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### **Vugar Bayramov: How To Use Oil Revenues Effectively in Azerbaijan**

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## Abstract

The economic life of Azerbaijan is closely tied to oil. This study claims that the advantage of possessing oil can quickly be spoiled if the resources are merely spent to satisfy short-term interests. However, if managed wisely, e.g. through proper defining and prioritising the long-term interests of the entire society owning the resources, having oil can be extremely beneficial. Proper resource management ensures that the benefits are cumulative, sustainable and consistent. But if these interests are not well-defined, agreed upon, and followed through, then the resources run the risk of being squandered to serve short-term and small group interests only.

The paper analyses different scenarios of using the oil money and advocates for a strategy that would involve the following steps:

- oil rent money needs to be isolated from the economy and collected in an Oil Fund
- the Fund should select the most efficient strategy
- the Fund's resources should initially be invested abroad only
- a diversification plan needs to be prepared
- ethical principles need to be outlined
- the correlation of the percentage share of funds needs to be determined
- the relationship between the risk, expected return, number of investments and overall Fund resources needs to be determined
- principles need to be developed for future possibilities for investing in the domestic business sector

The study claims that the main challenge for Azerbaijan is to develop the non-oil sector to ensure that the economy continues to grow on a sustainable path after the oil boom, meeting both short-term expectations and longer-term demands. Key objectives include:

- developing income-generating opportunities
- creating new employment opportunities in the non-oil sector
- building up small- and medium-sized entrepreneurship

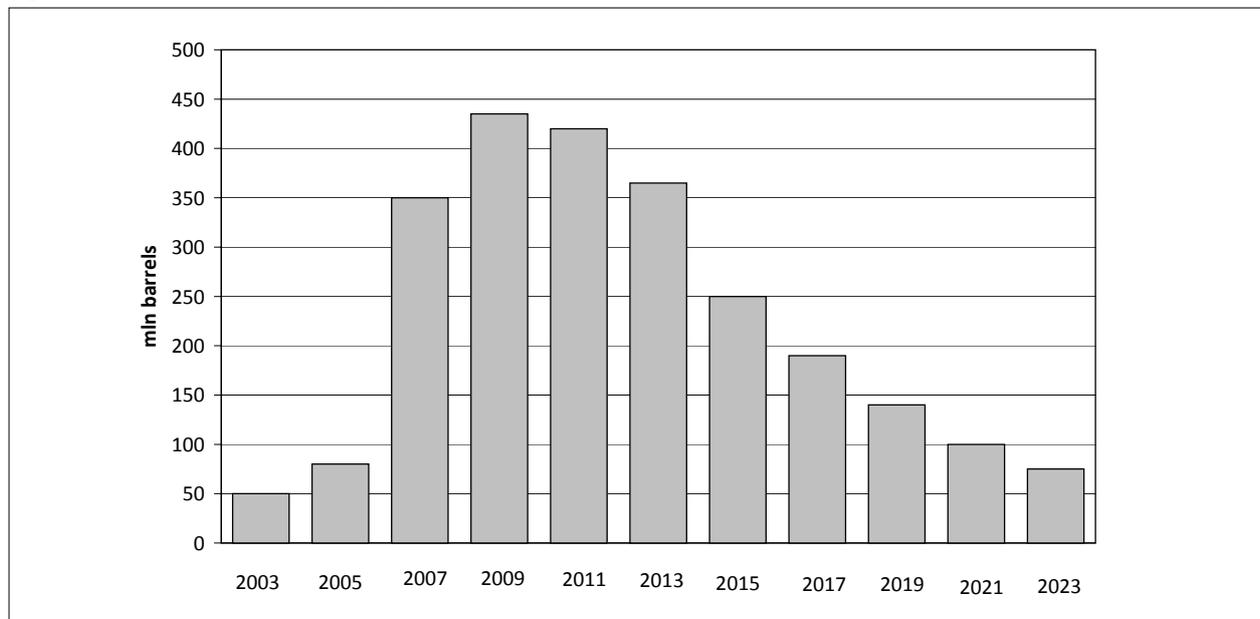
The paper concludes that the efficiency gap in the management of oil money in Azerbaijan is enormous. Improvements need to be made in the oil money accumulation, saving and spending processes in order for this short-term national resource to better serve the long-term development needs of the nation. The necessary changes include redefining and streamlining the Oil Fund in parallel with improvements in budgetary and public investment work.

