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Revenues from National Resource Taxation – both a blessing and a curse

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Abstract

There are 31 oil producing countries in the world where fiscal oil revenues account more than 25 percent of total fiscal revenue.However, revenues from national resource taxation are not always a blessing. This paper therefore explains the Dutch disease and describes National resource funds, instruments to reduce the negative economic effects of the Dutch disease.

Introduction

Like all commodities, the prices of natural resources are prone to huge fluctuations as can be seen in the development of oil prices from 1960 until 2009

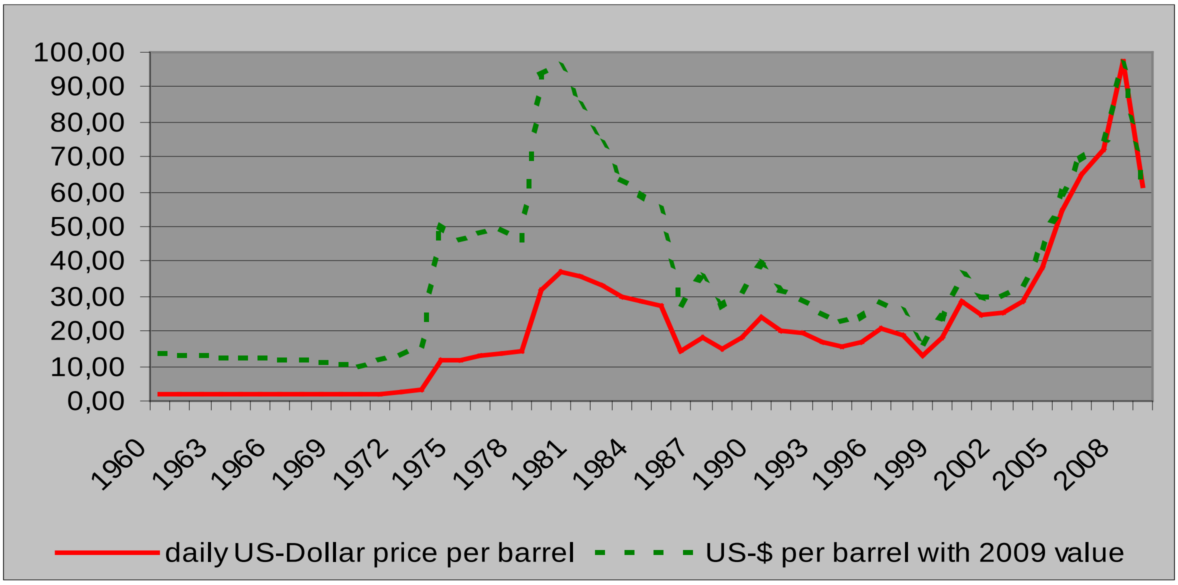

Figure 1: Development of oil prices in US dollars per barrel from 1960 until 2009,
Source: own illustration

Revenues from natural resource taxation are quite important in some counties because there are 31 oil and gas producing countries in the world where fiscal oil revenues account more than 25 percent of total fiscal revenue. These 31 countries are listed in the table below according to the indicator per capita GNI in US dollars during the period 2005-2008

Low income ($995 or less)	Lower-middle-income economies ($996 to $3,945)	Upper-middle-income economies ($3,946 to $12,195)	High-income economies ($12,196 or more)
Chad	Algeria	Gabon	Bahrain
Nigeria	Angola	Kazakhstan	Brunei
Vietnam	Azerbaijan	Libya	Equatorial Guinea
Yemen	Bolivia	Mexico	Kuwait
	Cameroon	Russia	Norway
	Congo	Venezuela	Oman
	Ecuador		Qatar
	Indonesia		Saudi Arabia
	Iran		Trinidad
	Sudan		United Arab Emirates
	Timor-Leste		

Table 1: Counties with huge oil revenues sorted by GNI income
Source: Villafuerte and Lopez Murphy, 2010

The Dutch disease

On the one hand, a country benefits from the exploration of natural resources because it receives money from foreign countries. On the other hand, this extra money will cause an increase in the exchange rate and destabilise the non oil producing industries. The term “The Dutch disease” was coined to describe the decline of the manufacturing sector in the Netherlands after the discovery of a large natural gas field in the North Sea in 1959.

