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Republic of Serbia
Commission for Protection of Competition

REPORT
ON THE SECTOR INQUIRY INTO THE OIL DERIVATIVES RETAIL MARKET 2018

-December 2019-

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1. METHODOLOGICAL AND LEGAL FRAMEWORK AND DATA SOURCES

1.1. Methodological framework, scope of the inquiry and data sources

Pursuant to Article 47 of the Law on Protection of Competition (Official Gazette of the RS 51/2009 and 95/2013 – hereinafter, the Law) and the Decision of the Council of the Commission for Protection of Competition enacted at the 180th session held on December 17, 2018, the Commission for Protection of Competition (hereinafter, the Commission) launched a sector inquiry into the oil derivatives retail market.

In the previous period, the Commission prepared eight sector inquiries into the market concerned, namely:

1. Report on the analysis of imports, processing, wholesale and retail market of oil and oil derivatives in the period 2008-2010;
2. Report on the sector inquiry into the oil derivatives wholesale and retail market 2011;
3. Report on the sector inquiry into the oil derivatives wholesale and retail market 2012;
4. Report on the sector inquiry into the oil derivatives wholesale and retail market 2013;
5. Report on the sector inquiry into the oil derivatives wholesale and retail market 2014;
6. Report on the sector inquiry into the oil derivatives wholesale and retail market 2015.
7. Report on the sector inquiry into the oil derivatives retail market 2016, and
8. Report on the sector inquiry into the oil derivatives retail market 2017.

The main purpose of the report writing is to analyze the competitive conditions prevailing in the oil production and processing market and in the oil derivatives retail market, to identify potential market weaknesses or other anti-competitive conditions. Additionally, the purpose of this inquiry is to recognize certain tendencies and trends, as well as to reach more clear findings on the functioning of this market through a comparative analysis of particular economic categories.

The subject of the sector inquiry is to establish relations between main competitors in the predefined market segments and assess their market share and relative market power.

The main sources of data and information for the inquiry-related purposes were:

- Undertakings, providing related information based on the structured questionnaires drafted by the Commission – Request for the provision of information;
- Ministry of Energy and Mining, providing information on the aggregate trading of oil derivatives and the total number of petrol stations;
- Ministry of Finance - Customs Administration, and the Chamber of Commerce and Industry of Serbia, providing information on the imports and exports of crude oil and oil derivatives;
- Ministry of Finance, providing information on the total excise tax revenues, per type of oil derivative;
- Information provided by the Association of Oil Companies of Serbia (Serbian acronym UNKS);
- The existing legal framework and information from the Energy Balance publication;
- Publicly available online data.

To ensure the continuity of the work undertaken in the preparation of previous reports and monitor the dynamics of particular indicators, the sample captured all 11 undertakings included in the previous inquiry, as well as additional 8 undertakings which, based on publicly available information, have been found to have considerably increased their retail networks in the previous period. The sample may be considered as representative given that it captures 19 business entities operating in the oil derivatives retail domain and whose petrol stations account for 58% of the total number of petrol station in Serbia.

The following undertakings have been approached by the Commission with the Request for the provision of information:

- Društvo za istraživanja, proizvodnju, preradu, distribuciju i promet nafte i naftnih derivata i istraživanje i proizvodnju prirodnog gasa Naftna industrija Srbije a.d. Novi Sad (hereinafter, **NIS**); *([Joint stock] Company for research, production, processing, distribution and trade of oil and oil derivatives and research and production of natural gas Naftna industrija Srbije a.d. Novi Sad),*
- Društvo za promet naftnih derivata Lukoil Srbija ad Beograd (hereinafter, **Lukoil**); *([Joint stock] Company for trade of oil derivatives Lukoil Srbija ad Beograd),*
- Preduzeće za trgovinu naftom i gasom Mol Serbia doo Beograd (hereinafter, **MOL Serbia**); *([Limited liability] Company for trade of oil and gas Mol Serbia doo Beograd),*
- Privredno društvo za trgovinu i usluge OMV Srbija doo Beograd (hereinafter, **OMV**); *([Limited liability] Trading and service company OMV Srbija doo Beograd),*
- Eko Serbia ad Beograd (hereinafter, **Eko Serbia**); *([Joint stock] Company Eko Serbia ad Beograd),*
- Društvo za proizvodnju, promet i usluge Knez Petrol doo Beograd (hereinafter, **Knez petrol**); *([Limited liability] Company for production, trade and services Knez petrol doo Beograd),*
- DOO Euro Petrol trgovačko preduzeće Subotica (hereinafter, **Euro Petrol**); *([Limited liability] Trading company DOO Euro Petrol Subotica),*
- Preduzeće za proizvodnju, promet i usluge Evolucija 2004 doo Beograd (hereinafter, **Evolucija 2004**); *([Limited liability] Company for production, trade and services Evolucija 2004 doo Beograd),*
- Natfachem petrol doo za trgovinu i usluge Sremska Kamenica (hereinafter, **Naftachem**); *([Limited liability] Trading and service company Natfachem petrol doo Sremska Kamenica),*
- Preduzeće za trgovinu Speed doo Beograd (hereinafter, **Speed**); *([Limited liability] Trading company Speed doo Beograd),*
- Društvo za trgovinu, promet i usluge Daki petrol doo Beograd (hereinafter, **Daki petrol**)[1]; *([Limited liability] Company for trade, transport and services Daki petrol doo Beograd)*,

[1] In preparation of the report, company *Daki petrol* informed the Commission on the freeze of corporate accounts and termination of all lease agreements as of May 2018, as well as that the company had no petrol stations open as of December 31, 2018.

- Art Petrol doo Beograd (hereinafter, **Art Petrol**); *([Limited liability] Company Art Petrol doo Beograd),*
- Preduzeće za trgvinu naftom i naftnim derivatima Radun Avia doo Novi Sad (hereinafter, **Radun Avia**); *([Limited liability] Company for trade of oil and oil derivatives Radun Avia doo Novi Sad),*
- Taxi Petrol doo Pančevo (hereinafter, **Taxi Petrol**); *([Limited liability] Company Taxi Petrol doo Pančevo),*
- Mihajlović sistem doo Paraćin (hereinafter, **Mihajlović sistem**); *([Limited liability] Company Mihajlović sistem doo Paraćin),*
- Preduzeće za promet roba i usluga Golubović doo Čubra (hereinafter, **Golubović**); *([Limited liability] Trading company Golubović doo Čubra),*
- Privredno društvo Morava Gas doo Ljig (hereinafter, **Morava Gas**); *([Limited liability] Company Morava Gas doo Ljig),*
- Petrol društvo za trgovinu naftom i naftnim derivatima doo Beograd (hereinafter, **Petrol**); *([Limited liability] Company for trade of oil and oil derivatives Petrol doo Beograd),* and
- Privredno društvo za proizvodnju, trgovinu, saobraćaj i usluge Miletić-Komerc doo Šaludovac (hereinafter, **Miletić-Komerc**); *([Limited liability] Company for production, trade, transportation and services Miletić-Komerc doo Šaludovac).*

When defining the markets for the purposes of this sector inquiry, the Commission observed the entire chain of supply in this particular industry sector and established that the inquiry into competitive conditions should relate to the following markets:

1. Oil production and processing and oil derivatives production market, and
2. Oil derivatives retail market.

In addition to these broadly defined markets, the Commission established that for the purposes of this sector inquiry said markets should be additionally segmented, specifically between:

- gasoline retail market;
- diesel retail market;
- liquefied petroleum gas (LPG) retail market[2].

The sampled companies were requested to provide the following information concerning the oil derivatives retail segment:

- number of petrol stations;
- sales revenues from oil derivatives, sales revenues from non-core activities and the total turnover breakdown by categories of petrol stations;
- operating expenses by categories of petrol stations;
- major suppliers of gasoline and diesel, expressed in terms of quantity and value;
- breakdown of purchase volumes and prices of oil derivatives by sources of supply;
- breakdown of sold volumes and prices of oil derivatives by categories of petrol stations;

[2] The additional segmentation was made by the Commission for the sector inquiry purposes only, given the fact that the gasoline market and the liquefied petroleum gas market cannot be fully treated as two separate markets.

- oil derivatives retail pricing strategy.

In addition to said information, undertakings were also requested to provide the weekly retail prices of oil derivatives, *Evro premijum BMB 95* and *Euro Diesel*, valid at petrol stations on highways and in urban areas.

The research is conducted by using desk research and survey methods. The use of a combination of the qualitative and quantitative research techniques when processing collected data was rendered necessary given the subject and the purpose of this inquiry. The methods used when drafting the sector inquiry are the descriptive research method, the method comparison, and the statistical method. The correlation and regression analyses are used in the analysis of the oil and oil derivatives price fluctuations.

1.2. Relevant legal framework in 2018

The main regulations governing legal relations in the oil derivatives market in 2018 are the following:

1. Energy Law (Official Gazette of the RS 145/2014 и 95/2018-as amended), and
2. Law on Trade (Official Gazette of the RS 53/2010, 10/2013 и 44/2018 – as amended).

Additionally, regulations of relevant importance are the following:

1. Regulation on labeling (marking) of oil derivatives (Official Gazette of the RS 51/2015 and 5/2017);
2. Regulation on oil derivatives and biofuels quality monitoring (Official Gazette of the RS 97/2015, 5/2017, 8/2017, 119/2017 and 102/2018);
3. Rulebook on license for carrying out energy activities and certification (Official Gazette of the RS 87/2015);
4. Rulebook on technical and other requirements for liquid fuels of petroleum origin (Official Gazette of the RS 111/2015, 106/2016, 60/2017, 117/2017, 120/2017, 50/2018 and 101/2018); and,
5. Rulebook on minimum technical requirements for carrying out oil derivatives and biofuels trading operations (Official Gazette of the RS 68/2013 and 81/2015).

In terms of fiscal policy, regulations listed below are considered relevant:

1. Regulation on the amount, method of calculation, payment and disposal of fees for the formation of mandatory reserves of oil and oil derivatives (Official Gazette of the RS 53/2015)

The fees for the formation of mandatory reserves are as follows: 2.6 din/l for unleaded gasoline and aviation fuel; 2.6 din/kg for gas oils, liquefied petroleum gas and fuel oil; and, 0.10 din/kg for jet fuels.

2. Excise Tax Law (Official Gazette of the RS, 22/01, 73/01, 80/02 – as amended, 80/02, 43/03, 72/03, 43/04, 55/04, 135/04, 46/05, 101/05 – as amended, 61/07, 5/09, 101/10, 43/11, 101/11, 93/12, 119/12, 47/13, 68/14 – as amended, 142/14, 55/15, 103/15, 5/2016, 108/2016, 7/2017, 18/2018 and 30/2018)

The amounts of excise tax on motor fuels laid down by the Excise Tax Law are amended on March 17, 2018[3], and are given in Table 1:

In 2018, the value added tax was payable at the rate of 20 percent.

Table 1 *– Excise taxes, 2018*

Type of oil derivative	Excise tax per unit of measure
Leaded gasoline	59.58 din/l
Unleaded gasoline	54.94 din/l
Diesel fuels, gas oils	56.50 din/l
Liquefied petroleum gas	42.90 din/kg

In addition to excise and VAT duties, the retail price structure of a liter of oil derivative also includes the fuel marking and the quality monitoring service costs of 0.28 din/l and 0.09 din/l, respectively.

2. OIL AND OIL DERIVATIVES PRODUCTION AND PROCESSING MARKET

2.1. Production and imports of crude oil

The oil, oil derivatives and biofuels balance, as part of the Energy Balance, covers the production, imports and exports of crude oil, processing of crude oil in oil refineries, as well as the production, imports, exports and consumption of oil derivatives.

The 2018 Energy Balance of the Republic of Serbia contains data on the realized energy balance for 2017, estimates for 2018, and plans for 2019.

According to the Energy Balance data, the Republic of Serbia produced 924,000 tonnes of crude oil in 2017, while the net imports amounted to 2.6 million tonnes. The national production covered 24% of the total needs for this energy source, while the remainder was procured from foreign supply sources.

[3] For the purposes of this inquiry, the new amended amounts of excise duties are considered to be implemented as of April 2018.

***Table 2** – Production and net imports of crude oil, 2016-2019*

Crude oil supply sources	Production and net imports (000 t)			
	Realized energy balance in 2016	Realized energy balance in 2017	Estimates for 2018	Plans for 2019
Production	984	924	906	842
Net imports	2.295	2.557	2.719	2.556
Total	3.269	3.481	3.625	3.398

Source: Energy Balance of the Republic of Serbia for 2019, pp. 13-14

The trend of decreasing national production volumes of crude oil from the previous period continued in 2018 as well, followed by the increase in net imports, as a result of which, the 2018 estimates saw a 2% decrease in the production of crude oil than in 2017, while the 2019 plans assumed a reduction by 7% and 9% in the production of crude oil compared to 2018 and 2017, respectively.

The 2019 forecasts predict somewhat smaller needs for oil in the total amount of 3.4 million tonnes, which will be mostly globally sourced as in the previous period. In 2019, approximately 25% of crude oil supply for processing purposes in oil refineries will be secured from the domestic production sources, while the imports will be reduced by 6% compared to 2018.

The only oil and gas research and production company in the Republic of Serbia is NIS. Information on the total volumes supplied from both supply sources, per months and supply sources, are presented in Table 3:

***Table 3** – Supply structure of crude oil, 2018*

Month	Volumes supplied (t)	
	production	imports
January	[…]	[…]
February	[…]	[…]
March	[…]	[…]
April	[…]	[…]
May	[…]	[…]
June	[…]	[…]
July	[…]	[…]
August	[…]	[…]
September	[…]	[…]
October	[…]	[…]
November	[…]	[…]
December	[…]	[…]
Total, 2018	[…]	[…]
Percentage share	24%	76%

Source: **NIS**

Based on the above data, it can be noted that 76% of crude oil was externally procured in 2018, while the balance of 24% was domestically sourced. Diagram 1 gives a graphic representation of the ratio of domestic production to imports of crude oil.

Diagram 1 *– Supply structure of crude oil, 2018*
[…]

Source: NIS

Table 4 provides an overview and comparison between the purchase price of domestic and imported crude oil:

Table 4 *– Purchase price of domestic and imported crude oil (USD/t), 2018*

Month	Purchase price (USD/t)		Price diff. index (domestic crude oil = 100)
	Imported crude oil	Domestic crude oil	
January	[…]	[…]	[…]
February	[…]	[…]	[…]
March	[…]	[…]	[…]
April	[…]	[…]	[…]
May	[…]	[…]	[…]
June	[…]	[…]	[…]
July	[…]	[…]	[…]
August	[…]	[…]	[…]
September	[…]	[…]	[…]
October	[…]	[…]	[…]
November	[…]	[…]	[…]
December	[…]	[…]	[…]

Source: NIS

The price of imported crude oil was [...] higher than the price of crude oil procured from domestic sources throughout the entire year. The price difference between the domestic and imported crude oil reached a maximum during the month of [...] when the foreign sourced crude oil was [...] more expensive than the crude oil from domestic sources, while the minimum price difference was recorded during the month of [...] when the imported crude oil was [...] more expensive than the domestic crude oil.

Diagram 2 gives a graphic representation of the purchase price trends.

Diagram 2 *- Comparative overview of the purchase price trends of crude oil (USD/t), 2018*

[...]

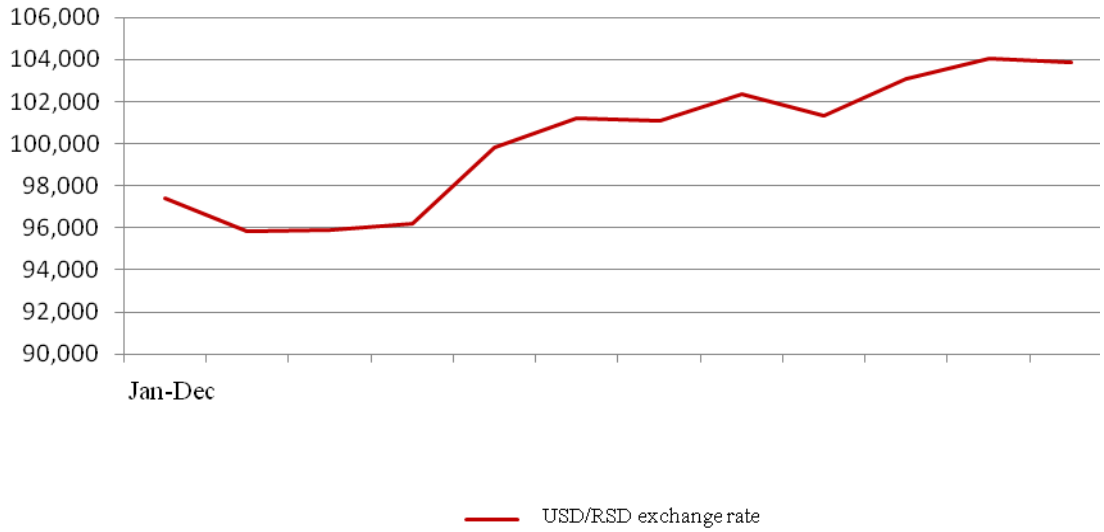
Source: NIS

Based on the above diagram, it can be noted that the price of imported crude oil fluctuated slightly upward for a good part of 2018, only to see the change in the trend with a significant price undercutting by the closing quarter relative to the previous period. On the other hand, the price of domestic crude oil sustained an upward trend throughout the year, exceeding by [...] in December than at the beginning of the year. Due to the opposing price trends of imported and domestic crude oil in the second half of the year, the price difference was

reduced by [...] relative to the January price. The correlation coefficient of foreign and domestic crude oil was weak negative, reaching [...].