## 1. Introduction

The rapid increase in oil production resulted in Azerbaijan's economy posting its fifth consecutive year of double-digit growth in 2006. Gross domestic product (GDP) expanded by a record 34.5% in real terms, the world's highest growth rate for the second year running. By far, the greatest engine of growth has been the industrial sector, in which value added was up by just over 56%, bringing cumulative growth in 2005–2006 to almost 150%. Within the industry sector, it is the oil and gas sector that is driving the growth. The non-oil economy is still growing strongly, expanding by 11.2% in 2006, but its contribution to GDP is falling as the oil economy expands. Non-oil sectors provided 47% of nominal GDP in 2006, down from 58% a year earlier and 61% in 2004. The medium-term outlook for Azerbaijan's economy is positive. GDP growth is expected to continue posting high double-digit growth over the next few years, mainly from increased oil and gas production and exports. Foreign investment is expected to decline over time as the major oil and gas projects move toward less intensive stages. However, the Azerbaijani government expects increased domestic public investment to offset some of this decline. Government expenditures rose by over 80% in

2006 and are projected to rise by a further 50% in 2007, which puts considerable pressure on inflation. In the long term, Azerbaijan's high dependence on oil exports poses a potential threat to the economy given the potential volatility in the international oil market. The main challenge for Azerbaijan is to develop the non-oil sector to ensure that the economy continues to grow on a sustainable path after the oil boom, meeting both short-term expectations and longer-term demands. A key objective is to develop income-generating and new employment opportunities in the non-oil sector, in such priority areas as banking and finance, trade, and small- and medium-sized enterprise (SME) development.

Figure 1: Oil Production, Forecast (mln barrels)



Source: SSC, 2007

The above graph shows that Azerbaijan will have huge oil revenues starting from 2009 until 2023. Income from oil sales is expected to peak in 2010. About 450 million barrels are estimated to be produced that year. At the current price (1 barrel=USD 76), USD 34.2 billion in income from oil sales is projected for one year alone.

## 2. Problem

Until its separation from the rest of the USSR, the republic was financially controlled by Moscow. Azerbaijan thus had little experience in independently managing its oil industry and the revenues accumulated (the only chance it had to do so was during its short-lived independence between 1918 and 1920).

Azerbaijan has an Oil Fund (SOFAZ) in which oil revenues are deposited, so the lion's share of responsibility for administering oil income falls on the managing of the Oil Fund resources. If Azerbaijan's oil advantage is to benefit not only this generation but also posterity, the Fund needs to be rescued from popular programmes. As in every issue concerning the nation's future, society's long-term interests need to be prioritised in order to prevent short-term or small group interests from taking over the Fund's resources. But first, those long-term interests need to be identified, and then a mechanism for adhering to them needs to be created and implemented.

The Fund was created eight years ago and serves to separate oil revenues from the rest of the economy. However, clearer resource management principles are needed to ensure that the Fund is operated in a way that will maximise the benefit to the overall economy. Money from the Fund is currently being spent

with no strategy or criteria to measure the effectiveness of the spending decisions against alternative ways of using the Fund.

In addition to economic concerns, there is a reciprocal role between the Fund and democracy; not only does democracy guarantee effective management of the Fund, but effective management of the Fund will also instil feelings of ownership of and responsibility for national resources among the citizens of Azerbaijan. They will come to view the Fund as their own money for their children and grandchildren and so forth, and will always be watchful of whether public officials are doing an efficient job.

