

Evolution of oil and petroleum product prices and taxation levels during the year 2008 in the European Union



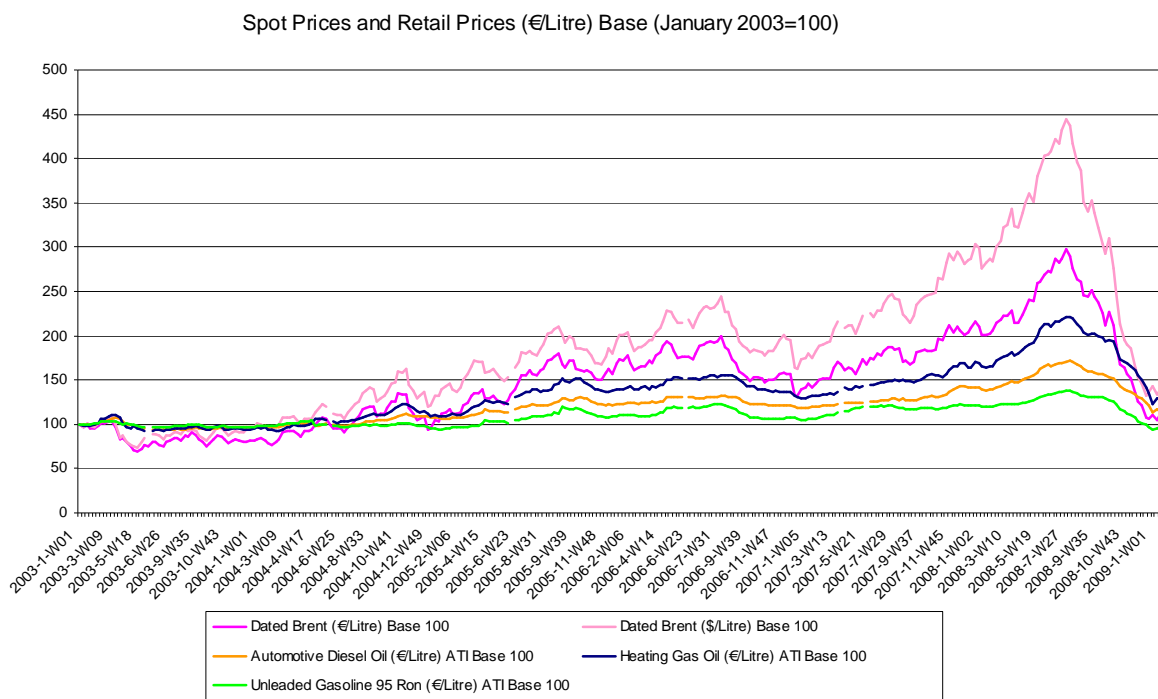
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1. INTRODUCTION