Diagram 3 gives a graphic representation of the Serbian Dinar (RSD) to US Dollar (USD) exchange rate fluctuations in 2018.

Diagram 3 *- RSD-USD exchange rate fluctuations, 2018*



The US Dollar has mildly strengthened against the Serbian Dinar in 2018, where the average middle exchange rate during the period amounted to 100.2063 dinars, which remains a lower value against the 2017 average exchange rate at 107.4987 dinars. The exchange rate fluctuated between 98.1367 dinars on January 3, 2018, and 103.3893 dinars on December 31, 2018, which represents a higher exchange rate or depreciation of the national currency by 5%.

The fluctuations in prices of crude oil and the USD Dollar exchange rate will represent considerable variables in the cost analysis that will be presented in a separate part of this report.

2.2. Production and imports of oil derivatives

2.2.1. Production of oil derivatives

According to the figures provided by NIS, a total of [...] million tonnes of oil derivatives are produced in 2018, by [...] more than in 2017. The total production volumes relate to the Oil refinery Pančevo since the production capacities of the Oil refinery Novi Sad are currently out of commission. The production structure of oil derivatives is given in Table 5.

Table 5 *– Production of oil derivatives, 2018*

Type of oil derivatives	Oil refinery Pančevo (t)	%
1. Motor fuels (1.1.+1.2.+1.3.+1.4.+1.5.)	[...]	/60-70/
1.1. Gasoline	[...]	/10-20/
Evro Premijum BMB-95	[...]	[...]
Evro BMB-100	[...]	[...]
Evro BMB-98	[...]	[...]
Other gasoline	[...]	[...]
1.2. Diesel fuels	[...]	/40-50/
Euro Diesel	[...]	[...]
Biodiesel	[...]	[...]
Other diesel fuels	[...]	[...]
1.3. Aviation fuel – jet fuel	[...]	/5-10/
1.4. LPG for motor vehicles – auto gas	[...]	/0-5/
1.5. Other motor fuels	[...]	/0-5/
2. Energy generating fuels (2.1.+2.2.+2.3.)	[...]	/5-10/
2.1. LPG gas cylinders	[...]	[...]
2.2. Fuel oil – heavy fuel	[...]	/5-10/
Low-sulphur fuel oil (NSG-S)	[...]	[...]
Medium fuel oil (S)	[...]	[...]
Extra light fuel oil (EURO EL)	[...]	[...]
2.3. Other energy generating fuels	[...]	[...]
3. Non-energy generating fuels (3.1.+3.2.+3.3.+3.4.)	[...]	/20-30/
3.1. Primary fuel	[...]	[...]
3.2. Bitumen	[...]	[...]
3.3. Petrochemical raw materials	[...]	[...]
3.4. Other non-energy generating fuels	[...]	[...]
OIL DERIVATIVES, TOTAL (1.+2.+3.)	[...]	100%

Source: NIS

Motor fuels (gasoline, diesel fuels, aviation fuel-jet fuel, LPG for motor vehicles-auto gas, other motor fuels) dominate in the oil derivatives production structure and make up about /60-70/% of the total oil derivatives production. The production of non-energy generating fuels account for about /20-30/% of the total oil derivatives production, while the energy generating fuels with about /5-10/% have the lowest share in the total production of oil derivatives. Table 6 provides a comparative overview of the oil derivatives production volumes during the last five years.

Table 6 *– Comparison table of the total production of oil derivatives, 2014-2018*

Type of oil derivatives	Production of oil derivatives (t)				
	2014	2015	2016	2017	2018
Motor fuels	[...]	[...]	[...]	[...]	[...]
Energy generating fuels	[...]	[...]	[...]	[...]	[...]
Non-energy generating fuels	[...]	[...]	[...]	[...]	[...]
Oil derivatives production, total	[...]	[...]	[...]	[...]	[...]

Source: NIS

The observed five year-period reaffirmed the trend towards a continuous increase in the volume oil derivatives production by [...] in 2018 relative to 2014. The production of motor and non-energy generating fuels increased by [...] and [...], respectively, while the production

of energy generating fuels was reduced by [...] during the observed period. Relative to 2017, the highest output growth was recorded in the motor fuels category by [...].

Based on the data from the 2019 Energy Balance of the Republic of Serbia, the planned production of oil derivatives in 2019 amounts to 3.62 million tonnes, which is an 1.3% increase against the realized domestic production of oil derivatives in 2018. The structure of motor fuels production in 2018 is presented in Table 7.

***Table 7**- Structure of motor fuels production, 2018*

Type of oil derivatives	Production (t)	Share (%)
Gasoline	[...]	/20-30/
Diesel fuels	[...]	/60-70/
Aviation fuel - jet fuel	[...]	/5-10/
LPG auto gas	[...]	/0-5/

Source: NIS

As in the previous period, diesel fuels are dominant in the structure of motor fuels production with /60-70/% share, while the gasoline production accounts for /20-30/%. The production of aviation fuel-jet fuel and LPG for motor vehicles-auto gas jointly account for around /5-10/% of the total production of motor fuels, where the share of LPG auto gas in the total production of motor fuels decreased from year to year.

Evro Premijum BMB 95 accounts for /80-90/% in the production structure of gasoline, while the share of BMB 100 is /10-20/% and BMB 98 only /0-5/%. Euro diesel is absolutely dominant in the total production of diesel fuels with /90-100/%.

2.2.2. Imports of oil derivatives

The data on total imports of oil derivatives are collected from the Ministry of Finance-Customs Administration and the Chamber of Commerce and Industry of Serbia. Both data sources are used in the inquiry. The data on the total imports of gasoline and diesel fuels are sourced from the Customs Administration, while the data on the liquefied petroleum gas imports are retrieved from the CCI, calculating the imports of auto gas or butane-propane mix, LPG gas cylinders excluded, based on the official statistical and customs data. Table 8 provides a comparative overview of the imports of selected oil derivatives in the previous five-year period.

***Table 8** – Comparison table of the imports of motor fuels, 2014-2018*

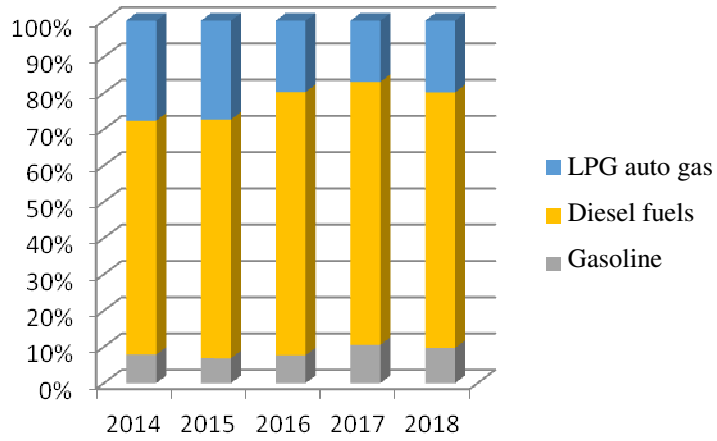
Type of oil derivative	Volume (t)				
	2014	2015	2016	2017	2018
Gasoline	53,084	49,133	53,645	77,408	66,664
Diesel fuels	434,934	468,979	504,136	530,441	483,333
LPG auto gas	186,118	194,584	136,841	123,617	135,647
Total	674,136	712,695	694,622	731,498	685,644

Source: CCI, Customs Administration

The total imports of the category of oil derivatives covered during the observed five-year period showed a variable trend and it was 2% higher in 2018 than in 2014. The imports of gasoline during the same period experienced growth of 26%, imports of diesel fuels increased by 11%, while the imports of LPG auto gas decreased by 27%.

The imports of gasoline and diesel fuels dropped in 2018 by 14% and 9%, respectively, relative to the previous year, 2017, while the imports of LPG auto gas increased for the first time in the last five years by 10%. Diagram 5 gives a graphic representation of the motor fuels import structure.

Diagram 5 *– Comparative overview of the motor fuels import structure, 2014-2018*



Source: CCI, Customs Administration

Based on the diagram above, it can be noted that in the import structure of motor fuels in 2018, as in the previous period, diesel fuels dominate with about 70% of the imported quantities. The share of gasoline in the total volume of imported motor fuels make up about 10%, while the imports of liquefied petroleum gas represent 20% of the total imports of motor fuels.

The analysis of the import structure by importers[4], it can be noted that only two gasoline importers operated during 2018, companies OMV and Mol Serbia, reaching /40-50/% and /50-60/% share of the total imports, respectively. OMV is the only importer of unleaded petrol BMB 100, while BMB 95 is imported by both importers.

Mol Serbia and Lukoil are at the forefront of the euro diesel imports in 2018 with /30-40/% and /10-20/% share in the total imports of this oil derivative, respectively, followed by Speed, OMV and Evolucija 2004, where the five undertakings make up about 85% of the euro diesel imports in 2018. Prominent euro diesel importers are also NIS and Eko Serbia, while other undertakings import marginal amounts of this oil derivative.

The largest importer of LPG auto gas is NIS with /40-50/% share in the total imports, followed by PETROL LPG with /10-20/% share in the imports, Euro gas and Mol Serbia with /10-20/% each and OMV with /5-10/% share in the imports, where the five importers make up 95% of the total imports of LPG auto gas.

[4] The import structure by importers is observed based on the information provided by the Customs Administration and CCI.

3. OIL DERIVATIVES RETAIL MARKET

The retail trade of oil derivatives implies the trade in motor and other fuels used to provide power to motor vehicles. Both national and foreign companies with subsidiaries registered in the territory of the Republic of Serbia operate as petroleum retailers in Serbia.

An additional segmentation of retail market into three separate markets is performed for the sector inquiry related needs: gasoline retail market, diesel retail market, and LPG retail market.

The structure of supply is observed within each segregated sub-market, in terms of establishing the sources and degree of concentration, as well as the structure of sales towards identifying the market power of undertakings in narrowly defined market segments.

In order to analyze the trends in oil derivatives retail market and establish the market shares of respective undertakings, the Commission collected the following aggregate data:

- Information on the total excise duty collected, by type of oil derivatives, provided by the Ministry of Finance;
- Information provided by the Ministry of Mining and Energy, collected pursuant to the Regulation on labeling (marking) of oil derivatives, which governs conditions, manner and procedure of labeling (marking) of oil derivatives placed on the market, while the term 'placement on the market' within the meaning of this regulation means the trading in oil derivatives in the market of the Republic of Serbia, trading in oil derivatives in the market of the Autonomous Province of Kosovo and Metohija for the duration of the UN Security Council Resolution 1244, and the exports of oil derivatives;
- Information on the own assessment of NIS' share of the total retail sales of particular oil derivatives, used for further estimates of the total turnover of oil derivatives under analysis.

Table 9 provides a comparative overview of the total retail turnover of oil derivatives, based on the above-mentioned three sources of information.

Table 9 *– Comparison table of the estimated retail turnover, 2018*

Type of oil derivative	Estimated turnover in motor fuels (000l)		
	Ministry of Finance	Ministry of Mining and Energy	NIS
Gasoline	562,108,675	567,813,165	[...]
Diesel fuels	2,071,076,755	2,100,120,978	[...]
Liquefied petroleum gas	362,518,551	409,254,561	[...]

Source: Ministry of Finance, Ministry of Mining and Energy, NIS

Based on the above table, certain biases in the estimation of sold quantities of oil derivatives are noticeable, most likely due to the implementation of various methods of calculation.

For the purposes of this sector inquiry, the Commission opted for the information provided by the Ministry of Finance, foremost owing to the comparability of data on market shares of selected undertakings with the data from the previous sector inquiry.

Prior to the analysis of oil derivatives retail market, it is also important to mention the sample representativeness since it is established that:

- The turnover in gasoline generated by undertakings captured by the sample account for 80% of the total retail trade turnover in gasoline;
- The turnover in diesel fuels generated by undertakings captured by the sample account for 61% of the total retail trade turnover in diesel fuels;
- The turnover in LPG generated by undertakings captured by the sample account for about 59% of the total retail trade turnover in LPG.

3.1. Number of petrol stations and structure by location

The total number of petrol stations determined on the basis of information provided by 19 undertakings captured by the sample is **886** as on December 31, 2018**.**

Table 10 provides an overview of the total number of petrol stations in operation owned by undertakings captured by the sample, in addition to their structure by location.

Table 10 *– Overview of the petrol stations in operation as on December 31, 2018*

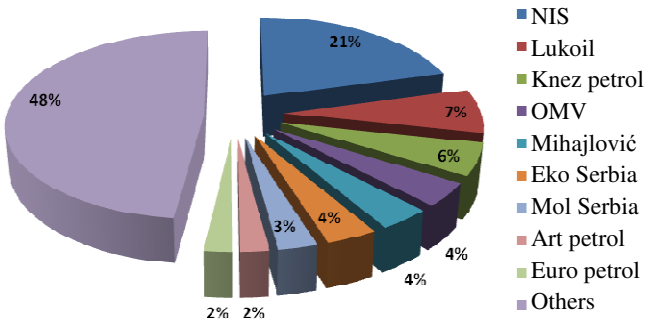
No.	Undertaking	Highways	Urban areas	Arterial highways	Rural areas	Total
1	Eko Serbia	7	34	14	0	55
2	Euro petrol	1	17	6	6	30
3	Evolucija 2004			2		2
4	Knez petrol	0	61	8	15	84
5	Lukoil	8	57	10	39	114
6	Mol Serbia	9	26	7	0	42
7	NIS	17	184	48	68	317
8	Daki Petrol	0	0	0	0	0
9	OMV	12	40	9	0	61
10	Naftachem petrol	0	5	0	6	11
11	Speed		1		1	2
12	Mihajlović	0	34	6	16	56
13	Golubović		3	3	4	10
14	Radun avia	0	11	0	12	23
15	Taxi petrol	0	8	0	3	11
16	Petrol doo	1	11			12
17	Art petrol	1	19	6	5	31
18	Morava Gas			1	12	13
19	Miletić-Komerc	0	8	0	4	12
Total		**56**	**519**	**120**	**191**	**886**

Source: Information provided by undertakings

Out of the total number of petrol stations, 59% is concentrated in urban areas and about 22% in rural areas. There are about 14% of petrol stations on arterial highways, while the smallest number of petrol stations are located on highways, only 6%.

Based on the information provided by the Ministry of Mining and Energy, the total number of petrol stations in operation during 2018 amounted to 1,523, out of which 58% is captured by the sector inquiry. The percentage shares of the top none undertakings with the highest number of petrol stations are presented in Diagram 6.

Diagram 6 *– Ownership structure of petrol stations, 2018*



The highest number of petrol stations (317) are owned by NIS, managing 21% of the total number of petrol stations in Serbia, followed by Lukoil and Knez petrol with 7% and 6% share in the total number of petrol stations in the country, respectively. Companies OMV, Mihajlović and Eko Serbia own about 4% each, Mol Serbia about 3%, while Art Petrol, and Euro Petrol own about 2% of the total number of petrol stations. The shares of other undertakings in the total number of petrol stations are below 1%. Table 11 gives a comparative overview of the number of petrol stations owned by 19 observed undertakings in 2017 and 2018.

