"NON-LEVYING" VAT ON OIL IMPORTS: CAUSES AND CONSEQUENCES[1]

On January 1, 2002, the legislative provision[2], which exempted oil importers from the value-added tax (VAT), expired. This legislation was approved by the Parliament of Ukraine on March 2, 2000. In accordance with its latest wording[3], importers and producers of diesel fuel, as well as importers of raw oil were awarded, for a limited period of time, a number of privileges dealing with paying certain taxes and levies. Specifically, importers and producers of diesel fuel were exempted from VAT, excise taxes, import duties, and the levy payable to the State Innovative Fund for a period ending on October 1, 2000; besides, importers of raw oil were exempted from the import duty for a period until January 1, 2001, and VAT – until December 31, 2001. Thus, only one provision of this Law was still in effect in 2001 – the provision exempting importers of raw oil from VAT.

More than once was a draft law **On Amendments to the Law of Ukraine 'On Interim Procedure for Taxation of Operations Dealing with Production and Sale of Raw Oil and Some Fuels and Lubricants'[4]** ***submitted to the Parliament. This draft legislation intended to extend the effect of tax exemptions for imported raw oil until January 1, 2005. Among other things, the draft law proposed to exempt imports of raw oil from import duties and VAT. The third convocation of the Parliament failed to decide the fate of this draft law; therefore, the current legislature may have to consider it.***

Foreword

Professional literature on public finance provides an ample range of detailed descriptions of the main conceptual and practical features of the value-added tax. Although this brief paper cannot discuss all that bears this issue, it is worthwhile considering at least the most important aspects of VAT administration.

All the existing taxes are conventionally divided into two major groups: direct and indirect. Direct taxes are levied on incomes and assets, while indirect taxes are included into the price for a good as a surcharge payable on the top of the price or as an element of production costs. Indirect taxes primarily include: excise taxes and customs duties, VAT, sales tax, and turnover tax. The latter three taxes comprise a special group of so-called consumption taxes[5].

Compared to other indirect taxes, VAT features a rather peculiar method of administration. While most indirect taxes are levied at the stage of ultimate consumption (perhaps the only exception of is a turnover tax), VAT is a many-stage tax levied at each stage of the production and distribution chain on each input to the end value up to the moment of final consumption. Indeed, as it is very difficult to practically implement the collection of the tax truly at each stage when the value added is created, the value-added tax is collected at the moment of trade operations when the components and materials are delivered from suppliers to customers (including sale of the end product to the end consumer). Thus, later on in this paper, when talking about stages of production chain or production stages, we mean trade agreements that are entered while the good passes to the end consumer.

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[1] By Yuriy Dzhygyr.

[2] Law of Ukraine *On Interim Procedure for Taxation of Operations Dealing with Production and Sale of Raw Oil and Some Fuels and Lubricants* (N 1521-14 VR of March 2, 2000), Article 1.

[3] Amendments were introduced by the Law of Ukraine *On Amendments to Some Laws of Ukraine Concerning Taxation of Operations Dealing with Production and Sale of Raw Oil and Some Fuels and Lubricants* (N 1962-14 VR of September 21, 2000).

[4] Draft Law of Ukraine *On Amendments to the Law of Ukraine "On Interim Procedure for Taxation of Operations Dealing with Production and Sale of Raw Oil and Some Fuels and Lubricants"* (N 8237 of November 7, 2001).

[5] Formally speaking, in addition to the VAT as a consumption tax, there are several other types of VAT. Depending on the way in which investment is included in the calculation of the tax base, the following VATs are distinguished: ***consumption-type VAT*** – where the tax base does not include investment; ***net income-type VAT*** – where the tax base includes investment and excludes the amount of depreciation for each period; and ***gross income-type VAT*** – where the tax base includes the full amount of investment. Despite this rather broad choice, the majority of European tax systems use the consumption-type VAT (Rosen, H. 1991).

These specifics of VAT administration can be easily explained using a simple numerical example. Before getting down to the example, however, it should be emphasized that the analysis of advantages or disadvantages of one tax relative to another one is beyond the scope of this paper. The aim of the example discussed below is to contrast the specifics of VAT administration against other comparable taxes.

