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“HOW OIL REVENUES HAVE TRANSLATED INTO A SUSTAINABLE IMPROVEMENT IN SOCIAL WELFARE IN ALGERIA: 1998-2007”

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In the last few years, oil prices have reached historical levels, bringing windfall gains to producing countries. The results of this improvement are mixed: in some cases the increased revenue from oil production has translated into a general improvement in welfare and a reduction of poverty, whereas in other countries increased oil revenues have coincided with the worsening of social indicators.

The present paper aims to discuss the mechanisms which allow oil revenues to translate into a sustainable improvement in social welfare. In particular, it will focus on governments' capacity to participate in oil revenue and improve social welfare in a long-term perspective, with final policy recommendations to improve the effectiveness of such mechanisms. The Algerian case will be reviewed for a period of ten years from 1998 to 2007.

The rest of the paper is structured as follows:

- a) A brief description of the oil industry followed by some theoretical principles in managing oil revenues.*
- b) Government oil revenues and relation with the overall budget balance.*
- c) Government social expenditure: description of the evolution and main trends of government social expenditure, particularly health and education expenditures and other relevant poverty alleviation policies.*
- d) Social welfare indicators: description of the evolution of social welfare indicators that could be directly or indirectly related to oil revenues in the country and a conclusion will be offered.*

I. The Oil Industry

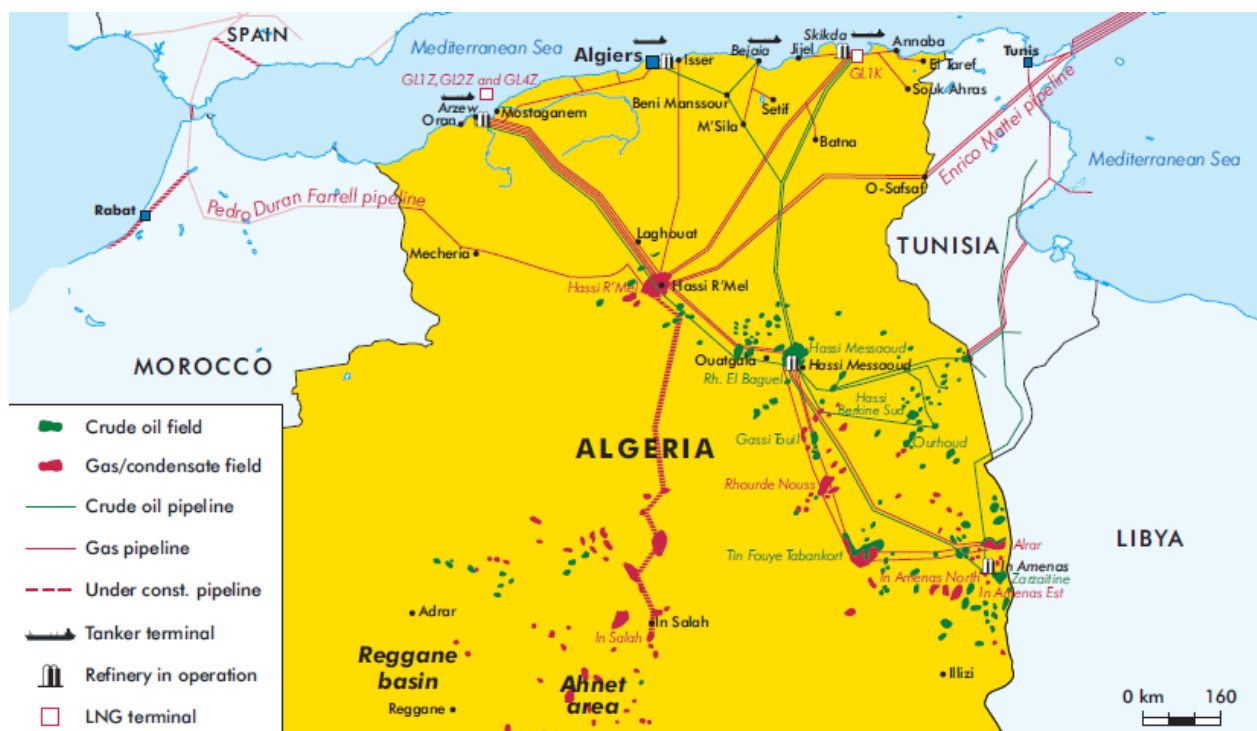
The predominant state-owned enterprise in the hydrocarbon sector is the largest Algerian enterprise in terms of employment, with a work force of 41,886 employees in 2007. SONATRACH's activities include petroleum exploration, oil and gas production and marketing, and pipeline transportation.