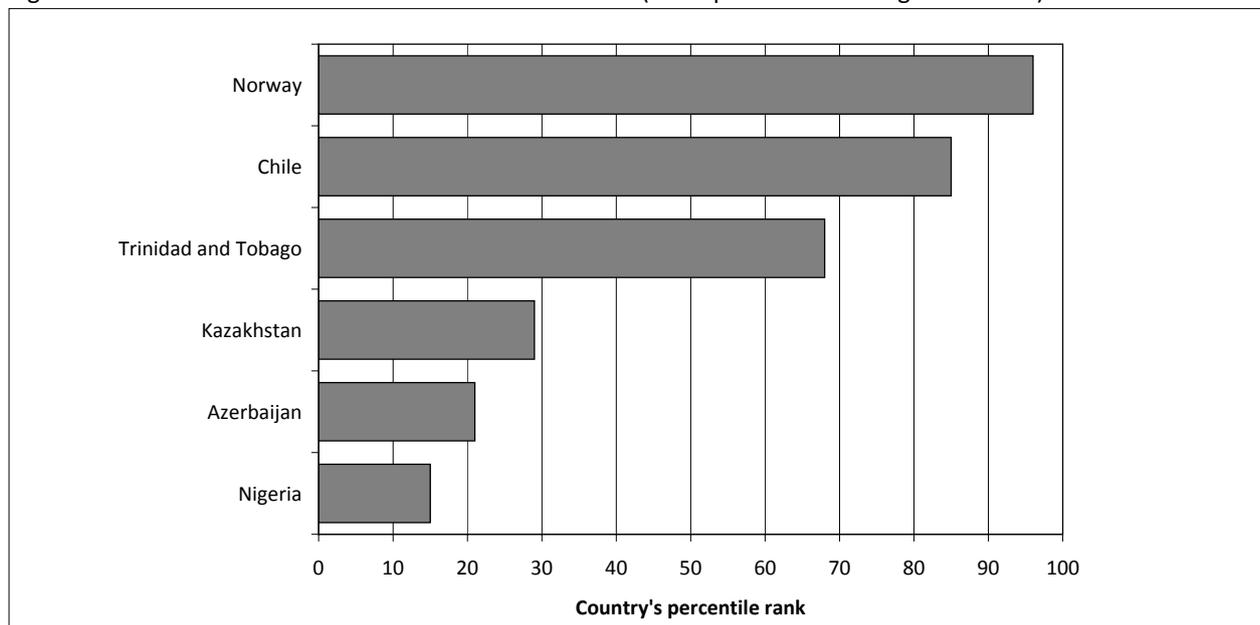
### 3. Severity of the Problem

What can be done with the Oil Fund can theoretically be done without it. In reality, 'Oil funds can allow some revenues to be "protected", allowing larger surpluses than would be possible otherwise'. The benefit from creating the Fund thus lies in the political economy and the point of having the fund is to isolate the oil money from irresponsible government decisions. Research shows that countries that have developed a separate institution to isolate oil money from the economy have better managed the economy during the boom years and have been better able to prevent oil money from being consumed by internal rent pumps.

Many other oil-producing countries have had bad experiences, resulting in the emergence of the umbrella term of 'oil curse'. Now the government of Azerbaijan has officially acknowledged the need for careful handling of oil revenues.

