

Quarterly Report on European Electricity Markets



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Dear readers,

After registering the lowest volumes since 2003 in the second quarter of 2009, EU monthly electricity consumption stabilised in Q3 of 2009, recording lower yearly falls than the preceding quarter. However, consumption levels were still very low, with values for the months of July and August being the lowest since 2003.

At the same time, there was an improvement in the general economic climate, with GDP growth rates for the EU area turning positive in the third quarter for the first time since the beginning of the crisis in 2008.

This was the background for the evolution of EU wholesale electricity markets in the third quarter, which extended the upward trend in spot prices already observed in the second quarter 2009, after more than six months of almost uninterrupted free fall. The notable exceptions were the Nordic region, Italy and the UK.

As of the 1st of September 2009, a harmonised market model has been effective for the trading participants operating on the power spot markets of EEX, the German power exchange, and the French power exchange Powernext. EPEX Spot is in turn one of the parties, along with Nord Pool Spot and OMEL, involved in a cooperation of power exchanges to test the concept of a pan-European price coupling.

We welcome this development as regional markets are an important intermediate step towards the constitution of a single European electricity market.

Matthias Ruete



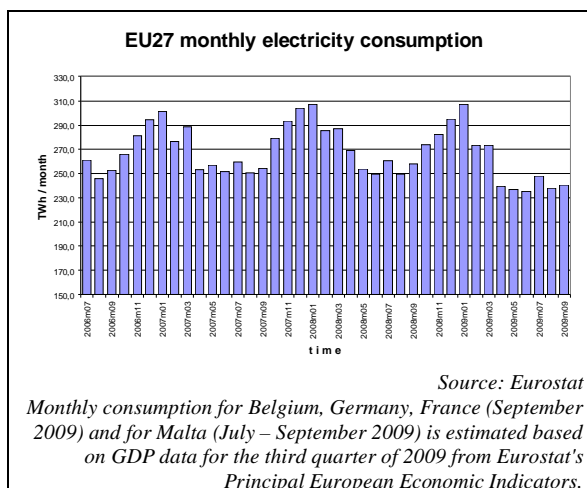
QUARTERLY REPORT ON EUROPEAN ELECTRICITY MARKETS

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A. Recent developments in the electricity markets across Europe

After registering the lowest quarterly volume since 2003 in the second quarter of 2009, EU monthly electricity consumption stabilised in Q3 of 2009.

While monthly levels continued to record year on year falls compared to 2008, these were less than those recorded in the previous quarter. In total, electricity consumption grew by slightly less than 2% in Q3 compared to Q2 2009, while year on year it fell by more than 5%.



Disclaimer

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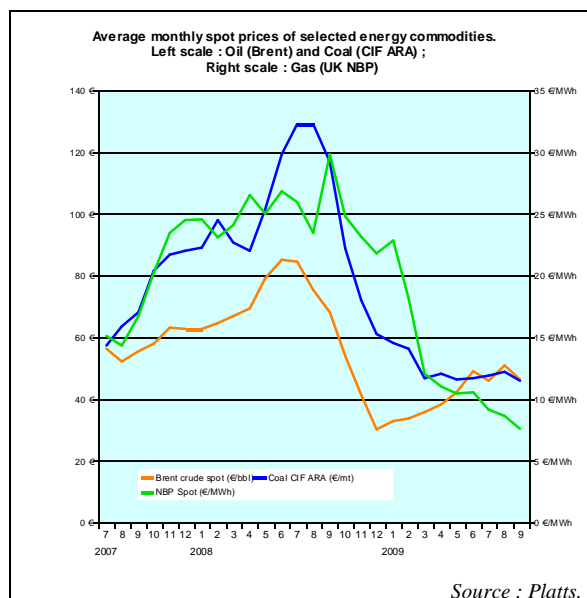
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Looking at economic data reveals a more positive outcome. Eurostat third quarter GDP growth estimates indicate that quarter on quarter GDP growth rates for the EU turned positive for the first time since the first quarter of 2008. While the first signs of a recovery could already be witnessed in the second quarter - with a number of EU countries already beginning to record positive growth - by the third quarter, more than half of the 20 EU countries that had reported their GDP results had experienced positive growth. Those countries included Belgium, the Czech Republic, Germany, France, Italy, the Netherlands, Austria, Poland and Portugal.