So, let us consider a tax whose route to the end user consists of three stages: manufacturing, wholesale, and retail sale. At each stage, some value is added to the product as a result of production activity. This value is the main factor that determines the ultimate price at which the good is sold to the consumer. In addition to the value added, the price to the consumer typically includes tax/taxes (if any). For the sake of better understanding the specific features of VAT administration, the numerical example below compares two types of taxes which affect the final price of the good: VAT and tax on retail sales. In both cases, the amount paid for the good by the end user equals the sum of the value added and the tax levied.

Table 1. Comparison of Sales Tax and Value-added Tax (UAH)

	Production stage			**Total tax**
	A	B	C	
1. Inputs	-	400	600	
2. Value added	400	200	100	
3. Sales price (1 + 2)	**400**	**600**	**700**	
Value-added tax (10 % of 2)	*40*	*20*	*10*	***70***
Sales tax (10%)	-	-	*70*	***70***

As one can see from Table 1, other terms and rates being equal, both taxes generate equal revenues to the budget. But although the amounts of taxes are equal, the mechanisms of their levying differ essentially. While the sales tax is collected in the full amount at the stage of selling the good to the final consumer, the value-added tax is collected in parts at each stage of production.

The scheme of VAT collection shown in Table 1 reveals a number of important competitive advantages, which have galvanized a swift growth of popularity of this tax in the recent decades (as mentioned above, analysis of advantages and disadvantages of VAT versus other comparable taxes is beyond the scope of this paper). At first glance, the scheme outlined above appears to be fairly simple and understandable. In reality, however, VAT administration is much more complicated than one can assume from this model. Further on in this paper, some specific aspects of VAT functioning will be discussed in more detail.

The very name of the tax suggests that the base for the VAT is "value added", i.e. the value which the entrepreneur (be it producer, distributor, vendor, etc.) creates as a result of his or her business. The values added can be determined as the *sum* of wages and profits or as the *difference* between the sales value and the input value (as in the example above).

Regardless of the chosen approach to the calculation of the tax base (in our case – the value added), there are two methods to define tax liabilities – direct and indirect. For the majority of taxes, liabilities are assessed by way of applying the tax rate to the calculated tax base. This fairly common and understandable approach is usually called a "direct" method for calculating tax liabilities. An alternative is the so-called "indirect" method, where the tax base is not formally calculated and net tax liabilities are assessed by way of application of the tax rate to the components of the tax base[6].

[6] Conceptually, there are two direct and two indirect ways to calculate VAT liabilities with an identical result: (1) direct additive, or balance, method: *t* (wages + profits); (2) subtractive direct method, or business transfer tax: *t* (output - input); (3) indirect additive method: *t* (wages) + *t* (profits); and (4) subtractive indirect, or invoice, method: *t* (output) – *t* (input), where *t* is tax rate (Tait, A. 1988).

Despite the rather wide choice of methods for calculating VAT liabilities, the most popular one is the indirect subtractive, or so-called invoice, method. The essence of this method is that the amount of VAT charged on inputs is subtracted from the amount of VAT charged on outputs. Thus, only the difference between the two VAT amounts generates additional revenue. In other words, tax liabilities are calculated as the difference between the two amounts of taxes – the one received from purchases and the one paid to suppliers[7]. Let us consider this method using our numerical example.

Table 2. Scheme for Defining VAT Liabilities Using the Invoice Method

	Production stage			**Total tax**
	A	B	C	
1. Value of inputs (without VAT)	-	400	600	
2. Price for output (without VAT)	400	600	700	
3. VAT on purchase (10 % of 1)	-	40	60	
4. VAT from sale (10 % of 2)	40	60	70	
VAT liabilities (4 – 3)	*40*	*20*	*10*	*70*

If entrepreneur B, in a given accounting period, sells goods worth UAH 600 (plus VAT amounting to UAH 60) and spends UAH 400 for inputs (plus VAT amounting to UAH 40), the amount of VAT, what has to be paid to the budget is calculated as the difference between the tax received from the buyers of the goods (UAH 60) and the tax paid to the suppliers (UAH 40). Thus, entrepreneur B is to pay to the budget UAH 20 (UAH 60 – UAH 40).

