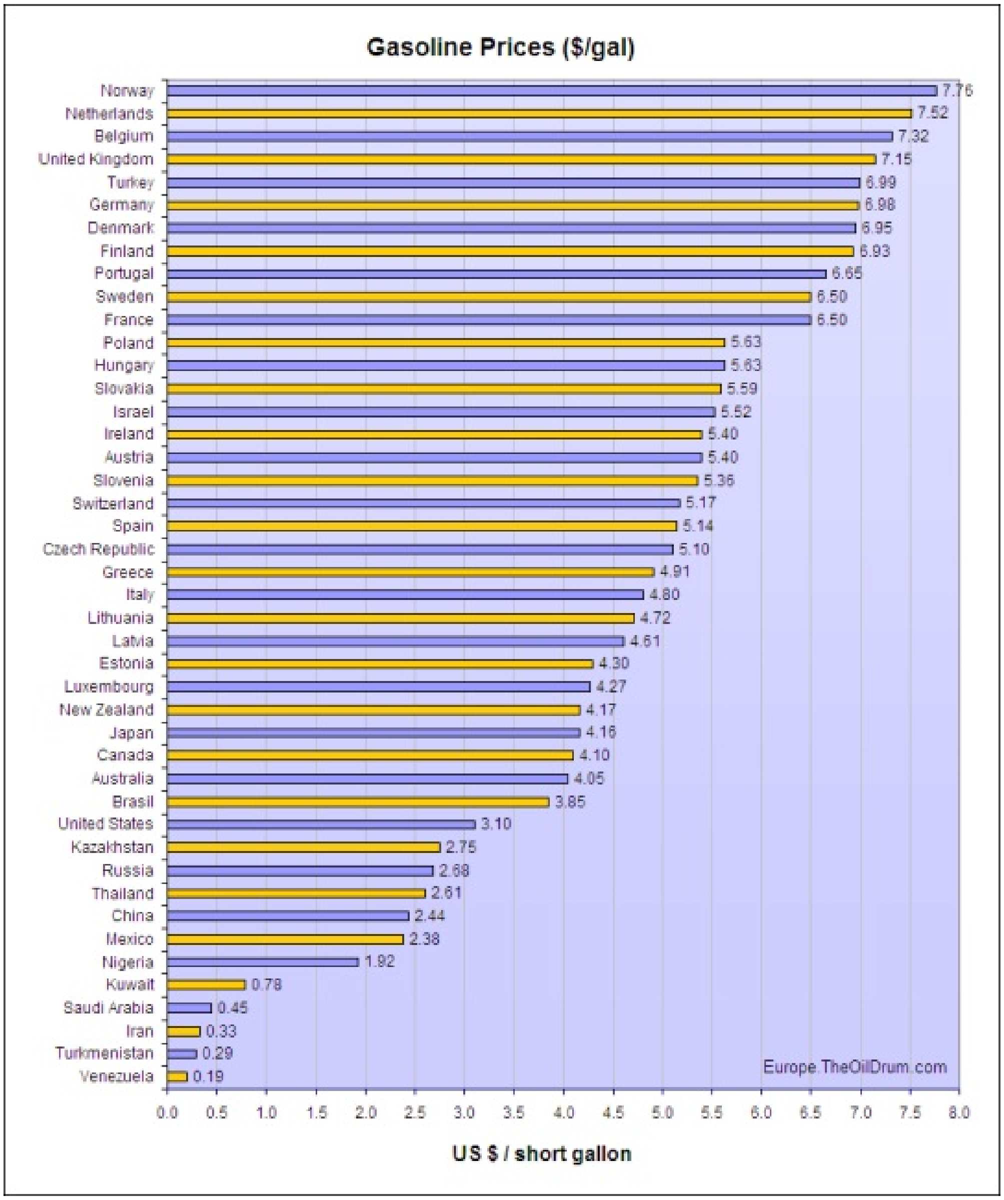
The Oil Drum: Europe
DISCUSSIONS ABOUT ENERGY AND OUR FUTURE

The Cost of Gasoline around the World

Posted by Luis de Sousa on June 15, 2007 - 11:30am in The Oil Drum: Europe
Topic: Demand/Consumption
Tags: carter doctrine, gas prices, gdp [list all tags]



Prices of a short gallon of gasoline in US$ around the World. Source: AA Motoring Trust via USAToday and Wikipedia. Click to enlarge.

These last weeks the MSM has been reporting news that, wouldn't it be for the seriousness of the Hubbert Peak, would belong in the section of bizarre news of your local newspaper. First it was the report by PFC Energy that imposed a *responsibility* on oil exporting countries to supply oil importing countries. Jérôme showed his indignation on this kind of pressure on oil exporters to bring crude on the market, no matter what.

