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## Identification of Refund of Excise Duty on Motor Oils in International Road Freight Transport

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**Abstract** In this article, the authors focus on the issue in the field of refund of excise duty on motor oils within Europe. Some states have a refund in their legislation, most European countries do not, and this creates pressure from carriers to make decisions, where and how much it pays to refuel with their vehicles in international transport. Survey research has been created for this article, analyzing and comparing the conditions for creating a competitive environment across Europe. The artikle also wants to point out that reimbursement is not subject to national transport, respectively international transport and drawing by foreign carriers in countries is supported, where a refund is made.

**Keywords** road freight transport, duty on motor oils, refund on excise duty, international transport

**JEL** R49, L91

#### 1. Introduction

The tax revenue from the excise duty on mineral oils can be classified as one of the highest, which are credited to the state budget of the country. As the degree of automation increases every year, it is assumed that income to the state budget should also increase. However, fuel costs also have a big impact on income. In the case of road freight transport, if the carriers perform the international carriage of persons or goods, it is more convenient for them to refuel there, where they are the cheapest, or where there is a possibility to use the excise duty refund on mineral oils. The main reason why carriers make this decision is that fuel costs are the largest cost item. These costs represent approximately 30% of the costs. Currently, it is possible to use the option of refunding excise duty on mineral oils for given vehicle types in 6 EU member states. These countries are more competitive than others. This also increases the income to the state budget of these countries. If other countries also want to be competitive, two options can be used. The first option is to set a minimum level of taxation. However, this determination would be for all vehicles and therefore the situation could be that the revenue to the state budget rather decreased. The second option is precisely to determine the refund of excise duty on diesel fuel and based on conditions that are already in place in those states.

#### 2. Comparison of conditions in Slovakia and abroad

Since 2010, the EU Member States have been obliged to comply with the minimum level of taxation of excise duties

on mineral oils according to two legal standards. The first is Council Directive 20023/96 / EC of 27 October on the restructuring of the Community legal framework for the taxation of energy products and electricity The second piece of legislation is Council Directive 2004/74 / EC of 29 April 2004, amending Directive 2003/96 / EC as regards the possibility for certain member states apply temporary exemption in respect of energy products and electricity or lowering the tax rate. The standard was adopted because of the transition period, where countries did not have to immediately apply a minimum level of taxation. This was intended for countries where the minimum rates laid down in Directive 2003/96 / EC would create serious economic and social difficulties and could have an adverse effect on nationals and national economies. Member States such as Cyprus, the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovenia and the Slovak Republic could apply the transitional period. At present, member state cannot apply this transitional period and must comply with a minimum level of taxation for excise duty on diesel of € 330/1000 litres.

#### 2.1. Excise duty on mineral oils in Slovakia

Excise duty is an indirect tax of a selective nature, which applies only to the selected goods. These are:

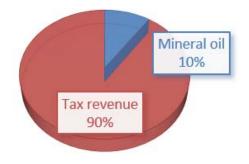
- alcoholic beverages (alcohol, beer, wine, intermediate)
- tobacco and raw tobacco,
- electricity, coal, natural gas,
- mineral oil (eg diesel, petrol, LPG) [1].

Excise duties are indirect due to the fact that they are not paid by the LP (legal person) and IP (individual person) directly, but on the purchase of the above goods and the excise duty is introduced in the selling price. This article analyses the excise duty on mineral oils. Mineral oils are taxed by two indirect taxes, namely VAT and excise duty on mineral oils. Indirect taxes are a significant revenue for the state budget [2]. The table (Table 1) shows the selected revenues of the state budget for the monitored periods. Revenue is of a growing nature and is expressed in bill euros.

**Table 1.** Selected state budget revenues for the period under review in  $bill. \in$ 

Period Income	2017	2018	Estimate 2019
Tax revenue	11.141	11.968	12.46
VAT	5.922	6.420	6.63
Excise taxes	2.253	2.324	2.42
Mineral oils	1.232	1.267	1.33

Source: authors



**Figure.1.** The share of excise duty on mineral oil in total tax revenues for 2018 Source: authors

From the picture (Fig. 1) we find out that the component of excise tax on mineral oils contributes to the total tax in SR as of 31.12.2018 approximately 10%.

## 3. Excise duty on mineral oils abroad, where a refund is applied

Part of this article is dedicated to individual states that are legally allowed to refund part of the excise duty on mineral oils. Refunds apply to those carriers who have pumped diesel with vehicles over 7.5 tons or M2 and M3 vehicles, or buses. These vehicles are due to the minimum fuel requirement, so that a refund is recognized. In France, Slovenia and Italy, it is possible to send documents on CD-ROM.