Yet another question, which plays a critical role in administration of VAT in addition to the above-described differences in calculating VAT liabilities, arises in cases where goods or services have to cross international borders on their way from initial producer to the final consumer. This question is in the choice of the added value to be considered as a tax base for levying VAT. In other words, the question sounds as follows: what value should we tax if a good consumed on the territory of one country was produced in another country or, vice versa, if a good produced inside the country is exported and consumed abroad? Formulated in broader terms, the question is: what should we reckon as the tax base for VAT purposes – should it be the value added of the goods consumed in the country or, alternatively, the value added of the goods that the country produces?

The answer to this question depends on the chosen approach to taxation of export/import operations. In this area, there are two major principles: the principle of the *country of origin* of the good/service and the principle of the *country of destination*. According to the first principle, VAT is levied on the value added created within the country that levies the tax. According to the country-of-destination principle, VAT is levied on any goods and services consumed within the country. It should be emphasized once again that these principles differ essentially only in taxation of export/import transactions: according to the country-of-origin principle, VAT is levied on exported goods and not levied on imports; according to the country-of-destination principle, VAT is levied on goods and services imported and not on exports.

The treatment that will be applied to taxation of export/import flows, to a considerable extent, determines the allocation of the tax base between the countries that are trading partners. Indeed, when applying the country-of-origin principle, the value added to an export is part of the tax base of the exporting country, while when the country-of-destination principle is applied, the same is true for the importing country. Thus, the country-of-origin principle is more favorable for those countries where net export prevails, since, in that case, their tax bases increase. And *vice versa*, for the same reasons, the country-of-destination principle is more favorable for the countries where net import prevails.

[7] The main reasons for the popularity of this method include the following: (1) the moment when a tax liability arises is attached to the moment of transaction; (2) this method simplifies tax control; (3) only this method allows applying differentiated VAT rates; and (4) this method allows use of any accounting period (*ibid*).

Most economies with a value-added tax apply the principle of the country of destination. The main reason for its popularity is that the alternative country-of-origin principle has considerable drawbacks. The country-of-origin principle is undesirable mainly by virtue of the fact that, in this case, the price for exports in foreign markets includes the VAT collected from the exporter in his home country. The existence of the possibility to influence the price in foreign markets may result in an undesirable tax competition.

In some cases it is possible (and sometimes desirable) to apply the above-mentioned principles selectively; in trade with some countries the country-of-origin principle is applied, while in trade with some other countries the country-of-destination principle is used. This practice is especially common in relations between countries that are members of the same customs or economic unions. Weak customs control over trade within such a union allows the member states to apply the country-of-origin principle in their trade with other member states and the country-of-destination principle for trade with the rest of the world.

In the law under consideration, the relevant Article says that "... when raw oil is imported to the customs territory of Ukraine, VAT ***is not levied*** at the moment of crossing the customs border of Ukraine....". What does the phrase "is not levied" mean in this case?

In the literature on VAT, the following two terms are used widely: zero VAT rate and VAT exemption. Though these two appear to be alike, there is an essential difference between them. Moreover, it should be noted that there is some comic equivocality: a trader that is called "exempt from VAT" is actually pays some tax, while the "zero-rate taxpayer" is in fact exempted.

For instance, Alan Tait explains these terms as follows: "…the exempt trader pays VAT on his purchases, but is unable to claim his input tax liability as a credit against his liability on sales as he cannot impose a VAT on these exempt sales. Such a trader is out of the VAT system and is treated as a final purchaser. On the other hand, a trader liable to the zero rate is liable to an actual rate of VAT, which just happened to be zero; therefore, such a zero-rated trader is wholly a part of the VAT system and makes a full return for VAT in the normal way. However, when this trader applies the tax rate to his sales, it ends up as a zero VAT liability but from this he can deduct the entire VAT liability on his inputs, generating a repayment of tax from the government. In this way, the zero-rated trader reclaims all the VAT on his inputs and bears no tax on his outputs, and the purchaser of such a trader's sales buys the good or service free of VAT".

Source: Alan A. Tait, Value Added Tax. International Practice and Problems. (IMF. 1988).