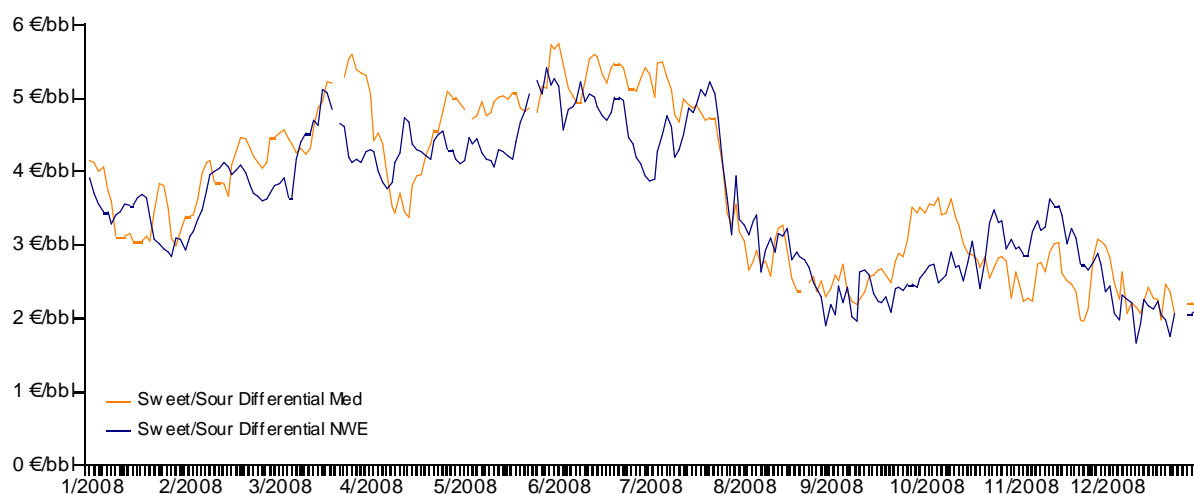
The oil market has witnessed extreme volatility during 2008. The rapid rise of oil prices that began early in 2007, culminated in the middle of 2008 and abruptly changed thereafter: crude oil (Dated Brent) cost 92 \$ per barrel in January 2008, reached 145 \$ per barrel in the course of July and fell back to 40 \$ per barrel, on average, in December, losing more than 70% of its value. Prices of oil products also fluctuated extensively as compared to historical standards, reaching the peak in July 2008 and sharply falling afterwards. In January 2009, the price of crude oil (Dated Brent) and unleaded gasoline 95 (with and without taxes), expressed in Euro, fell to a January 2003 level, whereas the end-consumer price for automotive diesel oil and heating gas oil still remained higher than in January 2003 by about 15% and 30% respectively. Excluding taxes, the price for these two petroleum products was about 35% higher in January 2009 in comparison with January 2003. The fact that the price evolution of these two products is not in line with the price evolution of crude oil and gasoline 95 may be due to constraints in the production capacity in the refining industry.



In terms of the dynamics, the changes of main end-user petroleum product prices in 2008 broadly followed the changes of crude oil price. However their fluctuations were less pronounced as crude oil price comprises only part of the final price, the rest being largely determined by application of taxes. Given this composition of the final consumer price, we will first discuss the determinants of crude oil price movements in 2008 followed by the oil product taxation levels and changes in 2008.

2. DRIVERS OF CRUDE OIL PRICE IN 2008 AND OIL MARKET OUTLOOK

Drivers of oil price movements. In the first half of 2008 oil prices reached exceptional heights. As noted in the "First Interim Report on Oil Price Developments and Measures to Mitigate the Impact of Increased Oil Prices"¹, real oil prices (adjusted for inflation) reached levels of the 1979-80 oil crisis. Among the most prominent drivers of the crude oil price surge in the first half of the year, was the continuation of strong demand growth, especially in countries such as China, India and the Middle East, in combination with sluggish response on the supply side. Investors' behaviour could also have amplified the rise of oil prices in the first half of the year, as oil acted as a relative safe investment and as a hedge against inflation when the dollar was weakening. In terms of different crude oil types, higher demand for diesel in comparison to petrol increased the prices of sweet oil (WTI, Brent) by more than sour crude oil, as shown by sweet and sour crude oil price differentials.



By the end of the summer and early autumn, the financial crisis continued to unfold. The economic outlook in most countries, including developing nations, significantly deteriorated. Forecasts indicated a sharp fall in aggregate demand worldwide, which in turn translated into lower oil demand estimates and falling oil prices. Moreover, in the autumn, investors became increasingly nervous and uncertain about the future economic development. The result for the oil market was increased uncertainty about the future price developments and higher price volatility. The decision to cut production taken by OPEC in autumn had almost no visible effect, as price developments were completely overwhelmed by a lack of demand. Crude oil prices decreased at the end of 2008 to around 40\$ per barrel and stabilised around this level at the beginning 2009.

The currency changes also affected the price of oil and its products. The average price of Dated Brent for the entire year of 2008 reached 97\$ per barrel versus 72 \$ per barrel in 2007, a 34% increase in price expressed in US dollars. However, the appreciation of the Euro against the US dollar, especially during the first seven months of 2008, has mitigated the price

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increase for the European consumers. Expressed in Euro, the average Dated Brent price in 2008 was 66 €/per barrel, in comparison to 53 €/per barrel in 2007 (up by 25%).