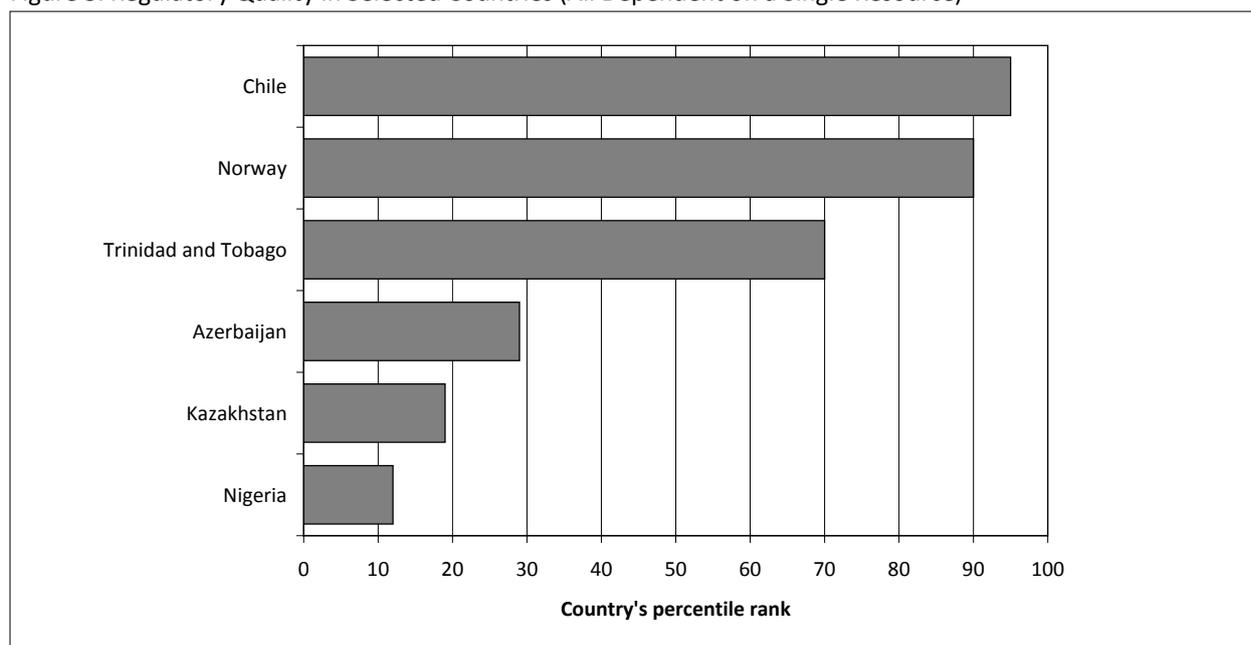
Government effectiveness, rule of law, regulatory quality, and voice and accountability are very low in Azerbaijan according to the study illustrated in the figures below.

Figure 2: Government Effectiveness in Selected Countries (All Dependent on a Single Resource)



Source: Converting black gold into human gold

Figure 3: Regulatory Quality in Selected Countries (All Dependent on a Single Resource)



Source: Converting black gold into human gold

The above graphs show that the bottom-ranking countries make less efficient use of their oil money, and that they are on the brink of converting the short-term boom into a disaster in the post-production years.

Table 1: Azerbaijan's Oil Fund Balance and Non-Oil Economy over the Years, in mln of AZN

Year	2007	2008	2009	2010	2011	2012
Oil Fund assets <sup>1</sup>	2659.98	11063.79	23112.32	34799.1	45293.5	56602
Oil Fund expenditures <sup>2</sup>	1107	767	705	705	655	655
Return from Fund assets <sup>3</sup>	106	443	924	1392	1812	2264
Oil Fund balance	-1001	-324	219	687	1157	1609
Non-oil GDP <sup>4</sup>	10366	12755	14859	17038	19513	22346
Fund returns/non-oil GDP	1	3	6	8	9	10

Source: IMF 2007, MOF 2007 and author's calculations

1. IMF projections (2007–2008 baseline scenario; 2009–2012 sustainable scenario)
2. Ministry of Finance projections
3. With 4% return rate as estimated with Pension Fund in Norway
4. IMF projections

In the early years, the expenditures made from the Fund exceeded its revenues. The monies were either transferred to the national budget or used for other social expenditures that duplicate the budget's function, and can thus be considered equivalent to transfers. The government is expected to increase expenditures further and spend more in the social sphere and infrastructure due to the upcoming elections in 2008. Later, the government may have more reasons to follow a strategy that is geared towards longer-term goals.

#### 4. Alternative Strategies

Our lives would be different without oil. Oil affects and changes our priorities as well as others' priorities concerning us. And we would run our economy differently if we did not have oil resources to rely upon.

However, as a short-term and finite resource, oil cannot be part of our national values and long-term interests, which should ideally be permanent. That leaves room for oil to serve as a temporary instrument only. Oil is short-term, but the Fund is long-term, and the effective management of the Fund should not depend on oil, but behave as if there were no oil at all. Norway's Pension Fund is analogous to Azerbaijan's Oil Fund and could serve as an example of successful management. Oil revenues are isolated from Norwegian society, or, put another way, society is isolated from the oil revenues almost as if the sector did not exist. The strategy of the Oil Fund needs to be at least as efficient. That strategy must flow from the purpose and mission of the Fund. If Azerbaijan wants to ensure an intergenerational balance or save money for the future, then it must resist short-term or any other non-productive programmes and save the maximum amount, which should include at least all of the oil money. By *at least* I mean that the Fund may also generate additional money and that money can be partially accumulated in the Fund.

