

Crude Oil Extraction Fees in Serbia: No Adequate National Policy So Far

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At a time when most nations are seriously tackling the issues of mineral resources exploitation and increasing energy efficiency, these problems have yet to become priorities in Serbia. Preparation for the upcoming privatization NIS, the national oil company, has raised numerous questions; nonetheless, the fate of domestic crude oil sources has attracted the least attention. Under the existing legislation, a company extracting crude oil pays a royalty of 3% of its total revenue, far lower than in other countries. And, low as they are, the royalties are not even being paid, which constitutes direct subsidizing of NIS. The situation is similar with regard to other mineral resources. The state, therefore, must regulate this field before the privatization commences. If the current legislation is retained, the subsidies to NIS would continued even after its privatization.

1. Introduction

a) From \$10 per barrel of crude oil in 1999 to over \$70 per barrel in mid-2006.

The surge in oil prices on the global market over the past several years,^{a)} accompanied by dwindling reserves, has led to a number of countries increasing the royalties for use of this natural resource. Governments of countries with large crude oil and gas reserves have seen an opportunity to increase their revenue.¹ The growing “oil taxes” had a mixed reception in the public. While some describe such moves as only normal, others emphasize that it is a bad signal to international investors, as these governments (mainly in Latin America) initially invited major companies to invest substantial sums in the oil business, only to later change their policies and impose high taxes.^{b)}

b) See, for example, “Tax That Fellow Behind The Drill,” *Forbes*, 12/12/2005.

2. Serbia’s national resources management policy

As far as regulations governing the use of national resources in Serbia are concerned, the country is still at an early stage compared to other transitional countries. The problem of collecting royalties/fees for the use of domestic resources has not been adequately solved. In the socialist era, the issue was not even raised. The mid-90s saw the passage of a Mining Act^{c)} that was supposed to regulate this field as well, but it failed to specify the royalties for using mineral resources. A government decree fixing the amount was only passed in mid-2002.^{d)} However, the expected results failed to materialize, primarily because of two factors:

c) *Official Gazette of the Republic of Serbia*, No. 44/95.

d) *Official Gazette of the Republic of Serbia*, No. 28/02.

1. The ancillary legislation that was supposed to regulate how the royalties/fees were to be collected was not passed, and, since the collection procedure was not clear, it was consequently not implemented;

2. The price of resources was not specified, resulting in companies (that both extracted and processed mineral raw materials) using internal clearing prices well below global levels.

e) *Official Gazette of the Republic of Serbia*, No. 34/06.

f) *Official Gazette of the Republic of Serbia*, No. 102/06.

The latest amendments to the Mining Act^{e)} and Regulations on Payment of Royalties for the Use of Mineral Resources^{f)} have only partly remedied these shortcomings. The Act stipulates that companies exploiting national resources in Serbia should pay a royalty from 1% to 5% (depending on the resource) of the value of the mineral resource extracted. The royalty for a

1 Governments actively charging crude oil extraction fees have seen fee revenues rise 53% in 2005 over 2004 levels. Source: *The 2006 Global Upstream Performance Review*, John S. Herold, Inc. & Harrison Lovegrove & Co. Ltd.

company extracting crude oil and gas in Serbia is 3% of the its revenue. This definition – taking as it does revenue, rather than the value of the extracted crude oil as the basis for the royalty – has made it possible for NIS to pay a lower amount. The legislation does not adequately define the method used for calculating the reference price to be utilized in determining the value of the raw material. In addition, the royalty has so far not been paid, meaning that the state has directly been subsidizing NIS. As privatization draws closer, a question begs itself: will the buyer of NIS get Serbia’s oil as a present?

