

**Modernization or Conservation: The Role of Export Duty  
on Crude Oil and Petroleum Products<sup>2</sup>**

**1. Grounds**

Since natural resources constitute a quite specific factor of production, primarily characterized by significant uncertainty in productivity, monopolistic state ownership and exhaustibility, natural resource pricing differs substantially from the determination of capital or labor prices. It is customary to associate a large part of the profit derived from goods produced from national natural resources (the prices for which are determined by considerable fluctuations of the prices on external markets) with the cost of the specific ‘factor’ of production — the national mineral resources — rather than with the rents accruing to other factors of production or with the profits of the manufacturer. Thus, the major part of such “excessive profit” received solely due to the price fluctuations will go to the owner of this ‘special factor’, i.e. to the state. The respective part of the profit may be called a tax or a duty of some kind but in reality it is the ‘factor’ payment.

However one must distinguish such factor payments from taxes levied on income from capital or labor used in the course of production and taxes on economic activities. The state, in cases where it owns the natural resources, acts both as an owner and a tax collector. The amounts of these two payments should be coordinated in order not to levy excessive or insufficient taxes on the oil and gas sector. In other words, the state should take into account that the sum of factor payments and taxes will determine the ability of an investor to make a profit from investments in this sector of the economy.

In the Russian economy factor payment for using Russian subsoil for oil extraction is represented by two components: mineral extraction tax (MET) and export duty on crude oil and petroleum products. However, while MET generally has the nature of a ‘factor payment’ used to extract resource rent, the export duty, despite the fact that, like MET, it is connected with fluctuations of world oil prices, cannot be considered to the fullest extent as a mechanism for extracting resource rent because it constitutes selective taxation of foreign consumers. Due to the application of export duty the domestic and external prices differ by its amount (less the cost of transportation to the foreign market) and this results in equal profitability for a supplier of a ton of crude oil to the internal market and to the foreign market.

As a result of the application of export duty in the Russian economy, any additional profit that would have accrued to the domestic market supplier had the domestic prices been the same as world prices (less the cost of transportation) does not accrue either to the supplier or to the state but

---

<sup>1</sup> Georgy Idrisov – Head of Industrial Organization and Infrastructure Economics Department, Gaidar Institute for Economic Policy. Sergey Sinelnikov-Murylev – Rector of the Russian Foreign Trade Academy.

<sup>2</sup> The original version of this paper was published in “*Ekonomicheskaya politika*”. Moscow, 2012, № 3

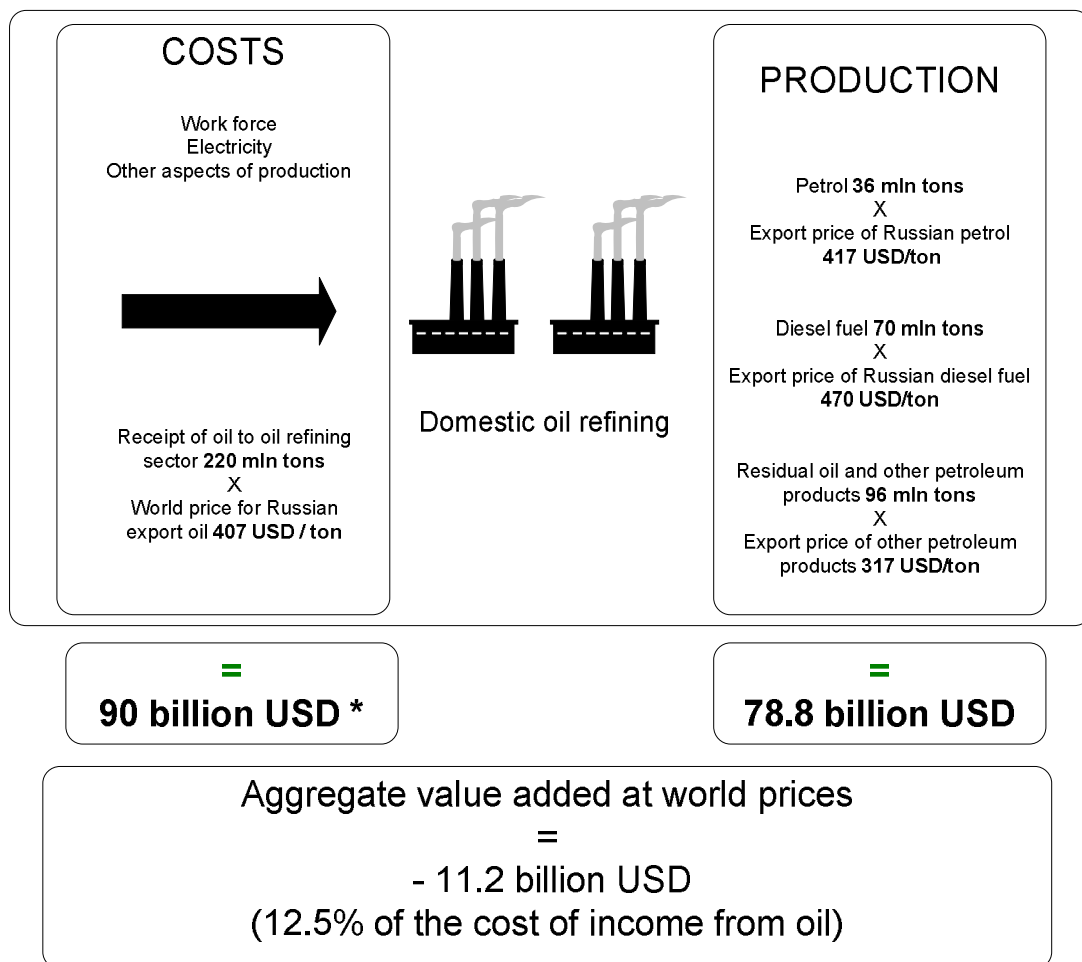
instead, through the reduced prices for the end products, goes immediately and directly, to the Russian consumers who, in the end, are the owners of the natural resources.

