, oil-exporters have sustained an average output growth per capita of 0.83 percent. This has been the result of a growth in physical capital of 2.24 percent and in human capital 1.96 percent.
- These growth rates occurred in an environment characterized by a negative growth in total factor productivity of 1.22 percent.
- In contrast, non-oil exporters in the Middle East grew about twice as fast (1.59 vs 0.83), invested at a rate about twice that of the oil exporters (4.94 vs. 2.24), and had a positive ratio of total factor productivity per output (1.55 vs -1.15).
- As in the Saudi Arabian case noted above, the oil exporters allocated a proportionate amount of resources to human capital (1.96 percent vs. 1.86

percent for the non-oil producers).

- Other oil exporters experienced similar patterns, with stagnant growth (0.07 percent) and total factor productivity per worker declining by 1.74 percent per annum.

While these results should be taken with caution, the dismal performance of oil exporters other than Norway is undeniable. Their established pattern of total factor productivity is especially troubling. Basically, total factor productivity reflects the ability of economic agents to respond efficiently to price signals in a continuing search for lower costs and greater competitiveness. If Iraq wants to achieve better economic performance than the oil-exporter norm, the authorities will have to create an environment that encourages and forces sustained levels of positive total factor productivity. Again, it is unlikely this has happened on a sustained basis outside of Norway.

There is still great controversy over the best way to stimulate total factor productivity. For some analysts, increased competition, privatization, and greater incentives for risk-taking are key (Sachs, 2000). For others (Rodrik and Subramanian 2002), the establishment of supporting institutions—independent central bank, a sound financial system, and efficient, equitable tax systems play a central role.

Another position is one taken by Oxfam America (2002). Here a series of fairly specific measures are proposed as a means to reduce the impact of "resource curse" (and in doing so presumably stimulate positive levels of total factor productivity). These cover diversification, the promotion of transparency, only aiding governments that are democratic and pro-poor, and finally allowing outsiders to monitor and control revenues.

Summing up the discussion of the Paradox of Plenty, there are several issues which if successfully addressed should provide significant dividends for the Iraqi economy. These entail controlling government expenditures to avoid overheating the economy and appreciating the exchange rate (Dutch Disease), greater accountability, efficiency and transparency in governmental fiscal activity (Rentier State), and in the short run the use of public expenditures in an anti-cyclical rather than the usual pro-cyclical pattern (Fiscal Uncertainty). Depending on the Iraqi authorities' preferences we might add the smoothing out of public expenditures over time to maintain continuity and efficiency.

Possible Solutions

As a starting point for possible solutions, one would be hard pressed to come up with a better list than that proposed by Stanley Weiss (2003):

- First, separate the new rulers from the natural resources—only when open books and the rule of law are in place should a new Iraqi government exercise a limited role in the oil industry.
- Second, ensure the petroleum benefits the people—avoid the curse of resources or the Paradox of Plenty problems.
- Third, diversify—follow the example of countries like Mexico, successful in reducing dependence on oil, by spurring other industries and non-oil exports.
- Fourth, attract back many of the four million highly trained and skilled expatriate Iraqis

Of course, all of these goals are interrelated with improvement in one area no doubt stimulating progress in the others. The second goal however is where the big pay-offs are in creating an environment conducive for a successful transition to a modern dynamic economy are likely to occur. Because Iraq is starting from a clean administrative slate, the Oxfam suggestion of allowing outsiders to monitor and control revenues might be a practical first step in overcoming the three dimensions of the Paradox of Plenty noted above. Stevens (2003) has branded off the shelf versions of this approach "at best impractical and at worst simply unrealistic", yet in Iraq's situation some type of oil fund is worth considering, and possibly adopting—especially if some of the objections to this type of arrangement can be successfully addressed.

In principle an institution of this type would be an extension of the development fund established in the United Nations Resolution 1492 of May 2003. Under that resolution the development fund for Iraq operates through the Central Bank of Iraq under the authority of the Coalition Provisional Authority (CPA). Its accounts are to be audited by accountants approved by representatives of the Secretary General, the IMF, the Arab Fund for Social and Economic Development and the World Bank.