3. Crude oil extraction fees around the world

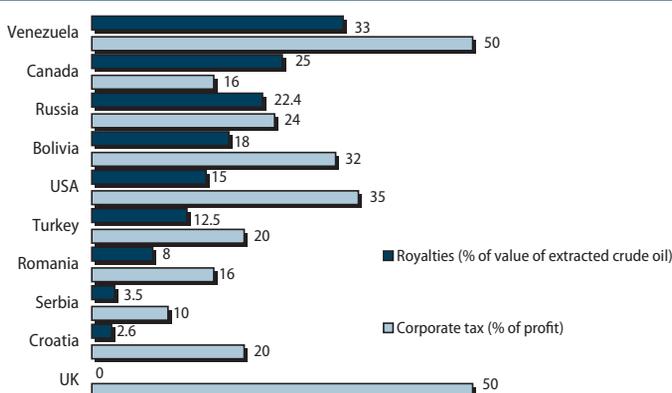
Many, often diverging, views on Serbia’s crude oil reserves have been advanced. Without even going into the matter of the size of the reserves, and leaving aside for a moment the procedure of granting concessions for exploiting Serbia’s mineral wealth,² the fact remains that there are reserves of crude oil, that they are not insignificant, and that they should therefore not be simply given away. Further proof of this are the facts that *crude oil is a rare and non-renewable resource*, that *prices have substantially risen over the past several years*, with a tendency of further growth, and that *Serbia’s economy is dependent, to a large degree, on this energy resource*.

The royalty that a company pays for exploiting crude oil and gas in Serbia is far lower than that paid by the major world corporations in developed market economies (Graph L2-1). For example, a company extracting crude oil in the United Kingdom pays corporate income tax at a rate of 50% on revenue obtained by selling the oil.^{g)} The situation is similar in the US and Canada. The amount of the “oil tax” in the US depends on *who* owns the land (whether it is the state or a private owner), the company’s *revenue*, as well as the *location* of the oilfield. Of 100 revenue units obtained by selling crude oil in the US, the state takes about 50 in various taxes.^{h)} In Canada, similar to the US, each province sets the amount of the crude oil extraction fee, which depends on the age of the deposit, production volume, and price in the global market.³ The state collects on average from 15% to 50% of the value of crude oil extracted, while the company (or part of company) engaged in the exploitation pays another 16% in corporate income tax to the state.

g) Wood Mackenzie, UK Upstream Service, Country Overview, May 2006.

h) Wood Mackenzie, US Upstream Service, Region Overview, May 2006.

Graph L2-1. World: Crude oil royalties in 2006



Source: Wood Mackenzie, Ministry of Finance of selected countries

Notes:

1. US corporate tax of 35% applies to revenue exceeding \$100,000.
2. In the UK, an income tax of 75% is payable for exploitation of crude oil sources developed before 1993. As crude oil extraction profits reach up to 80%, the state collects from 40% and 60% of the value of the extracted oil from the company.
3. In Turkey, Romania, Serbia and Croatia, the whole economy pays corporate profit tax.

different taxes on crude oil and gas extraction and replaced them with a single levy.⁴ Collection was simplified, with taxable income now defined as the quantity of oil extracted multiplied by

2 According to EBRD’s 2006 Transition Report, Serbia has made considerable progress as far as legislation governing concessions is concerned, but implementation remains a weak point.

3 Alberta Department of Energy, *Oil and Gas Fiscal Regimes*, Electricity & Gas Division, November 2003.

4 Viktor Subbotin (2004), “Tax Reform in the Oil Sector of Russia – A Positive Assessment,” Economic Expert Group, Higher School of Economics.

Until recently, Russia too confronted the problem of (non-) payment of royalties for using mineral resources. Its tax system was too complicated to ensure proper collection of taxes on the vast profits of oil companies, which at the same time extracted, processed, and sold oil. In addition, the price used in calculating the value of domestic oil was far below the global level. A reform of the tax system carried out in 2002 abolished the three

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the oil price on the global market. The results were easy to see:

- The profit tax rate was reduced from 35% to 24%;
- Crude oil use fees now stand at about 22.4%;⁵
- The amount of taxes collected rose by 27% in year one compared to the period before the tax reform, although prices in the global market had increased by only 3%.