The (social) benefit of subsidizing Russian consumers of energy resources in the form of reduced prices is highly questionable [or “raises serious doubts”] since low prices for energy resources prevent their efficient use, hampering the process of modernization of the economy. The often stated rationale behind this approach is that cheap resources allow for the production of cheap products which are therefore competitive on the world market. This statement is actually true but only in the case where the manufacturers consuming the cheap resources use the subsidy to maintain low prices for their manufactured goods rather than for covering up their own inefficiency and/or making excessive profits. In other words, only in some cases does the price subsidy for inputs that reduces costs compared to their long-term marginal can result in lower product prices, i.e., can achieve the intended purpose.

In general, the funding mechanism in question, works quite poorly from the point of view of economic efficiency because, in practice the major part of the subsidies flows only into certain industries. In the first place this is the oil refining industry, which is an intermediate between the crude oil and the end consumer. Considering world prices, the domestic oil refining industry has been creating negative value-added for over 20 years<sup>3</sup>. So if we assess the oil used, and the petroleum products produced, against world prices, the industry performance indicators will be different. In particular, this means that if we do not refine oil but sell it for export we may end up buying more petroleum products on the external market than are produced by the domestic oil refining sector. This statement is illustrated in figure 1.

---

<sup>3</sup> The first assessments were made by Yegor Gaidar in 1988



\* The assessment from below without including Labor Payment Fund costs and other costs of the industry

**Fig 1. Illustration of the negative value added in the domestic oil refining sector at world prices (2009 prices)**

The average processing depth of Russian refineries is 71% (this figure has not increased for the last 10 years) while the technological processing depth in developed countries is 90-95%. As a result, by holding oil prices at a level which is substantially lower than world prices (about 1.7% of GDP, see below for details), about one half of all the subsidies applied to the economy remains in the oil refining sector — covering its inefficiency.

Thus, modernization and structural reconstruction of the Russian economy in the medium — and long-term perspective are closely related to the cancellation of export duty so this means providing subsidies to local consumers of raw materials and energy resources at the expense of rent from the use of natural resources — which in fact belong to society (the state).

This paper is devoted to an analysis of the consequences of cancellation of the export duty on crude oil and petroleum products as a necessary step to creating incentives for increasing the energy efficiency of the Russian economy and eliminating underdevelopment caused by the unprecedented long-term subsidy of the inefficient Russian oil refining sector. We shall consider three possible courses of events as a result of the cancellation of export duty on crude oil and petroleum products,

each of which suggests the unchanged level of tax proceeds to the budget, in addition to the elimination of the considerable price distortions in the internal market.

## 2. Current situation

The mechanism of levying and distribution of resource rent as currently applied in Russia does not provide incentives for modernization, energy efficiency or environmental protection. This is determined, firstly, as resource rent is obtained from external markets through export duties, secondly, as the low prices for energy resources mean that the savings on resource rent for the internal market are shared directly (without going to the state budget) between the producers and consumers of crude oil and petroleum products and, thirdly, because, until recently, the higher export duties on light petroleum products (compared with those on heavy petroleum products) have been creating a negative incentive to modernization of the oil refining sector<sup>4</sup>. In general, the cancellation of export duties is an inevitable measure for eliminating underdevelopment of the oil refining sector and increasing energy efficiency within the economy. Modernization requires a set of economic reforms implying:

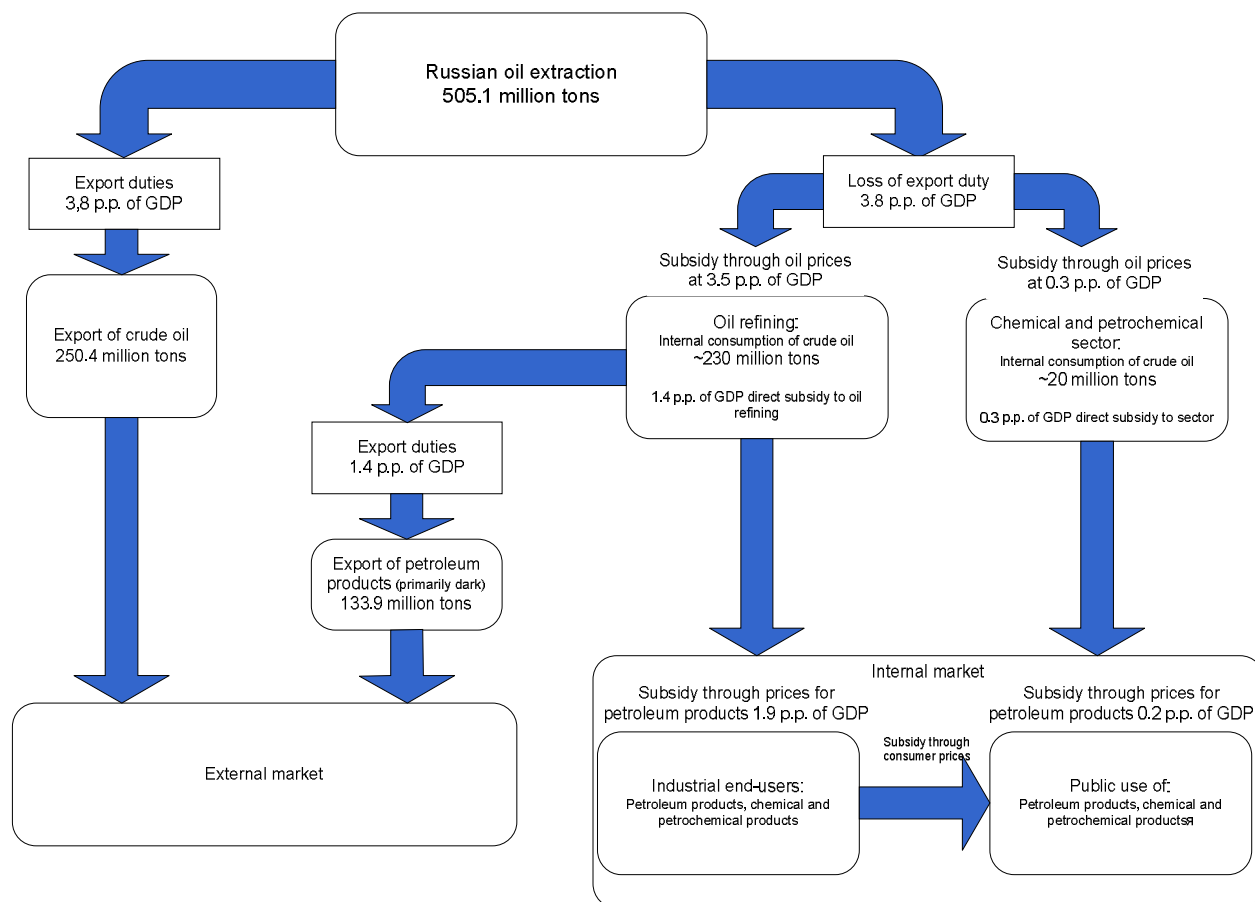
- (a) equalization of the internal and world prices for energy resources through the step-by-step cancellation of export duty on crude oil and petroleum products;
- (b) institutional transformations aimed at encouraging competition and the creation of a system of price incentives for high-quality modernization of the economy, rational use of resources and the reduction of negative environmental impacts.