Table 11 *– Comparison table of the number of petrol stations, 2017-2018*

No.	Undertaking	2017	2018	Variance
1	Eko Serbia	54	55	1
2	Euro Petrol	32	30	-2
3	Evolucija 2004	2	2	0
4	Knez petrol	79	84	5
5	Lukoil	115	114	-1
6	Mol Serbia	41	42	1
7	NIS	323	317	-6
8	Daki petrol	5	0	-5
9	OMV	61	61	0
10	Naftachem petrol	9	11	2
11	Speed	2	2	0
12	Mihajlović	52	56	4
13	Golubović	9	10	1
14	Radun avia	22	23	1
15	Taxi petrol	10	11	1
16	Petrol doo	12	12	0
17	Art petrol	28	31	3
18	Morava Gas	11	13	2

19	Miletić-komerc	11	12	1
Total		**878**	**886**	**8**

Source: CPC calculations based on information provided by undertakings

The comparative analysis of the number of petrol stations in operation during the observed two year-period led to the following observations:

- Four undertakings have kept the same number of petrol stations in 2018, namely Speed, OMV, Evolucija 2004, and Petrol doo;
- Three undertakings have reduced the number of petrol stations in 2018 (Euro petrol, Lukoil, and NIS), while one company exited the marketplace (Daki petrol);
- Eleven undertakings increased the number of petrol stations during 2018 relative to the preceding year, specifically Knez petrol (5 petrol stations), Mihajlović (4), Art Petrol (3), Naftachem (2), Morava Gas (2), and Eко Serbia, Mol Serbia, Golubović, Radun Avia, Taxi petrol (1 each).

3.2. Gasoline retail market

3.2.1. Gasoline supply structure

Out of a total of 19 undertakings under the analysis, eight undertakings procured only *Evro Premijum BMB 95*, nine undertakings procured *Evro Premijum BMB 95* and *Evro BMB 98*, one undertaking procured *Evro Premijum BMB 95* and *Evro BMB 100*, while NIS was the only company that procured all three types of this particular oil derivative. Table 12 gives an overview of the structure of gasoline supply by origin of supply in 2018.

Table 12 *– Gasoline supply structure, 2018*

Undertaking	Evro BMB 98		Evro premijum BMB 95		Evro BMB 100		Gasoline	
	domestic market	imports	domestic market	imports	domestic market	imports	domestic market	imports
Eko Serbia	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Euro petrol	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Evolucija 2004	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Daki petrol	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Lukoil	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Mol Serbia	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Naftachem petrol	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
NIS	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
OMV	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Speed	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Mihajlović	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Golubović	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Radun avia	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Taxi petrol	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Petrol doo	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Art petrol	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Morava Gas	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Miletić-komerc	[...]	[...]	[...]	[...]	[...]	[...]	[...]	[...]
Total	**100%**	**0%**	**93%**	**7%**	**88%**	**12%**	**92%**	**8%**

Source: CPC calculations based on information provided by undertakings

Based on information provided by undertakings, gasoline supplies are primarily domestically sourced (92%), while only 8% of the related quantities are imported. Only two companies, [...] and [...], are predominately supplied from foreign sources.

In terms of sources of supply or whether or not the procurement is done through an affiliate company, it can be noted that four undertakings have made indirect purchases via related affiliates. In this way, companies [...] and [...] have procured gasoline through a domestic affiliate company, while [...] and [...] have purchased most of gasoline from foreign sources.

By considering the procurement from external sources, it could be noted that NIS as a major supplier is associated with companies [...] and [...] (100%), [...] (94%), [...] (80%), and [...] (69%). On the other hand, NIS as a major supplier is not mentioned by [...], [...], [...], [...], and [...], while its share in the procurement of company [...] is 10%.

Table 13 provides an overview of the percentage share of the top five suppliers in the total procurement volumes, based on information provided by undertakings[5].

Table 13 *– Supplier concentration in gasoline, 2018*

Undertaking	Volume procured (in 000l)		Top five suppliers, percentage share
	Top five suppliers	Total	
Eko Serbia	[...]	[...]	[...]
Euro petrol	[...]	[...]	[...]
Evolucija 2004	[...]	[...]	[...]
Knez petrol	[...]	[...]	[...]
Lukoil	[...]	[...]	[...]
Mol Serbia	[...]	[...]	[...]
NIS	[...]	[...]	[...]
OMV	[...]	[...]	[...]
Daki petrol	[...]	[...]	[...]
Naftachem petrol	[...]	[...]	[...]
Speed	[...]	[...]	[...]
Mihajlović	[...]	[...]	[...]
Golubović	[...]	[...]	[...]
Radun avia	[...]	[...]	[...]
Taxi petrol	[...]	[...]	[...]
Petrol doo	[...]	[...]	[...]
Art petrol	[...]	[...]	[...]
Morava Gas	[...]	[...]	[...]
Miletić-komerc	[...]	[...]	[...]

Source: CPC calculations based on information provided by undertakings [6]

As shown above, a high concentration of supply in case of all observed undertakings can be noted, given that the top five suppliers represent between 76% and 100% of the supply.

3.2.2. Gasoline turnover structure

[5] [...] provided information on the procured volumes by suppliers in kilograms, converted to liters by using the following formula: 1 liter = 0.75 kg of gasoline

[6] [...] and [...] failed to provide information on the largest suppliers of gasoline.

A total of 19 undertakings have provided information on the total turnover in gasoline, where ten undertakings traded in *Evro BMB 98*, only two traded in *Evro BMB 100*, while all undertakings under the analysis have traded in *Evro premijum BMB 95*.

The gasoline trading volume of undertakings which have provided information to the Commission amounted to about 451 million liters.

Table 14 provides an overview of the market shares in 2018, obtained by cross-referencing the information on trading volumes of undertakings with the total turnover data based on information provided by the Ministry of Finance.

Table 14 *– Turnover in gasoline, 2018*

Undertaking	Generated turnover (000 l)	Market share (%)
Eko Serbia	[...]	/5-10/
Euro petrol	[...]	/0-5/
Evolucija 2004	[...]	/0-5/
Knez petrol	[...]	/0-5/
Lukoil	[...]	/5-10/
Mol Serbia	[...]	/0-5/
NIS	[...]	/40-50/
OMV	[...]	/5-10/
Daki petrol	[...]	/0-5/
Naftachem petrol	[...]	/0-5/
Speed	[...]	/0-5/
Mihajlović	[...]	/0-5/
Golubović	[...]	/0-5/
Radun avia	[...]	/0-5/
Taxi petrol	[...]	/0-5/
Petrol doo	[...]	/0-5/
Art petrol	[...]	/0-5/
Morava Gas	[...]	/0-5/
Miletić-komerc	[...]	/0-5/
19 undertakings, total	451,171	80.3%
Others	110,937	19.7%
Gasoline, total turnover	562,109	100.0%

Source: CPC calculations based on information provided by undertakings, Ministry of Finance

Company NIS generated the highest retail trade turnover in gasoline in 2018, reaching about a /40-50/% share which represents an increase by [...] percentage points compared to the previous year, followed by companies Lukoil (/5-10/%), OMV (/5-10/%), Eko Serbia (/5-10/%), Mol Serbia (/0-5/%), and Knez petrol with a /0-5/% share in turnover.

The information on the own market share assessment made by NIS relating to the company's retail trade in gasoline is presented in Table 15.

Table 15 *– Own market share assessment - gasoline, 2018*

Type of oil derivative	Market share assessment
Gasoline	[...]
Evro BMB 98	[...]
Evro premijum BMB 95	[...]

Source: NIS

Table 16 provides a comparative overview of the turnover in gasoline for 2017 and 2018, generated by undertakings for which historical data were available.

Table 16 *– Comparison table of the turnover in gasoline, 2017-2018*

Undertaking	Turnover, in 000 l		Index (2017=100)
	2017	2018	
Eko Serbia	[...]	[...]	[...]
Euro petrol	[...]	[...]	[...]
Evolucija 2004	[...]	[...]	[...]
Daki petrol	[...]	[...]	[...]
Knez petrol	[...]	[...]	[...]
Lukoil	[...]	[...]	[...]
Mol Serbia	[...]	[...]	[...]
Naftachem petrol	[...]	[...]	[...]
NIS	[...]	[...]	[...]
OMV	[...]	[...]	[...]
Speed	[...]	[...]	[...]
Total, 11 undertakings	389,393	423,327	109
Mihajlović	[...]	[...]	[...]
Golubović	[...]	[...]	[...]
Radun avia	[...]	[...]	[...]
Taxi petrol	[...]	[...]	[...]
Petrol doo	[...]	[...]	[...]
Art petrol	[...]	[...]	[...]
Morava Gas	[...]	[...]	[...]
Miletić-komerc	[...]	[...]	[...]
Total, 19 undertakings	n/a	451,171	n/a

Source: CPC calculations based on information provided by undertakings

If we compare data on the total turnover in gasoline generated by 11 observed undertakings in 2017 and 2018, it can be concluded that the total turnover increased by 9%. The increase in gasoline turnover levels compared to the previous year is registered with six undertakings, three companies reported a decline in turnover in this particular category, while two undertakings have maintained or deviated only slightly from their turnover levels compared to the preceding business year.

The highest rise in turnover is generated by [...] (41%) and [...] (35%), while [...] saw a steep drop in turnover due to [...].

Table 17 provides a comparative overview of the average turnover, obtained by cross-referencing the total turnover in gasoline with the total number of petrol stations.

Table 17 *– Average turnover in gasoline per petrol station, 2017-2018*

Undertaking	Average turnover, in 000 l		Index (2017=100)
	2017	2018	
Eko Serbia	[...]	[...]	[...]
Euro petrol	[...]	[...]	[...]
Evolucija 2004	[...]	[...]	[...]
Daki petrol	[...]	[...]	[...]
Knez petrol	[...]	[...]	[...]
Lukoil	[...]	[...]	[...]

	Average turnover, in 000 l		
Mol Serbia	[...]	[...]	[...]
Naftachem petrol	[...]	[...]	[...]
NIS	[...]	[...]	[...]
OMV	[...]	[...]	[...]
Speed	[...]	[...]	[...]
Total, 11 undertakings	538	590	110
Mihajlović	[...]	[...]	[...]
Golubović	[...]	[...]	[...]
Radun avia	[...]	[...]	[...]
Taxi petrol	[...]	[...]	[...]
Petrol doo	[...]	[...]	[...]
Art petrol	[...]	[...]	[...]
Morava Gas	[...]	[...]	[...]
Miletić-komerc	[...]	[...]	[...]
Total, 19 undertakings	n/a	509	n/a

Source: CPC calculations based on information provided by undertakings

The highest turnover in gasoline per petrol station in 2018 is generated by NIS, followed by Eko Serbia, OMV, and Mol Serbia, while these four undertakings generate a turnover per petrol station above the average for the sampled companies.

The average turnover for 11 observed undertakings increased during 2018 by 10% compared to 2017, reaching the level of 590 thousand liters. Given the fact that undertakings which the Commission included in the sample for the first time in 2018 generate a much smaller average turnover per petrol station, the average turnover for all 19 undertakings in 2018 amounted to 509 thousand liters.

The increase in the average turnover is recorded by seven undertakings, two companies saw a decrease in turnover per petrol station, one undertaking exited the marketplace, while one company maintained the average turnover.

The analysis of the gasoline turnover structure per category of petrol station indicates that gasoline account for 26% of the sales at petrol stations in rural areas, 25% in cities, and 18% and 19% of the sales at petrol stations on arterial highways and highways, respectively. Compared to the previous year, the share of gasoline in the total turnover at petrol stations on arterial highways has increased, while the other categories of petrol stations have maintained or only slightly changed the turnover share.

As in the previous year, in aggregate terms, gasoline accounted for 23% or nearly a quarter of the total sales at all petrol stations.

3.3. Diesel retail market

3.3.1. Diesel supply structure

Out of a total of 19 undertakings providing information on the imports of diesels fuels, 12 have procured both *Euro diesel* and *diesel Gas oil 0.1*, while 7 undertakings only procured *Euro diesel*.

Table 18 gives an overview of the structure of supply of diesel fuels, per type.

Table 18 *– Supply structure of diesel fuels, 2018*

Undertaking	Euro diesel		Gas oil 0.1		Diesel fuels	
	domestic market	imports	domestic market	imports	domestic market	imports
Eko Serbia	[...]	[...]	[...]	[...]	[...]	[...]
Euro petrol	[...]	[...]	[...]	[...]	[...]	[...]
Evolucija 2004	[...]	[...]	[...]	[...]	[...]	[...]
Daki petrol	[...]	[...]	[...]	[...]	[...]	[...]
Knez petrol	[...]	[...]	[...]	[...]	[...]	[...]
Lukoil	[...]	[...]	[...]	[...]	[...]	[...]
Mol Serbia	[...]	[...]	[...]	[...]	[...]	[...]
Naftachem petrol	[...]	[...]	[...]	[...]	[...]	[...]
NIS	[...]	[...]	[...]	[...]	[...]	[...]
OMV	[...]	[...]	[...]	[...]	[...]	[...]
Speed	[...]	[...]	[...]	[...]	[...]	[...]
Mihajlović	[...]	[...]	[...]	[...]	[...]	[...]
Golubović	[...]	[...]	[...]	[...]	[...]	[...]
Radun avia	[...]	[...]	[...]	[...]	[...]	[...]
Taxi petrol	[...]	[...]	[...]	[...]	[...]	[...]
Petrol doo	[...]	[...]	[...]	[...]	[...]	[...]
Art petrol	[...]	[...]	[...]	[...]	[...]	[...]
Morava Gas	[...]	[...]	[...]	[...]	[...]	[...]
Miletić-komerc	[...]	[...]	[...]	[...]	[...]	[...]
Total	90%	10%	100%	0%	90%	10%

Source: CPC calculations based on information provided by undertakings

Based on information on the supply structure by source of supply as provided by undertakings, diesel fuels are predominately domestically sourced, while only 10% is imported.[7] Only five undertakings have procured *Euro diesel* from foreign sources, out of which only [...] and [...] have fully relied on imports. In terms of *diesel Gas oil 0.1*, all undertakings have locally procured this oil derivative.

In regards to the supply structure of undertakings in terms of whether or not the procurement is done through an affiliate company, it can be noted that six undertakings have made indirect diesel purchases via affiliates, namely [...] (79%), [...] (96%), and [...] (100%) locally purchasing diesel fuels, as well as [...] (54%), [...] (95%), and [...] (30%) purchasing abroad.

In the domestic market, NIS holds a significant share in the supply of diesel fuels from external sources procured for the purposes of other companies, namely [...] (90%), [...] (73%), [...] (68%), [...] (64%), and [...] (59%), while the company is not listed among the top five suppliers of [...], [...], [...], and [...]. Company [...] is also a significant supplier of diesel fuels for [...], [...], and [...].

Table 19 provides an overview of the percentage share of procurements from the top five suppliers, based on information provided by undertakings.

[7] When interpreting this information, it is necessary to bear in mind that individual undertakings captured by the sample are locally supplied which is shown as domestic procurement, while the supplier (who also may be a subsidiary company) is also an importer, meaning that the part of the quantities supplied originates from foreign sources. To this effect, the actual share of procurements from imports is understandably higher than the value shown.

***Table 19** – Supplier concentration in diesel fuels, 2018*

Undertaking	Volume procured (in 000l)		Top five suppliers, percentage share
	Top five suppliers	Total	
Eko Serbia	[...]	[...]	[...]
Euro petrol	[...]	[...]	[...]
Evolucija 2004	[...]	[...]	[...]
Knez petrol	[...]	[...]	[...]
Lukoil	[...]	[...]	[...]
Mol Serbia	[...]	[...]	[...]
NIS	[...]	[...]	[...]
OMV	[...]	[...]	[...]
Daki petrol	[...]	[...]	[...]
Naftachem petrol	[...]	[...]	[...]
Speed	[...]	[...]	[...]
Mihajlović	[...]	[...]	[...]
Golubović	[...]	[...]	[...]
Radun avia	[...]	[...]	[...]
Taxi petrol	[...]	[...]	[...]
Petrol doo	[...]	[...]	[...]
Art petrol	[...]	[...]	[...]
Morava Gas	[...]	[...]	[...]
Miletić-komerc	[...]	[...]	[...]

Source: CPC calculations based on information provided by undertakings [8]

Based on information provided by undertakings, it can be noted that the procurement of diesel fuels is highly concentrated since 14 out of 19 undertakings procure more than 90% of their supplies from the top five suppliers.

3.3.2. Diesel turnover structure

All 19 undertakings have provided information on the traded volumes of diesel fuels, 12 of which traded both in *Euro diesel* and *diesel Gas oil 0.1*, while 7 only traded in *Euro diesel*.

Table 20 provides an overview of the market shares, obtained by cross-referencing the information on trading volumes of undertakings with the total turnover data based on information provided by the Ministry of Finance.