The potential losses from pursuing faulty national resource management policies can be seen in Romania's example. The law prescribes that a company extracting crude oil in Romania must pay a royalty ranging from 3.5% to 13.5% of the value of its crude oil production, with the amount depending on production volume. The company must also pay corporate tax at a rate of 16%, from which it is exempted in its first year of operation.ⁱ⁾ Additionally, the system of collecting mineral resource exploitation royalties was inefficient, with resource prices not defined adequately. Romania privatized its national oil company, Petrom, in 2004 (it was bought by Austria's OMV). In the course of 2005 and 2006, the price of crude oil on the global market rocketed from \$36 to as much as \$72 per barrel. Following these price hikes, Petrom's revenue from crude oil exploitation in 2005 rose nearly fivefold when compared to 2004, and amounted to about €610 million, even though crude oil production fell by 4.5% in 2005. In the first half of 2006, crude oil extraction revenue reached about €300 million.^{j)} The exploitation of Romania's crude oil has, therefore, brought OMV enormous excess revenue only from price hikes on the global market (its profit is five to six times higher than in 2004), and it quickly recouped the money for purchasing Petrom. The state received only a small part of the excess revenue; it was left both frustrated and powerless. Finally, the whole privatization of Petrom was declared suspect and an inquiry was launched into the deal.

i) Romanian National Agency for Mineral Resources, 2006.

j) Annual Report 2005 and Results for January-March 2006, www.petrom.ro

4. Profits from crude oil extraction around the world

Rising crude oil prices on the global market over the past ten years or so, due to smaller reserves and growing demand (and, in some years, even falling supply) far outstripped production costs (Table L2-2). While production costs grew at a constant but gradual rate, crude oil prices were very volatile during the entire period, in dependence on supply and demand. The high oil prices over the last four years have made it possible for oil companies to achieve very high profits. The impression is, however, that oil extraction fees have, to a large extent, followed the price rises, i.e. that governments have also endeavored to profit as much as possible from the unprecedented price rise. A typical example is Russia, which has managed to achieve a substantial balance of payments surplus thanks to rising crude oil and gas prices. In addition, some countries later nationalized oil extraction companies^{k)} (such as Russia),⁶ or completely changed their policy towards foreign oil companies (Bolivia and Venezuela).⁷

k) Most OPEC members did so as early as the 1970s.

Table L2-2. World: Average crude oil prices and extraction costs, 1995–2006

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006
	US\$/t											
Average world price	126.1	151.2	141.6	95.2	132.9	208.0	178.5	183.2	211.4	277.7	364.5	440.9
Average extraction costs	38.3	39.0	39.6	40.1	40.6	41.5	42.5	43.2	44.0	44.9	45.8	46.7

Source: World bank and Energy Information Administration (EIA).

A partial analysis of extraction costs, exploitation fees, and crude oil prices in a number countries leads to the conclusion that only some of them actually increased exploitation fees. Based on these findings, all countries can be divided into three groups: a) countries with initially high

⁵ Companies pay an additional export levy at a rate of 16.67%. In other words, the price of oil derivatives in Russia is below the European level, as the state allows domestic crude oil sales at prices below the global level.

⁶ Viktor Subbotin (2004), "Tax Reform in the Oil Sector of Russia – A Positive Assessment," Economic Expert Group, Higher School of Economics.

⁷ Jim Bentein, "Latin American Swing to the Left," *Nickle's Profiler*, Nickle's Energy Group, June 2006.

crude oil exploitation fees (the US, UK, and Saudi Arabia); b) countries where fees were initially low, but have risen in the meantime (Bolivia, Venezuela, and Russia); and c) countries where fees are still low and/or not collected (Serbia, Romania, Nigeria, and Croatia).