#### **Belgium**

In Belgium, part of the excise duty will be reimbursed in the case of refueling with vehicles with a payload of over 7.5 tones. Refunds are available up to 3 years after the withdrawal date, but only if the client has a valid license. A copy of the RITA (TRP / VIT internal program) license must also be provided, because the card number is needed. The minimum annual refundable amount of TRP / VIT is  $260 \in$ , quarterly  $\in$  1.000. Treasury documents are not acceptable [3-5].

#### France

Refunds apply to vehicles with a payload of over 7.5 tons and for buses. The condition of TRP / VIT is that the carrier has to refill at least 5 600 liters every six months. Treasury documents are not acceptable [3-5].

#### Italy

Part of the excise tax can be refunded when refueling diesel vehicles with a payload of over 7.5 t and buses. It is necessary to apply every two years after the period. In 2016, a TRP / VIT minimum rate of € 214.18609 / 1000 liters was provided. Treasury documents are not acceptable [3-5].

#### Slovenia

The refund of part of the excise duty concerns the refueling of vehicles with a payload of over 7.5 tons and for buses. At least 6,500 liters per year are required. Cash receipts are only allowed if all details are given and paid by card [1-3].

#### Spair

In Spain, refunds are granted for vehicles over 7.5 t and buses. The request cannot be retroactively. It starts from the date when the new Gasóleo Profesional refueling card began to be used. TRP / VIT makes a refund only if the client draws max. 50 000 liters, for the second year at least 25 000 litres. The basic condition is that foreign transport companies must have a NIF number if it is a. r. o./a. s., or NO number for sole traders in Spain. This is a tax identification number for foreigners. All documents must be sent to Murcia to receive the NIF number. [3-5] TRP / VIT registers a client in Spain if he sends a NO number to Murcia with an extract from the AB translated into Spanish and Apostille, with a copy of his passport or director's identity card (person signing the documents) and with two attached permits. [35] It is very important for all authorities to know that if a TRP / VIT company registers a company on its behalf it must be clear whether this is a new registration or just a change of representative. The form must be completed in any case. This means that the client needs to know if he is registered in Spain and if so, the NIF number and name, address and NIF of the agent (at least the name) [3-5].

#### Hungary

It is possible to refund the excise duty on mineral oils if it pays diesel fuel with vehicles with a payload of over 7.5 t and buses. The application to the tax office is required by 31.01.2017 for the period 01-12 / 2016. Refundable amount from 01.01.2016 is 7.00 HUF / liter. Treasury documents are not acceptable. [3-5]

#### Summary

The table (Table 2) shows the current rates of excise duty for countries where refunds are possible. By comparison, we find that Belgium has the highest return chance. One of the reasons may be the increase in the mandatory tax rate from January 2018. Hungary has the lowest refund amount. All rates are set by the customs offices in the countries concerned and by the competent European authorities. [] Excise duty refunds may be up to 24 eurocent per liter, however, carriers must reckon that excise duty refunds will only be made under certain conditions, e.g. registration in that country for the purpose of refunding excise duty, using fuel

cards for a specific vehicle registration number or the amount of liters consumed for a particular period. [4]

 Table 2. Country excise rates applicable to international transport companies Source: authors

Country		Rate €/ liter	
Belgium		0.2476158	
France	Trucks	0.1775	
	Buses	0.2175	
Italy		0.21418000	
Slovenia		0.06272	
Spain		0.048	
Hungary		7 HUF/l – 0.2*	

<sup>\*</sup> exchange rate 04.03.2019

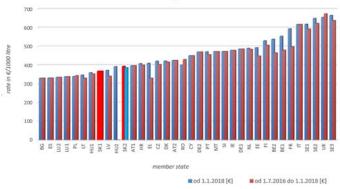
In the following part of the article we will also look at other states within the EU group. The table (Table 3) shows the excise duty on gas oil in the EU member states.

Table 3. The amount of excise duty on gas oil in the EU member states from 1.1.2018

Country		Excise duty rate		
		National currency		
Belgium	> 10 mg/kg	EUR	554.1618	-
	≤ 10 mg/kg		538.4522	-
Bulgaria		BGN	646	330.29
Czech Republic		CZK	10 950	421.2349
Denmark		DKK	3 139	421.8066
Cormony	> 10 mg/kg	EUR	485.70	-
Germany	≤ 10 mg/kg		470.40	-
Estonia		EUR	493	-
(	Greece		410	-
Spain		EUR	331	-
France		EUR	594	-
Croatia		HRK	3 060	408.1633
Ireland		EUR	479.02	-
Italy		EUR	617.40	-
Cypress		EUR	450	-
L	ithuania	EUR	347	-
Latvia		EUR	372	-
Luxem-	> 10 mg/kg	EUR	338.3548	-
burg	≤ 10 mg/kg	EUR	335	-
Hungary	Crude oil > 50	HUF	111.966	359.5107
	USD/barell			
	Crude oil ≤ 50	HUF	121.966	391.6196
	USD/barell	HUF	121.900	391.0190