Historical Background: Ukrainian Legislation and Relations with the Russian Federation

Since 1992 – the year when a value-added tax was implemented in the Ukrainian economy[8] – Ukraine has been applying the country-of-destination method in value-added taxation. That is, as was mentioned above, VAT is not levied on exports from Ukraine[9], while imports (with some exemptions[10]) are taxed at the time when they cross the Ukrainian border.

There are, however, certain deviations from the above-described practice, in particular, in taxing mercantile operations with the Russian Federation. Russia implemented a VAT almost concurrently with Ukraine in 1992[11], but there had been a number of unsettled positions with respect to this tax in both Russian and Ukrainian legislation throughout the next nine years (that is, until the Tax Code of Ukraine was enacted). Though Ukraine generally adhered to the country-of-destination principle with respect to taxation of its foreign trade, Russia's approaches to taxation of export and import operations had changed fairly often.

[8] Law of Ukraine *On the Value-added Tax* (N 2007 – VR of December 20, 1991). This Law was invalidated by the Decree of the Cabinet of Ministers *On the Value-added Tax* (N 14-92 of December 26, 1992). Currently, the value-added tax is regulated by the existing Law of Ukraine *On the Value-added Tax* (N 168/97– VR of April 3, 1997).

[9] In case goods are exported outside the customs territory of Ukraine, the value-added tax is assessed at a zero rate (for more details see the box above). This means that the exporter can claim refund of the VAT paid on inputs to exported goods from the State budget.

[10] There is a wide range of exemptions from import VAT stipulated in the above-mentioned laws that regulated the VAT in the relevant periods. Besides, there are exemptions awarded to businesses operating within free economic zones; exemptions for so-called 'critical imports'; and a number of exemptions awarded by Presidential decrees on a temporary basis.

[11] Law of the Russian Federation *On the Value-added Tax* (N 1992-1 of December 6, 1991).

Economic consequences of these unmatched tax treatments between Russian and Ukrainian necessitated harmonization of the two VAT systems. This took shape of numerous amendments to tax legislation. The year of 1994 promised to be a crucial point in the history of these tax relations for this was the year when the two countries concluded a free-trade agreement[12]. Among other things, this agreement stipulated mutual non-application of import VAT to sales between the two countries. The declared intention, however, failed to be immediately implemented in practice. Besides, the effectiveness of this agreement was fairly soon almost entirely negated as a result of introduction of many protectionist duties and quotas caused by anti-dumping and special investigations. At long last, this agreement turned into a "free-of-trade agreement" according to journalists' striking phrase.

Between 1992 and such time when the Tax Code of the Russian Federation was enacted, the most weighty attempt was made to fully synchronize the VAT systems and to make thereby practicable the free-trade agreement signed in 1994 was undertaken in 1998. Ukraine decided to exempt Russian imports from VAT (the relevant Cabinet of Ministers Resolution[13] came into effect on February 1, 1998). In reality, the above-mentioned exemption was awarded only to those imports from the Russian Federation, whose "Russian" origin was proved by special certificates at the time of customs clearing of these goods. VAT was not levied at the time when the goods crossed the border but when Russian imports were later sold on Ukraine's customs territory, VAT was levied on the contractual value in the full amount. A quite similar[14] tax treatment of Ukrainian exports was applied at the Russian end[15]. At the same time, according to than-existing legislation, Russia continued to levy VAT on its exports to Ukraine, while Ukraine, as mentioned above, taxed all its exports at a zero rate.

*Two years later (in 2000) the Law of Ukraine mentioned at the beginning (*On Interim Procedure for Taxation of Operations Dealing with Production and Sale of Raw Oil and Some Fuels and Lubricants*) temporarilly extended the list of imports exempted from import VAT by including not only products of Russian origin but also oil products imported from other states.*

The treatment, according to which VAT was not levied on imports in Russia and Ukraine on a mutual basis, had lasted until June 1, 2001, when the new Tax Code of the Russian Federation was enacted and the Decree of the Russian President on exempting goods imported from the customs territory of Ukraine lost effect. According to the new Tax Code, Russia shifted to the country-of-destination principle in taxation of all export/import operations. However, for purposes of taxation of oil and gas exported to Ukraine, the earlier procedure was retained; i.e., this group of goods is taxed on a country-of-origin basis.