Table L2-3. World: Crude oil extraction costs, 1995–2004

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
	US\$/t									
Iran	5.7	5.9	6.0	6.0	6.1	6.2	6.4	6.5	6.6	6.7
Iraq	5.8	5.9	6.0	6.1	6.2	6.3	6.5	6.6	6.7	6.8
Saudi Arabia	5.7	5.8	5.9	6.0	6.1	6.2	6.4	6.5	6.6	6.7
Kuwait	11.3	11.5	11.7	11.9	12.0	12.3	12.6	12.8	13.0	13.3
Libya	31.6	32.2	32.7	33.1	33.6	34.3	35.1	35.7	36.4	37.1
Nigeria	30.8	31.4	31.9	32.3	32.7	33.5	34.3	34.8	35.5	36.2
Mexico	29.0	29.6	30.1	30.4	30.8	31.5	32.3	32.8	33.4	34.1
Bolivia	104.8	106.7	108.5	109.7	111.3	113.7	116.5	118.4	120.5	123.1
Venezuela	28.7	29.3	29.8	30.1	30.5	31.2	31.9	32.5	33.1	33.7
Indonesia	49.9	50.8	51.6	52.2	53.0	54.1	55.4	56.3	57.4	58.6
USA	73.1	74.5	75.7	76.5	77.6	79.3	81.3	82.6	84.1	85.9
Canada	106.4	108.4	110.2	111.4	113.1	115.5	118.3	120.3	122.5	125.0
Russian Federation	40.5	41.2	41.9	42.4	43.0	43.9	45.0	45.7	46.6	47.5
Ukraine	21.9	22.3	22.7	22.9	23.2	23.8	24.3	24.7	25.2	25.7
UK	125.4	127.8	129.9	131.4	133.3	136.2	139.5	141.8	144.4	147.4
Europe, average	38.2	38.9	39.6	40.0	40.6	41.5	42.5	43.2	44.0	44.9

Source: World Bank.

Note: The wide variations in extraction costs result from a combination of factors: a) natural causes (assets needed to research and develop new drilling sites, the depth oil is extracted from, whether the sites contain gas or pumps have to be used, the size of the deposits in a site, etc); b) technology (some sites have long since been amortized, while others were opened relatively recently, and the investment has yet to be amortized); c) labor prices; d) exchange rate of the domestic currency against the US dollar (some currencies are underappreciated, so costs expressed in dollars are very low, e.g. in Iraq); e) crude oil density and quality (due to differences in density, a ton of crude oil may contain from 6 to 8 barrels, which is why the price in dollars per ton is not a good indicator for comparison, and price per barrel is used instead).

Therefore, as oil becomes ever scarcer, and its price continuously rises, governments approach the issue ever more seriously, understanding the need for managing this resource as rationally as possible. In addition to current policies calling for enhancing energy efficiency of both the economy and households, as well as attempts to switch to other (renewable) energy sources, serious resources management also involves payment of adequate fees for their use. Little or no account is taken of this in Serbia as yet. The country is at the bottom of the European ladder when it comes to energy efficiency,¹⁾ while natural resources management policy is still sidelined.

1) National Energy Efficiency Program, Government of the Republic of Serbia, Ministry of Mining and Energy.

5. Conclusion

Serbia faces the privatization of its national oil company and a raft of unresolved problems: NIS enjoys a monopoly on the domestic market,⁸ and pays a crude oil extraction fee of only 3% of the oil's value; the price used to calculate the value is lower than that prevailing on the global market, etc. Bearing in mind the above, as well as the fact that the situation is no better with Serbia's other natural resources (water, gas, non-metallic minerals, etc), the impression is that the state is prone to overspending, wasting, and even giving away its natural resources.

It should be stressed at this point that the Ministry of Mining and Energy made a major step forward by adopting the Regulations on Payment of Royalties for the Use of Mineral Resources; unfortunately, it did not have the capacity (and the political will was lacking) to solve the remaining problems. Furthermore, there is no agreement worldwide on the best method of collecting fees for the use of mineral resources.⁹ On the one hand, the government wishes to attract foreign investments by reducing corporate profit taxes and other forms of taxation (at

8 An initiative was launched in October 2006 to introduce customs duties on the import of oil products, and thereby wind down the monopoly by 2012; the necessary legislation has, however, yet to be enacted.