This positive outcome was in line with the European Commission business and consumer indicators. The euro area's Business Climate Indicator (BCI), which is a leading indicator for industrial production, had been improving for the sixth consecutive month in September 2009. The indicator still remained very low, however, suggesting that year-on-year growth in industrial production would still have been negative by the end of September, but by less than the previous few months.

Looking also at the EU's Economic Sentiment Indicator (ESI) for the months of July to September 2009 for the EU 27, it is worth noting that improved confidence in the industry and services segments have been by far the largest contributors in the overall improvement of the ESI, largely exceeding improved consumer, retail and construction confidence. It can also be observed that the greatest contribution to the lift in industry sentiment during those months in the EU came from optimistic production expectations.

On the occasion of the European Commission's autumn economic forecast exercise at the beginning of November 2009, it was announced that the third quarter of 2009 will have been the beginning of the EU's economic recovery, on the back of unprecedented fiscal and monetary policy actions, favourable inventory cycle, with a number of financial indicators getting back to pre-crisis levels and business climate and consumer confidence indicators constantly rising. Global trade and growth are also expected to have strengthened and to contribute to EU growth in the second half of 2009.



The relatively positive picture for the EU's economy in the third quarter is also reflected in continued oil price growth, as the graph above clearly shows. Oil prices had in fact already begun to pick-up before the change in economic sentiment. This increase of oil prices has led to divergences of views regarding the driving forces behind this development, with fears that it may be supported less by economic fundamentals, including supply cuts and

large stock levels, and more by rising sentiment in the equity markets or the fall in the value of the dollar.

In comparison, gas and coal prices merely stabilised in the second quarter, while in the third quarter, gas prices resumed their fall, while coal prices remained stable. Thus it appears that the positive signs of economic recovery have not been enough to push up the prices of those commodities, with high levels of gas storage in the EU, high levels of supplies and bountiful supplies of LNG all contributing to some extent to continued low levels in gas prices (please refer to the Quarterly Report on European Gas Markets series from the Market Observatory for Energy for further details).

News of a return to positive economic growth in the third quarter of 2009 and growingly optimistic sentiments on the EU's economic prospects and business climate will certainly have been welcome by the EU's power exchanges which can look forward to a return to growing levels of traded wholesale volumes and prices of power. Q3 progression in both will provide ground for optimism going forward, with expectations of a return to growth in industrial production and therefore electric consumption in the not- too distant future. As can be seen in this report, forward power markets seem to be pricing in such expectations.

A.1 Wholesale markets

A.1.1 Day ahead

EU wholesale markets

As was noted in the last issue of this report, the second quarter of 2009 provided a turnaround in the day-ahead price development of European power exchanges¹. After more than two full quarters of almost uninterrupted free fall in power prices, during which certain power exchanges experienced four-fold decreases, the large majority of power exchanges experienced a return to positive growth. With the notable exception of the Nordic region, Italy and the UK, the third quarter of 2009 provided an extension of this upward trend. From a range of €3 to €37/MWh in Q2, the *Platts monthly Pan European Electricity Price Index* extended to a new range of between €37 and €40/MWh. Note however that prices across Europe still remain well below their peaks attained in the previous year.