On June 27, 2001, in response to the Russian initiative, Ukraine's government issued a resolution[16] that canceled (from July 1, 2001) the exemption from VAT awarded to imports with origin from the customs territory of the Russian Federation. The only exemptions that continued included oil and gas. Thus, VAT was not levied when these goods cross the border. Later, the Cabinet of Ministers issued a resolution[17] that extended the list of exempted goods by way of adding to this list components for nuclear power plants (fuel elements, rods with burning-out absorbers, and absorbing rods for control and protection systems) imported from Russia.

[12] *Free-trade Agreement between the Government of Ukraine and the Government of the Russian Federation* (N 643-009 of June 24, 1993).

[13] Cabinet of Ministers Resolution *On Implementation of the Free-trade Agreement between the Government of Ukraine and the Government of the Russian Federation* (N 13 of January 5, 1998).

[14] In Russia, if a good was delivered from the customs border directly to a retailer, VAT was levied only on the distribution margin.

[15] Decree of the President of the Russian Federation *On Invalidation of the Decree of the President of the Russian Federation 'On Value-added Tax on Goods with Origin from the Territory of Ukraine Imported to the Customs Territory of the Russian Federation (N 1216 of August 18, 1996)'* (N 1392 of December 31, 1997).

[16] Cabinet of Ministers Resolution *On Amendments to Item 1 of the Cabinet of Ministers Resolution N 13 of 5 January 1998* (N 745 of June 27, 2001).

[17] Cabinet of Ministers Resolution *On Amendments to Item 1 of the Cabinet of Ministers Resolution N 13 of 5 January 1998* (N 842 of July 13, 2001).

As mentioned above, the Law of Ukraine that introduced the VAT exemption for imported oil products, in particular raw oil, was enacted as early as 2000. As was already mentioned, however, this Law treated this VAT exemption as a temporary measure, which expired in late 2001. Several proposals were submitted to the Parliament with respect to extension (for the period ending January 1, 2005) of this exemption. What impacts on the Ukrainian budget may such a decision have and why?

Revenue Implications of Exempting Raw Oil from VAT

This section attempts to answer the following broad question: What are the costs for the Ukrainian budget of various plausible scenarios of tax relations between Russia and Ukraine? And, in particular, what are the revenue implications of exemption from VAT of raw oil imported from Russia as proposed currently?

In order to answer these questions, numerical examples are provided below for each of the main options of export/import taxation. In each case, the examples simulate a situation where a good produced in Russia (say, raw oil) is exported to Ukraine for processing and sale to the end-consumer. Each of the Tables below contains four columns, which reflect four stages of the process of manufacturing the end product; two of these take place in Russia and another two in Ukraine. It is assumed that a 20-percent VAT rate is applied in each of the countries and that each production stage adds 100 units to the value of the product.

Scenario 1. At first, as a baseline for further comparisons, we suggest to consider a hypothetical situation where each country (both Ukraine and Russia) applies VAT on a country-of-destination basis. This example is presented in Table 3.1. As was mentioned above, the country-of-destination principle means that the exporting country (Russia in our case) does not levy VAT on its export and the importing country (Ukraine in our case) levies VAT on imports. As Table 3.1 shows, at the first stage of manufacturing raw oil, Russian manufacturers pay 20 units of VAT on their purchases to the budget of the Russian Federation but at the stage of exportation, the VAT from sales is zero-rated and exporters have negative tax liabilities which are refunded from the Russian budget and, thus, VAT on this oil is not paid to the Russian budget since this good is to be consumed abroad.