When assessing the consequences of cancellation of the export duty on crude oil and oil products it is necessary to take into account several important facts. The first of these is that only two sectors of the national economy are directly subsidized as a result of reduced internal prices for oil. These are, primarily, the oil refining sector and, secondarily, the chemical and petrochemical industry. At the same time the domestic oil extraction and refining sectors are dominated by vertically integrated oil companies (VIOC) which account for 90% of oil extraction and 85% of the production of refined petroleum products. In view of the above, especially taking into account transfer pricing inside a VIOC, in an analysis of the consequences of the possible reduction of export duties it is feasible to discuss, mainly, the effectiveness of oil refining and the expediency of the low internal prices for petroleum products. The second factor is that tax-free prices for petrol and other oil products in Russia are only at about 60% of the tax-free prices for petrol of comparable quality in Europe. In the Russian wholesale sector quite a substantial margin is collected on the sales of oil products. Once the end prices for petrol are brought into the conditions of equal indirect taxes, and taking into account costs relating to distribution and the margin in trade operations, the end prices for petrol for industrial consumers, according to our estimates, would be equivalent to only 80% of the price in Europe and, for the public — 95% of the prices in Europe. This points to the fact that in Russia quite a substantial margin is formed in the wholesale and retail sector. The third and, in our opinion, the most important factor, which must be taken into account, is that the final amount of the subsidy due to the reduced internal prices for crude oil and petroleum products, is composed of the following components: In the internal market the following industries are subsidized in the form of reduced prices: oil refining (3.5 p.p. of GDP), and the chemical and petrochemical sectors (0.3 p.p. of GDP). At the same time the largest end “subsidies” are received directly by wholesale (industrial) consumers (1.7 p.p. of GDP) and the public (0.1 p.p. of GDP). In other words from the 3.5 p.p. of GDP in direct subsidies to the oil refining industry the end customers receive only one half, while

---

<sup>4</sup> The Decree of the Government of the RF No.1155 issued in August 2011 partially remedied this situation.

the other half remains in the oil refining sector itself (figure 2), covering the inefficiency of this sector whilst ensuring sufficient profitability.



**Figure 2. Illustration of subsidy of the Russian economy in the form of reduced oil prices in 2010**

The equalization of domestic and world prices for energy resources through step-by-step cancellation of the export duty on crude oil and petroleum products may be represented by the following simultaneous processes, grouped for convenience into three blocks.

*Block 1.* Cancellation of the export duty on crude oil (3.8 p.p. of GDP) and petroleum products (1.4 p.p. of GDP). For oil extraction additional income from the external market would result directly from the cancellation of the duty — 3.8 p.p. of GDP (which is equal to the budget loss), and from the domestic market — due to an increase of the domestic prices for crude oil — also 3.8 p.p. of GDP. The oil refining sector, on the one hand, would gain additional income from the foreign markets, owing to the cancellation of the export duty (budget loss 1.4 p.p. of GDP) and from the domestic market due to the price increase whilst, on the other hand, it would face losses due to the increase in price of the incoming crude oil.

*Block 2.* Withdrawal of additional income from oil refining through MET without changing the incentives to oil extraction (with the existing profit level in the oil extraction sector remaining unchanged). An increase in the MET would compensate for the export duty charged on sales on foreign markets, ensuring budget neutrality (3.8 p.p. GDP in the state budget). In the domestic market an increase in MET levies a resource rent from the oil extracting companies. This had

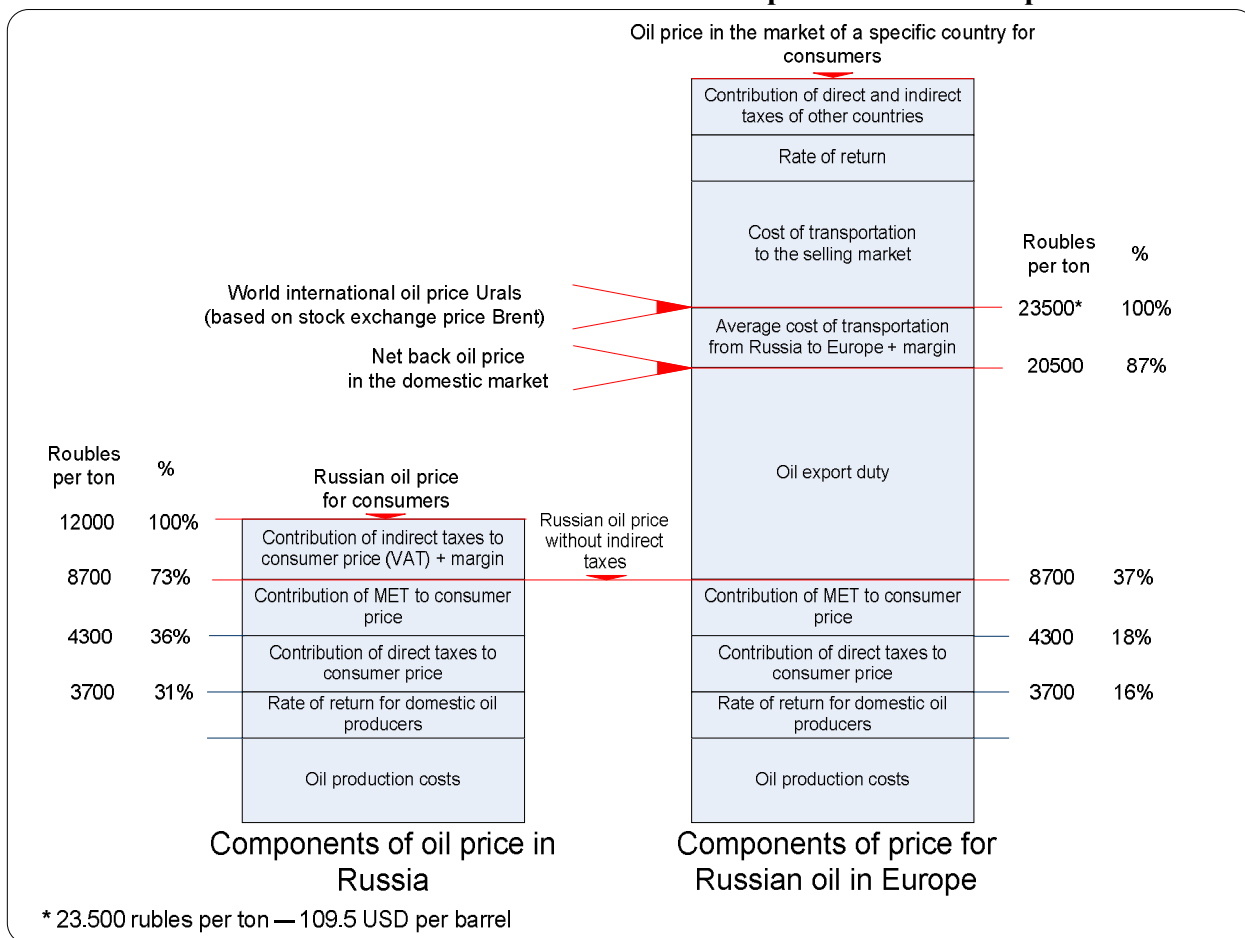
previously partially remained in the oil refining sector, through reduced oil prices, and had been partially received directly by consumers of petroleum products (3.8 p.p. of GDP) through reduced prices for these products.