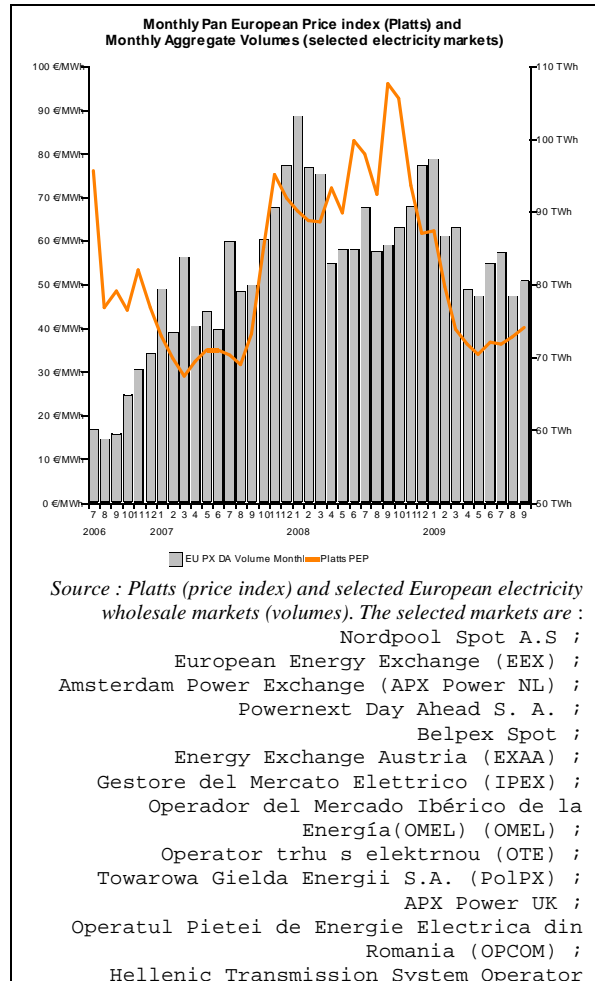
With regard to volumes traded, results were more mixed but in the majority of cases these exceeded the levels attained in Q3 of 2008, which lends further credence to a turnaround in the EU economy. Aggregated volumes reveal a different picture however, as three of the markets for which this was an exception also

¹ The *Quarterly Report* intends to cover all Member States, Candidate countries and countries from the European Economic Area that have developed a functioning wholesale market for electricity. For the time being, the selected countries are: Austria (AT), Belgium (BE), the Czech Republic (CZ), Denmark (DK), Finland (FI), France (FR), Germany (DE), Greece (GR), Italy (IT), the Netherlands (NL), Poland (PL), Portugal (PT), Romania (RO), Spain (ES), Sweden (SE), the United Kingdom (UK) and Norway (NO).

happen to be the ones with the largest volumes of exchange-traded power, i.e: Nordpool, Germany's EEX and IPEX in Italy.

Price levels were often propped-up by supply levels, which generally proved to be adequate, with few cases of over supply. Other than typical seasonal peaks in demand due to the use of air conditioning units especially in Southern regions of the EU, power demand was generally moderate, with no instances of significant changes in demand driving prices up.

In comparison to the evolution of EU 27 electricity consumption, growth in traded volumes followed a similar, if slightly more subdued, trajectory: growing by 1.1% since the previous quarter, and falling by 6.7% year on year, compared to electricity consumption quarterly growth of close to 2% and yearly growth of -5%, as reported earlier.



Market coupling

Last year, European Energy Exchange AG (EEX) – the German power exchange – and the French power exchange Powernext cooperated to set up EPEX Spot SE. The new entity was established as a joint venture equally owned by the two exchanges which integrates their spot power trading activities. EPEX Spot SE therefore encompasses spot power trading for France, Germany, Austria and Switzerland.

As of the 1st of September 2009, a harmonised market model has been effective for the trading participants

operating on these power spot markets, and since October 2009, the trade volumes generated on the power spot market of EPEX Spot SE has been published jointly for these areas.

The cooperation between EEX and Powernext includes not only the spot but also the derivatives market and clearing. The aim behind this cooperation is to initiate a truly European power market at the wholesale level, in the interest of a uniform European single market.

EPEX Spot is in turn one of the parties, along with Nord Pool Spot and OMEL, involved in a cooperation of power exchanges to test the concept of a pan-European price coupling called 'Price Coupling of Regions' (PCR). This consists in testing a common concept through which spot electricity price formation will be coordinated in an area covering Portugal, Spain, France, Germany, Austria, Switzerland, Denmark, Norway, Sweden and Finland: amounting to over two thirds of the European power market.

In September 2009 market coupling in the Czech and Slovak day-ahead power markets was also launched.