Outlook. Investors' sentiment significantly shifted during the year 2008. The backwardation in the oil market, prevalent in the first half of the year, changed into a position of contango. Given the current circumstances, the short term outlook remains negative based on concerns over subdued demand and the deepness of the economic crisis. A recent IEA report indicates that the fall in oil demand will be much graver than previously forecast. Taking into account the drop of oil demand in the US and weakening demand in China, the demand contraction in 2009 is expected to be the sharpest since 1982. The medium term outlook is thus highly uncertain. However, evidence indicates that the long term outlook may give some comfort: while supply will most likely remain restricted, world demand is expected to rebound in particular due to industrial use and rising income / increasing car ownership in developing countries.

3. DEVELOPMENT OF PETROLEUM PRODUCT PRICES IN 2008

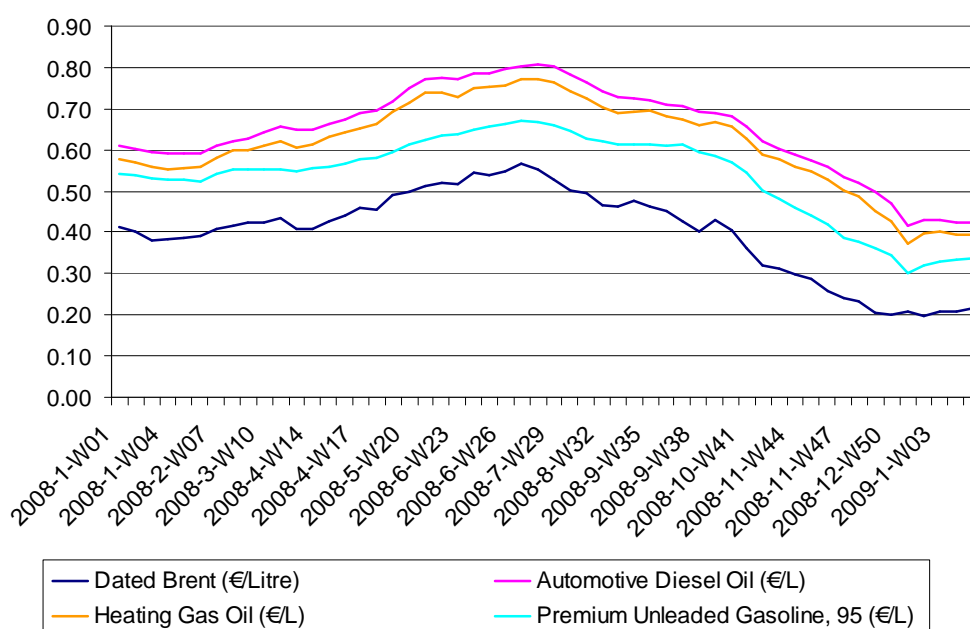
Prices of oil products, namely gasoline, diesel and heating oil, broadly followed the prices of crude oil. The swings of the EU27 average pre-tax petroleum product price dynamics were slightly less pronounced than the swings of the crude oil price (Dated Brent) if compared on a semi-annual and yearly basis.

Price levels of the main oil products net of duties and taxes and their changes

	Jan. 2008	July 2008	July/Jan. 2008	Jan. 2009	Jan. 2009/Jan. 2008
	(€/litre)	(€/litre)	(in %)	(€/litre)	(in %)
Euro super 95	0.5283	0.6548	+ 23.9 %	0.3070	- 41.9 %
Diesel oil	0.5951	0.7987	+ 34.2 %	0.4153	- 30.2 %
Heating gas oil	0.5634	0.7526	+ 33.6 %	0.4078	- 27.6 %
Crude oil (Dated Brent)	0.3932	0.5312	+ 35.1 %	0.2071	-47.3 %

A more detailed analysis of pre-tax oil product prices and crude oil prices show that changes in the crude oil price were reflected in the final product price with a lag of about one week (see the Commission's Report on Oil Price Developments²). This holds for the EU27 level, but not necessarily at the individual Member State level due to specificities in each country. In addition, there were minor divergences noticeable in the movement of Dated Brent oil price and the price of the main petroleum products. These divergences could be attributed to the fluctuations of seasonal demand for a particular product, as well as a temporary surplus or deficit for a certain product on the international market.