Table 3.1. Russia and Ukraine Apply the Country-of-destination principle

	Russia		Ukraine	
	A	**B**	**C**	**D**
1. Input costs (without VAT)	0	100	200	300
Value added	*100*	*100*	*100*	*100*
2. Sales price (without VAT)	100	200	300	400
3. VAT on purchase	0	20	40	60
4. VAT from sales	20	0	60	80
VAT liabilities (4 minus 3)	20	-20	20	20

Paid to Ukraine's budget when oil is imported

Price to Ukrainian consumer	480	= 400 + 80
Total VAT paid to Russian budget	0	= 20 + (-20)
Total VAT paid to Ukrainian budget	80	= 40 + 20 + 20

Oil arrives in the country of destination (i.e., Ukraine) at a price that does not include VAT; in our case this "net of Russian VAT" price is 200 units (this equals to the value added on the Russian territory). When the good crosses the border, the country of destination levies 20 percent of VAT (40 units) on the imported good. At each of the subsequent production stages, VAT on the sales of oil products is levied to the Ukrainian budget amounting to 20 percent of the sales price; thus, tax liabilities arise twice on the way to the end-consumer amounting to 20 units each time. Therefore, 200 units of the value created by Ukrainian manufacturers is added in Ukraine to the price of import (200 units) as well as 80 units of VAT to be paid to Ukraine's budget by the Ukrainian consumer (40 units

when the good crosses the border and two times 20 units at each production stage). The price to consumer in this baseline case is 480 units.

Scenario 2. A more complicated situation is described in the next hypothetical example shown in Table 3.2. This scenario assumes that Ukraine continues to apply the country-of-destination principle for VAT purposes, while Russia applies the country-of-origin principle, i.e., levies VAT on the value added on the Russian territory. Table 3.2 shows that in this case Russian oil arrives in Ukraine at a price higher than in the baseline example. This time, the price is 240 units instead of 200 units, since additional 40 units must be paid at the stage of exporting oil to the Russian budget and this amount is also included in the price paid by Ukrainian consumers. At first, at the stage of crossing the border, this surcharge is paid by importers of Russian oil, but since the price of all subsequent sales will be increased automatically, these additional 40 units paid to the Russian budget will eventually be borne by the Ukrainian consumer.

Table 3.2. Russia Applies the Country-of-origin principle; Ukraine – the Country-of-destination principle

	Russia		Ukraine	
	A	**B**	**C**	**D**
1. Input costs (without VAT)	0	100	240	340
Value added	*100*	*100*	*100*	*100*
2. Sales price (without VAT)	100	200	340	440
3. VAT on purchase	0	20	48	68
4. VAT from sales	20	40	68	88
VAT liabilities (4 minus 3)	20	20	20	20

Price to Ukrainian consumer	528	= 400 + 40 + 88
Total VAT paid to Russian budget	40	= 20 + 20
Total VAT paid to Ukrainian budget	88	= 48 + 20 + 20

Moreover, the increased price on import (240 units instead of 200 units) increases the assessed VAT liabilities payable to the Ukrainian budget. Table 3.2 shows that the importer of oil will sell it to the Ukrainian processor, including a VAT of 68 units (20% of 300 units plus 20% of the additional 40 units of the Russian VAT) rather than 60 units as in the previous case (20% of 300 units = 60 units), that is, 8 units more. In other words, the price to the Ukrainian consumer will amount to 528 units, which is up 48 units relative to the baseline case – this new price includes a 40 units VAT paid to the Russian budget plus a 8 units VAT paid to the Ukrainian budget due to the increase in the initial price of import. As a result, the Russian budget and the Ukrainian budget will receive 40 and 88 units, respectively.

Scenario 3. What changes compared to Scenario 2 is what will happen if Russia were to apply the country-of-origin principle and Ukraine, in response, would exempt its importers from VAT on imports? The numerical example in Table 3.3 will help analyze such a situation. From the Russian end, the situation will undergo no changes; based on the country-of-origin principle, 40 units will be collected from the Ukrainian consumer of oil produced in Russia. As was described under Scenario 2, similar changes compared to the baseline would also occur to the purchase price for Russian oil paid by Ukrainian importers – it will amount to 240 units.

The difference is that the Ukrainian importer is not liable to pay the import VAT to the Ukrainian budget at the time when oil crosses the border. What are the impacts on the price for oil to be paid by the consumer and on Ukraine's budget revenues? Since only raw oil is VAT-exempted at the time of crossing the border and all subsequent operations (processing and sale) are taxed at a standard rate of 20 percent of the contractual price, at the next stage that follows the importation stage, the buyer will have to pay 20 percent of VAT on the price; this price will be the same as under scenario 2 – 340

units (240 units of the Russian price plus 100 units of the value added). In other words, at the next ("non VAT-exempted") stage, Ukraine's budget gains the same 68 units as under Scenario 2.