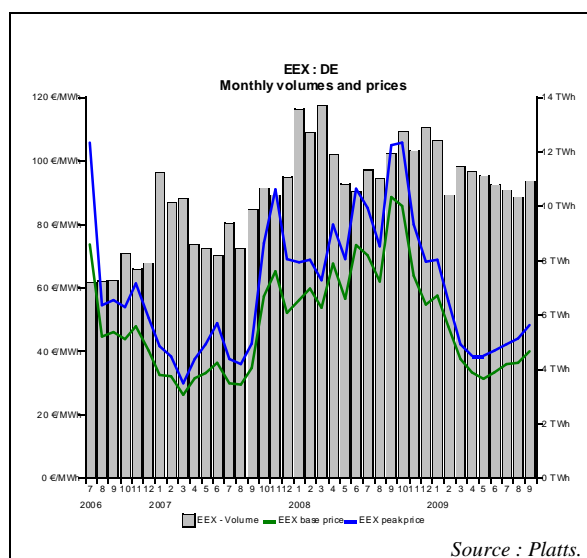
The Commission considers the development of regional markets as an important intermediate step towards the constitution of a single European electricity market.

Regional markets

Central Western Europe

Germany

Q3 day-ahead monthly traded volumes on the EEX platform for Germany remained at similar levels as the volumes observed in the preceding quarter, averaging around 11 TWh per month. Total volumes for the quarter fell slightly compared to Q2, while relative to the third quarter of 2008, they fell by 7%.

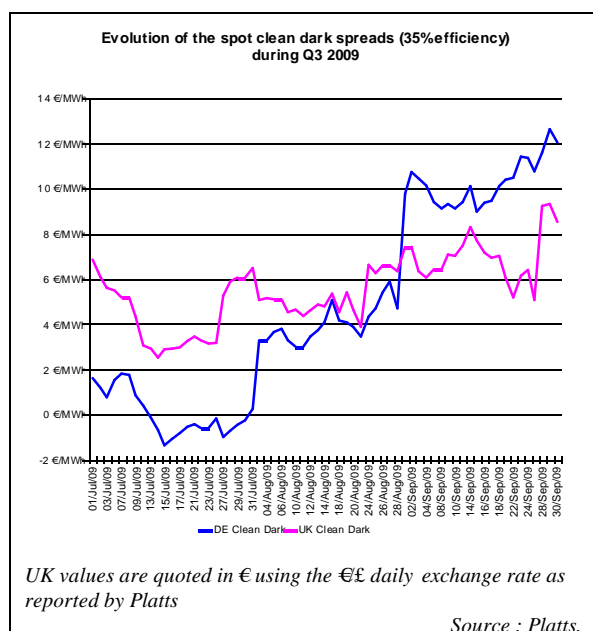


Prices of both the base and peak loads increased in Q3, relative to the previous quarter: averaging €37 and €45/MWh respectively for the base and peak loads compared to respective averages of €32 and €39/MWh in Q2. In comparison to the corresponding period in 2008 however, Q3 2009 prices were around half the value of the previous year, as was the case also in Q2 of 2009.

The case of Germany with regard to price developments is in fact representative of

what many European day-ahead power markets experienced in the third quarter, that is: an increase in prices since the last quarter, but with prices still remaining far below the 2008 pre-crisis record levels.

As usual for Germany, both plant availability and wind levels were key drivers of spot power prices, with sufficient levels of capacity often being observed, in some cases making up for low wind levels. Industrial demand was less determinant, though on the few occasions it did have an impact on prices in Q3, it was usually downwards, due to weakness in demand.



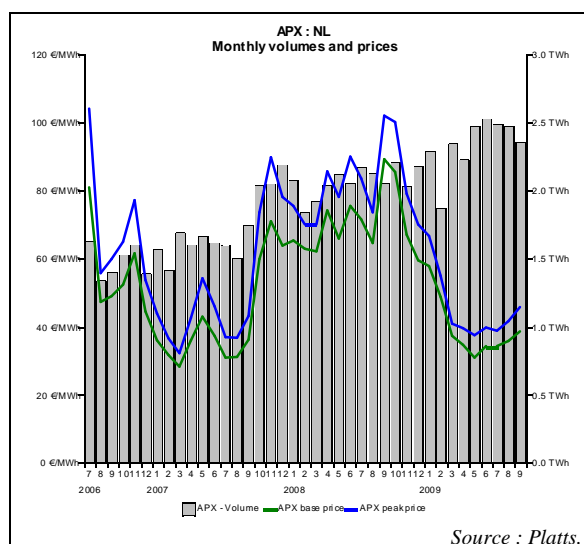
German spot clean dark spreads² continued their upward progression which began in

² Dark spreads are reported as indicative prices giving the average difference between the cost of coal delivered ex-ship and the power price. As such, they do not include operation, maintenance or transport costs. Spreads are defined for a coal-fired plant with 35 % efficiency.

the previous quarter, to end the quarter at €12/MWh, thereby signalling the attractiveness of coal-fired power production in Germany in Q3.