The **hydrocarbon sector dominates the Algerian economy**. In 2006, it accounted for **45.9 percent of GDP, 98 percent of exports of goods, and 77 percent of budgetary revenue**.

Because of the low labour intensity of production processes, the sector's share in employment is only about 3 percent.

On the external side hydrocarbons represent the main source of foreign exchange earnings accounting for about 95 percent of total merchandise exports.

Figure 1: Major Oil and Gas Fields and Energy Infrastructure in Algeria



II. Managing Oil Revenues – Some Theoretical Principles

The following section sets out some general principles for managing oil rents well, based on the experience of exporters over the last three decades as reported by A. Gelb¹.

Most of the essentials for managing oil revenues well are the same as those for good budget management in general, but some issues are more important for oil exporters.

¹ Benn Eifert, Alan Gelb and Nils Borje Tallroth, *The Political Economy of Fiscal Policy and Economic Management in Oil Exporting Countries*, World Bank Policy Research Working Paper 2899, October 2002

These include:

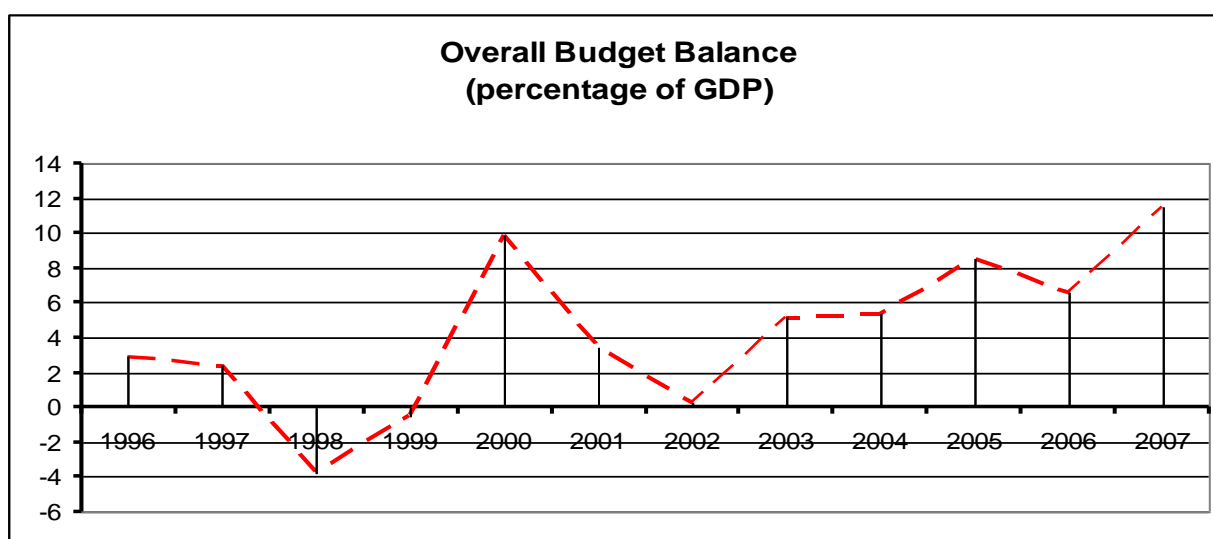
- ✚ **how much to save for future generations,**
- ✚ **how to deal with uncertain revenues,**
- ✚ and **how to ensure that spending is of high quality,** whether in the form of large investment projects, public consumption or subsidies.