The figure (Fig. 2) shows a comparison of changes in excise duty rates. From 01.01. In 2018, thirteen member states

increased the amount of excise duty. Romania was the only one to reduce excise duty. Although Poland has raised the rate in national currency, it represents a lower rate in euros than the previous one. In Bulgaria, the Czech Republic, Germany, Spain, Croatia, Ireland, Italy, Cyprus, Luxembourg, Malta, Austria, Slovenia and the United Kingdom, the amount of excise duty has remained unchanged since 1 July 2016. The Slovak Republic changed the rate, but for the second type, where gas oil is biodiesel free. Hungary has regulated tax collection in two ways. A lower tax is when the price for crude oil is higher than \$ 50 / barell. A higher tax is levied if the crude oil price is equal to or greater than \$ 50 / barell [5].



**Figure. 2.** Change in excise duty rates on mineral oils in EU member states Source: authors

Diesel prices are affected not only by the excise duty on mineral oil, but also by the value added tax. The table (Table 4) shows the VAT for each EU Member State expressed in %, ranked from lowest to highest. Luxembourg has the lowest VAT and Hungary has the highest VAT. The Slovak Republic has the 10th lowest VAT and at the same time, 6 EU countries also have 20% VAT as Slovakia [6-8].

Table 4. Value added tax in EU member states Source: authors

Country	VAT[%]	Country	VAT[%]
Luxemburg	17	Lithuania	21
Malta	18	Latvia	21
Germany	19	Netherland	21
Cypress	19	Italy	22
Romania	19	Slovenia	22
Bulgaria	20	Greece	23
Estonia	20	Ireland	23
France	20	Poland	23
Austria	20	Portugal	23
Slovakia	20	Finland	24
Great Britain	20	Denmark	25
Belgium	21	Croatia	25
Czech Republic	21	Sweden	25
Spain	21	Hungary	27

The price of diesel fuel in  $\[ \in \]$  / liter with VAT and excise tax is shown in the figure (Fig. 3). As we can see, the average price of diesel in the EU was  $\[ \in \]$  1,346. The Slovak Republic drew the 13th cheapest diesel of  $\[ \in \]$  1.251 / liter, so we have a lower price than the EU average. Neighboring countries of the Slovak Republic have a lower price, only Hungary is on the same level, so only one cent is higher. Luxembourg also had the cheapest diesel in 2017 but also in 2019, where in 2019 it is  $\[ \in \]$  1,101 / liter. Great Britain pumped the most expensive diesel at  $\[ \in \]$  1,518 / liter.

# 4. Research in the field of reimbursement of excise duties on motor oils carried out on a sample of inquiries from transport companies

The authors of the article conducted a research focused on Slovak carriers operating international road transport. Fuel costs can be classified as the highest variable cost items in road transport. Depending on the classification of transports, in particular as regards long-distance or short-distance transport, they may account for up to 40% of the total annual cost. These costs may be affected by the carrier in several ways, eg:

- selecting fuel suppliers;
- optimization of fuel consumption due to different fuel prices abroad;
- the possibility of refunding excise duty on diesel in selected countries [9].

In the latter case, the possibility of reimbursement of part of the excise duty paid on diesel fuel would be able to reduce fuel costs. This subchapter evaluates the obtained data whether the possibility of cost reduction is also used by carriers in the Slovak Republic.

In order to find out the situation in the Slovak Republic among carriers carrying goods or passengers within the EU on the topic of refunding excise duty on diesel fuel, the authors conducted a survey. The carrier's e-mail addresses have been obtained through the carrier's register on the website of the single road transport information system. Not all carriers provide a contact email in the carrier register, or the email address was invalid or the addresses did not receive mail. Based on this, 300 emails were sent to carriers established in the Slovak Republic. Some have also taken into account the number of vehicles where the authors have focused on those who have indicated that they have licenses for more than 10 vehicles. The questionnaire consisted of five simple questions and that:

- 1. Do you use the possibility of refunding excise duty on mineral oils abroad?
- 2. If you answered yes, please select from which country (s).
- 3. Please indicate the amount (€ / year).
- 4. If you introduce a refund of excise duty on mineral oils

- in Slovakia, what are your recommendations?
- 5. What is your experience with the refund of excise duty on mineral oils?

### Use the refund option

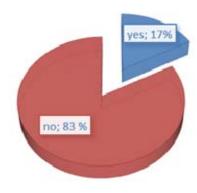


Figure. 3. The answer to the question of using excise duty refund Source: authors

The figure 4 shows the answers to the second question. They had the opportunity to mark multiple answers on this question. Most refunds will be made from Belgium. This may be due to the highest refund of excise duty or to multiple shipments to this country. Least refunds will be made from Spain.