And then another pearl, the US Democratic Congress and Senate proposed a bill to amend anti-trust laws in order to make possible suing foreign countries that do not supply the market with desired quantities of oil. Luckily there seems to be some sane people at the Republican White House.

No, this is not a bundle of people going mad at the same time; these are just modern (although awkward) manifestations of the Carter Doctrine. As explained by Professor Michael T. Klare, the Carter Doctrine is a legacy of the 1970s oil crisis that basically transforms resources in foreign regions into indigenous assets that will be protected and controlled, no matter what.

And Europe is not the good guy of this play. As a hole it deployed troops in Afghanistan, and its Christian Democrat and Liberal states played along with the Iraq commission (after trying "politely" to secure Iraqi oil through the UN).

The problem is that those elected don't seem to have any other way to deal with the common man on the street, demanding, complaining, raging, about gasoline prices. This is how electors get in touch with the Hubbert Peak, and being sadly clueless about it, they just cry like a baby that's losing its candy. And instead of saying "grow up, it's time to forget about the candy" those elected simply reply "daddy's gonna fetch you more candy".

But how high are gasoline prices?

Searching the web it is possible to find the price of a short gallon of regular gasoline for a number of countries around the World. In April the USAToday published a good number of prices provided by the AA Motoring Trust. And the Wikipedia gathers prices reported on the media during the last months. Compiling these numbers one gets Figure 1.