As things stand now (June 2003), unencumbered funds from the Oil-For-Food Program, revenues from the sale of Iraqi oil, and assets of the former regime will be transferred to the Development Fund. The Development Fund will address humanitarian needs, economic reconstruction, infrastructure repair, disarmament, civil administration costs, and other purposes benefiting the Iraqi people. At this point the Fund seems to be little more than a depository of money that will (somehow) be spent (sometime) to improve the lives of Iraqis. There do not appear to be any clear priorities established for individual expenditures, nor is it clear that

any frame is established for the time-phasing of expenditures—two key elements if the Fund is to make a significant contribution to the country's reconstruction and development.

For an idea of what needs to be done to upgrade the Development Fund to a more comprehensive and effective Stabilization fund, one only has to look at some of issues raised to date:

- Will the Fund have sufficient resources to meet the immediate reconstruction costs?
- Reported contracts indicate a heavy infrastructure emphasis that may not maximize an Iraqi role nor attain desired systemic reform in other reconstruction areas, such as governance and democratization efforts.
- Because the CPA and the coalition military presence are very strapped for cash, reconstruction efforts have gotten off to a slow start.

Of course, the devil is always in the details, but some considerations for the establishment of an effective stabilization fund will involve:

Setting a trend in income and pursuing counter-cyclical fiscal policy.

Operationally this will be accomplished by offsetting falling revenues with increased expenditures and rising revenues with subdued expenditures. However, in doing so, the authorities will first have to determine how much capitalization is necessary for the fund to perform this function. Where will the deposits be held? In what structure of a portfolio? The main technical issue will involve determining a credible long-run equilibrium oil price and predicting whether price swings are temporary or permanent (Fasano, 2000).

Assessing what percentage of the fund should be paid out directly to Iraqi citizens.

Paul Bremer, the US civil administrator for Iraq has stated that a major goal is transforming the country into a free-market economy (Khalaf, 2003, Bremer 2003). Here decisions have to be made as to the proper balance between demand creating transfers—increases in the purchasing power of the average Iraqi, and how much should be supply-creating transfers—funds earmarked for funding private investment projects.

Determining the type of macro-economic model used in the stabilization exercises.

If the country adopts a fixed exchange rate, (Looney, May, 2003) a model stressing fiscal policy would be best for this purpose. Is there enough data to construct models adequate for the task? How will they be updated in light of

unanticipated events?

Establishing objective priorities in expenditures. Should short run humanitarian activities come before reconstruction? Or should longer-term development projects have a high priority from the beginning? What role will Iraqis have in these decisions?

Initiating an honest reporting system. For the stabilization fund to be credible it would also have to incorporate the new principle advocated by George Soros (2003) of "publish what you pay." The main premise here is that many oil-rich countries experience massive corruption and waste because no one ever accounts for their wealth.

Maintenance of sound fiscal policy. IMF studies of other oil funds has found that they cannot be a substitute for sound fiscal management, and its success or failure can be attributed as much to the fiscal discipline as to the fund's management (Fasano 2000).

Gauging the proper time to relinquish control of the Fund to Iraqi authorities. This is probably the most difficult issue to resolve. As noted above, Weiss feels that only when open books and the rule of law are in place should a new Iraqi government exercise a limited role in the oil industry. Jim Lacy (2003) has proposed that on a set schedule the administering body could make determinations as to whether Iraq has met certain goals toward achieving democracy and internal stability. When those goals were met, the fund would revert to Iraq's control. Since this will probably not be a black and white case, should this transfer gradually over time or in one fell swoop?

Conclusions

Oil funds are getting a close look these days, with one recently initiated in Chad. "If it succeeds, the project known officially as the Chad Cameroon Petroleum development and Pipeline Project could offer the world a blueprint for how multinational companies, aid groups, and governments can join hands to beneficially develop the mineral wealth of Iraq and other countries. It could also reverse the violent curse of oil money (Thurow and Warren, 2003).

The "devil's excrement" pretty much characterizes Iraq's oil wealth over the last several decades. However, if an oil stabilization fund that addresses the concerns noted above can be established and competently run, then Iraq may be finally at the

point where its oil resources can be viewed as a gift from God.

See [Summary Tables: Political Classification of Oil Exporters... Average Growth of Outputs and Inputs](#).

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For Further Reading

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