The concept of the Dutch disease explains the connection between the increase in exploitation of natural resources and a decline in the manufacturing sector resulting from the fact that the increase in revenues from natural resources strengthens the nation's currency compared to that of other nations so that the nation's other exports become more expensive for other countries to buy and the manufacturing sector is consequently less competitive.[1] Apart from this reference to revenues from natural resources, some economists also use the idea of the Dutch disease to explain the effect when foreign aid flows into a small developing country or when the currency appreciates as a result of foreign direct investments.[2]

Furthermore, revenues from natural resources can lead to excessive borrowing and tax exporting, because a country with huge revenues from natural resources receives easy credit from financial markets. Politicians can also use the extra money from resource taxation to subsidise domestic cuts in personal income tax or corporate income tax. For this reason, a huge oil price fluctuation has a huge impact around the world.

Moreover, the revenues from natural resources can generate more corruption and disregard of education. With the extra money from abroad there is no incentive to „invest“ in the educational level of the population. Finally, natural resources can even provoke armed conflicts as was the case with diamonds in Sierra Leone and Angola or oil in South Sudan (Christian versus Moslem entities).

The so-called national resource funds which have been set up in various different forms and which were described in the following subchapter present one solution for preventing the negative impacts of the Dutch disease.

National resource funds

One way of preventing the Dutch disease are so-called national resource funds which have been set up in various different forms. These national resource funds include, for

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[1] The “classic paper” of the Dutch disease was written by Max Corden and Peter Neary in 1982. They show that when a country catches the Dutch disease, the traditional export sector gets crowded out. See Corden / Neary, 1982.

[2] However, some economists have even observed a positive effect for natural resources. For example, Graham Davids has analysed 43 mineral oil-producing developing countries for the period from 1970 until 1991 and has concluded that the effects of the exploitation of natural resources for the long-term development of resource-based developing countries are not widespread; see Davids, 1995. Alan Gelb (1988) and Richard Auty (1990), on the other hand, documented many of the development problems of natural resource dependent economies and the cross-country data of Xavier Sala-i-Martin (1997) as well as Gernot Doppelhofer et al. (2000) show that natural resources are among the most robust variables negatively affecting countries economic growth.

example, the Alaska Permanent Fund (APF), Government Pension Fund Global in Norway and the Stabilization Fund of the Russian Federation.

The Alaska Permanent Fund (APF) was established in 1976 after a referendum. Based on the result of this referendum, at least 25 percent of all mineral lease rentals, royalties, royalty sales proceeds, federal mineral revenue-sharing payments and bonuses received by the state have to be placed in a permanent fund, the principal of which may only be used for income-producing investments. Half of the annual net profits are distributed via a dividend directly to the people of Alaska. Each resident receives the same amount although citizens with a criminal record are excluded from the dividend.

The following figure highlights the people's dividend in US dollars from the APF from 1980 until 2009:

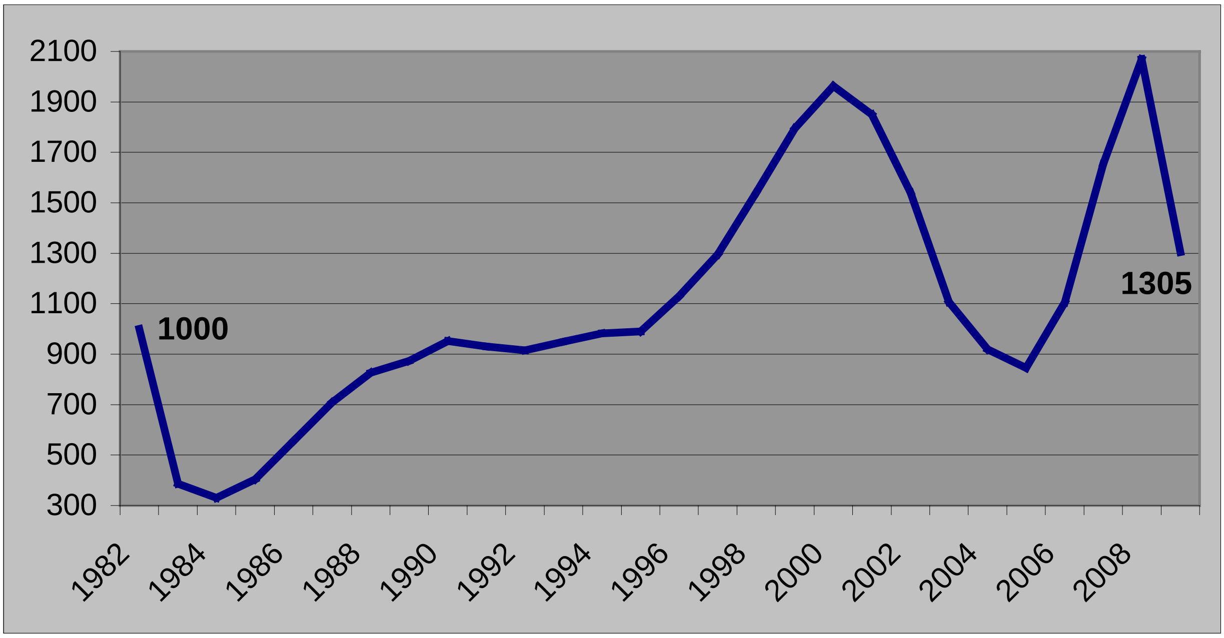

Figure 2: People's dividend from the APF from 1980 until 2009
Source: own illustration

A further national resource fund is the Government Pension Fund Global in Norway, formerly the Government Petroleum Fund. In 1990 the Norwegian Parliament passed a law to create the fund and in 1996 the Norwegian Ministry of Finance transferred the first amount of money. The Fund's inflow consists of all state petroleum revenues, net financial transactions related to petroleum activities, as well as the return on the Fund's investments. The Norwegian Ministry of Finance sets guidelines, including benchmark and risk limits, while the operational management is carried out by the Central Bank. The fund only invests abroad based on ethical guidelines (e.g. no investments in companies that produce tobacco or sell weapons) and does not hold more than 3 % stock share from one company. The fund had a volume of € 352 billion at the end of June 2010.

The Stabilization fund of the Russian Federation was established in 2004 in order to balance the federal budget when the oil price falls below a cut-off price, currently set at

$27 per barrel. The Fund accumulates revenues from the export duty for oil and the tax on the oil mining operations when the oil price exceeds the set cut-off price. The capital of the Fund may be used to cover the federal budget deficit and for other purposes, if its balance exceeds 500 billion rubles (€ 12 billion). Since 2005, the surplus of the fund has been used for early foreign debt repayments as well as to cover the Russian Pension Fund's deficit. The investment structure is 45 % US dollars, 45 % € and 10 % British pounds, mainly in debt securities of countries in the Euro zone as well as the United States of America.

In January 2008 the volume of the fund was around US $ 150 billion. It was then closed and in February 2008 two new funds were set up, the Reserve Fund (RF) and the National Wealth Fund (NWF). The objective of the RF is to ensure that the federal budget expenses are financed and the federal budget balance is maintained if oil and gas revenues decline. The RF can also be used for early state foreign debt repayment. Its level is limited to 10 percent of GDP. The objectives of the NWF are to co-finance voluntary pension savings of the Russian citizens and to maintain the budget balance of the Pension Fund of the Russian Federation. The NWF assets may not be used for any other purposes. As of December 1, 2011, the RF and NWF totaled US$ 25.60 billion and US$ 88.26 billion, respectively.

There are over 40 public-owned funds in the world, for example the State Oil Fund of Azerbaijan, the Future Generations Fund of the State in Kuwait, the Abu Dhabi Investment Authority (ADIA) or the Alberta Heritage Fund (AHF).

Conclusion

National resource funds are one solution for preventing the negative impacts of the so-called Dutch disease are. However, without a transparent "business policy" a national resource fund is a danger for the democracy. The appearance of oil revenues in a region which already wishes to separate from a country simply adds fuel to the fire. Institutional arrangements can reduce fiscal conflicts, e.g. through an intergovernmental forum. However, if the political stakeholders do not possess a common interest such as the continuance of a country and would prefer to see the secession of a region, even a well designed equalisation system would not able to prevent such a situation.[3]

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[3] The case of Bosnia and Herzegovina is quite unique (see Werner, Guihery and Djukic, 2006), because on the one hand the respective ethnic groups in this country use the distribution of tax revenues to heat up national tension, and on the other hand the international community is working to avert a separation through external political pressure as well as an internal control institution named OHR. In some countries like Spain, fiscal conflicts are the result of an unfulfilled wish for independence by the regions and if one erroneous trend in the intergovernmental system is rectified, the political leaders of the Autonomous Communities bring up another painful subject, instead of considering their huge autonomy and the successful development of Spanish democracy over the last decades. See Werner 2009 and Werner 2008.

Paul Bernd Spahn’s suggestion that “such conflicts are best avoided a priori through clear tax and revenue assignments rules” (see Spahn, 2007, page 51) is more than reasonable in order to reduce fiscal conflicts, especially in the area of natural resources.

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