Dated Brent / oil products without taxes (in €)

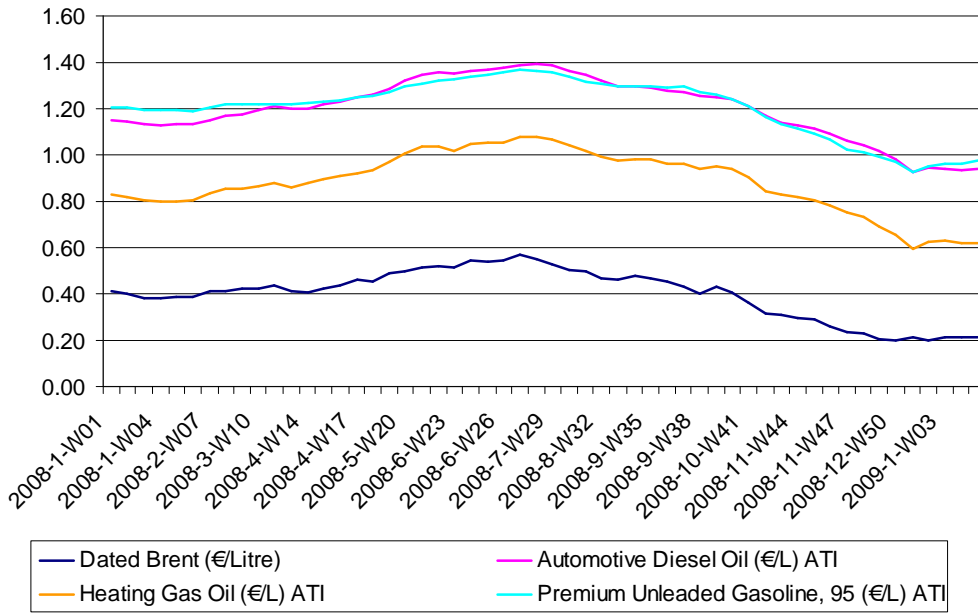


Similarly, end-consumer prices for the main oil products (including taxes and duties) followed an upward trend in the first half of 2008 and a downward trend in the second half of 2008. Yet these swings were even less pronounced, as taxation (mainly VAT and excise duties) absorbed the sharp increase recorded in the crude price and in the net oil product price (without taxes) evolution.

Price levels of the main oil products including duties and taxes and their changes

	Jan. 2008	July 2008	July/Jan. 2008	Jan. 2009	Jan. 2009/Jan. 2008
	(€/litre)	(€/litre)	(in %)	(€/litre)	(in %)
Euro super 95	1.2844	1.4557	+ 13.3 %	1.0168	- 20.8 %
Diesel oil	1.2221	1.4444	+ 18.2 %	0.9746	- 20.3 %
Heating gas oil	0.8660	1.0174	+ 17.5 %	0.5866	- 32.3 %
Crude oil (Dated Brent)	0.3932	0.5312	+ 35.1 %	0.2071	- 47.3 %

Dated Brent / oil products with taxes (in €)



4. TAXATION OF PETROLEUM PRODUCTS

The table below shows the evolution in the EU27 of taxation (indirect taxes and VAT) in the end-consumer prices for the three main petroleum products. Three dates have been chosen: 17 December 2007 when the crude price was round 65 € per barrel, 28 July 2008 when the crude price was round 85 € per barrel and 26 January 2009 when the crude price was round 33 € per barrel.

It should be noted that, in the EU, the taxation share is generally the highest on Euro super 95 followed by diesel oil and then heating gas oil. The heating gas oil taxation's share, at EU27 level, is less than half the taxation share of Euro super 95.