These prescriptions are well enough in theory. But they often confront the reality of opaque, highly politicized fiscal systems that lack the checks and balances needed to ensure that resources are well employed and to provide the fiscal flexibility needed to adjust spending in line with changes in resources.

II. Government Oil Revenues

The recent increase in world hydrocarbon prices has transformed Algeria's fiscal situation:

- ✚ **The overall budget balance** went from a deficit of 4 percent of GDP in 1998 to a surplus of 12 percent in 2007.
- ✚ **The share of hydrocarbon revenue** in total budget increased from 60 percent in 1999 to nearly 78 percent in 2007.



This sizable surplus contributed to finance external debt amortisation and early retirement of domestic debt, and resulted in the accumulation of large cash balances (about 8 percent of GDP) on the treasury account at the central bank.

Since its creation in 2000, windfall proceeds have been housed in a **Hydrocarbon Stabilization Fund** (*Fonds de Régulation des Recettes*, known as **FRR**) for two purposes:

- ✚ (i) to make advanced **payments on external debt principal**;

- ✚ and (ii) to **finance any fiscal deficit** arising from an oil price that falls below the budget law reference price.

III. Government Social Expenditure

Algeria is continuing to make **progress on a number of social indicators** in the last ten years.

- ✚ According to the latest estimates, **the overall poverty threshold fell** from 14.1% in 1995 to 12.1% in 2000 and to 6.8% in 2004 (from 4 million to 2.2 million persons) as a result of the introduction of a national social development strategy and an increase in public spending, in particular social transfers.

- ✚ **Life expectancy increased** from 56 in the early 1970s to 71 in 2002, while the number of children dying before their first birthday decreased from 120 to 39 (per 1 000 live births).

- ✚ **Educational improvements** resulted in a decrease in illiteracy from 36% to 22% for men from 1990 to 2002, and from 59% to 40% for women.

- ✚ **But chronic problems are spreading** and becoming acute such as **high unemployment levels** which were estimated at 12.3% in 2006 after having reach 27% in 2001. The young and women are particularly hit by this phenomenon. Youth unemployment was at 24.3% in 2006.

- ✚ **The recurrent water shortages** affecting many towns and the acute housing shortage constitute some major factors of social discontent. The large majority of the population is particularly very anxious to see not only economic growth and employment, but also an improvement in basic services...

IV. Implications for Social Welfare Indicators

The presence of a large natural resource sector has been an important element in shaping the structure and management of the Algerian economy.

Links between macroeconomic aggregates, on the one hand, and international oil prices, on the other hand, have operated through a number of channels. With respect to the impact on growth, oil price variations have affected both demand and supply.

Through the budget's dependence on revenue from the oil sector, fluctuations in oil prices had important direct implications for public expenditure management. Favourable oil prices were often partly seen as signalling permanent increases in income, and contributed to higher levels of public expenditure that were difficult to reduce once the boom had proven only temporary.

The recent economic growth can be broadly classified into three distinct periods:

- ✚ **A recession, 1990–95**, featuring negative GDP per capita rates.

- ✚ **Recovery, 1996–2000**, with positive, but modest GDP growth averaging 3.1 percent.

- ✚ **A growth acceleration period, 2001–05, with high growth rates mainly associated with the oil price boom.** In this period, the Algerian economy took off. Growth rates averaged 5 percent. Average inflation rates remained below 3 percent. The oil windfall helped other sectors reach high growth rates—construction, telecommunication, and other services. As a result, GDP per capita was above 3 percent, which should have contributed to lower poverty rates.

It should be stressed, GDP growth rates remain closely linked to those of the hydrocarbon sector, but agriculture is the most volatile sector. Severe droughts explain the significant fall in agricultural outputs in 1997, 2000 and 2006.