*Block 3.* From the government's point of view the additional budgetary income released (resource rent) may be used for the compensation of the shortfall in income from the export duty on petroleum products (1.4 p.p. of GDP, see block 1). It may also be used to reduce taxes (including excise and transfers) as compensation for the losses incurred both by the consumers of energy resources and by the public due to the increase in prices. Additionally it may be used for covering priority budget spending (financing of social services, expenses relating to long-term development: investments in the infrastructure and human capital assets). Finally there is the potential for creating financial reserves (the Reserve Fund, the National Welfare Fund).

The main macroeconomic consequences of the proposed reforms are: an effect on prices in certain industries and an effect on prices for energy resources and on economic growth. The main consequences with high social impact are: an increase in consumer prices, the prices for housing services and utilities and retail petrol prices. The starting point for assessing these consequences should be the determination of a domestic equilibrium price for petroleum products for industrial enterprises and the retail price to be paid by consumers.

The starting point for assessing the consequences of the cancellation of the export duty on crude oil and petroleum products is the current structure of the relevant prices in the Russian Federation.

### Illustrative calculations on the basis of a crude oil price of 109.5 USD per barrel



Note. “World price” means world international (stock exchange) price, i.e. FOB-price (without duties, taxes, insurance)

**Fig 3. Components of internal and external oil price**

The components of internal and external oil prices are shown in the left column of Figure 3. According to Rosstat, the internal oil price for industrial enterprises is 12,011 rubles per ton, out of which 3,293 rubles are the wholesale costs, margin and VAT whilst the remaining 8,718 rubles represent tax-free profit for the oil producers, which is also as published by Rosstat. The breakdown of the tax-free price is made on the basis of the authors’ assessment. The right column shows the interconnections between the components of internal and external prices and the overall the price for Russian oil on the foreign markets.

In order to assess the consequences of cancellation of the export duty on crude oil and petroleum products, certain assumptions must be made regarding the development of the scenario.

### 3. Scenarios of the reform

The following three scenarios of the reform may be nominally arranged by the extent of institutional transformations in the industry, the rate of modernization and the degree of admission of foreign petroleum product manufacturers to the internal market. In all the scenarios the internal tax-free oil

price in Russia grows to the level of the world price, less the cost of transportation to Europe, and the export sales margin which is, according to our estimates, 20,500 rubles.

*Scenario 1.* Cancellation of export duty, closed domestic market for petroleum products in the absence of modernization of the oil refining industry, low competition, and a reduction of the excise tax rate for petroleum products in order to compensate the price growth. The preconditions for this scenario are: that, in the short and medium terms, the Russian domestic market is closed to a certain extent, from foreign energy producers, i.e. in the internal market VIOCs increase prices to the level of monopoly prices; a low speed of institutional transformations of the industry is observed in Russia; no modernization processes are launched in the industry.