***Table 20 –** Turnover in diesel fuels, 2018*

Undertaking	Generated turnover (000 l)	Market share (%)
Eko Serbia	[...]	/0-5/

[8] [...] failed to provide information on the largest suppliers of diesel fuels.

Undertaking	Generated turnover (000 l)	Market share (%)
Euro petrol	[...]	/0-5/
Evolucija 2004	[...]	/0-5/
Knez petrol	[...]	/0-5/
Lukoil	[...]	/5-10/
Mol Serbia	[...]	/0-5/
NIS	[...]	/30-40/
OMV	[...]	/5-10/
Daki petrol	[...]	/0-5/
Naftachem petrol	[...]	/0-5/
Speed	[...]	/0-5/
Mihajlović	[...]	/0-5/
Golubović	[...]	/0-5/
Radun avia	[...]	/0-5/
Taxi petrol	[...]	/0-5/
Petrol doo	[...]	/0-5/
Art petrol	[...]	/0-5/
Morava Gas	[...]	/0-5/
Miletić-komerc	[...]	/0-5/
19 undertakings, total	1,266,955,199	61.2%
Others	804, 121, 557	38.8%
Diesel fuels, total turnover	2,071,076, 755	100.0%

Source: CPC calculations based on information provided by undertakings, Ministry of Finance

As in the previous period, NIS generated the highest retail trade turnover in diesel fuels in 2018, reaching a /30-40/% market share, followed by OMV and Lukoil with /5-10/% each and Knez petrol with /0-5/%.

The information on the own market share assessment made by NIS relating to the company's turnover in diesel fuels is presented in Table 21.

***Table 21** – Own market share assessment – diesel fuels, 2018*

Type of oil derivative	Market share assessment
Diesel fuels	[...]
Euro diesel	[...]
Gas oil extra light EL (>0.1%)	[...]

Source: NIS

Table 22 gives a comparative overview of the turnover in diesel fuels for 2017 and 2018, generated by undertakings for which historical data were available.

***Table 22** – Comparison table of the turnover in diesel fuels, 2017-2018*

Undertaking	Turnover, in 000 l		Index (2017=100)
	2017	2018	
Eko Serbia	[...]	[...]	[...]
Euro petrol	[...]	[...]	[...]
Evolucija 2004	[...]	[...]	[...]
Daki petrol	[...]	[...]	[...]
Knez petrol	[...]	[...]	[...]
Lukoil	[...]	[...]	[...]
Mol Serbia	[...]	[...]	[...]
Naftachem petrol	[...]	[...]	[...]

	Turnover, in 000 l		
NIS	[...]	[...]	[...]
OMV	[...]	[...]	[...]
Speed	[...]	[...]	[...]
Total, 11 undertakings	1,106,349	1,153,582	104
Mihajlović	[...]	[...]	[...]
Golubović	[...]	[...]	[...]
Radun avia	[...]	[...]	[...]
Taxi petrol	[...]	[...]	[...]
Petrol doo	[...]	[...]	[...]
Art petrol	[...]	[...]	[...]
Morava Gas	[...]	[...]	[...]
Miletić-komerc	[...]	[...]	[...]
Total, 19 undertakings	n/a	1,266,955	n/a

Source: CPC calculations based on information provided by undertakings

During 2018, 7 out of 11 undertakings saw an increase in *Euro diesel* turnover, three undertakings recorded a decline in turnover in this particular category of oil derivatives, while one company ([...]) exited the marketplace. Eleven undertakings under the analysis, for which historical data were available, have generated an overall increase in *Euro diesel* turnover by 4% relative to the previous year. Table 23 gives a comparative overview of the average turnover in diesel fuels per petrol station, obtained by cross-referencing the total turnover in diesel fuels with the total number of petrol stations.

Table 23 *– Average turnover in diesel fuels per petrol station, 2017-2018*

Undertaking	Average turnover, in 000 l		Index (2017=100)
	2017	2018	
Eko Serbia	[...]	[...]	[...]
Euro petrol	[...]	[...]	[...]
Evolucija 2004	[...]	[...]	[...]
Daki petrol	[...]	[...]	[...]
Knez petrol	[...]	[...]	[...]
Lukoil	[...]	[...]	[...]
Mol Serbia	[...]	[...]	[...]
Naftachem petrol	[...]	[...]	[...]
NIS	[...]	[...]	[...]
OMV	[...]	[...]	[...]
Speed	[...]	[...]	[...]
Total, 11 undertakings	1,528	1,607	105
Mihajlović	[...]	[...]	[...]
Golubović	[...]	[...]	[...]
Radun avia	[...]	[...]	[...]
Taxi petrol	[...]	[...]	[...]
Petrol doo	[...]	[...]	[...]
Art petrol	[...]	[...]	[...]
Morava Gas	[...]	[...]	[...]
Miletić-komerc	[...]	[...]	[...]
Total, 19 undertakings	n/a	1,430	n/a

Source: CPC calculations based on information provided by undertakings

The highest turnover in diesel fuels per petrol station in 2018 is generated by NIS, followed by OMV, Mol Serbia, and Euro petrol. These four undertakings generate a turnover per petrol station above the average for the sampled companies.

The average turnover in diesel fuels for 11 observed undertakings has increased during 2018 by 5% compared to 2017, reaching the level of 1.6 million liters. Given the fact that undertakings which the Commission included in the sample for the first time in 2018 generate a smaller average turnover per petrol station, the average turnover for all 19 undertakings in 2018 was smaller and amounted to 1.4 million liters. Seven undertakings have increased the average turnover levels, while three companies saw a decrease in turnover per petrol station.

The analysis of the diesel turnover structure per category of petrol station indicates that diesel fuels account for 62% of the sales at petrol stations in urban areas, 69% in rural areas, and 71% and 75% of the sales at petrol stations on arterial highways and highways, respectively. Compared to the previous year, the share of diesel fuels in the total turnover per all categories of petrol station has slightly decreased.

As in the previous year, in aggregate terms, diesel fuels accounted for 66% or about 2/3 of the total sales at all petrol stations.

3.4. Liquefied petroleum gas (LPG) retail market

3.4.1. LPG supply structure

The supply structure of liquefied petroleum gas in 2018 is presented in Table 24.

Table 24 *– Supply structure of liquefied petroleum gas, 2018*

Undertaking	LPG auto gas	
	domestic market	imports
Eko Serbia	[...]	[...]
Euro petrol	[...]	[...]
Evolucija 2004	[...]	[...]
Daki petrol	[...]	[...]
Knez petrol	[...]	[...]
Lukoil	[...]	[...]
Mol Serbia	[...]	[...]
Naftachem petrol	[...]	[...]
NIS	[...]	[...]
OMV	[...]	[...]
Speed	[...]	[...]
Mihajlović	[...]	[...]
Golubović	[...]	[...]
Radun avia	[...]	[...]
Taxi petrol	[...]	[...]
Petrol doo	[...]	[...]
Art petrol	[...]	[...]
Morava Gas	[...]	[...]
Miletić-komerc	[...]	[...]
Total	73%	27%

Source: CPC calculations based on information provided by undertakings

About three quarters of the total procured volumes of LPG auto gas were domestically sourced in 2018, while the balance was secured through imports[9]. Only three undertakings have imported LPG auto gas, out of which two predominately ([...]) or entirely ([...]) have secured this oil derivative from foreign sources.

3.4.2. LPG turnover structure

All 19 undertakings have provided information on the traded volumes of liquefied petroleum gas. Table 25 provides an overview of the turnover generated and the market shares of undertakings under the analysis.

Table 25 *– Turnover in LPG auto gas, 2018*

Undertaking	Generated turnover (000 l)	Market share (%)
Eko Serbia	[...]	/5-10/
Euro petrol	[...]	/0-5/
Evolucija 2004	[...]	/0-5/
Knez petrol	[...]	/5-10/
Lukoil	[...]	/5-10/
Mol Serbia	[...]	/0-5/
NIS	[...]	/10-20/
OMV	[...]	/5-10/
Daki petrol	[...]	/0-5/
Naftachem petrol	[...]	/0-5/
Speed	[...]	/0-5/
Mihajlović	[...]	/0-5/
Golubović	[...]	/0-5/
Radun avia	[...]	/0-5/
Taxi petrol	[...]	/0-5/
Petrol doo	[...]	/0-5/
Art petrol	[...]	/0-5/
Morava Gas	[...]	/0-5/
Miletić-komerc	[...]	/0-5/
19 undertakings, total	213,333	58.8%
Others	149,185	41.2%
LPG auto gas, total turnover	362,519	100.0%

Source: CPC calculations based on data provided by undertakings

The highest turnover in LPG auto gas in 2018 was generated by NIS, reaching about /10-20/% market share, followed by Lukoil, Eko Serbia, Knez petrol, and OMV. The combined turnover of these five undertakings accounts for 47% of the total turnover in LPG auto gas. The companies captured by the Commission's sample make up 59% of the total turnover in LPG auto gas in 2018.

Based on the own market share assessment made by NIS, the company's market share in the total retail trade turnover in LPG auto gas amounts to [...] and has not changed compared to the previous year. Table 26 provides an overview of the turnover in LPG auto gas generated in 2017 and 2018, and the respective index.

[9] When interpreting this information, it is necessary to bear in mind that individual undertakings are locally supplied which is shown as domestic procurement, while the supplier is also an importer, meaning that the part of the quantities supplied originates from foreign sources. To this effect, the actual share of procurements from imports is understandably higher than the value shown.

Table 26 – *Turnover in LPG auto gas, 2017-2018*

Undertaking	Turnover, in 000 l		Index (2017=100)
	2017	2018	
Eko Serbia	[...]	[...]	[...]
Euro petrol	[...]	[...]	[...]
Evolucija 2004	[...]	[...]	[...]
Daki petrol	[...]	[...]	[...]
Knez petrol	[...]	[...]	[...]
Lukoil	[...]	[...]	[...]
Mol Serbia	[...]	[...]	[...]
Naftachem petrol	[...]	[...]	[...]
NIS	[...]	[...]	[...]
OMV	[...]	[...]	[...]
Speed	[...]	[...]	[...]
Total, 11 undertakings	214,320	199,708	93
Mihajlović	[...]	[...]	[...]
Golubović	[...]	[...]	[...]
Radun avia	[...]	[...]	[...]
Taxi petrol	[...]	[...]	[...]
Petrol doo	[...]	[...]	[...]
Art petrol	[...]	[...]	[...]
Morava Gas	[...]	[...]	[...]
Miletić-komerc	[...]	[...]	[...]
Total, 19 undertakings	n/a	213,333	n/a

Source: CPC calculations based on information provided by undertakings

A total of 9 out of 11 undertakings for which historical data were available have recorded a drop in LPG auto gas turnover compared to the previous year, while [...] and [...] have increased their respective turnover levels by 70% and 6%, respectively. The observed eleven undertakings saw a 7% turnover drop relative to the previous year. Table 27 gives a comparative overview of the turnover in liquified petroleum gas per petrol station in 2017 and 2018, and the respective index.

Table 27 *– Average turnover in LPG auto gas, 2017-2018*

Undertaking	Average turnover, in 000 l		Index (2017=100)
	2017	2018	
Eko Serbia	[...]	[...]	[...]
Euro petrol	[...]	[...]	[...]
Evolucija 2004	[...]	[...]	[...]
Daki petrol	[...]	[...]	[...]
Knez petrol	[...]	[...]	[...]
Lukoil	[...]	[...]	[...]
Mol Serbia	[...]	[...]	[...]
Naftachem petrol	[...]	[...]	[...]
NIS	[...]	[...]	[...]
OMV	[...]	[...]	[...]
Speed	[...]	[...]	[...]
Total, 11 undertakings	296	278	94
Mihajlović	[...]	[...]	[...]
Golubović	[...]	[...]	[...]
Radun avia	[...]	[...]	[...]
Taxi petrol	[...]	[...]	[...]
Petrol doo	[...]	[...]	[...]

	Average turnover, in 000 l		
Art petrol	[...]	[...]	[...]
Morava Gas	[...]	[...]	[...]
Miletić-komerc	[...]	[...]	[...]
Total, 19 undertakings	n/a	241	n/a

Source: CPC calculations based on information provided by undertakings

The highest average turnover in LPG per petrol station in 2018 is generated by Euro petrol and Eko Serbia, followed by OMV, Knez petrol, and Mol Serbia, while NIS generated a turnover of [...] in LPG per petrol station. The majority of undertakings experienced decreased sales of LPG at petrol stations, indicating that the average turnover trend mirrored the total turnover trend.

The analysis of the LPG turnover structure per category of petrol station indicates that LPG auto gas accounts for 5% of the sales at petrol stations in rural areas, 6% on highways, and 11% and 13% of the sales at petrol stations on arterial highways and in urban areas, respectively. In total, LPG accounts for 11% of the turnover at all petrol stations, which is slightly below the 2017 level.

3.5. Operating expenses, turnover and retail performance

The analysis of operating expenses and generated revenues and their cross-refencing, that is, calculation of the economic profit, was aimed at establishing the effectiveness of undertakings operating in this market segment.

3.5.1. Operating expenses in retail

The total expenses of petrol stations as a form of retail trade in oil derivatives are presented as the sum of the purchase value of the goods sold and the operating expenses that include the logistics costs (transport, storage, handling), payroll, material costs, utility costs (electricity, water, postal/telephone/internet costs), charges and fees, maintenance, marketing costs and other costs. Tables 29 provides a comparative overview of the operating expenses and their share in the total expenses in 2017 and 2018.

Table 29 – *Operating expenses and their share in the total expenses, 2017-2018*

Undertaking	2017		2018	
	Operating expenses (in 000 RSD)	Share in the total expenses (%)	Operating expenses (in 000 RSD)	Share in the total expenses (%)
Eko Serbia	[...]	[...]	[...]	[...]
Euro petrol	[...]	[...]	[...]	[...]
Evolucija 2004	[...]	[...]	[...]	[...]
Daki petrol	[...]	[...]	[...]	[...]
Knez petrol	[...]	[...]	[...]	[...]
Lukoil	[...]	[...]	[...]	[...]
Mol Serbia	[...]	[...]	[...]	[...]
Naftachem petrol	[...]	[...]	[...]	[...]
NIS	[...]	[...]	[...]	[...]
OMV	[...]	[...]	[...]	[...]
Speed	[...]	[...]	[...]	[...]
Mihajlović	[...]	[...]	[...]	[...]
Golubović	[...]	[...]	[...]	[...]
Radun avia	[...]	[...]	[...]	[...]

Taxi petrol	[...]	[...]	[...]	[...]
Petrol doo	[...]	[...]	[...]	[...]
Art petrol	[...]	[...]	[...]	[...]
Morava Gas	[...]	[...]	[...]	[...]
Miletić-komerc	[...]	[...]	[...]	[...]

Source: CPC calculations based on information provided by undertakings

Based on the above table, it can be noted that five out of nine observed undertakings for which historical data were available, have increased their operating expenses ranging from 5% ([...]) to even 155% ([...]), while four undertakings have reduced their operating expenses from 2% ([...]) to 33% ([...]).

Company [...] had the largest share of operating expenses in the total retail operating expenses, which have increased from 17% to 24%, followed by [...] that kept the share of operating expenses at the previous year's level (12%), while the most of the remaining undertakings recorded the respective share in the range from 6% to 8%.

Table 31 gives a comparative overview of the average operating expenses (operating expenses per petrol station) in 2017 and 2018, and the respective index.[10]

Table 31 – *Average operating expenses, 2017-2018*

Undertaking	Operating expenses per petrol station, in 000 RSD		Index (2017=100)
	2017	2018	
Eko Serbia	[...]	[...]	[...]
Euro petrol	[...]	[...]	[...]
Evolucija 2004	[...]	[...]	[...]
Daki petrol	[...]	[...]	[...]
Knez petrol	[...]	[...]	[...]
Lukoil	[...]	[...]	[...]
Mol Serbia	[...]	[...]	[...]
Naftachem petrol	[...]	[...]	[...]
NIS	[...]	[...]	[...]
OMV	[...]	[...]	[...]
Speed	[...]	[...]	[...]
Mihajlović	[...]	[...]	[...]
Golubović	[...]	[...]	[...]
Radun avia	[...]	[...]	[...]
Taxi petrol	[...]	[...]	[...]
Petrol doo	[...]	[...]	[...]
Art petrol	[...]	[...]	[...]
Morava Gas	[...]	[...]	[...]
Miletić-komerc	[...]	[...]	[...]