Despite these drops, growth acceleration in the 2000s was stimulated by the 2001-2004 PSRE (*"Programme of Support for Economic Revival"*) and the 2005-09 PCSC (*Programme Complémentaire de Soutien à la Croissance*). Initially estimated at \$60 billion, the PCSC plan has been reevaluated at over \$140 billion, a substantial amount for a country like Algeria. Both plans with the aim of promoting growth have started to contribute progressively to a reduction in the unemployment and poverty rates.

Compared with the previous decade, the overall social environment has greatly improved. The state's substantial revenue has enabled it to reassume a role of redistribution. The social categories receiving government assistance are relatively better targeted than during the controlled-economy epoch, when the policy of low prices was synonymous with rationing and, hence, with inequality. Government social action represented between 5.5 per cent and 7.7 per cent of GDP from 1999 to 2005.

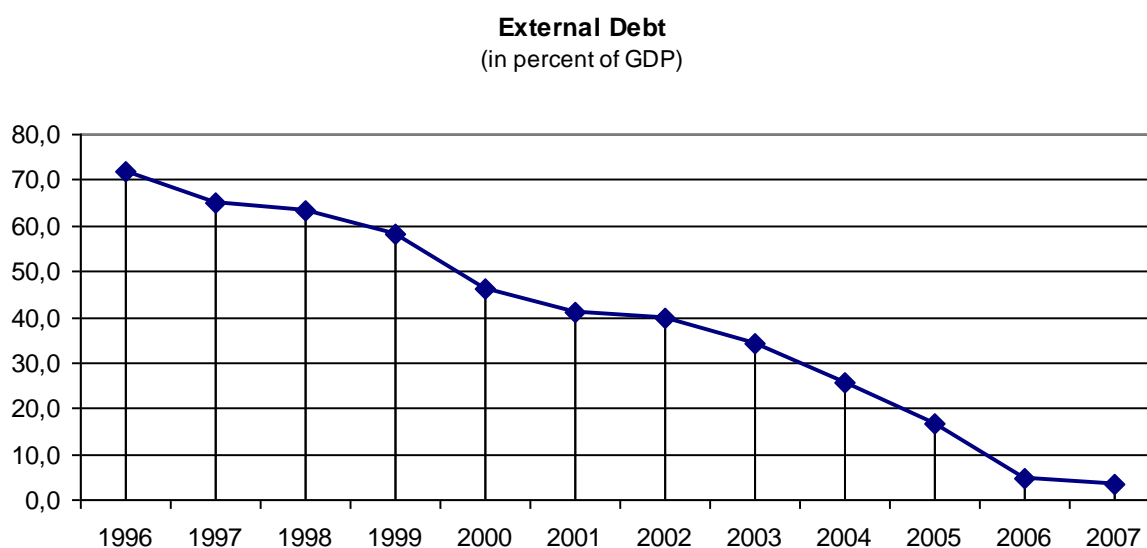
Concluding Remarks

Algeria is the world's third-largest exporter of natural gas and the world's tenth-largest oil exporter. The policy implemented since the beginning of the 90's has been a commitment to sound management of hydrocarbon revenues through prudent macroeconomic policies, a liberal trade regime, and structural reforms aimed at economic diversification. Efforts are starting to bear fruit, but more needs to be done to reduce the economy's dependence on hydrocarbons and to create jobs for the young labor force.

Hydrocarbon wealth has allowed the government to:

(1) launch a massive public investment program for 2005–09 (US\$155 billion) to improve infrastructure, housing, and the delivery of public services;

(2) **reduce external public debt** to 3.5 percent of GDP in 2007 from more than 70 percent in 1996. Nevertheless, official reserves now exceed US\$100 billion, and about half of hydrocarbon budget revenues have been saved in a hydrocarbon stabilization fund (FRR) that was established in 2000.



Perhaps the most important challenge facing any oil-producing countries is how best to manage their oil wealth taking into account its exhaustible character and with due attention to intergenerational equity, given their dependency on a depleting natural resource.

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