Share of the taxation (indirect taxes + VAT) in the end-consumer prices

	Premium unleaded 95 Ron			Automotive diesel oil			Heating gas oil		
	17/12/07	28/07/08	26/01/09	17/12/07	28/07/08	26/01/09	17/12/07	28/07/08	26/01/09
AT	57%	55%	67%	49%	45%	57%	31%	28%	35%
BE	62%	57%	69%	47%	41%	55%	20%	19%	21%
BG	52%	49%	61%	46%	42%	54%	48%	43%	55%
CY	43%	40%	53%	37%	33%	45%	16%	26%	19%
CZ	54%	52%	66%	47%	45%	56%	27%	25%	31%
DE	64%	61%	73%	53%	49%	61%	24%	23%	27%
DK	60%	58%	69%	50%	46%	59%	45%	42%	54%
EE	46%	47%	62%	39%	41%	54%	22%	22%	26%
ES	51%	47%	60%	43%	38%	49%	26%	23%	30%
FI	61%	54%	72%	46%	42%	52%	28%	26%	33%
FR	62%	58%	71%	52%	47%	60%	24%	22%	26%
GR	48%	45%	58%	41%	38%	48%	20%	43%	21%
HU	54%	51%	61%	47%	43%	51%	47%	43%	51%
IE	55%	51%	69%	49%	44%	55%	18%	17%	20%
IT	58%	55%	66%	50%	45%	57%	50%	45%	56%
LT	46%	44%	63%	41%	38%	52%	18%	18%	20%
LU	53%	50%	62%	42%	37%	50%	12%	12%	13%
LV	46%	42%	56%	40%	36%	47%	18%	17%	21%
MT	44%	41%	53%	39%	36%	49%	2%	1%	28%
NL	61%	57%	70%	48%	43%	57%	37%	37%	56%
PL	56%	53%	66%	47%	44%	51%	27%	26%	28%
PT	60%	55%	69%	48%	42%	54%	27%	27%	37%
RO	49%	44%	58%	41%	38%	47%	50%	42%	56%
SE	62%	60%	71%	53%	50%	61%	52%	48%	61%
SI	51%	46%	67%	44%	40%	59%	24%	22%	34%
SK	56%	53%	68%	52%	48%	61%	19%	18%	20%
UK	64%	58%	73%	62%	53%	66%	25%	19%	28%
EU 27	60%	56%	69%	51%	45%	57%	27%	27%	31%

As can be seen from the data, at EU27 level and in almost all Member States, the taxation share is decreasing when the crude price and the net product prices are increasing and, conversely, it is increasing when the crude price and the net product prices are decreasing.

This can be explained as being the result of the relative stability of excise duties (see the next table) since, in the end-consumer price the VAT applies on the total of net prices plus excise duties. The evolution of the taxation share on heating gas oil is different in Greece and in Cyprus, where every year the level of excise duties is drastically increased in spring and

reduced in autumn by a comparable amount. This explains why the level of taxation has remained constant, at 27%, for the EU27 heating gas oil average price between December 2007 and July 2008 while a drop has been observed in most Member States.

5. PETROLEUM PRODUCT PRICE DYNAMICS IN INDIVIDUAL MEMBER STATES

Indirect taxation (mainly excise duties) in different Member States has been relatively stable. The table shows the variations in percentage of indirect taxation, expressed in national currency, between the 17 December 2007 and the 26 January 2009 for the three main petroleum products.

Indirect taxes evolution 17/12/2007 - 26/01/2009 in national currencies for 1000L

	Premium unleaded 95 Ron			Automotive diesel oil			Heating gas oil		
	17/12/07	26/01/09	Variation	17/12/07	26/01/09	Variation	17/12/07	26/01/09	Variation
AT	484	485	0,2%	385	386	0,3%	108	109	1,0%
BE	623	586	-6,0%	318	341	7,2%	18	18	0,0%
BG	635	685	7,9%	535	600	12,1%	535	600	12,1%
CY	299	309	3,6%	244	256	4,7%	21	32	54,6%
CZ	11840	11840	0,0%	9950	9950	0,0%	2143	2143	0,0%
DE	655	654	0,0%	470	470	0,0%	61	61	0,0%
DK	4030	4187	3,9%	2730	2850	4,4%	2100	2176	3,6%
EE	4500	5620	24,9%	3840	5165	34,5%	690	960	39,1%
ES	396	407	3,0%	302	311	3,1%	85	87	2,8%
FI	588	611	4,0%	320	330	3,3%	71	81	13,7%
FR	602	606	0,6%	426	428	0,5%	57	57	0,0%
GR	313	365	16,7%	265	310	16,8%	21	26	26,1%
HU	106538	106538	0,0%	88006	88006	0,0%	88006	88006	0,0%
IE	443	509	14,9%	368	368	0,0%	52	52	0,0%
IT	564	564	0,0%	423	423	0,0%	403	403	0,0%
LT	995	1500	50,8%	849	1140	34,3%	73	73	-0,1%
LU	462	462	0,0%	290	302	4,0%	10	10	0,0%
LV	209	209	0,0%	178	178	0,0%	15	15	0,0%
MT	310	404	30,5%	246	332	35,4%	14	97	592,5%
NL	665	701	5,4%	380	413	8,6%	217	249	15,0%
PL	1647	1652	0,3%	1144	1144	0,0%	233	233	0,0%
PT	583	583	0,0%	364	364	0,0%	137	176	28,4%
RO	1254	1254	0,0%	1061	1061	0,0%	1230	1230	0,0%
SE	5060	5520	9,1%	3720	4339	16,6%	3413	3804	11,5%
SI	359	459	27,9%	302	402	33,1%	54	94	76,6%
SL	462	514	11,4%	432	481	11,4%	22	24	11,4%
UK	503	523	4,0%	503	523	4,0%	97	101	3,9%