The Netherlands

Day-ahead volumes traded on the Dutch APX exchange have been increasing steadily in the last two years, as can be clearly seen in the graph below, reaching a historical record monthly volume of 2.53 TWh in June 2009. Monthly volumes then fell progressively from that peak even if, on a quarterly basis, Q3 2009 volumes remained on a par with the previous quarter. Compared to the equivalent quarter in 2008, Q3 2009 day-ahead volumes grew by an impressive 15.0%, which is however less than the year-on-year growth recorded in the previous quarter of 16.4%.



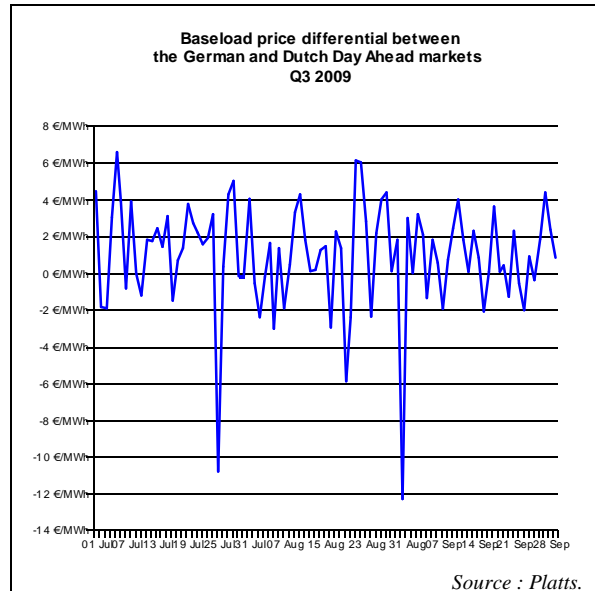
Dark spreads are given for UK and Germany, with the coal and power reference price as reported by Platts.

Clean dark spreads are defined as the average difference between the price of coal and carbon emission, and the equivalent price of electricity.

Monthly base and peak prices registered small increases compared to the previous quarter, with average prices for the quarter of €36 and €42/MWh respectively for the base and peak load prices, compared to equivalent averages of €33 and €39/MWh in the previous quarter. However this is far off previous average price highs of €48 and €54/MWh of the first quarter, and much less than the prices of the previous year.

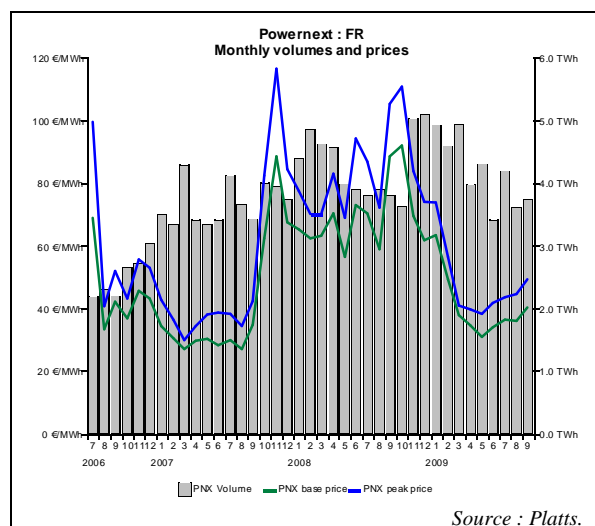
As usual in the Dutch market, the key price drivers in the past quarter were plant availability and wind levels, with tightness in French nuclear power (see next section on France for more details) and at times low wind levels in the Netherlands and Germany providing support for Dutch spot power prices.