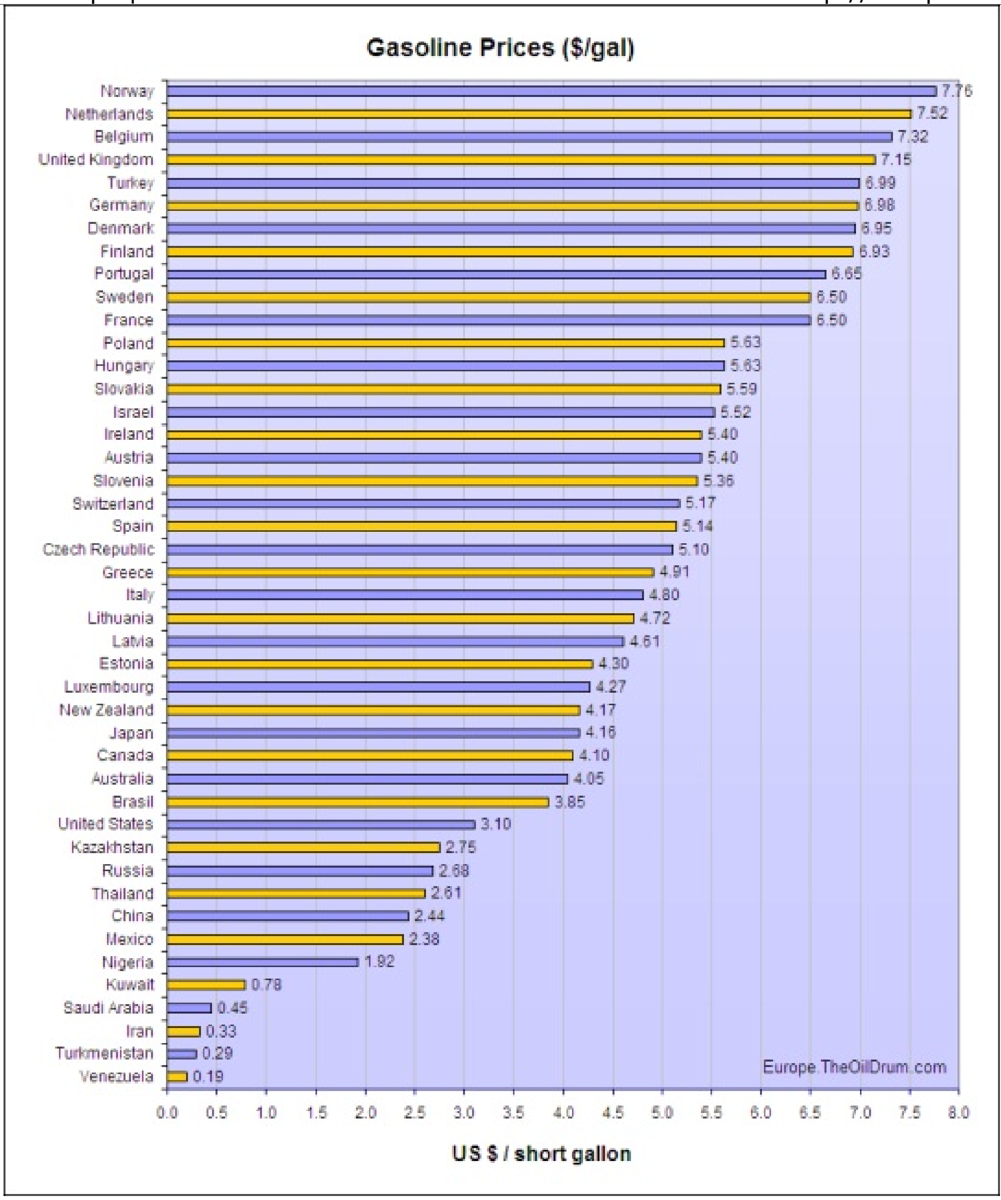


Figure 1 – Prices of a short gallon of gasoline in US$ around the World. Source: AA Motoring Trust via USAToday and Wikipedia. Click to enlarge.

These prices report mainly to April and May of 2007 with a small number of them being from last summer, when oil prices were above 70 $ per barrel like today. Some variations would occur if these prices where all from the same epoch, but they are good enough to get the overall picture. It is important to note though, that South America with two countries and Africa with one are poorly represented.

Looking at Figure 1 three big groups of countries can be identified:

- below 3 $ / gallon – mainly composed by oil exporting countries and some developing Asian countries that facilitate the access to fuel;
- from circa 4 $ / gallon to 6 $ / gallon – starting in Brasil and ending up in Poland this is a set of mostly developed (or close to) countries that perform mild tax policies on gasoline;
- above 6 $ / gallon – mostly wealthy countries that apply heavy tax policies on gasoline (Turkey being an obvious exception).

The United States is to be fond in no-man's land with 3.1 $ / gallon, closer to the countries that subsidize consumption than those that do not.

But this is just half of the picture because in different countries a gallon of gasoline has different weights on the individual's budget. One way to assess this difference would be to ponder the gasoline price against the average wage of each country. This approach was not taken for two reasons: first the average wage is not as available as other statistics and second it is biased by the tax policies followed in each country (e.g. the average wage in Norway is considerably lower than in the US, while both countries have similar numbers for GDP per capita).

Since the IMF publishes GDP per capita numbers in its World Economic Outlook for most of the countries in the World, this statistic was alternatively used (a quick compilataion can be found at Wikipedia). GDP (Gross Domestic Product) is a measure of the wealth generated in a country during a reference period (usually one year). GDP per capita is not affected by tax policies (which broadly speaking determines which part of the GDP is managed directly by the state) and is probably a best measure of individual wealth than average wages.

For the above countries, of which gasoline prices are known, the GDP per capita figures are the following:

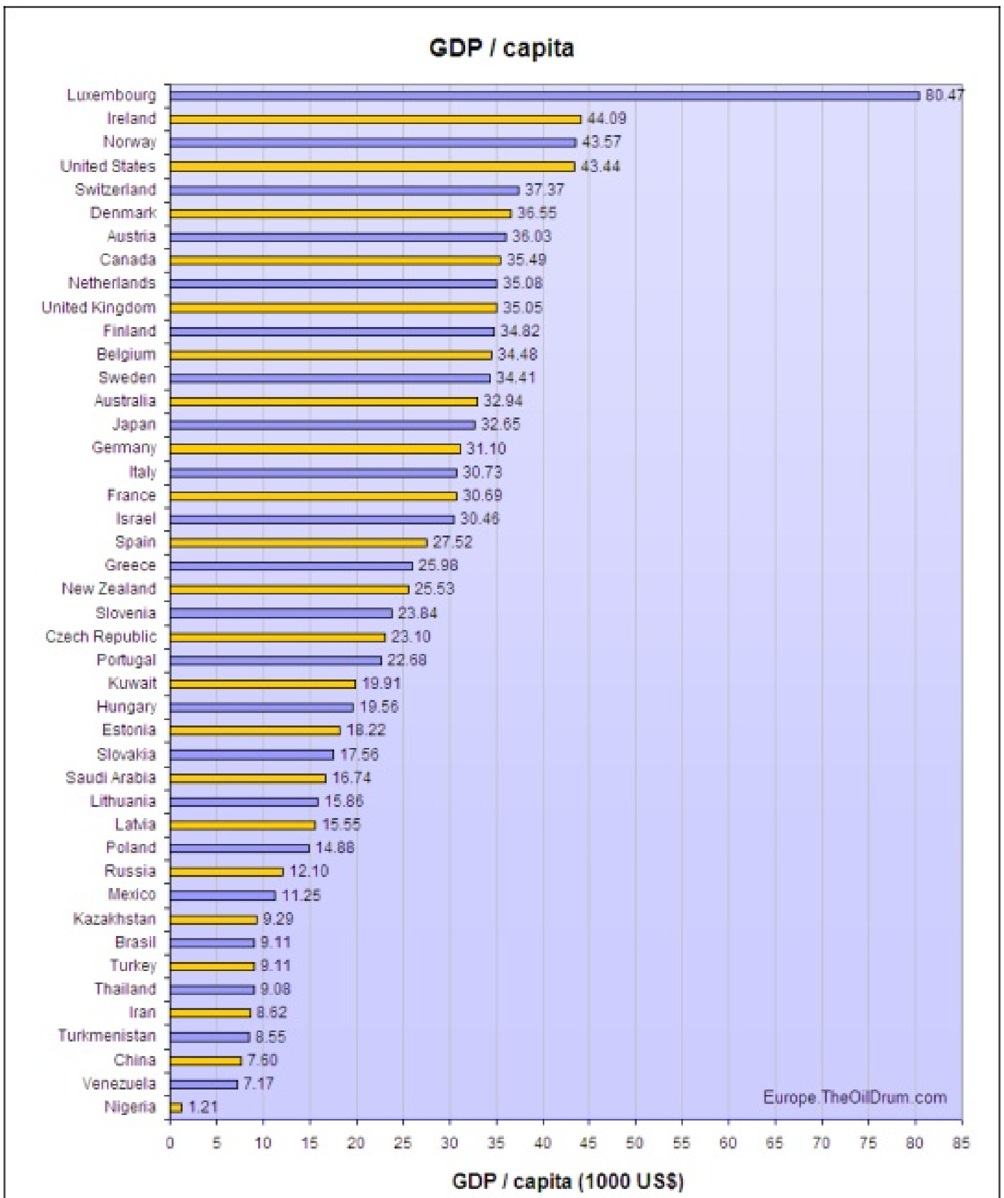


Figure 2 – GDP per capita for the countries featured in Figure 1. Source: IMF World Economic Outlook. Click to enlarge

Besides Luxembourg, there are no big surprises in this graph. It is interesting to note that most major oil exporters are yet to achieve the levels of wealth in Europe, where almost every country is above 20000 US$ / cap. Of special note is Nigeria, one of the world's largest oil exporters. This situation will likely change in consequence of the Hubbert Peak.

Luxembourg seems to be in a different level, but there are explanations for that. The country is a tax safe heaven situated right in the heart of Europe (at the cross point of the axis Paris – Frankfurt and Amsterdam – Strasbourg) making it favourable territory for financial/banking institutions. Also the majority of the workforce labouring in Luxembourg lives in the surrounding countries.

With this two sets of data (GDP and gasoline prices) it is possible to compute the weight of gasoline on an individual's available wealth. Figure 3 shows the cost of a short gallon of gasoline as percentage of the wealth available daily per individual.