The principal conclusions to be drawn from this analysis by country are the following:

- six Member States have not modified their indirect taxes on the three products between the two dates (CZ, DE, HU, IT, LV, RO);
- thirteen Member States have increased (by up to 15%) their indirect taxes on one or more products (AT, BE, BG, DK, ES, FI, FR, IE, LU, NL, PL, SK, UK);
- eight Member States have raised (by more than 15%) their indirect taxes on one or more products (CY, EE, EL, LT, MT, PT, SI, SE);

- only one decrease in indirect taxes has been recorded between the two dates; it concerns Belgium for the Euro super 95 (- 6%);
- in all EU Member States, with the exception of the UK, the level of indirect taxation on diesel oil is below the level recorded on the Euro super 95. In the UK, indirect taxes on these two products are at the same level.

The VAT level on the three main petroleum products has remained stable between the 17 December 2007 and the 26 January 2009 in all EU Member States with the exception of Latvia, Lithuania, Portugal and the United Kingdom.

In Latvia and Lithuania, VAT rates were increased as of 1st January 2009 from 18% to 21% and 19% respectively.

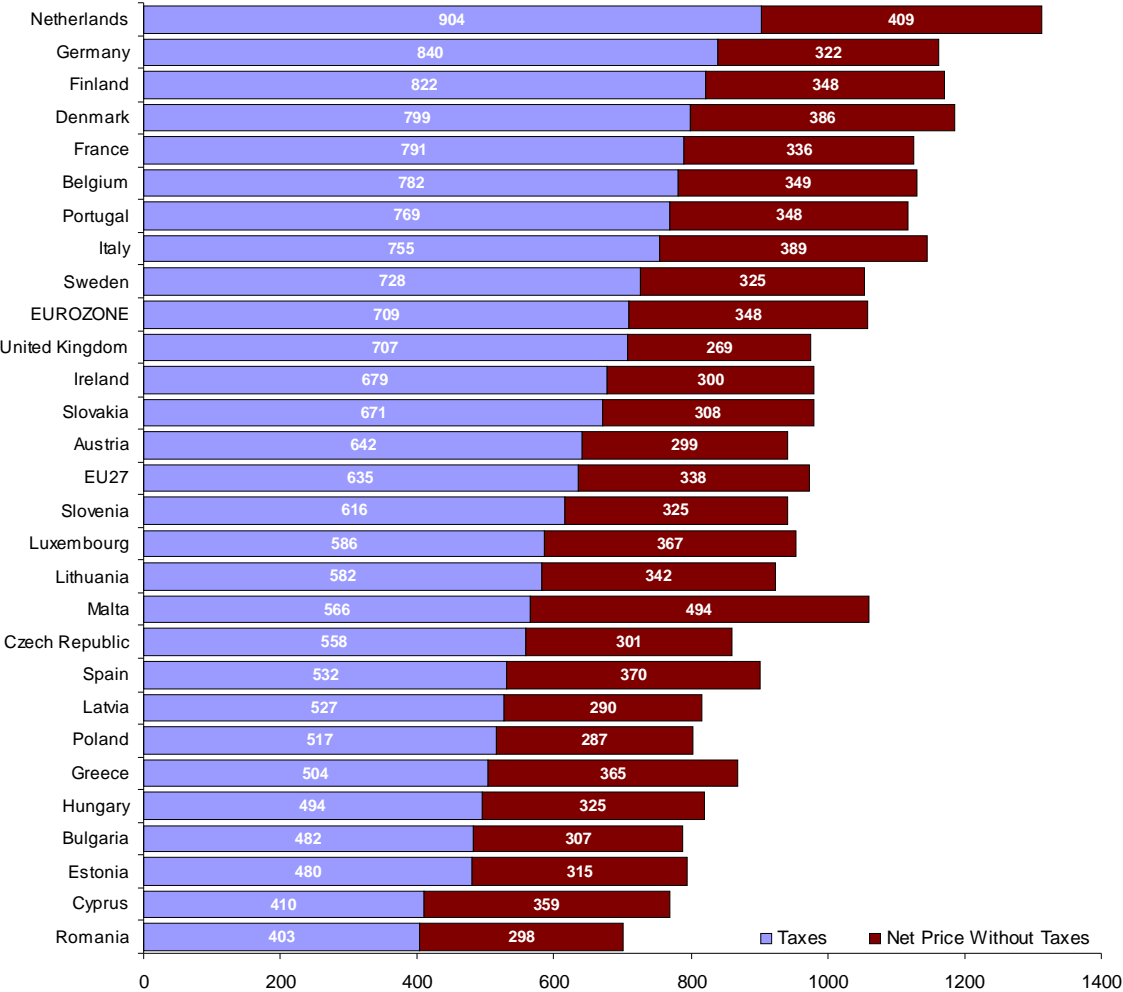
In Portugal, VAT rates were reduced on motor fuels from 21 % to 20% as of 1st July 2008.