While in Q2, Dutch base load prices generally traded at a premium to German prices, this was no longer the case throughout the third quarter, German average prices having risen by more than Dutch prices. It seems that the biggest price differences with respect to neighbouring areas tend to be observed during the weekends.



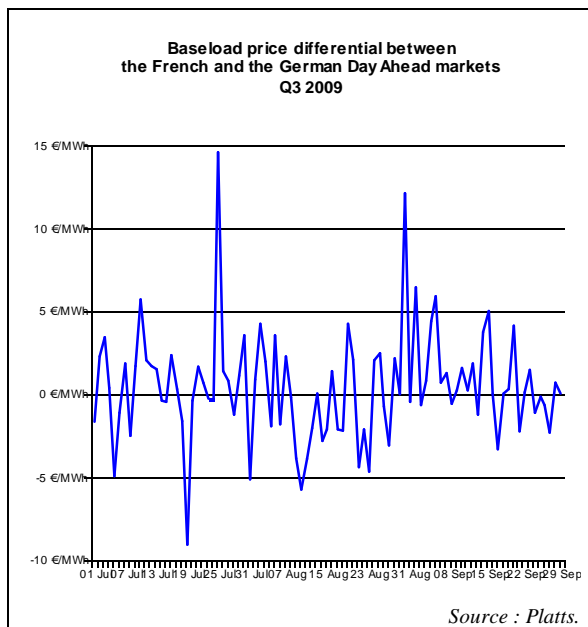
France

Day-ahead volumes on the French Powernext exchange for the third quarter of 2009 remained stable compared to the preceding quarter. Volume levels were also on a par with the equivalent quarter of the preceding year.

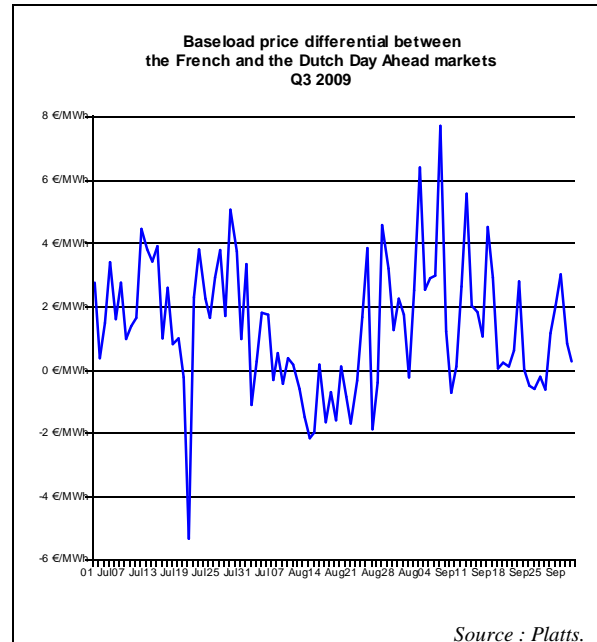


Prices followed a similar trajectory to other power exchanges, recording increases in

average base and peak load prices for the quarter of around €/MWh, supported in part by tight capacity levels at frequent intervals during the course of the quarter, with several instances of nuclear outages. Indeed, there were frequent cases of nuclear reactors being taken offline for scheduled refuelling and maintenance works and/or plant checks during the month of September, with as many as 19 of EDF's 58 reactors being out of action at any one time. In addition, EDF's 3.6 GW, four reactor, Bugey plant was out of action for nearly two weeks from the end of August due to strike action there. In spite of these events however, falls in French power demand enabled the country to remain a net exporter.