Source: CPC calculations based on information provided by undertakings

The highest operating expenses per petrol station in 2018 had [...], whose average expenses are increased by 155% compared to the previous year, which also corresponds to the increase in the total operating expenses. Companies [...] and [...] have also significantly increased the

[10] The average operating expenses in 2018 for Daki petrol are not calculated since there were no petrol stations in operation by the end of 2018. [...] failed to provide information on the operating expenses in retail, specifying that expenses are only observed at the company level.

average operating expenses by 147% and 81%, respectively, while [...] increased its average operating expenses by 23%. The largest decrease in operating expenses per petrol station is achieved by company [...], the last year's leader in the average operating expenses, reducing said expenses by 34% as a result of the decrease in the total operating expenses.

3.5.2. Retail trade turnover

Retail trade turnover in oil derivatives are presented as the sales of oil derivatives and the non-core sales, per each category of petrol station in 2018.

Table 32 gives an overview of the total retail trade turnover in 2017 and 2018, and the respective index.

Table 32 *– Total retail trade turnover in oil derivatives, 2017-2018*

Undertaking	Total retail trade turnover, in 000 RSD		Index (2017=100)
	2017	2018	
Eko Serbia	[...]	[...]	[...]
Euro petrol	[...]	[...]	[...]
Evolucija 2004	[...]	[...]	[...]
Daki petrol	[...]	[...]	[...]
Knez petrol	[...]	[...]	[...]
Lukoil	[...]	[...]	[...]
Mol Serbia	[...]	[...]	[...]
Naftachem petrol	[...]	[...]	[...]
NIS	[...]	[...]	[...]
OMV	[...]	[...]	[...]
Speed	[...]	[...]	[...]
Total, 11 undertakings	161,006, 047	176,626,508	110
Mihajlović	[...]	[...]	[...]
Golubović	[...]	[...]	[...]
Radun avia	[...]	[...]	[...]
Taxi petrol	[...]	[...]	[...]
Petrol doo	[...]	[...]	[...]
Art petrol	[...]	[...]	[...]
Morava Gas	[...]	[...]	[...]
Miletić-komerc	[...]	[...]	[...]
Total, 19 undertakings	n/a	202,842,207	n/a

Source: CPC calculations based on information provided by undertakings

NIS has generated the highest total retail trade turnover in oil derivatives in both observed years, with [...] turnover in 2018 of [...], followed by Lukoil whose [...] turnover in 2018 is by [...], Eko Serbia and Knez petrol whose [...] turnover is by [...] and [...], respectively, and OMV and Mol Serbia whose [...] turnover is by [...] and [...], respectively. Three undertakings have experienced a decline in turnover from the previous year's figures, while the total turnover for 11 undertakings, for which historical data were available, is increased by 10%.

To increase clarity regarding the business performance of retail outlets - petrol stations, the following section specifically analyses the sales turnover in oil derivatives and the non-core sales turnover.

Table 33 provides a comparative overview of the retail trade turnover in oil derivatives and the respective index.

Table 33 – *Sales turnover in oil derivative, 2017-2018*

Undertaking	Sales turnover in oil derivatives, in 000 RSD		Index (2017=100)
	2017	2018	
Eko Serbia	[...]	[...]	[...]
Euro petrol	[...]	[...]	[...]
Evolucija 2004	[...]	[...]	[...]
Daki petrol	[...]	[...]	[...]
Knez petrol	[...]	[...]	[...]
Lukoil	[...]	[...]	[...]
Mol Serbia	[...]	[...]	[...]
Naftachem petrol	[...]	[...]	[...]
NIS	[...]	[...]	[...]
OMV	[...]	[...]	[...]
Speed	[...]	[...]	[...]
Total, 11 undertakings	128,691,901	142,143,493	110
Mihajlović	[...]	[...]	[...]
Golubović	[...]	[...]	[...]
Radun avia	[...]	[...]	[...]
Taxi petrol	[...]	[...]	[...]
Petrol doo	[...]	[...]	[...]
Art petrol	[...]	[...]	[...]
Morava Gas	[...]	[...]	[...]
Miletić-komerc	[...]	[...]	[...]
Total, 19 undertakings	n/a	166,651,920	n/a

Source: CPC calculations based on information provided by undertakings

The highest sales turnover in oil derivatives in both observed years is achieved by company NIS, where such turnover in 2018 [...] by [...], followed by Lukoil and Eko Serbia whose turnover in oil derivatives [...] by [...] and [...], respectively. Three undertakings have experienced a decline in turnover of the sale of oil derivatives, while the total turnover for nine undertakings, for which historical data were available[11], is increased by 10%.

Table 34 gives a comparative overview of the average sales turnover in oil derivatives.

Table 34 *– Sales turnover in oil derivatives per petrol station, 2017-2018*

Undertaking	Average sales turnover in oil derivatives, in 000 RSD		Index (2017=100)
	2017	2018	

[11] [...] failed to provide separate data on the sales turnover in oil derivatives and the non-core sales turnover in both observed years, while [...] provided the requested separate data only for 2018.

	Average sales turnover in oil derivatives, in 000 RSD		Index (2017=100)
Eko Serbia	[...]	[...]	[...]
Euro petrol	[...]	[...]	[...]
Evolucija 2004	[...]	[...]	[...]
Daki petrol	[...]	[...]	[...]
Knez petrol	[...]	[...]	[...]
Lukoil	[...]	[...]	[...]
Mol Serbia	[...]	[...]	[...]
Naftachem petrol	[...]	[...]	[...]
NIS	[...]	[...]	[...]
OMV	[...]	[...]	[...]
Speed	[...]	[...]	[...]
Total, 11 undertakings	177,997	197,971	111
Mihajlović	[...]	[...]	[...]
Golubović	[...]	[...]	[...]
Radun avia	[...]	[...]	[...]
Taxi petrol	[...]	[...]	[...]
Petrol doo	[...]	[...]	[...]
Art petrol	[...]	[...]	[...]
Morava Gas	[...]	[...]	[...]
Miletić-komerc	[...]	[...]	[...]
Total, 19 undertakings	n/a	188,095	n/a

Source: CPC calculations based on information provided by undertakings

The highest sales turnover in oil derivatives per petrol station in 2018 is achieved by Mol Serbia and Eko Serbia, both undertakings recording an increase in the average turnover in 2018 by [...] and [...], respectively. Three undertakings have experienced a decline in the average turnover of the sale of oil derivatives compared to the previous year, while the average sales turnover in oil derivatives for nine undertakings, for which historical data were available, is increased by 11%.

Table 35 gives a comparative overview of the share of sales turnover in oil derivatives in the total sales turnover.

Table 35 *– Share of the sales turnover in oil derivatives in the total sales turnover at petrol stations, 2017-2018*

Undertaking	Share of the sales turnover in oil derivatives (%)	
	2017	2018
Eko Serbia	[...]	[...]
Euro petrol	[...]	[...]
Evolucija 2004	[...]	[...]
Daki petrol	[...]	[...]
Knez petrol	[...]	[...]
Lukoil	[...]	[...]
Mol Serbia	[...]	[...]
Naftachem petrol	[...]	[...]
NIS	[...]	[...]
OMV	[...]	[...]
Speed	[...]	[...]
Mihajlović	[...]	[...]
Golubović	[...]	[...]
Radun avia	[...]	[...]

	Share of the sales turnover in oil derivatives (%)	
Taxi petrol	[...]	[...]
Petrol doo	[...]	[...]
Art petrol	[...]	[...]
Morava Gas	[...]	[...]
Miletić-komerc	[...]	[...]

Source: CPC calculations based on information provided by undertakings

The share of sales turnover in oil derivatives in the total sales turnover is relatively stable with all observed undertakings. In 2018, the sales turnover in oil derivatives of 13 undertakings accounted for more than 90% of the total turnover, out of which 3 undertakings failed to specify the non-core sales turnover. The highest share of sales turnover in oil derivatives in the total sales turnover in 2018 is recoded by company [...] (97%), while [...] had the smallest respective share of 78%.

The turnover from non-core activities comprises of all turnover not directly related to the sales of oil derivatives and includes the turnover of the sale of non-core product range, restaurant, car wash and auto service sales.

Table 36 gives a comparative overview of the turnover from non-core sales and the respective index.

Table 36 *– Turnover from non-core sales, 2017-2018*

Undertaking	Turnover from non-core sales, in 000 RSD		Index (2017=100)
	2017	2018	
Eko Serbia	[...]	[...]	[...]
Euro petrol	[...]	[...]	[...]
Evolucija 2004	[...]	[...]	[...]
Daki petrol	[...]	[...]	[...]
Knez petrol	[...]	[...]	[...]
Lukoil	[...]	[...]	[...]
Mol Serbia	[...]	[...]	[...]
Naftachem petrol	[...]	[...]	[...]
NIS	[...]	[...]	[...]
OMV	[...]	[...]	[...]
Speed	[...]	[...]	[...]
Mihajlović	[...]	[...]	[...]
Golubović	[...]	[...]	[...]
Radun avia	[...]	[...]	[...]
Taxi petrol	[...]	[...]	[...]
Petrol doo	[...]	[...]	[...]
Art petrol	[...]	[...]	[...]
Morava Gas	[...]	[...]	[...]
Miletić-komerc	[...]	[...]	[...]

Source: CPC calculations based on information provided by undertakings

The highest turnover from non-core activities was yield by NIS, whose turnover [...] exceeded the turnover from non-core sales generated by OMV as the second-ranking company in non-core sales. Among undertakings with a considerable turnover from non-core sales in nominal value, Lukoil, Mol Serbia, and Eko Serbia stand out, while other undertakings generated much smaller income on that basis.

The majority of undertakings for which historical data were available, have increased the turnover from non-core activities in 2018. The highest increase in revenues is recorded by company [...] by 110%, while the majority of other undertakings increased the respective turnover from non-core sales by about 20%. Company [...] saw a significant decrease in turnover from non-core activities by 74%, while [...] was affected by a decline in turnover by 25%.

3.5.3. Retail performance

Table 37 gives a comparative overview of the operating performance, calculated by cross-refencing the total turnover generated at petrol stations and the total expenses.

Table 37 *– Operating performance, 2017-2018*

Undertaking	Operating performance, in 000 RSD	
	2017	2018
Eko Serbia	[...]	[...]
Euro petrol	[...]	[...]
Evolucija 2004	[...]	[...]
Daki petrol	[...]	[...]
Knez petrol	[...]	[...]
Lukoil	[...]	[...]
Mol Serbia	[...]	[...]
Naftachem petrol	[...]	[...]
NIS	[...]	[...]
OMV	[...]	[...]
Speed	[...]	[...]
Mihajlović	[...]	[...]
Golubović	[...]	[...]
Radun avia	[...]	[...]
Taxi petrol	[...]	[...]
Petrol doo	[...]	[...]
Art petrol	[...]	[...]
Morava Gas	[...]	[...]
Miletić-komerc	[...]	[...]

Source: CPC calculations based on information provided by undertakings

In 2018, twelve undertakings have recorded a positive retail performance, while four undertakings have presented operating losses. As in 2017, companies [...] and [...] achieved the best operating performance results in 2018, followed by [...] and [...]. Compared to the previous year, company [...] remained in the red, while [...] slipped into operating at a loss from being in the black.

4. OIL DERIVATIVE PRICE TREND ANALYSIS FOR 2018

4.1. Analysis of oil derivative price trends in retail market

For all observed types of oil derivatives, the weighted-average purchase price is calculated for each month of the year, observing both domestic and external sources of supply separately, as well as the total volume of purchases from both sources.

On the other hand, the weighted-average selling prices valid at petrol stations on highways, arterial highways, rural and urban areas are also calculated.

The analysis of trends in retail pricing of oil derivatives relied on the figures net of fiscal duties (VAT and excises).

4.1.1. Gasoline retail trend analysis

- **Gasoline *EVRO BMB 98***

Unlike in 2017 when two undertakings imported *Evro premijum BMB 98* gasoline, this oil derivative was solely locally procured in 2018.

The lowest weighted-average purchase price net of fiscal duties is recorded by [...], while the weighted-average purchase prices of other undertakings were for 10-15 dinars higher. However, it is necessary to bear in mind that purchase prices increased after the month of April, impacting the difference in weighted-average purchase prices between undertakings procuring this particular oil derivative throughout the entire year and those who have procured it only during a particular, shorter period of time. In this regard, a comparison was made between the weighted-average purchase prices of those undertakings who have been procuring this particular oil derivative throughout the entire year (Eko Serbia, Knez petrol, Euro petrol, Lukoil, Radun avia, and Petrol doo), indicating that the differences in weighted-average purchase prices stayed below 3 dinars.

Company [...] achieved the lowest weighted-average selling price net of fiscal duties at petrol stations **in urban areas**, selling this oil derivative from January to April inclusive. Out of undertakings selling this oil derivative throughout the entire year, the lowest average price was achieved by [...], followed by [...], [...] and [...] whose average prices were nearly identical and for 1.5-2 dinars above the price of [...]. The highest weighted-average price at petrol stations in urban areas was recorded by [...], for 10 dinars above the price of [...].

Company [...] achieved the lowest weighted-average selling price net of fiscal duties at petrol stations **on highways**, selling this oil derivative from January to April inclusive. Out of three undertakings selling this oil derivative throughout the entire year, the lowest average price was achieved by [...], followed by [...] with a slightly higher average price, while [...] had the highest price, for 8 dinars higher than the price of [...].

The lowest weighted-average selling price net of fiscal duties at petrol stations **on arterial highways** was achieved by [...], while [...] yet again had the highest prices, for 9 dinars higher than the price of [...].

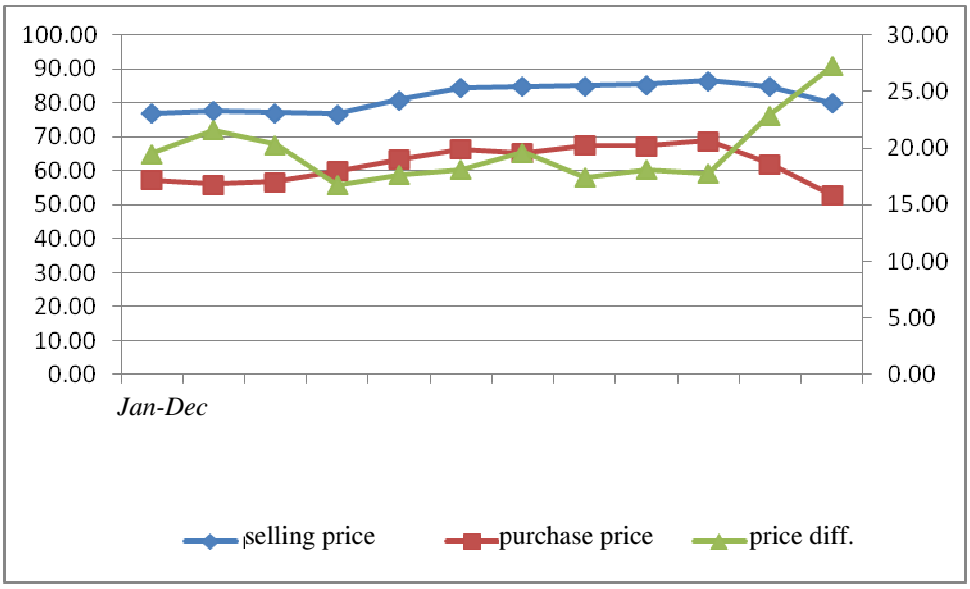
Companies [...] and [...] have recorded the lowest and nearly identical weighted-average selling price out of undertakings selling this oil derivative at petrol stations **in rural areas**, while [...] had the highest price of this particular oil derivative, selling this gasoline as from August 2018.

The analysis of the weighted-average selling prices of this gasoline per category of petrol stations indicates that the lowest average price was recorded at petrol stations in rural areas and that the highest price was on highways, while the difference between the two prices was about 6 dinars per liter. The average selling prices of *Evro premijum BMB 98* at petrol stations on arterial highways and in urban areas were roughly at the same level and for around 5 dinars per liter higher than the prices of this gasoline at petrol stations in rural areas.

In terms of weighted-average prices for all categories of petrol stations, the lowest prices are achieved by [...] and the highest prices are recorded by [...], while the difference between the two prices was about 10 dinars per liter.

Diagram 7 gives a graphical view of the trends in average selling and purchase prices and the price differential during 2018.

***Diagram 7**- Evro BMB 98 gasoline price trends, 2018 (in RSD/l)*



Source: CPC calculations based on information provided by undertakings

The average selling and purchase prices showed an upward trend until October when a change in the trend occurred, somewhat more prominent in the case of purchase prices. The average selling price in December was by 4% higher than in January, while the average purchase price was lower by 8% than at the beginning of the year.