In the United Kingdom, VAT rates were reduced on motor fuels from 17.5 % to 15 % as of 1st December 2008.

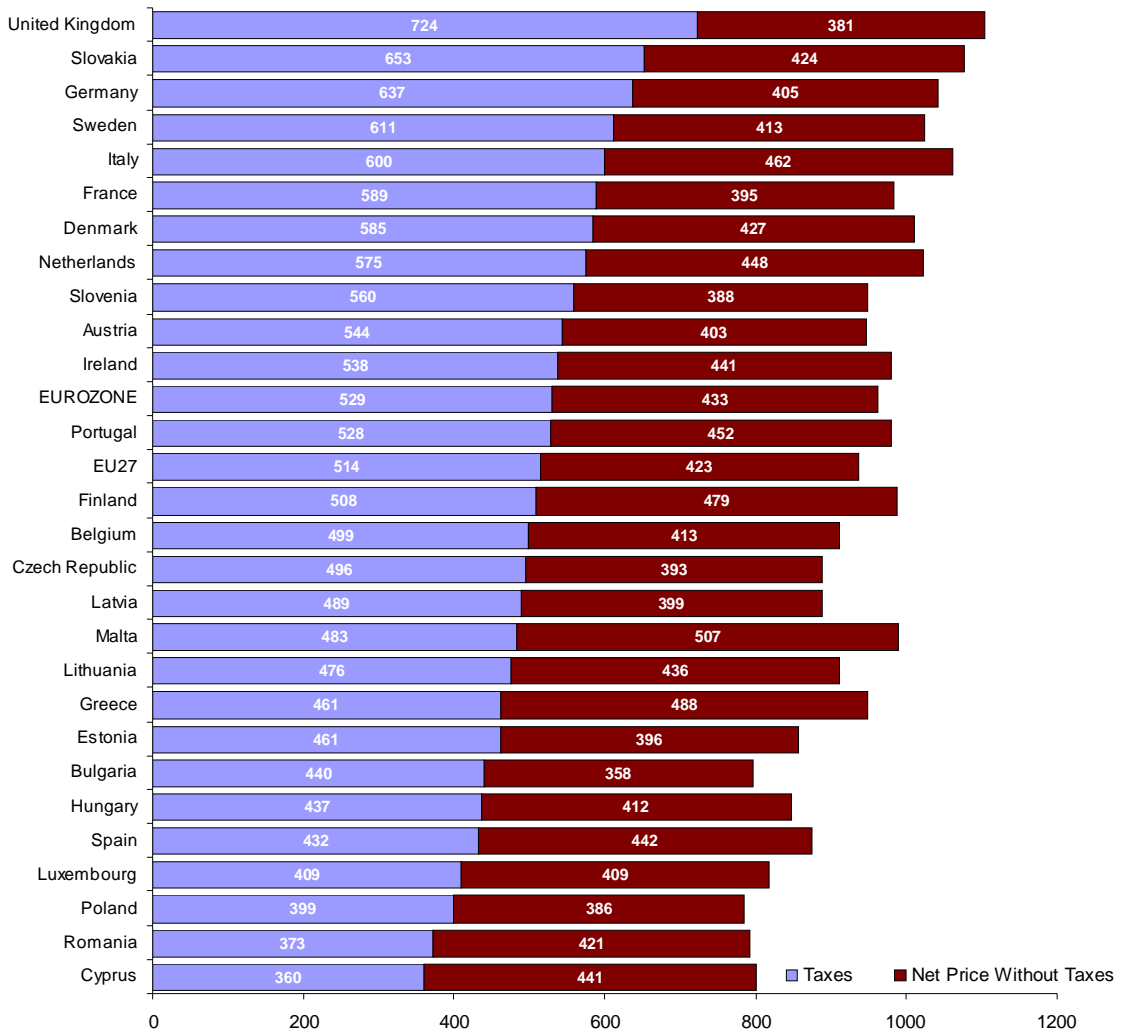
	Premium unleaded 95 Ron		Automotive diesel oil		Heating gas oil	
	17/12/07	26/01/09	17/12/07	26/01/09	17/12/07	26/01/09
AT	20.0 %	20.0 %	20.0 %	20.0 %	20.0 %	20.0 %
BE	21.0 %	21.0 %	21.0 %	21.0 %	21.0 %	21.0 %
BG	20.0 %	20.0 %	20.0 %	20.0 %	20.0 %	20.0 %
CY	15.0 %	15.0 %	15.0 %	15.0 %	15.0 %	15.0 %
CZ	19.0 %	19.0 %	19.0 %	19.0 %	19.0 %	19.0 %
DE	19.0 %	19.0 %	19.0 %	19.0 %	19.0 %	19.0 %
DK	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %
EE	18.0 %	18.0 %	18.0 %	18.0 %	18.0 %	18.0 %
ES	16.0 %	16.0 %	16.0 %	16.0 %	16.0 %	16.0 %
FI	22.0 %	22.0 %	22.0 %	22.0 %	22.0 %	22.0 %
FR	19.6 %	19.6 %	19.6 %	19.6 %	19.6 %	19.6 %
GR	19.0 %	19.0 %	19.0 %	19.0 %	19.0 %	19.0 %
HU	20.0 %	20.0 %	20.0 %	20.0 %	20.0 %	20.0 %
IE	21.0 %	21.0 %	21.0 %	21.0 %	13.5 %	13.5 %
IT	20.0 %	20.0 %	20.0 %	20.0 %	20.0 %	20.0 %
LT	18.0 %	19.0 %	18.0 %	19.0 %	18.0 %	19.0 %