The difference is as follows. Under Scenario 2, 48 units are to be paid at the cost of the importer immediately after the border is crossed and later the next buyer is to pay 68 units on the next sale and compensate the importer's costs by paying the next 20 units of VAT to the budget. Unlike Scenario 2, under Scenario 3 the import VAT paid by the importer is zero (given the tax exemption), and hence 68 units of VAT paid by the "next" buyer will be transferred to the State budget in the full amount. All the remaining production stages are identical to Scenario 2.

Table 3.3. Russia Applies the Country-of-origin principle;
Ukraine Applies the Country-of-destination Principle plus VAT-exemption for Imports

	Russia		Ukraine	
	A	B	C	D
1. Input costs (without VAT)	0	100	240	340
Value added	*100*	*100*	*100*	*100*
2. Sales price (Without VAT)	100	200	340	440
3. VAT on purchase	0	20	0	68
4. VAT from sales	20	40	68	88
VAT liabilities (4 minus 3)	20	20	68	20

Price to Ukrainian consumer	528	= 400 + 40 + 88
Total VAT paid to Russian budget	40	= 20 + 20
Total VAT paid to Ukrainian budget	88	= 68 + 20

Summarizing, it should be noted that, regardless of what additional production stages the raw oil goes through after crossing the border, if a 20 percent rate is applied at any of these stages, this would inevitably mean that the final consumer will have to pay a 20-percent VAT to the Ukrainian budget. Since the contractual price on which the ultimate VAT is applied remains unchanged, whether any stage is exempted from input VAT or not (it equals to the "Russian" price plus the amount of all the value added in Ukraine), the eventual VAT liability payable to the Ukrainian budget remains unchanged too. In our case, this liability amounts to 88 units, or 20 percent of 440 units of the "net" price to consumer (the tax liability plus the "net price" add up to a sales price of 528 units). Similar to the previous case, out of these 440 units, 40 units will be paid by the Ukrainian consumer to the Russian budget (owing to the fact that Russia chose to apply the country-of-origin principle).

Thus, non-levying VAT on imports affects, first and foremost, the amount of the importer's VAT liabilities. Without VAT exemptions, the importer would be liable to transfer to the Ukrainian budget 20 percent of the value of imports, and, with the exemption in place, the liability is zero. At the same time, non-levying VAT on such import affects neither the end price for which the product is sold to the Ukrainian consumer nor Ukraine's budget revenue from this tax.

Scenario 4. Given that an exemption from import VAT effects neither national budget revenues nor the price for oil products in the Ukrainian market, what measures can be undertaken that might affect both of them? One plausible way is to exempt from VAT all operations with oil products on the Ukrainian territory. Such a case is shown in Table 3.4, which describes Scenario 4. This scenario assumes that Russia continues to apply the country-of-origin principle and, hence, receives 40 units from the Ukrainian consumer in the form of a 20-percent tax, which is paid by the Russian exporter and included in his price.

Given that a 200-unit value will be added to the import price (240 units) on the Ukrainian territory in the course of further processing and resale, the "net" price to consumer will remain at a level of 440 units as under Scenario 3 (400 units of value added plus 40 units of Russian VAT). This price is determined by factors, which are out of Ukraine's control, and, hence, cannot be changed. Ukraine, however, is able to effect the VAT rate applied to each stage of processing of the Russian product

and, thereby, the price paid by the end-consumer. But, as one can see from Scenario 3, in order to achieve this goal, the government should exempt from VAT not one (or even several) stages, such as import, but all stages. If VAT is levied, leastwise, at any one production stage, this automatically influences the further sales price. Therefore, in order to exempt the end price from VAT, the tax should be levied at no production stage. This Scenario is shown in Table 3.4.