If we compare the volume-weighted average selling price at all categories of petrol stations with the volume-weighted purchase price of this energy derivative procured from both supply sources, it can be noted that undertakings have earned positive profits, averaging at 19.7 dinars per liter.

The highest average price differential of 21-22 dinars per liter was achieved by [...] and [...], while the lowest related value of 14 dinars per liter was recorded by [...]. In percentage terms compared to the purchase price, the average price differential fluctuated between 21% and 43%.

- **Gasoline *EVRO PREMIJUM BMB 95***

The procurement of gasoline *Evro premijum BMB 95* was mostly domestically sourced, while companies [...] and [...], and [...] to an extent, have procured this oil derivative abroad.

The lowest weighted-average purchase price net of fiscal duties is recorded by [...], predominately supplied from [...] sources. It is followed by [...] and [...], whose weighted-average purchase prices were for around 3 dinars more than [...] prices, while the purchase prices of other undertakings were higher than [...] prices for 5 to 10 dinars.

The import prices of this oil derivative have not differed substantially and the weighted-average import price deviation stayed below 2 dinars.

Undertakings procuring this particular gasoline from both domestic and foreign sources have experienced more costly supply from domestic sources than from the imports, while the weighted-average purchase price from domestic sources was for 3-6 dinars more than the weighted-average import price. The exception is [...], whose weighted-average purchase price from internal supply sources was lower for 1.4 dinars than the weighted-average import price.

Companies [...] and [...] have achieved the lowest weighted-average selling price net of fiscal duties at petrol stations **in urban areas**, while [...] and [...] have recorded the highest average prices, for about 7 dinars higher than the average prices of [...].

The lowest weighted-average selling price net of fiscal duties at petrol stations **on highways** was recorded by [...], while the average prices of other undertakings varied for about 5 dinars per liter. Companies [...] and [...] achieved the highest average prices, for about 7-8 dinars higher than the average price of [...].

Company [...] also achieved the lowest weighted-average selling price net of fiscal duties at petrol stations **on arterial highways**, while [...] and [...] recorded the highest prices, for about 6 dinars above the average price of [...].

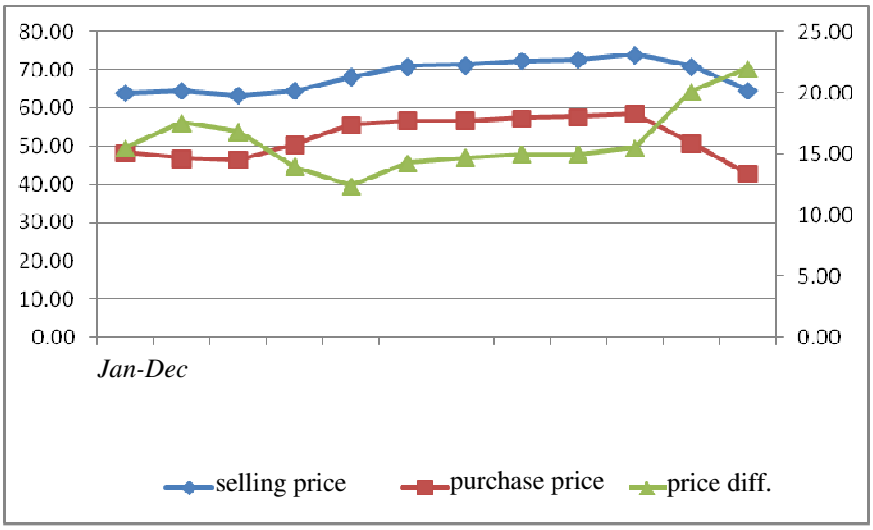
Company [...] recorded the lowest weighted-average selling price out of undertakings selling this oil derivative at petrol stations **in rural areas**, followed by [...] whose average price was slightly higher, while [...] had the highest average price of this particular oil derivative, for about 6 dinars above the average price of [...].

The analysis of the weighted-average selling prices of this oil derivative per category of petrol stations indicates that the lowest average price was recorded at petrol stations in rural areas, while the weighted-average prices valid at petrol stations in urban areas and on arterial highways have deviated only slightly. The highest average price was recorded on highways, where the price differential was about 3 dinars per liter.

In terms of the weighted-average prices for all categories of petrol stations, companies [...] and [...] have recorded the lowest prices, while [...] had the highest price, where the price differential was about 7 dinars per liter.

Diagram 8 gives a graphical view of the average-weighted purchase and selling prices net of fiscal duties and the price differential.

***Diagram 8**- Evro premijum BMB 95 gasoline price trends, 2018 (in RSD/l)*



Source: CPC calculations based on information provided by undertakings

Similar to BMB 98 gasoline, the average selling and purchase prices of this oil derivative showed an upward trend until October when a change in the trend occurred, somewhat more prominent in the case of purchase prices. The average selling price in December was by 1% higher than in January, while the average purchase price was lower by 12% than at the beginning of the year.

If we compare the volume-weighted average selling price at all categories of petrol stations with the volume-weighted purchase price of this energy derivative procured from both supply sources, it can be noted that undertakings have earned positive profits, averaging at 16 dinars per liter.

The highest average price differential of 19.5 dinars per liter was achieved by [...], followed by [...] with 18.3 dinars per liter, while the lowest related value of 10.4 dinars per liter was recorded by [...]. In percentage terms compared to the purchase price, the average price differential fluctuated between 17% and 36%.

- **Comparative analysis of gasoline purchase prices**

To gain an understanding of the difference in prices at which gasoline is procured (*BMB 98* and *Evro premijum BMB 95*), the following two comparative analyses are detailed below:

- Comparative analysis of average prices at which undertakings have procured gasoline from NIS;
- Comparative analysis of average prices at which vertically integrated undertakings (OMV, Mol Serbia, and Naftachem petrol) have procured gasoline from their affiliated entities, against the average prices at which they have procured gasoline from other suppliers.

Diagram 9 provides an overview of the average prices at which undertakings have procured gasoline from NIS, expressed as the relation between the costs and the volumes of procured gasoline.

Diagram 9 *– Average purchase prices of gasoline in 2018 (in RSD/l)*

[...]
Source: CPC calculations based on information provided by undertakings

Based on the above diagram, it can be noted that [...] of undertakings[12] have procured gasoline from NIS, whose purchase prices were [...] from [...] to [...] dinars per liter against the prices at which NIS supplied its own petrol stations.

A comparative analysis of the prices at which vertically integrated undertakings have procured gasoline from their affiliated entities and the purchase prices of other suppliers in the local market is presented in Diagram 10.

Diagram 10 *– Comparative analysis of average purchase prices in 2018 (in RSD/l)*

[...]
Source: CPC calculations based on information provided by undertakings

The diagram provides an insight into the following:

[...]

4.1.2. Diesel retail trend analysis

- **Diesel fuel EURO DIESEL**

The procurement of *Euro diesel* is carried out in both national and international markets. The analysis of the weighted-average purchase price net of fiscal duties from both supply sources indicates that [...] and [...] achieved the lowest purchase prices. The weighted-average purchase prices of other undertakings were higher for 4 to 8 dinars per liter than the purchase price of [...], while the highest average purchase price was recorded by [...], for 12 dinars higher than the average purchase price of [...].

If we compare the weighted-average purchase prices per sources of supply, it can be noted that only [...] procured of this oil derivative from foreign sources at higher prices, while other

[12] The data on volumes and value of purchases provided by an undertaking ([...]) were unusable.

undertakings paid on average 1.5 to 5 dinars less for *Euro diesel* procured abroad than from the local supply sources. Company [...] recorded the lowest weighted-average import purchase price, about 2 dinars less than the price of this oil derivative when procured from domestic internal sources of supply. Other undertakings imported diesel fuels at relatively uniform prices, about 4-6 dinars higher than the purchase prices of [...], while the most expensive diesel fuels from the imports was paid by [...], importing this oil derivative only three times during the year.

The lowest weighted-average selling prices net of fiscal duties at petrol stations **in urban areas** are achieved by [...] and [...], while [...] and [...] recorded the highest average prices, for about 10 dinars above the average prices of [...].

The lowest weighted-average selling price net of fiscal duties at petrol stations **on highways** is achieved by [...], followed by [...] whose average price was for 1.5 dinars higher, while [...] and [...] have recorded the highest prices, for about 8-10 dinars above the average prices of [...].

The lowest weighted-average selling price net of fiscal duties at petrol stations **on arterial highways** is also achieved by [...], followed by [...] whose average price was for about 3 dinars higher, while [...] and [...] have recorded the highest prices, for about 10 dinars above the average prices of [...].

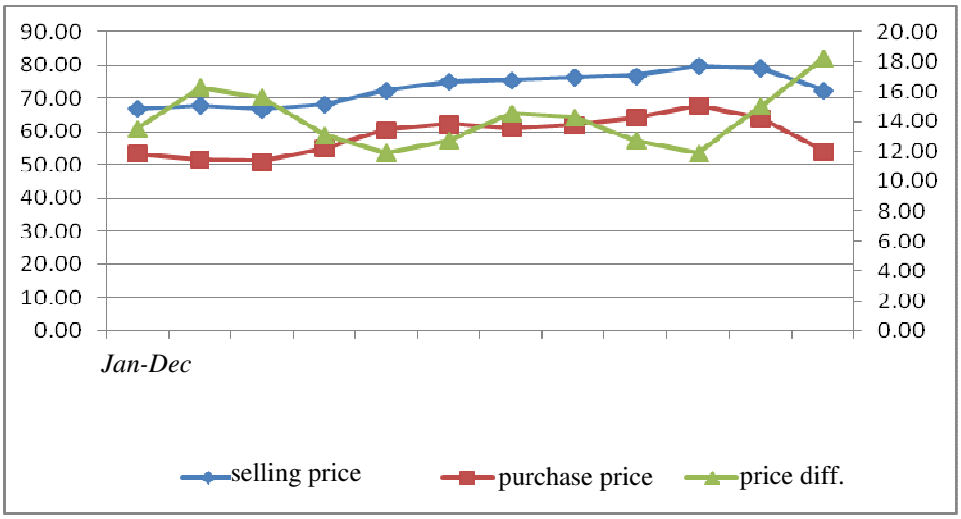
Companies [...] and [...] have achieved the lowest weighted-average selling price out of undertakings selling this oil derivative at petrol stations **in rural areas**, while [...] had the highest average price of this particular oil derivative, for about 10 dinars above the average selling price of [...].

The analysis of the weighted-average selling prices of this oil derivative per category of petrol stations indicates that the lowest average price was recorded at petrol stations on arterial highways, while the weighted-average prices valid at petrol stations in urban and rural areas have deviated only slightly. The highest average price was recorded on highways, where the price differential was about 5 dinars per liter.

In terms of the weighted-average prices for all categories of petrol stations, companies [...] and [...] have recorded the lowest prices, while [...] had the highest price, for about 11 dinars higher on average than the price of [...].

Diagram 11 gives a graphical view of the average-weighted selling and purchase prices and the price differential.

Diagram 11 *– Euro diesel price trends in 2018 (in RSD/l)*



Source: CPC calculations based on information provided by undertakings

Similar to gasoline, the average selling and purchase prices of *Euro diesel* showed an upward trend until October when a change in the trend occurred, somewhat more prominent in the case of purchase prices. The average selling price in December was by 8% higher than in January, while the average purchase price was higher by 2% than at the beginning of the year.

If we compare the volume-weighted average selling price at all categories of petrol stations with the volume-weighted purchase price of this energy derivative procured from both supply sources, it can be noted that undertakings have earned positive profits, averaging at 14 dinars per liter.

When viewed individually, the highest average price differential of 19.3 dinars per liter was achieved by [...], followed by [...] with 18.4 dinars per liter, while the lowest related value of 6.6 dinars per liter was recorded by [...]. In percentage terms compared to the purchase price, the average price differential fluctuated between 10% and 32%.

- **Diesel fuel GAS OIL 0.1**

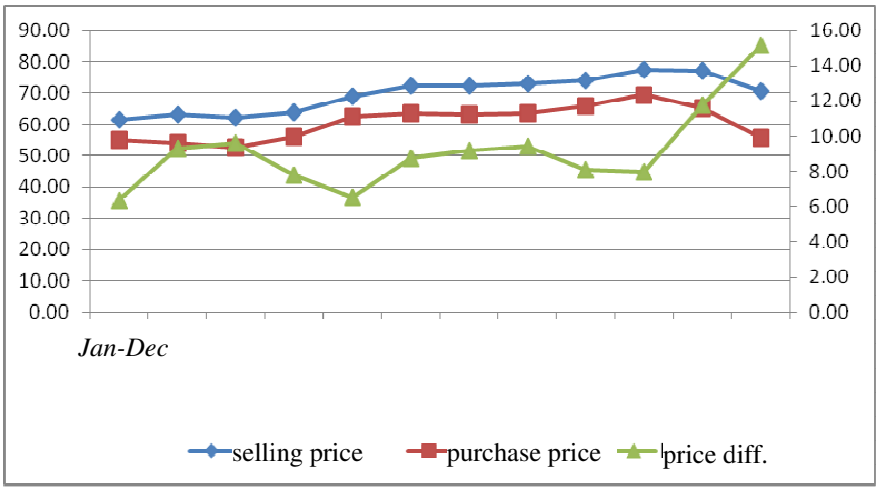
The procurement of diesel fuel *Gas oil 0.1* is fully carried out in the national market.

The lowest weighted-average purchase price net of fiscal duties was recorded by [...], procuring this oil derivative [...], while the prices of other undertakings were on average higher for 6 to 8 dinars per liter.

The lowest weighted-average retail price net of fiscal duties at all categories of petrol stations is recorded by [...], while the average prices of other undertakings were above the price of [...] for 4-5 dinars per liter. The highest average selling price at all categories of petrol stations was recorded by [...].

Diagram 12 gives a graphical view of the trends in average-weighted selling and purchase prices.

Diagram 12 *– Diesel fuel Gas oil 0.1 price trends in 2018 (in RSD/l)*



Source: CPC calculations based on information provided by undertakings

The average selling and purchase prices of diesel fuel *Gas oil 0.1* also showed an upward trend until October when a change in the trend occurred, somewhat more prominent in the case of purchase prices. The average selling price in December was by 15% higher than in January, while the average purchase price was higher by only 1% than at the beginning of the year.

If we compare the volume-weighted average selling price at all categories of petrol stations with the volume-weighted purchase price of this energy derivative procured from both supply sources, it can be noted that undertakings have earned positive profits, averaging at about 9 dinars per liter.

When viewed individually, the highest average price differential of 10 dinars per liter was achieved by [...], while the lowest related value of 5.5 dinars per liter was recorded by [...]. In percentage terms compared to the purchase price, the average price differential fluctuated between 8% and 17%.

- **Comparative analysis of diesel purchase prices**

To gain an understanding of the difference in prices at which undertakings have procured diesel fuels, the following two comparative analyses are detailed below:

- Comparative analysis of average prices at which undertakings have procured diesel fuels from NIS;
- Comparative analysis of average prices at which vertically integrated undertakings have procured diesel fuels from their affiliated entities, against the average procurement prices of other suppliers.

Diagram 13 provides an overview of the average prices at which undertakings have procured diesel fuels from NIS, expressed as the relation between the total value and the total volumes of procured diesel fuels.

Diagram 13 *– Average purchase prices of diesel fuels in 2018*

[...]

Source: CPC calculations based on information provided by undertakings

A total of [...] undertakings[13] have procured diesel fuels from NIS, whose purchase prices were [...] from [...] to [...] dinars per liter against the prices at which NIS supplied its own petrol stations.

A comparative analysis of the average prices at which vertically integrated undertakings have procured diesel fuels from their affiliated entities and the average purchase prices of other suppliers is presented in Diagram 14.

Diagram 14 *– Comparative analysis of average purchase prices of diesel fuels in 2018 (in RSD/l)*

[...]
Source: CPC calculations based on information provided by undertaking

Diagram 14 provides an insight into the following:

[...]

[13] The data on volumes and value of purchases provided by two undertakings, namely ([...] and [...]), were unusable.

4.1.3. LPG retail trend analysis

Undertakings have procured liquefied petroleum gas from both domestic and foreign sources. Company [...] procured this oil derivative from the imports only, while [...] and [...] utilized both supply sources.[14]

The weighted-average purchase price of this oil derivative from domestic external procurement sources was higher than the weighted-average import price for 1.5 dinars per liter.

The lowest weighted-average purchase price on the national market was achieved by [...], procuring this oil derivative from [...]. The company is followed by [...], whose average purchase price was only marginally higher, while [...] had the highest average purchase price, for about 5 dinars above the price achieved by [...].