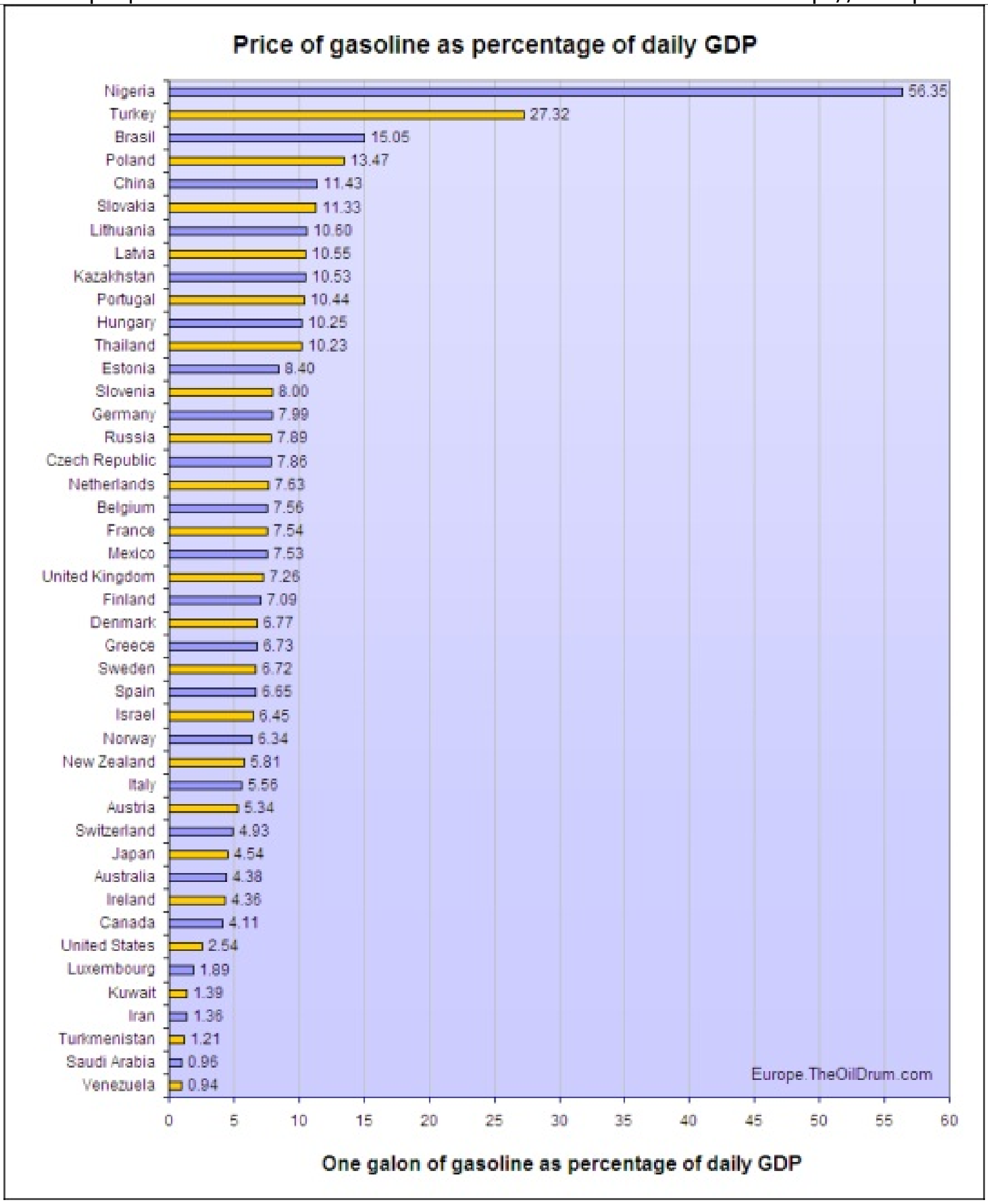


Figure 3 – Cost of a short gallon of gasoline as percentage of daily GDP. Click to enlarge.

Again three main groups can be roughly devised:

- below 1.5% - less wealthy countries that export oil;
- from 4% to circa 8% - wealthier countries;
- above 10% - less wealthy countries that import oil.

The cost of a short gallon of gasoline in Nigeria is a scorching 56% of daily available wealth per capita. And this is an oil exporting country, in other African countries the costs of fuel is probably too high to have real meaning, and most people live without it.

Once more the US is in no-man's land, this time accompanied by Luxembourg. In both of these countries a gallon of gasoline, as a fraction of available wealth, costs close to what it costs in oil exporting countries.

Table 1 tries to give further insight on the cost of gasoline in the US and Luxembourg. The prices shown are those that equal the wealth costs of a short gallon in Japan, Germany and Brasil.

Table 1 – Prices for the US and Luxembourg that equal the wealth costs of a short gallon of gasoline in Japan, Germany and Brasil (US$)

	Japan	Germany	Brasil
United States	5.50	9.75	18.40
Luxembourg	10.25	18.00	34.00

The average cost of gasoline in Europe is 7.53% of daily GDP per short gallon. This is very close to the figure for France. In light of that, Table 2 presents what the gasoline prices would have to be in France to match the wealth costs in the US, China and Brasil.

Table 2 – Prices for France that equal the wealth costs of gasoline in the US, China and Brasil

	United States	China	Brasil
US$/gal	2.20	9.85	13.00
€/litre	0.45	1.95	2.55

Of note is also the disparity found among member states of the EU. Even with the half-harmonization imposed by the VAT, different states have completely different tax policies on fossil fuel consumption. Even discounting Luxembourg, gasoline in Estonia costs the double of what it costs in Ireland, and in Portugal almost the triple. Among the member states with lower gasoline costs, are some with visible commercial deficits, like Spain or Italy. This is probably an issue yet to be address in the framework of the European Construction.

Looking at these numbers it doesn't seem to be the right time for the Carter Doctrine to set in. Gasoline prices are only cheaper than in the EU or the US in the countries that currently posses the base resource and that are yet to get to the western standards of wealth.

Countries like Venezuela or Turkmenistan have a significantly lower population and per capita consumption than the EU or the US. Gasoline prices in these less wealthy oil producing countries can't have a visible impact on prices in the wealthy countries. Taking direct control of these countries' resources is very likely a vain strategy.

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