If the economy can survive without the Oil Fund, then it should be even more robust with assistance coming from the Fund. However, popular programmes must not be allowed to eat the seed corn.

The main strategic issues regarding the Oil Fund are whether to transfer the revenues to the state budget or not, and how to invest the money that remains in the Fund. The principles of modern finance can be applied to help identify the best investment strategy. Diversification is the rule of thumb for lessening risk: investing the oil wealth among a wide range of allocations diversified across many levels (countries, industries, businesses, etc.) may guarantee high returns with lower risk. An index fund, which ensures that the investment in each company is proportional to its market value, can be used as an instrument for diversifying. But diversification only works well with a realistic and prudent approach to every investment decision. Expert advice and some scepticism are necessary, and the pitfalls of the underlying risk lurking behind seemingly high returns need to be carefully analysed. Decisions should not be guided by intuition or astrology. By the same token, non-transparent management is likely to lead to self-satisfying behaviour and inefficient investment decisions. For the management of a public fund such as the Oil Fund, a methodology needs to be prepared in which investment decisions will take into account not only the risks and returns from investments, but also brokerage and investment charges. Better investment options are often described as a trade-off between a good dinner and a good night's sleep. This is to say that a large number of riskier investments could indeed increase the overall return for an investment portfolio, but then the group responsible for investments needs to have permanent control and keep track of ups and downs in order to be able to change investment decisions in a timely manner. However, a good night's sleep can be guaranteed with government bonds; although these yield lower returns, they are often inflation indexed and entail lower risk.

#### 4.1. The Budget or the Fund

Meral Karan provides information on how Oil Fund (SOFAZ) resources should be used by the state agencies and treats the Fund as a secondary state budget. However, this approach conflicts with the mission and purpose of the Fund and will not provide the expected benefits.<sup>1</sup>

Let us look at and compare the international experience first. The table below compares the growth of expenditures in several countries. 'After the boom' is a relative term, since the countries on the list still produce oil. In addition, 'boom' refers here to the rise in production but not to the production itself.

Table 3: Average Annual Growth of Budget Expenditures (%)

Country	Prior to the boom	Oil boom period	After the boom
Azerbaijan	12.9	46.2	-
Saudi Arabia	27.5	112.5	30
Nigeria	29.6	70	-3.0
Norway	12.7	32	17.2

Source: IMF. International Financial Statistics. 2006

1 Meral Karan: Fighting the resource curse: The Azerbaijan response.

Norway's economy is widely considered to be the most successful in translating its oil money into sustainable development of the country. The Norwegian government's determination to spend its oil revenues wisely is considered the key to the country's economic success as well as its ability to overcome the pitfalls associated with the oil boom.

To manage its oil wealth, Norway established the Petroleum Fund (the prototype of Azerbaijan's Oil Fund), where it accumulated all of its oil money. This money then was transferred into bonds and corporate equities to generate a more stable flow of income that was not dependent on the current rate of oil production in the country. Later, the Fund's functions were integrated with the national insurance scheme, and the fund continued to function under the name of the Pension Fund. The strategy of isolating the economy from oil money did not change, however. The amount of money the government may withdraw from the Fund for budgetary purposes is again not a function of the country's current oil production, but of the growth rate of the Fund apart from current oil revenues. However, there were cases when the non-oil deficit of the budget was over the estimated annual non-oil growth of the Fund.<sup>2</sup>

Ulrich F.W. Ernst characterises Norway's strategy in managing the oil revenues as follows:<sup>3</sup>