The lowest average import price was also achieved by [...], while [...] had the highest import prices, for about 3.5 dinars more than [...] price.

The lowest weighted-average selling price net of fiscal duties at petrol stations **in urban areas and on highways** was achieved by [...], while company [...] recorded the highest price, where the respective price difference ranged between 3-4 dinars per liter.

The lowest weighted-average selling price net of fiscal duties at petrol stations **on arterial highways** was also achieved by [...], while company [...] had the highest average price, where the respective price difference was about 3 dinars per liter.

Company [...] presented the lowest weighted-average selling price out of undertakings selling this oil derivative at petrol stations **in rural areas**, while [...] had the highest average price of this particular oil derivative, where the respective price difference was about 3.5 dinars per liter.

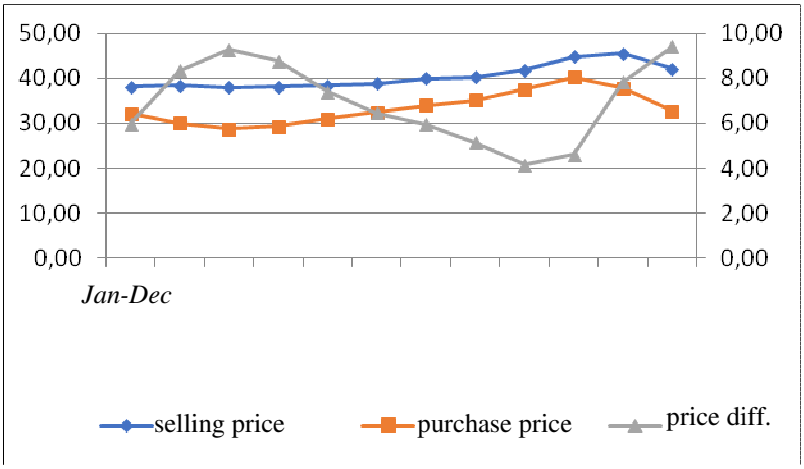
The weighted selling prices of this oil derivative at petrol stations in urban and rural areas and on arterial highways were nearly identical, while the average price offered at petrol stations on highways was slightly higher.

In terms of the weighted-average prices for all categories of petrol stations, companies [...] and [...] achieved the lowest prices, while [...] had the highest average price, on average for about 3 dinars per liter above the price of [...].

Diagram 15 gives a graphical view of the trends in average-weighted purchase and selling prices.

[14] The data on average purchase and selling prices of liquefied petroleum oil are not provided in a uniform manner by all undertakings, which caused the limited comparability of data. The analysis is limited to data provided by 10 undertakings, namely: Eko Serbia, Evolucija 2004, Lukoil, Mol Serbia, NIS, OMV, Radun avia, Petrol doo, Morava Gas, and Miletić-komerc. The total turnover of the 10 undertakings makes up 76% of the turnover generated by all 19 observed undertakings, thus the findings based on the sample can be considered sufficiently representative.

Diagram 15 *– LPG auto gas price trends in 2018 (in RSD/l)*



Source: CPC calculations based on information provided by undertakings

The average selling and purchase prices of LPG auto gas showed an upward trend until October when a change in the trend occurred, more prominent in the case of purchase prices. The average selling price in December was by 11% higher than in January, while the average purchase price was higher by only 2% than at the beginning of the year.

If we compare the volume-weighted average selling price at all categories of petrol stations with the volume-weighted purchase price of this energy derivative procured from both supply sources, it can be noted that undertakings have earned positive profits, averaging at about 7 dinars per liter.

When viewed individually, the highest average price differential of 10.4 dinars per liter was achieved by [...], while the lowest related value of 4 dinars per liter was recorded by [...]. In percentage terms compared to the purchase price, the average price differential fluctuated between 11% and 32%.

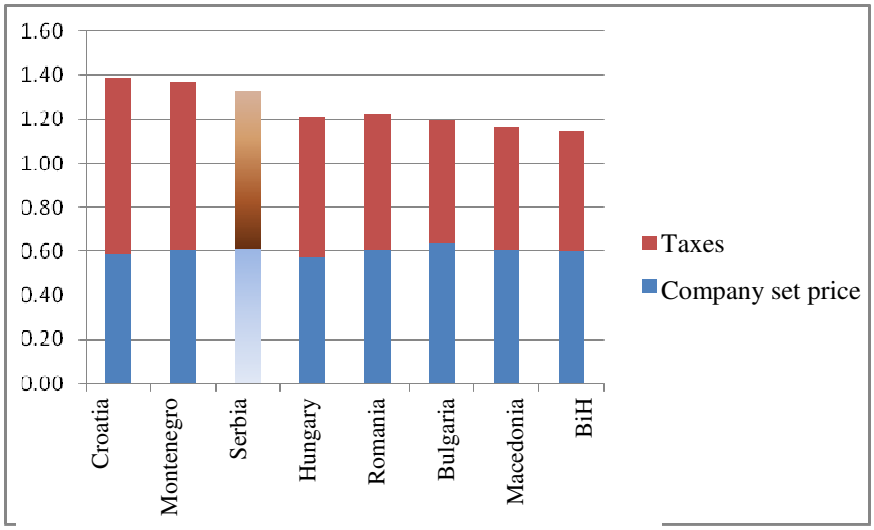
4.2. Retail price structure of oil derivatives in the Republic of Serbia and neighboring countries

To increase clarity regarding the structure of the average retail price of oil derivatives observing the correlation between the company set prices and the state levies of fiscal and nonfiscal nature, a comparative overview of the retail price structure of oil derivatives in Serbia and neighboring countries is provided below.

The structure of the average retail price is observed on October 29, 2018, and calculated at the middle exchange rate of the respective central banks.

Diagram 16 provides a comparative overview of the structure of average retail prices of *gasoline BMB 95* in the neighboring countries.

Diagram 16 – *Structure of the average retail price of gasoline BMB 95 in 2018 (EUR/l)*



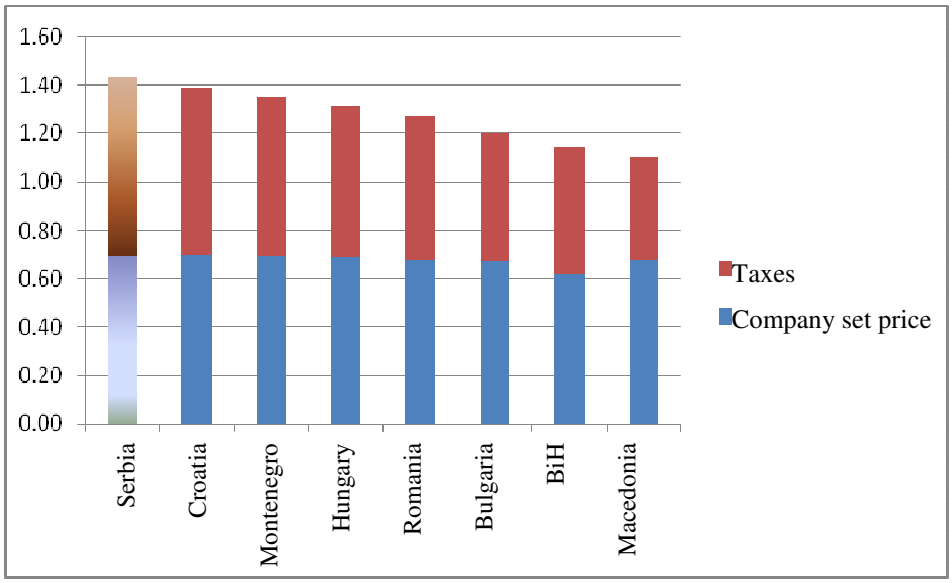
Source: UNKS

Based on the above figure, it can be noted that the share of government taxes in retail price of gasoline *Evro premijum BMB 95* is most prominent in Croatia (57.5%), while Serbia ranks third among regional countries with a 53.6% tax share in retail prices. The lowest taxes are levied in Bulgaria, making up 46.95% of the retail price, while Macedonia, and Bosnia and Herzegovina are also among the countries where the share of government taxes in retail prices is less than 50%.

The company set prices have not varied significantly among the regional countries. The average company set prices are highest in Bulgaria (0.64 EUR/l) and in Serbia (0.62 EUR/l), while the lowest company set prices are in Hungary (0.58 EUR/l).

Diagram 17 provides a comparative overview of the structure of average retail prices of diesel fuels in the neighboring countries.

Diagram 17 - *Structure of the average retail price of Euro diesel in 2018 (EUR/l)*



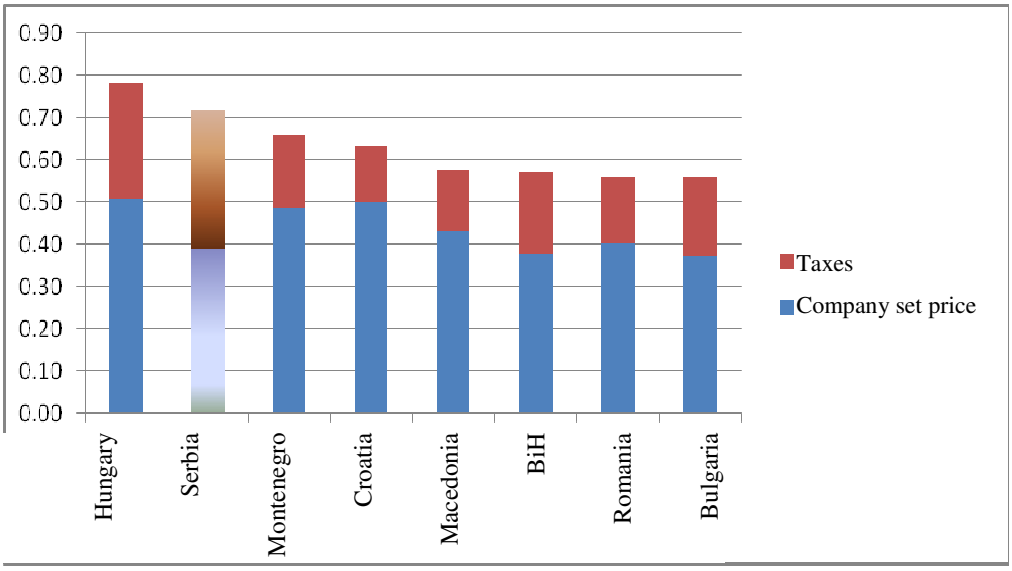
Source: UNKS

Based on the above outline, it can be noted that the share of government taxes in *Euro diesel* is highest in Serbia, making up 51.7% of the retail price, followed by Croatia with a 49.7% tax share in retail prices of this particular oil derivative. The lowest taxes are levied in Macedonia, with a 38.1% tax share in *Euro diesel* retail price.

The average company set prices of diesel fuels are lowest in Bosnia and Herzegovina (0.62 EUR/l), while said prices in other regional countries are roughly the same, ranging between 0.68 EUR/l and 0.70 EUR/l.

Diagram 18 gives a comparative overview of the average retail prices of LPG auto gas in the neighboring countries.

Diagram 18 *– Structure of the average retail price of LPG in 2018 (EUR/l)*



Source: UNKS

Serbia imposes the highest government taxes on LPG auto gas, 45.6% of the retail price. The lowest taxes on LPG auto gas are levied by Croatia, with a 21.2% tax share in retail prices of this particular oil derivative.

The average company set prices of LPG auto gas are highest in Hungary, set at 0.51 EUR/l, while Serbia with 0.39 EUR/l in government taxes belongs to the group of countries with the lowest said prices in the region, headed by Bulgaria with the lowest company set prices net of fiscal duties (0.37 EUR/l).

4.3. Econometric analysis

The aim of the correlation and regression analysis presented in this segment is to establish the intensity of price responses of the bestselling oil derivative sold at petrol stations in urban areas, *Euro diesel*, to the changes in crude oil prices.

Following the drop in crude oil prices in 2015, an upward trend started in 2016, continuing until October 2018 when the crude oil prices started to fall once again.

The following data series are used to analyze the degree, i.e., the extend of speed of *Euro diesel* price adjustments:

- price of crude oil type BRENT (USD/barrel)[15]
- retail price net of fiscal duties of *Euro diesel* at petrol stations in urban areas owned by NIS (RSD/l)
- Official middle exchange rate of the Serbian Dinar against the US Dollar[16]

The weekly data covering a four-year period are used in the analysis, starting at Week 1/Jan 2015 and ending with Week 52/ Dec 2018, totaling to 209 observations. Additionally, a data transformation is performed, specifically the first differences of LOG on time series which are approximately equal to the discrete growth rates.

A regression model is estimated by using Eviews 10+ software, which best reflects the trends in the observed time series. Multiple regression models are tested according to the usual procedure, where the best model is selected based on the lowest values of the information criterion (AIC values) and also described in this report.

It concerns a model describing the dependency of *Euro diesel* retail price on the crude oil trends in the current period, as well as in the five preceding periods. The model has satisfactory properties and is presented in the following table.

Table 38 *– Estimated model of Euro diesel price trends (January 2015 – December 2018)*

Variable	Estimate	Standard error	t-ratio
Constant	0.001	0.0007	0.8691
Crude oil growth rate	0.0428	0.0143	2.997651*
Crude oil growth rate (-1)	0.0861	0.0141	6.089794*

[15] Closing prices are downloaded from https://www.investing.com
[16] Official middle exchange rate is downloaded from https://www.nbs.rs

Crude oil growth rate (-2)	0.0991	0.0142	6.954119*
Crude oil growth rate (-3)	0.0782	0.0142	5.492755*
Crude oil growth rate (-4)	0.0433	0.0142	3.036895*
Crude oil growth rate (-5)	0.0367	0.0141	2.601550**
R^2=0,4133 S=0,0099 Q(6)=7.45 SC=-6,253 DW=1,70			

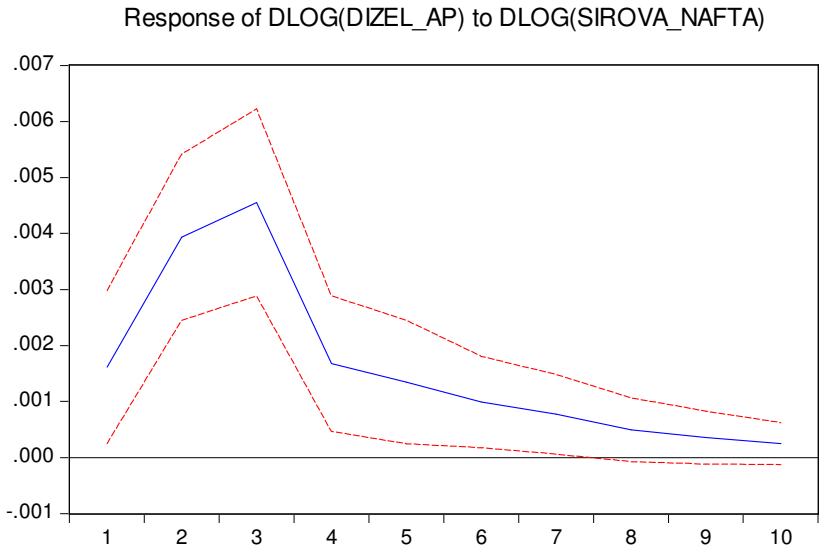
* significance level of 1%
** significance level of 5%
***significance level of 10%

The estimated model demonstrated that 41% of the variation in *Euro diesel* retail price is explained by the global crude oil trends observed during five weeks preceding the current period.

The vector autoregression (VAR) model is also estimated by using Eviews 10+ software given than these models are used for the analysis of dynamic relations between multivariate time series, which is the specific purpose of this part of the analysis.
The VAR(2) model is created as a framework for the empirical analysis of causality between the following three time series: retail net price of *Euro diesel* at petrol stations in urban areas, RSD-USD exchange rate, and the global prices of crude oil type *Brent*.

To gain an understanding of the system response to an unexpected influence (impulse), the impulse response function (IRF) is used. The IRF is calculated based on the Cholesky decomposition of a covariance matrix into uncorrelated errors over a sequence: crude oil price – exchange rate – retail price of *Euro diesel*. By adding the values of parameters in the impulse response function for the observed unit shock, a change in the global crude oil price on the retail price of *Euro diesel*, the impulse response function is obtained. The chart presented below gives a graphic view of the diesel price response to sudden changes in crude oil price.

Chart 1- *Diesel price response to sudden changes in crude oil price in 2018*



The chart above shows a period in which the response of diesel prices to a change in crude oil prices has occurred. The effects of the shock have peaked during the second and third week. After the Week 5, the effects of the shock are fully eliminated.