LU	15.0 %	15.0 %	15.0 %	15.0 %	12.0 %	12.0 %
LV	18.0 %	21.0 %	18.0 %	21.0 %	18.0 %	21.0 %
MT	18.0 %	18.0 %	18.0 %	18.0 %	18.0 %	18.0 %
NL	19.0 %	19.0 %	19.0 %	19.0 %	19.0 %	19.0 %
PL	22.0 %	22.0 %	22.0 %	22.0 %	22.0 %	22.0 %
PT	21.0 %	20.0 %	21.0 %	20.0 %	12.0 %	12.0 %
RO	19.0 %	19.0 %	19.0 %	19.0 %	19.0 %	19.0 %
SE	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %	25.0 %
SI	20.0 %	20.0 %	20.0 %	20.0 %	20.0 %	20.0 %
SK	19.0 %	19.0 %	19.0 %	19.0 %	19.0 %	19.0 %
UK	17.5 %	15.0 %	17.5 %	15.0 %	5.0 %	5.0 %

The graphs below rank the Member States of the EU in decreasing order, on the basis of the importance of their total taxes (indirect taxes plus VAT) in the end-consumer price for the three main petroleum products.

Premium unleaded 95 Ron
 Net Prices and Taxes in the EU (€1000L)
 at 26/01/2009



Automotive diesel oil
Net Prices and Taxes in the EU (€/1000L)
at 26/01/2009



Heating gasoil
Net Prices and Taxes in the EU (€/1000L)
at 26/01/2009