1. The Norwegian economy is isolated from oil revenues; fund reserves are entirely invested abroad. The exchange rate between the krone (local currency) and other European currencies is kept stable through economic rather than monetary policies.  
The name of the fund has been changed to better reflect its image and mission.  
However, there is some emerging sensitivity to 'domestic' arguments, since the amount of capital flowing out of the country is increasing while the fund continues to grow. The fund is becoming the largest single-managed fund in the world.
2. Investments are made in both fixed income and equity instruments – since 1998, up to 50% of the total reserves have been permitted to be invested in stock markets (foreign only). Now the investments in foreign markets have reached a level of approximately 40 percent.  
The issue is to determine whether a 50% ceiling and the current 40% of investments in the equity market is sufficient or too large. This is more a debate over how much risk can be afforded versus the expected returns.  
Now the fund is spreading investments across industries and regions to diversify in an effort to reduce risk. And the management guidelines now limit the fund's investments to 5 percent of the capital of any given company (the limit was 3% before 2006). The fund's exposure in the companies in which it has invested now averages 0.3 percent.
3. Ethical issues are intertwined with the investments. Efforts must be made to avoid conflicts of interest and to make the fund's allocations internationally responsible. The fund should not invest in businesses involved in non-peaceful or environmentally bad practices.  
If these ethical standards were to be applied in Azerbaijan, some countries, businesses and particular companies would have to be stricken from the list of the investment options for SOFAZ.

The first item to consider is how much of the oil money to save, i.e. accrue in the Fund, and how much to consume, i.e. allocate for state budget expansion. This is not a *consume or invest?* question, however, because the elements of the state budget may also suggest investments in the future. Instead, it is a question of how much money from the current economy needs to be taken and saved in the Fund. This requires an analysis of where that money will provide the best long-term benefit for society.

## 4.2. Saving or Stabilisation

The traditional literature suggests that the budgets in oil-producing countries depend on the oil prices on the international market. The Oil Fund thus needs to include a stabilisation function, i.e. a way to bridge

2 Bjorn Taraldsen: 2007. Management of the Norwegian Government Pension Fund. Norwegian Central Bank. Norway.

3 Ulrich F.W. Ernst: Foiling the resource curse: Norway's Petroleum Fund.

budget deficiencies in recession years. This paper argues and takes as a basis for further analysis that (1) it is not the oil price but overall oil revenues that matter (the latter includes many other factors, including the amount of oil production) for the decisions between the budget and the Fund, and (2) it is not the budget but the overall income that depends on oil revenues; due to political processes and decisions, the budget is often linked to short-term oil revenues. The Fund could eliminate that link and allow the budget to rely on long-term and secure incomes.

Stabilisation should not protect the economy from fluctuations in oil prices but be negatively linked to the overall revenues. It should link budget transfers to the spending capacity of the government (i.e. how much of government expenditures reach beneficiaries, generate benefits and translate into sustainable development).

Yelena Kalyuzhnova focuses more on the stabilising role of oil funds, and thus provides analyses and recommendations on how to protect the economy from sharp changes in oil prices.<sup>4</sup>

She sees the role of an oil fund 'as formalising – or giving institutional focus to – a set of fiscal rules'. She also evaluates the effectiveness of the fund as deriving from this role, i.e. how it is reflected in the policy rules, and how market expectations buffer the economy from price shocks. She admits that 'history provides many illustrations, where stabilisation policies relating to commodities collapsed with the rapid exhaustion of finance'. She further argues that the stabilising approach should be pragmatic and that there is no universal set of management techniques to make that function optimal.

She also concludes that the fiscal policy of the oil-producing state must take into account the size of oil revenues in the economy.

John Wakeman-Linn, Paul Mathieu and Bert van Selm conclude that oil funds improve coordination between monetary and fiscal policy and that they function best when they can be separated from the state budget (and thus cannot be easily deployed by state agencies). The authors dismiss the necessity of a stabilisation function for oil funds, arguing that 'Shortfalls in state budget must be made up through changes/improvements in the state budget'.<sup>5</sup>

The standard macroeconomic literature suggests that real exchange rate appreciation will be accompanied by an increase in oil revenues. Generally, oil revenues increase the wealth of the overall country and consumers, which leads to an increase in the aggregate demand. The latter has several effects:

- exports go down for the reason that people consume more
- imports go up for the same reason
- exports go down again due to the negative effects of the oil money running into the domestic market; local productivity goes down for every tradable good except oil due to the decrease in the competitiveness of local production

Jeffrey Davis, Rolando Ossowski, James Daniel and Steven Barnett justify oil funds on political economy grounds: 'Such funds may help the government to resist spending pressures if there are constraints on borrowing. These may reflect explicit fiscal rules or may arise from political difficulties in issuing debt.'<sup>6</sup>

As for the stabilisation function, the authors justify it for the case when there is instability in fiscal revenue – this complicates fiscal management, budgetary planning, and the efficient use of public resources. Sharp cuts in expenditures can be disruptive and costly and increases in revenues can be a temptation to boost spending to unsustainable levels.