The impulse response function is arranged in tabular form in Table 39.

Table 39 – *Impulse response function, IRF*

Sequence of Cholesky decomposition	Number of weeks									
	1	2	3	4	5	6	7	8	9	10
Crude oil – exchange rate – *Euro diesel* retail price	0.002	0.004	0.004	0.002	0.001	0.001	0.001	0.000	0.000	0.000

Based on the above data, it can be noted that a 5-week period is needed for the full adjustment of prices of oil derivatives in the national market to the shocks in global crude oil prices.

5. FINDINGS AND RECOMMENDATIONS

5.1. Findings

On the basis of the information collected and the inquiry into the state of competition in the oil derivatives retail market in 2018, as well as on the basis of a comparative analysis of individual financial ratios against the previous year, the following findings are made:

- **The total crude oil production** in the Republic of Serbia in 2018 amounted to 906 thousand tonnes, while the total net imports reached 2.7 million tonnes. Based on the Energy Balance data, a declining trend in the domestic crude oil output will continue in the coming period as well, while a decrease in net imports is also expected.
- **Crude oil import purchase prices** in 2018, as in the previous years, were significantly higher than the crude oil prices on the domestic market.
- **The total production of oil derivatives** in 2018 amounted to [...] million tonnes, where the highest share in the production structure of /60-70/% related to motor fuels, while non-energy and energy generating fuels have accounted for /20-30/% and /5-10/% of the total production, respectively. Compared to the previous period, a steady growth trend is observed, both in the total production of oil derivatives and in the production of motor fuels and non-energy generating fuels, while the production of energy generating fuels is declining.
- **The total imports of motor fuels** in the Republic of Serbia amounted to 686 thousand tonnes in 2018, which is a 6% decline relative to 2017. Compared to the previous year, the imports of gasoline and diesel fuels fell by 14% and 9%, respectively, while the imports of LPG auto gas increased for the first time in the last five years, by 10%. As in the previous period, diesel fuels dominate in the structure of imports with a 70% share in the total imported volumes, while the share of gasoline and liquefied petroleum gas in the total imports of motor fuels accounts for 10% and 20%, respectively. The only importers of gasoline were OMV and Mol Serbia, while Mol Serbia and Lukoil were at the forefront of diesel imports, as in the previous

period. The largest importer of LPG auto gas was NIS with a /40-50/% share in the total imports, followed by PETROL LPG, Euro gas and Mol Serbia. Gasoline was imported from Hungary and Romania, while diesel fuels were imported from Hungary, Slovakia, Romania, Russian Federation, and Bulgaria.

- **The total number of petrol stations** owned by undertakings under the analysis is 886, representing 58% of the total number of petrol stations in 2018, according to the records maintained by the Ministry of Mining and Energy. In comparison to the previous year, Euro petrol, Lukoil, and NIS have reduced the number of petrol stations, while one company has ceased trading and exited the marketplace. Eleven undertakings have increased the number of petrol stations in 2018 compared with the previous year, while four undertakings have maintained the number of petrol stations in operation.
- **The supply of gasoline** is predominately provided from domestic sources, where NIS is the largest supplier, while only [...] and [...] to a considerable extent have procured gasoline from foreign sources. Four undertakings have procured gasoline from affiliated entities. The level of concentration in the supply of gasoline provided by five largest suppliers was high, ranging between 76% and 100%.
- **The total turnover in gasoline** in the Republic of Serbia amounted to 562 million liters in 2018, while the sales made by undertakings under the analysis accounted for 80%. The highest market share was achieved by NIS with about /40-50/%, followed by Lukoil with /5-10/%, OMV with /5-10/%, Eko Serbia with /5-10/%, and Mol Serbia with a /0-5/% share in the turnover. Six undertakings have increased the turnover in gasoline compared to the previous year, three companies have experienced a decline in sales in this particular category, while two undertakings have maintained or deviated only slightly from their turnover levels compared to the preceding business year. The highest turnover per petrol station was generated by NIS, followed by Eko Serbia and OMV. As in the previous year, gasoline accounted for 23% of the total sales at all petrol stations.
- **The supply of diesel fuels** is predominately provided from domestic sources, where company NIS is observed as the largest market supplier of this particular oil derivative, while much smaller quantities are imported. Only five undertakings have procured *Euro diesel* from foreign sources, out of which only [...] and [...] have fully relied on the imports. Six undertakings have procured diesel fuels from affiliated entities. The level of concentration in the supply of diesel fuels is high, while the share of the top-five suppliers in the total procurement for majority of undertakings exceeds 90%.
- **The total turnover in diesel fuels** amounted to about 2 billion liters in 2018, while the sales made by undertakings under the analysis accounted for 61%. As in the previous period, by far the largest retail turnover in diesel fuels is generated by NIS with about /30-40/% share, followed by OMV and Lukoil with /5-10/% each, and Knez petrol with /0-5/%. Seven undertakings have increased their respective sales in 2018, three companies saw a decrease in diesel fuel sales, while one ([...]) has ceased trading and exited the marketplace. The highest turnover per petrol station was generated by NIS, followed by OMV and Mol Serbia. As in the previous year, diesel fuels accounted for about 2/3 of the total sales at all categories of petrol stations.
- About 3/4 of the total **LPG auto gas supplies** are procured from domestic sources, while only two undertakings, [...] and [...], have predominately or fully relied on foreign sources of supply.

- **The total turnover in LPG** amounted to 362.5 million liters in 2018, while the sales made by undertakings under the analysis accounted for 59%. The highest turnover in LPG auto gas was generated by NIS whose market share is about /10-20/%, followed by Lukoil, Eko Serbia, Knez petrol and OMV, while these five undertakings account for 47% of the total LPG sales. The majority of undertakings have experienced a decrease in LPG sales compared to the previous year, while only two companies have increased their respective turnover levels. Companies Euro petrol and Eko Serbia have made the highest average sales in LPG per petrol station, while NIS generated [...] in LPG sales per petrol station. In total, LPG auto gas accounted for 11% of the sales made at all categories of petrol stations in 2018.
- **The highest revenues from the sales of oil derivatives**, as in the previous period, are generated by company NIS, followed by Lukoil and Eko Serbia, while these undertakings [...] the respective sales revenues compared to the previous year. The highest revenues from the sales of oil derivatives per petrol station are generated by Mol Serbia and Eko Serbia. The share of revenues from the sales of oil derivatives in the total revenues is relatively stable with all observed undertakings.
- **The highest revenues from non-core activities** are generated by NIS with [...] in revenues compared to OMV as the second highest earning company from non-core activities. The majority of undertakings have increased their earnings in this category in 2018, while [...] and [...] saw a significant decrease of revenues generated from non-core sales.
- **Favorable retail performance** was achieved by 12 undertakings, while four companies were operating at a loss. Companies [...] and [...] have achieved the best retail performance in 2018, followed by [...] and [...]. Compared to the previous year, company [...] remained in the red, while [...] slipped into operating at a loss from being in the black.
- **The lowest weighted-average purchase price of oil derivative *Evro BMB 98*** had company [...], while the differences in weighted-average purchase prices remained below 3 dinars. Unlike the previous year, this particular oil derivative was solely procured from domestic sources in 2018.
- **The lowest average selling price of oil derivative *Evro BMB 98*** was recorded at petrol stations in rural areas, while the highest price was observed at petrol stations on highways, where the difference between the two prices was about 6 dinars per liter. The average selling prices of *Evro BMB 98* at petrol stations on arterial highways and in urban areas were nearly identical, and higher for about 5 dinars per liter than the prices of this oil derivative valid at petrol stations in rural areas. In terms of the weighted-average prices valid at all categories of petrol stations, company [...] had the lowest price, while [...] had the highest respective price, where the difference between the two prices was about 10 dinars per liter.
- **Positive price differential** is achieved by all undertakings trading in oil derivative *Evro BMB 98*. The highest average price differential was achieved by [...] and [...], while the lowest respective value was achieved by [...]. In percentage terms compared to the purchase price, the average price differential fluctuated between 21% and 43%.
- **The lowest weighted-average purchase price of oil derivative *Evro premijum BMB 95*** had company [...], predominately supplied from [...] sources, while the purchase prices of other undertakings were higher than [...] prices, from 3 to 10 dinars. Undertakings procuring this particular gasoline from both domestic and foreign sources have experienced more costly supply from domestic sources than from the imports, for 3-6 dinars per liter.

- **The lowest average selling price of oil derivative *Evro premijum BMB 95*** was recorded at petrol stations in rural areas, while the weighted-average prices valid at petrol stations in urban areas and on arterial highways have deviated only slightly. The highest average price was observed at petrol stations on highways, while the difference between these prices was about 3 dinars per liter. In terms of the weighted-average prices valid at all categories of petrol stations, companies [...] and [...] have achieved the lowest prices, while [...] had the highest respective price, where the difference between these prices was about 7 dinars per liter.
- **Positive price differential** is achieved by all undertakings trading in oil derivative *Evro premijum BMB 95*. The highest average price differential was achieved by [...], while the lowest respective value was achieved by [...]. In percentage terms compared to the purchase price, the average price differential fluctuated between 17% and 36%.
- **The lowest average purchase prices of oil derivative *Euro diesel*** are achieved by companies [...] and [...], while the weighted-average purchase prices of other undertakings were between 4 and 12 dinars per liter higher than the purchase price [...]. If we compare the weighted-average purchase prices per sources of supply, it can be noted that only [...] procured of this oil derivative from foreign sources at higher prices, while other undertakings paid on average 1.5 to 5 dinars less for *Euro diesel* procured abroad than from the local supply sources.
- **The lowest average selling price of oil derivative *Euro diesel*** was recorded at petrol stations on arterial highways, while the weighted-average prices valid at petrol stations in urban and rural areas deviate only slightly. The highest average price was observed at petrol stations on highways, while the difference between these prices was about 5 dinars per liter. In terms of the weighted-average prices valid at all categories of petrol stations, companies [...] and [...] have achieved the lowest prices, while [...] had the highest respective price, on average higher for about 11 dinars than the price of [...].
- **Positive price differential** is achieved by all undertakings trading in oil derivative *Euro diesel*. The highest average price differential was achieved by [...], while the lowest respective value was achieved by [...]. In percentage terms compared to the purchase price, the average price differential fluctuated between 10% and 32%.
- **The lowest weighted-average purchase price of oil derivative *diesel Gas oil 0.1*** was achieved by [...], while the prices of other undertakings were on average higher for 6-8 dinars per liter.
- **The lowest average selling price of oil derivative *diesel Gas oil 0.1*** at all categories of petrol stations was achieved by company [...], while the average prices of other undertakings were higher for 4-5 dinars per liter.
- **Positive price differential** is achieved by all undertakings trading in oil derivative *diesel Gas oil 0.1*. The highest average price differential was achieved by [...], while the lowest respective value was achieved by [...]. In percentage terms compared to the purchase price, the average price differential fluctuated between 8% and 17%.
- **The supply of liquified petroleum gas** is primarily provided from domestic sources, while the weighed-average purchase price of this oil derivative from domestic external supply sources was higher than the weighted-average import price for 1.5 dinars per liter. The lowest weighted-average purchase price from both sources of supply was achieved by [...].
- **The weighted-average selling prices of LPG auto gas** valid at petrol stations in urban and rural areas, as well as on arterial highways were nearly identical, while the average price offered at petrol stations on highways was slightly higher. In terms of

the weighted-average prices valid at all categories of petrol stations, companies [...] and [...] have achieved the lowest prices, while [...] had the highest price, on average higher for about 3 dinars per liter than the price of [...].

- **Positive price differential** is achieved by all undertakings trading in oil derivative *LPG*. The highest average price differential was achieved by [...], while the lowest respective value was achieved by [...]. In percentage terms compared to the purchase price, the average price differential fluctuated between 11% and 32%.
- **Company set prices (net of fiscal duties) of oil derivative *Evro premijum BMB 95*** in EUR/l have not differed significantly between the regional countries. State levies in 2018 were highest in Croatia, contributing 57% to the retail price, and lowest in Bulgaria with 47%, while Serbia ranked third in government taxes, contributing 54% to the retail price of this oil derivative. The highest selling prices are recorded in Croatia and Montenegro, while the lowest were observed in Macedonia and BiH.
- **Company set prices of oil derivative *Euro diesel*** in EUR/l have been nearly identical among the regional countries, apart from Bosnia and Herzegovina where the lowest average company set price is observed. In terms of government taxes, Serbia ranked first among the regional countries, contributing 52% to the retail price of this oil derivative, while the share of government taxes in Macedonia was the lowest and contributed 38% to the retail price. The highest average retail prices are recorded in Serbia and Croatia, and the lowest are observed in Bosnia and Herzegovina, and Macedonia.
- **Company set prices of LPG auto gas** in EUR/l have varied significantly among the regional countries, where the highest company set prices are recorded in Hungary and Montenegro, while the lowest are observed in Bosnia and Herzegovina, and Bulgaria. The highest share of government taxes in retail prices are noted in Serbia (46%), while the lowest respective tax share in retail prices is recorded in Croatia (21%). The highest average retail prices of LPG auto gas in 2018 are recorded in Serbia, while the lowest respective prices are observed in Bulgaria and Romania.

5.2. Recommendations

As a preliminary point, the degree of implementation of recommendations given in the previous reports should be noted. Table 40 gives an overview of the recommendations.

Table 40 – *Degree of implementation of recommendations given in the previous report*

Recommendations	Annual progress update
To keep statistical records on oil and oil derivatives	Partial progress
To submit all relevant legislation and regulations for the provision of opinions, by all government bodies	No requests for the provision of opinions

In terms of recommendations provided in the previous reports on keeping statistical records on oil and oil derivatives, it should be noted that the Ministry of Mining and Energy again failed to keep own records on the trade in oil derivatives, instead, the Commission received information on the marking in accordance with the Regulation on labeling (marking) of oil derivatives. In its letter addressed to the Commission, the Ministry of Mining and Energy underlined that the database is developed, while undertakings dealing with the production and trade in oil and oil derivatives, biofuels and compressed natural gas, as well as in the trade of motor and other fuels at petrol stations, are responsible for the database entries as of April 16, 2018. The database is in the testing phase, including data volumes and quality performance checks. In that regard, aggregate data on the trade in oil and oil derivatives should be available form 2019, which will constitute a significant data source for future inquiries into this market.

The Ministry of Mining and Energy has provided information on the number of petrol stations this year as well, based on the data gathered by the Ministry of Trade and Telecommunications – Sector for market inspection, as a result of monitoring activities regarding the oil derivatives marking program. In accordance with the Regulation on amendments to the Regulation on monitoring the quality of oil derivatives and biofuels (Official Gazette of the RS 5/2017), the Ministry of Trade and Telecommunications has developed the Public database on petrol stations in late 2017. The Public database is available at the Ministry website[17] and is regularly updated, while undertakings are obligated to submit information on the facilities used for trade in motor and other types of fuel.

As far as concerns a recommendation pertaining to the cooperation between the Commission and other competent institutions towards creating a legal and business environment that will enable free competition in the oil derivatives market, the Commission received no requests for the provision of opinions from government bodies in 2018.

On the basis of the foregoing findings and the degree of implementation of recommendations given in the previous years, the Commission adopts the following **recommendations**:

- Continuous monitoring of the oil industry requires keeping precise statistical records on oil and oil derivatives in all phases of production and trade cycle. The key issue faced by the Commission when drafting sector inquiry reports in the previous period has related to the lack of aggregate data on the wholesale and retail trade in oil derivatives, in total, per type of oil derivative, as well as by individual business entities, based on which it would be possible to precisely determine the respective market shares of undertakings and their real market power. Although certain improvements have occurred, seeing that the Commission was able to approximately derive data on the total turnover based on information provided by the Ministry of Finance, as well as information provided by the Ministry of Mining and Energy obtained in accordance with the Regulation on labeling (marking) of oil derivatives, the Commission reiterates the commitment of energy entities that perform the activity of production and trade in oil and oil derivatives, to submit data to the Ministry of Mining and Energy on the purchase and sale of oil and oil derivatives, prices of oil derivatives, as well as other requested data, pursuant to Article 335 of the Energy Law (Official Gazette of the RS 145/2014).

[17] http://mtt.gov.rs/javna-baza-benzinskih-stanica/

- The Commission also reiterates the significance of cooperation between the Commission and other competent authorities towards creating a legal and business environment that will enable free market competition. On those points, the Commission restates the need for submission of all relevant legislation and regulations by all government bodies for the provision of opinions.