9 James M. Otto, "Mining Taxation in Developing Countries", UNCTAD, November 2000; J. Otto et al, *Global Mining Taxation Comparative Study* (2nd edition), Colorado School of Mines, 2000.

m) James M. Otto et al, *Mining Royalties: A Global Study of Their Impact on Investors, Government, and Civil Society*, Chapter 5, *The World Bank*, 2006.

10%, Serbia's profit tax rate is one of the lowest in Europe); on the other hand, there is less and less oil and gas in the world. Oil and gas prices are certainly set to rise, and a rational government would not want to renounce the substantial benefits of controlling these resources.^{m)} Profits from extracting coal and other mineral resources are far smaller; one could agree that fees for using them could be lower. However, profits from crude oil and gas sales are enormous, so fees for their exploitation would have to be higher. The price of these resources on the global market should, therefore, serve as a benchmark for setting the extraction fee.

The conclusions are clear. Changing the legislation after NIS is privatized would send the wrong message to foreign investors.¹⁰ On the other hand, if the existing legislation is retained and the negligible crude oil extraction fee is retained, the state would practically give away about €50 million to whoever buys NIS. An enticing offer, isn't it?

Box 1. Crude Oil Extraction Profits in Serbia

According to NIS data, about 700,000 tons, or some 5.2 million barrels of oil, have been extracted in Serbia each year for the past several years (one ton of domestic oil equals 7.418 barrels). This is about one-fifth of Serbia's annual oil consumption. The average price of Ural crude, taken as the reference price since this oil is closest in quality to Serbia's, was \$61 per barrel in 2006 (or about \$452.5 per ton of crude oil); although the price fell in late 2006, by February 2007 it had again come close to \$60 per barrel. On the other hand, no information could be obtained about the costs of crude oil extraction in Serbia. Still, if it is taken into account that most (maybe even all) of Serbia's oil drills have been amortized, and that the average cost of extracting a ton of crude oil in Europe is about \$45, it may be assumed that Serbian costs at least come close to this level. A rough calculation brings out that NIS could make over €200 million each year only from selling crude oil (without factoring in transport costs). According to an estimate by *Oil & Gas Journal*, the world's leading magazine covering the global oil and gas market, Serbia (including Montenegro) has reserves of about 78 million tons of crude oil.¹ Thus (and this is again a rough estimate), Serbia controls oil worth several tens of billions of euros.

Crude oil extraction royalties/fees are currently not being paid in Serbia. Taking into account current domestic crude oil production, and a possible fee reasonable for our circumstances of, say, 10% to 15%, after NIS is privatized, the state would lose between €30 and €50 million each year in uncollected royalties for the use of domestic crude oil sources. At the current fee level of 3%, the state has, merely by tolerating non-payment of fees for the past two years, subsidized NIS with about €20 million (2005 and 2006 totals).²

1 PennWell Corporation, "Special report: Oil production, reserves increase slightly in 2006", *Oil & Gas Journal*, Vol. 104.47, December 18, 2006.

2 For more information about this, see Udovički, K, Radosavljević, G, and Djoković, V, "Performance of the Serbian Oil Company (NIS): How Wide is the Gap Between the Actual and the Possible?", *Quarterly Monitor* 3, October – December 2005.

10 A potential lawyer of the Bor Mining and Smelting Plant in Eastern Serbia never requested as a condition for their participation, that existing legislation (the portion of the Mining Act governing the fee for the use of mineral resources) not be changed in the future. Source: B92, Beta, "Kuprom izneo dodatne uslove za RTB," ["Kuprom sets additional conditions for the Bor Mining and Smelting Plant"] 9 January 2007.

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