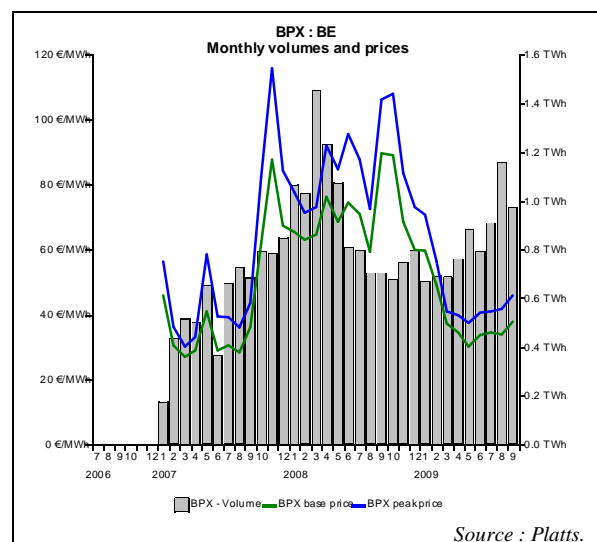


Similar to Q2, but for a few exceptions, French and German base load prices on the day-ahead markets traded in a fairly tight €/MWh range. Differentials between the French and Dutch prices were more volatile, also in comparison to the previous quarter.



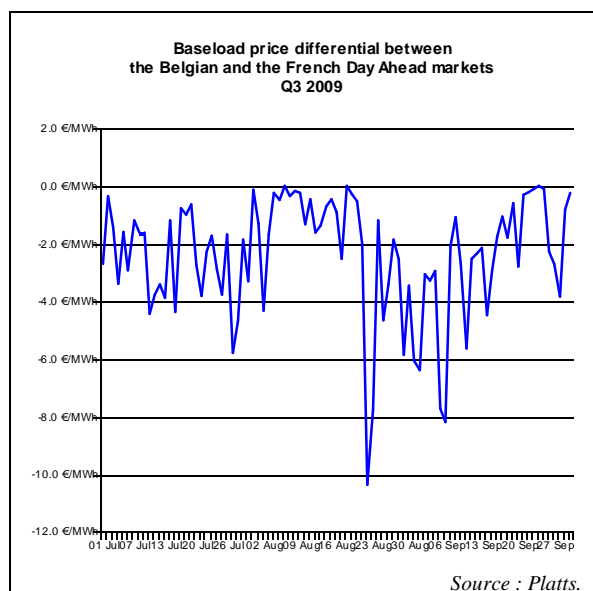
Belgium

While day-ahead monthly volumes on the Belgian power hub in Q2 were within the usual range of 0.7 to 0.9 TWh, a new range of 0.9 to 1.20 TWh was attained in Q3, representing levels last witnessed during the record period of end 2007 to first half of 2008 for traded volumes.

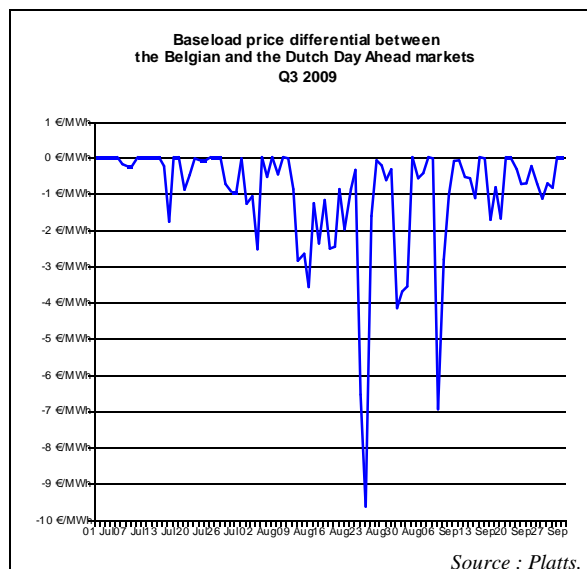


1.16 TWh were traded in the month of August, which was the highest monthly day-ahead volume recorded since April 2008. Altogether, total Q3 volume grew by an impressive 38% year on year, and by 24.5% compared to Q2.

With regard to price developments, these increased slightly compared to the levels observed in the previous quarter, trading in a range between €34 and €38 per MWh for the base load and €40 and €45/MWh for the peak load, representing a premium on the average prices recorded in Q2 of €2 and €4 respectively for the base load and the peak load.