Table 3.4. Russia Applies the Country-of-origin principle; Ukraine Exempts from VAT All Operations with Oil Products

	Russia		Ukraine	
	A	B	C	D
1. Input costs (without VAT)	0	100	240	340
Value added	*100*	*100*	*100*	*100*
2. Sales price (Without VAT)	100	200	340	440
3. VAT on purchase	0	20	0	0
4. VAT from sales	20	40	0	0
VAT liabilities (4 minus 3)	20	20	0	0

Price to Ukrainian consumer	440	= 400 + 40
Total VAT paid to Russian budget	40	= 20 + 20
Total VAT paid to Ukrainian budget	0	

The above-mentioned Table assumes that, after crossing the Ukrainian border, the Russian product (raw oil in our case) is sold to the importer for 240 units, and then 100 units of value is added to it and the price for the next buyer is 340 units. Since, in that case, not only the importer but also the buyer is VAT-exempted, the price for the latter is still 340 units and the surcharge in the form of a 68 unit VAT (20 percent of 340) is not added. Relations between this buyer (processor) and the end-consumer will be similar. Since neither of them is liable to pay VAT, the end price will be still equal to 440 units.

The decision to decrease the end price to the end-consumer by the amount of VAT obviously directly influences revenues of the State budget of Ukraine; the budget simply would not receive this amount of revenue. Under both Scenarios 2 and 3, the budget of Ukraine would receive 88 units of VAT.

Comparative summary of the 4 scenarios. Table 4 shows the amounts of the key indicators (price to consumer in the Ukrainian market and budget revenues of both countries) under each of the above described scenarios of trade arrangements between Russia and Ukraine.

Table 4. Comparative Summary of Scenarios 1-4

	Scenario			
	1	2	3	4
Price to Ukrainian consumer	480	528	528	440
Total VAT paid to Russian budget	0	40	40	40
Total VAT paid to Ukrainian budget	80	88	88	0

Table 4 emphasizes that the only case where the Ukrainian consumer does not pay VAT to the Russian budget is the baseline scenario, where each country applies the country-of-destination principle. In that case (Scenario 1), revenue of the Russian budget from consumption of value added is zero. In any other case, where Russia chooses to apply the country-of-origin principle, the Ukrainian importer has to pay to the Russian budget a 20-percent VAT (40 units), and this amount is an indispensable component of the end price, at which the oil product will be bought by the Ukrainian consumer. Such increase in the end price results also in a higher VAT liability of the Ukrainian consumer to be paid to the Ukrainian budget; VAT revenues in Ukraine increase (from 80 to 88 units) and so does the end price (from 440 to 528 units).

Tax measures undertaken by Ukraine in response to Russia's introducing the country-of-origin principle may be varied. Any of these measures, however, cannot affect the price to the Ukrainian consumer unless there are respective losses to the Ukrainian budget. (In order to offset the burden of the Russian VAT, included in the price charged in Ukrainian markets, Ukraine may exempt its consumers from domestic VAT, but revenue implications of this measure are adverse.)

Ukraine's non-levying VAT at only one production stage (e.g., at the stage of importation from Russia) relieves the importer from the need to immediately pay the VAT amount to the budget. Nonetheless, since the VAT continues to be paid at all the subsequent production stages, budget revenues and the end price for the good in the Ukrainian market remain the same as in case of where this exemption is not in place.

Plausibility of indirect consequences. Obviously, the simplified numerical models discussed here allow us to estimate only the direct effect of tax changes on the Ukrainian budget. It is also obvious that each of the above options, when implemented, can bring about many other economic consequences other than of a fiscal nature. Besides, such "non-fiscal" impacts can, in turn, have indirect revenue implications, and it is very difficult to estimate them, the more so within the limited scope of this paper. For instance, according to our scheme, a decision to exempt from VAT all operations with oil products results primarily in a lower price to consumer and decreased budget revenues (compared to other scenarios). The analysis in this paper is restricted to the direct effects and does not take into account, say, that the lower price may increase demand and, thereby, indirectly exert a beneficial effect on budget revenues. The case of Ukraine's VAT-exempting Russian imports is considered in this paper without regard to the potential economic effects of releasing importers' current assets as a result of being allowed not to pay import VAT immediately. For instance, lacking a necessary working capital, the importer may have to secure banking credits to pay the import VAT. In such a case, the final price to imported goods would increase by the amount of interest paid for use of credit resources. As mentioned above, the fact that most of these hypothetical effects are less straightforward makes it more complicated to make any precise predictions.

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