According to our estimates, as a result of this scenario the Russian internal tax-free price for petrol would increase by 48% and, due to the reduction of excise tax (compensation for the price growth), the retail price would also grow but to a lesser degree: +32% for the public and +40% for industrial enterprises.

Among the instruments of the macroeconomic policy used in this scenario the following should be noted: the necessity to reduce excise tax (or import duties) on petroleum products in the internal market in order to retain the growth of end prices for both the public and the industrial consumers. In this case the current situation, characterized by the absence of serious competition in the internal market, inefficiency of local oil refineries and the unreasonable (by European standards) margin in wholesale and retail prices, would, in general, remain unchanged.

*Scenario 2.* Cancellation of export duty, a gradual opening of the domestic market for petroleum products, strengthening of competition in the market for petroleum products and the gradual modernization of the oil refining industry. In this scenario the same strategic preconditions as in Scenario 1 are established, except for the high-quality institutional transformations which would be expected to take place in the industry in order to ensure: strong competition between VIOCs in the wholesale and retail sectors within the country due to the tightening of anti-monopoly laws; some competition (reduction of import duty on petroleum products to zero) between local VIOCs and foreign suppliers of petroleum products which, however, face administrative and regulatory barriers when supplying oil products to the Russian domestic market; the partial modernization and increase of the processing depth in the Russian refineries under government pressure in certain resonantly discussed cases, by ordering the compulsory renovation of equipment (deployment of budget funds).

As a result of this scenario the Russian internal tax-free price for petrol would increase by 48% but due to the reduction of excise tax and the implementation of institutional transformations and modernization the retail price would grow to a lesser degree than in the first scenario: +23% for the public and +33% for industry.

From the point of view of the economic policy instruments used in this scenario a certain change in the position (compared to scenario 1) is anticipated as a result of administrative regulation of activities in this monopolistic and inefficient sector. As with scenario 1, in order to reduce the prices to be paid by industrial consumers and the public, excise tax on petroleum products would need to be reduced.

*Scenario 3.* Cancellation of export duty, opening of the internal market for petroleum products, a competitive environment in the market for petroleum products, modernization of the oil refining



sector. This third scenario implies virtually perfect competition in the internal market for petroleum products between foreign suppliers and domestic VIOCs, the implementation of a complex of institutional transformations in the industry, ensuring a high level of competitiveness, considerable increase in the processing depth of the domestic oil refineries, elimination of inefficient market participants (those incapable of modernization). In other words, we assume that petroleum products would be traded in an equivalent manner to crude oil.

Here, the mechanisms for establishing internal tax-free prices and end prices differ substantially from the first two scenarios. Prices for petroleum products would be driven by market forces and VIOCs would be less able to use their power over the internal market.

Owing to the fact that the domestic market can be penetrated by foreign companies which would work with both industrial enterprises and retail consumers with minimal margins, they would begin to compete with domestic companies. At the same time low-quality petrol is supplied to the internal market only by local oil refineries. In practice, foreign companies may also enter the internal market for low-quality petrol, however, their minimum price would include an element for long-term marginal costs plus transportation. Thus, a uniform price for the low-quality petrol would be established in the domestic market, and local VIOCs which have a competitive reserve in the amount of double transportation costs per ton, would be, on the one hand, threatened by the import of low-quality petrol from Europe and, on the other hand, would have to compete with high-quality European petrol. These factors would influence the internal price for low-quality petrol within the country. At the same time, due to the openness of the internal market, the most intense competition between foreign and domestic suppliers would be observed in the European parts of Russia, while, further to the East, the competition would be lower as a result of the increased transportation costs. Hence, in the case of a sufficient openness of the internal market in the European part of Russia, at first, the prices for high-quality petrol would be established based on the following principle: “European tax-free price plus transportation” and prices for low-quality petrol on the principle “European price minus transportation”.

As a result of this scenario the tax-free price for petroleum products would increase by +64% (pre-tax price for petroleum products on the European market, minus transportation costs) while the retail price for petroleum products for consumers, due to the competition with import suppliers, would be estimated to grow only by 12% and for industrial enterprises — by 30%.

Theoretically, the instruments of the macroeconomic policy used in this scenario are, in our opinion, the most coherent and transparent. In order to ensure the commencement of modernization of the domestic oil refining sector, increase in the processing depth, increase in the level of competition within the country and, as a consequence, a reduction of the price for petroleum products for end consumers, it is necessary, firstly, to open the market to foreign petrol manufacturers. Along with the measures of administrative regulation aimed at preventing violation of the anti-monopoly laws, the market principles of competition and free trade will contribute to the displacement from the internal market of domestic companies which are not eligible or not ready for modernization and, in the end, to establishing margins for petrol trading within the country at levels corresponding to the international ones. Among the regulatory measures to be taken with respect to the petroleum products market we should consider, firstly, increasing competition both in the petroleum product selling sector and in the crude oil selling sector together with the termination of discrimination in access to the transport infrastructure used for transporting petroleum products. Thus, among

measures aimed at increasing the efficiency of the internal market for petroleum products, the following should be considered:

- implementation of institutional preconditions for modernization of the oil extraction and oil refining sector and, hence, elimination of unrepresentative and demotivating price distortions leading to excessive consumption of energy resources in the Russian economy;
- implementation of the practice of open and fair competition with import companies in the internal market — reduction of administrative, technical, customs and transport barriers for foreign suppliers of petroleum products;
- creation and development of regional stock exchanges for petroleum products with the compulsory sale on the stock exchange of part of the petroleum products manufactured by every VIOC;
- creation and development of an internal stock exchange for crude oil and stimulation of the reduction of internal costs for oil transportation by optimizing logistic schemes of supply to domestic oil refineries (including intra-industry exchange or oil trading between domestic extraction companies);
- ensuring equal access for all market participants to the transport infrastructure (including oil and petroleum product pipelines) carrying out export, import and internal supply of oil and petroleum products;
- improvement of regulations for the state purchase of petroleum products;
- improvement of anti-monopoly regulations in all sections of the production and sales of petroleum products.

The preconditions and consequences of the three scenarios presented are summarized in table 1.

**Table 1. Preconditions and consequences of various scenarios of cancellation of the export duty on crude oil and petroleum products**

|   | Scenario 1 | Scenario 2 | Scenario 3 |
|---|------------|------------|------------|
| <b>Main preconditions</b>   |            |            |            |
| Cancellation of export duty on crude oil and petroleum products   | +          | +          | +          |
| Cancellation of excise tax on import of petroleum products  | +          | +          | +          |
| Openness of the internal market   | -          | -          | +          |
| Internal competition  | -          | +          | +          |
| Administrative regulation of activities of regional markets for petroleum products under manual control | -          | +          | +          |
| Institutional modernization of the domestic oil refining sector   | -          | -          | +          |
| Processing depth of domestic oil refineries (%)   | 70-75      | 80-85      | 90-95      |
| <b>Main consequences</b>  |            |            |            |
| Increase in internal tax-free price for crude oil (%)   | + 136      | + 136      | + 136      |
| Increase in internal tax-free price for petrol (%)  | +48        | +48        | +64        |
| Increase in wholesale petrol price (%)  | +40        | +33        | +30        |
| Increase in retail petrol price (%)   | +32        | +23        | + 12       |

If we compare the final conditions of the economy obtained through the price for petroleum products for industrial enterprises and the public, we will see that the scenario with the most intense institutional transformations and modernization of the industry (scenario 3) leads to the least price growth for the public. The first and second scenarios are less preferable because domestic VIOCs can, to a certain degree, still use their monopolistic power in the retail sector and take advantage of the closeness of the market from import and the absence of incentives to real modernization of the sector so these would lead to considerable price growth. From the point of view of businesses — as consumers of petroleum products — the least favorable scenario is the first one, where VIOCs are

able to retain their inefficiency and partially transfer the collection of MET from the internal market onto the consumers of petroleum products.

From the point of view of industrial and end consumers the third scenario is better than the second and the second scenario is better than the first, whilst for domestic VIOCs the situation is the opposite: in the second scenario VIOCs are allowed partially to realize their market power in establishing high internal prices, however, their price level would still be lower than the prices for petroleum products paid by European industrial enterprises (internal prices are lower, on the one hand, due to the fact that domestic enterprises had previously used cheap petroleum products ineffectively and are simply unable to demonstrate demand at the same level as modern European enterprises and, on the other hand, because petroleum products within the country are of lower quality than those in Europe) meaning that the second scenario implies a partial subsidy of domestic industrial consumers of energy resources, due to the absence of institutional incentives for the modernization of the domestic oil refineries and the partial conservation of their inefficiency. In all of the scenarios, in fact, subsidization of sectors of the national economy in the form of reduced prices for crude oil is fully cancelled, but in the first and second scenarios subsidization of the oil refining industry continues through the closeness of the market and the opportunity of partial monopolization of the market within the country.

The key differences between the scenarios presented (and possible variations thereof) are: (a) the degree to which the domestic oil refining sector and petrochemical industry, which are currently subsidized in the form of reduced prices in the amount of 1.7 and 0.3 p.p. of GDP, respectively, compensate for the cancellation of their subsidization to the detriment of the end consumers of petroleum products (industrial enterprises and the public), and hence, in the end, move the cancellation of subsidies into (unreasonable) additional price growth; (b) the degree to which the domestic industrial sector, where currently 1.7 p.p. of GDP remains as a subsidy in the form of reduced prices for petroleum products, will burden the cancellation of this subsidy onto end consumers — related industries using their products and the public.