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4 Yelena Kalyuzhnova: *Overcoming the curse of hydrocarbon: goals and governance in the oil funds of Kazakhstan and Azerbaijan*, Comparative Economic Studies, December 1, 2006.

5 John Wakeman-Linn, Paul Mathieu and Bert van Selm: *Oil Funds in Transition Economies: Revenue Management*. Azerbaijan and Kazakhstan, October 16, 2002.

6 Jeffrey Davis, Rolando Ossowski, James Daniel, and Steven Barnett *Stabilization and Savings Funds for Nonrenewable Resources. Experience and Fiscal Policy Implications*, 2001 International Monetary Fund, April 13, 2001.

Large fluctuations in resource revenues may give rise to real exchange rate volatility, and increases in these revenues may lead to the 'Dutch disease.' There are also sometimes concerns that large revenue inflows may be misused or otherwise subject to poor governance.

However, while the stability of incomes from investments provides a sense of assuredness, it cannot serve as the sole criterion for an investment decision. The main criteria are the expected growth and the minimisation of risk.

In addition, the revenue from deploying nonrenewable resources represents a depletion of wealth that could be saved for the future generations. It is also not sustainable for the long-term, and in that respect it differs from other revenue types.

## 5. Conclusion

The efficiency gap in the management of oil money in Azerbaijan is enormous. Improvements need to be made in the oil money accumulation, saving and spending processes so that this short-term national resource can better serve the long-term development needs of the nation. The necessary changes include redefining and streamlining the Oil Fund in parallel with improvements in budgetary and public investment work.

Sustainable long-term development needs to be a major focus and the only criterion for the use of oil money, as with any public resource. The short-term availability of this resource, however, makes the issue more subtle and brings additional concerns. The need for sustainable long-term development makes the macroeconomic concerns a priority. This is to say that the nation's strategy for the use of oil money needs to focus on the long-term growth of GDP, fiscal stability and independence, and monetary concerns in order to avoid inflation, account for the capacity of the public sector and prevent the creation of an environment conducive to corruption. The strategy must clearly delineate the share and dynamics of national consumption, public investments, government expenditures and trade with other countries with the hydrocarbon resources deducted and oil money added to the national assets. A good strategy will measure and use the oil money not for separate consumption expenditures or investment projects, but in line with all public spending, while accumulating and saving that oil money separately.

Macroeconomic development strategies flow into the financial strategy of the Oil Fund as an institution that accumulates and saves money. Once the extent of the application of oil money (i.e. what exactly needs to be accumulated in the Fund) is determined to reflect the nation's the most pressing long-term interests, then strategies for portfolio investments, transfers to the state budget and public investment projects (if the strategy finds it appropriate) must be adopted and implemented.

The recommended improvements regarding the development of the institutional and legal framework will address and make the implementation of the proposed financial strategy for the Oil Fund possible. This will include the development of instructions, guidelines and standards for portfolio investments as well as the rules and standards for transfers from the Fund to the state budget and other domestic public and private uses. The recommended institutional and legal improvements are on the other hand based on the existing situation and current practices, and have political feasibility implications for the suggested changes, which are more extensively discussed in the analysis section of this paper.

A strategy is important for creating the rules for the effective management of the Fund. Having these strict rules is no less important for saving the nation's resources from short-term and populist programmes, as they are for stemming corruption. And the presence of clear efficiency criteria and strict rules along with civil society development facilitates transparency in the management of the Fund. Reciprocally, that transparency becomes a guarantee of the effective management of the Fund and the growth of society's wealth, and thus increases the sense of ownership and the level of civil society along with democracy.

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