#### Refund State



Figure 4. Answer the question about the place of refund Source: authors

The answers to the third question concerning the amount to be paid in respect of the refund of the excise duty on diesel for the year expressed in euro are given in the figure (Fig. 10). How can we assess the amounts are diverse, starting with the lowest of  $\ \ 1,200\ /$  year up to the highest of  $\ \ 75\ 000\ \ \$ / year. As stated in the previous question, the reasons may be different.

#### Refund amount in €/year

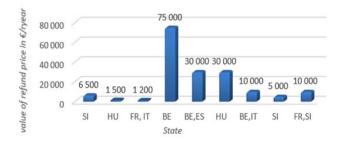


Figure 5. The answers of the value of refund price in €/year Source: authors

The fourth question was focused on recommendations of the way of refund, in case of introduction of refund of excise tax on mineral oils in Slovakia. The answers were different from carriers, for example, it is recommended to introduce:

- Fast processing, quick refund, online submission
- for Slovak carriers not to impose a limit of liters from which tax will be refunded,
- emphasize that the entire refund process is not unnecessarily complex (overly bureaucratic);
- reduce application processing time;
- fast payback, online submission.

The responses point out that if the excise duty on mineral oils is introduced in our country, the focus is mainly on the correct setting of the processing time for applications. As one of the carriers said, there is no need to think about the new conditions, but it is necessary to compare the countries that already have an excise refund procedure in place and to conclude the most appropriate system to which international road hauliers would agree. The experience of carriers is diverse. The problem is mainly the process of tax refund of diesel fuel in Belgium, where the country has set a longer time period for tax refund compared to eg. Spain. However, this problem cannot be influenced.

The responses also mention external specialized companies that are involved in this service. One carrier has good experience and the other does not. It depends on each carrier the company chooses. In the Slovak Republic, we can find that there are several such companies. When choosing a company in such a case, one can focus on the amount of commission for the company it requires in the event of handling a refund for the carrier in the desired country. This commission may vary from country to country, as the refund process may be more difficult in a country. As the documents required for the recovery of the diesel tax and the rates are set by the competent authorities in the countries, this would not have to play a role in the selection of an external company that carries out the excise duty refund service.

#### 5. Conclusion

This article focuses the issue of excise duties on mineral oils for road freight transport. Carriers, when they want to

reduce their cost items, are looking for solutions to how to do it. Mineral oil excise tax refunds are one of the options where fuel can be saved abroad for the international transport of goods. The article and its research showed different taxation in EU countries where one member state is more competitive than the other. EU legislation allows you to adjust the amount of this tax at will, however, at a minimum set limit of  $330\ \mbox{\ensuremath{\notin}}$  / liter. Only in 6 EU member states is the excise duty refund on mineral oils applied. The research carried out in this article also points to the external costs of excise duty and also to the correction taxes for diesel. Research has also been carried out in the field of excise duty refunds on a sample of inquiries from transport companies involved in this issue. Carriers still make the most use of a refund in Belgium, where the largest amount of refund is  $\mbox{\ensuremath{\notin}}$  0.24 / litre.

#### **ACKNOWLEDGEMENT**

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#### REFERENCES

- [1] Holguín-Veras J, Zorrilla JC, Thorson E (2005b) Modeling commercial vehicle empty trips: theory and application. XVI International Symposium of Traffic and Transportation Theory (ISTTT), pp. 585–608, H. Mahmassani (Editor), Elsevier
- [2] Hautzinger H (1984) The prediction of interregional goods vehicle flows: some new modeling concepts, ninth international symposium on transportation and traffic theory, VNU Science Press, pp 375–396.
- [3] Hong-wei Z, Wen-long W (2004) Safety analysis of over-size and over-load in road transport. J Highw Transp Res Dev 21(3):132
- [4] Debski, H., Koszalka, G., Ferdynus, M.: Application of FEM in the analysis of the structure of a trailer supporting frame with variable operation parameters. Eksploatacja i Niezawodnosc—Maintenance and Reliability. **14**, 107–114 (2012)
- [5] Braghin, F., Cheli, F., Melzi, S., Resta, F.: Tyre wear model: validation and sensitivity analysis. Meccanica 41, 143–156 (2006)
- [6] Borowiec, M., Rysak, A., Betts, D.H., Bowen, C.R., Kim, H.A., Litak, G.: Complex response of the bistable laminated plate: multiscale entropy analysis. Eur. Phys. J. Plus 129, 211 (2014)
- [7] Bowersox, D.J., Closs D.J., Cooper M.B.: Supply Chain Logistics Management, McGraw-Hill/Irwin, New York, (2002)
- [8] Vargo, S. L., Lusch, R. F.: Evolving to a new dominant logic for marketing. Journal of Marketing, no. 68, January, 1–17 (2004)