#### **4. Timeframes and possible consequences**

For an assessment of the aggregate long-term effect on the economy we have built our conclusions on the third of the presented scenarios which, in our opinion, corresponds best to the established goal of the rationalization of the consumption of energy resources. If sound institutional transformations are not carried out in the industry, the increase in prices for crude oil and petroleum products will, in the end, be burdened on consumers — through inefficiency and the inability to modernize the domestic oil refining sector. From the point of view of public well-being, such ineffective enterprises would have to leave the internal market, with their output being replaced by an increase in the output of modernized Russian oil refineries and the products of foreign companies.

Based on modeling calculations, using elements of the model of inter-industry balance, an increase of internal tax-free prices for crude oil by less than 10% per year (the increase in the end price of petroleum products for industrial consumers would be lower than 5% per annum) would not lead to a reduction of output in other sectors of the economy, due to the gradual structural reconstruction of the economy. Thus, the set of proposed reforms may be performed relatively painlessly for the aggregate output during the next 6 years, from 2013 to 2018. In this case we should take into

account that the most realistic scenario for conducting such reforms would be to connect the reforming period to the political circle — otherwise the reform may turn out to be a half-measure.

In order to reduce a negative influence on the national economy and consumption by the public during the first few years of the reforms, an equivalent reduction in excise tax on petroleum products and the cancellation of import duty on petroleum products are proposed, in order to retain the end prices for petroleum products for the national economy and public at levels close to the pre-reform levels.

The aggregate reform effect on the budget, expressed in the form of increased tax proceeds compared to the current model of taxation, will increase annually and will have reached 1.46% of GDP by 2017. In other words, 1.46% of GDP will constitute additional budgetary resources which should be used for reduction of the tax burden from other taxes and for targeted support of certain categories of consumers.

## **5. Political decision**

In the current situation it should be taken into account that the cancellation or maintenance of export duty is a decision which is political rather than economic. On the one hand, the current situation, of historically unprecedented prices for energy resources in the world markets, allows for concealment of the inefficiency, not only of the oil refining sector, but of dozens of other industries, whilst, on the other hand the current situation allows for the reform to be carried out painlessly, from a social point of view. Specific economic consequences, although described in this paper quite transparently, depend considerably on the course of conduct and chosen dynamics of the reform. Until now, no country in the world has performed such a large-scale cancellation of export duty; however export duty has never before been so significant in any country. The petrol price changes presented above for the internal market may be different if the situation in the external markets changes. In this case the obvious result would be that the higher the world price for crude oil and petroleum products, and the more the Russian economy depends on the export of hydrocarbons, the more painful the modernization will be.

If we take into account only economic considerations, the net subsidization of the inefficient Russian oil refining industry in the form of the low price for incoming crude oil — in the amount of 1.8 p.p. of GDP — must be stopped. The question of whether it is reasonable to keep subsidizing the Russian economy at a rate of 1.8 p.p. of GDP (industry and public together), which is reached by subsidizing them through the oil refining sector, remains open. If certain Russian strategic industries need a transitional period, this may be considered, but only in the following context: reforms first, then subsidies, but not vice versa. In this respect, the 20 years of subsidy of the domestic oil refining sector have not resulted in any major changes in the situation, so this confirms that the Russian oil refining sector has already used up its transitional period. Price subsidization, i.e. subsidy in the form of low prices for the incoming materials for production (for the oil refining sector this is crude oil; for other industries and the public these are petroleum products), is always ineffective as it stimulates excessive consumption of these materials and leads to material public loss and, as in case of the oil refining and probably other industrial sectors, to the conservation of technical obsolescence. From an economic point of view, when making positive decisions on the subsidization of certain industries or population groups, it is expedient to use the transfer to the consumer, which would be targeted and justified by reasonable necessity.

The elimination of distortions in price incentives, and the creation of economic preconditions to modernization and the reduction of energy consumption of GDP will occur not only by changing the structure of the economy but also by increasing technical effectiveness and by reducing the negative environmental impact. The reforms proposed in this paper imply quite serious changes in fuel prices for economic agents, retail and wholesale consumers. Inefficient enterprises and those which cannot be modernized will leave the market, to be replaced by effective Russian and foreign companies. Thus, the cancellation of export duty on crude oil and petroleum products is a necessary condition for the modernization of the Russian economy. The specific programme of relevant actions, such as a compensation of the reduction and cancellation of the export duty by increasing MET (as described herein) or by other mechanisms of levying resource rent, the introduction of institutional transformations to the industry, ensuring a smooth transfer of price shocks into internal prices, is a subject for further detailed analysis which will be determined by the willingness of Russian politicians to set the Russian economy on the way of modernization.