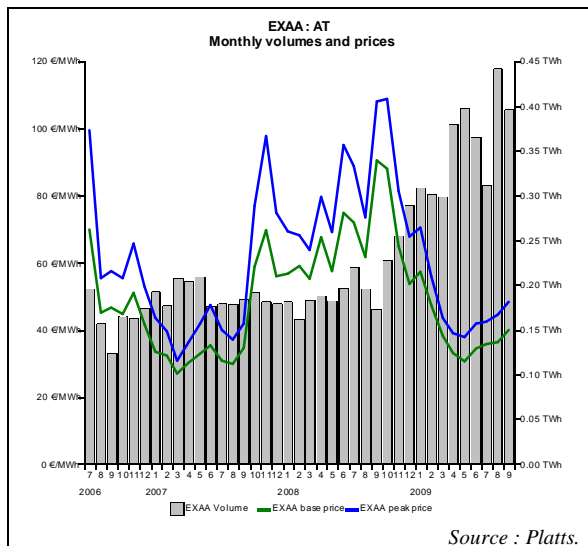


Relative to Dutch and French wholesale day-ahead prices, Belgian power continued to trade at a discount, thereby attracting strong exports during that period to those markets, which explains partly the impressive volumes traded.

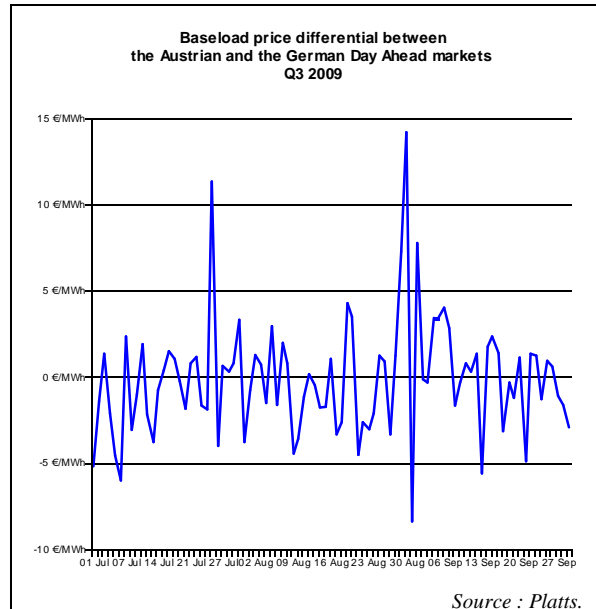


Austria

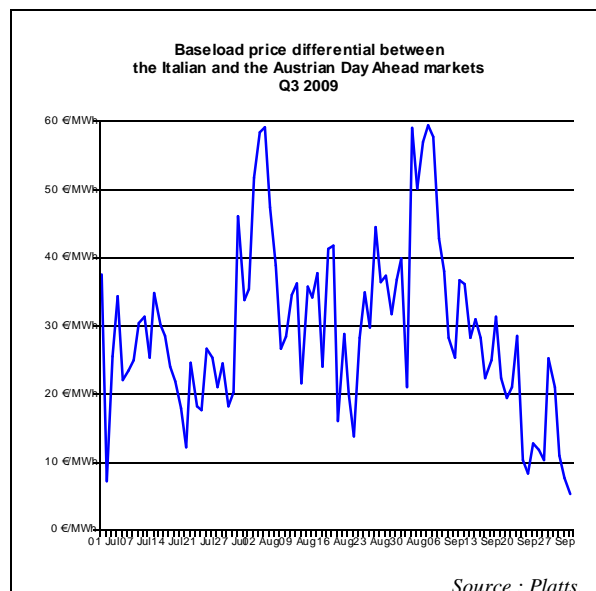
Day-ahead volumes on the Austrian power exchange pursued their upward trend by registering quite impressive gains in the months of August and September, though a relatively low traded volume in July resulted in Q3 volume levels on a par with the previous quarter. However year on year growth for Q3 was an impressive 95%. The previous quarter had already experienced a doubling in volumes.



With regard to prices, while there was some progression in both the base and peak load prices (with average prices of €37 and €45/MWh for the two loads, respectively, compared to equivalent prices of €32 and €39/MWh in the previous quarter), these still remained well below half of their 2008 peak levels.



Relative to German day-ahead prices, Austrian prices continued to trade in a very tight range of less than €5/MWh while a discount in prices relative to Italian power prices of in and around €30/MWh for both loads, as last witnessed in the first quarter of 2009, could again be observed.

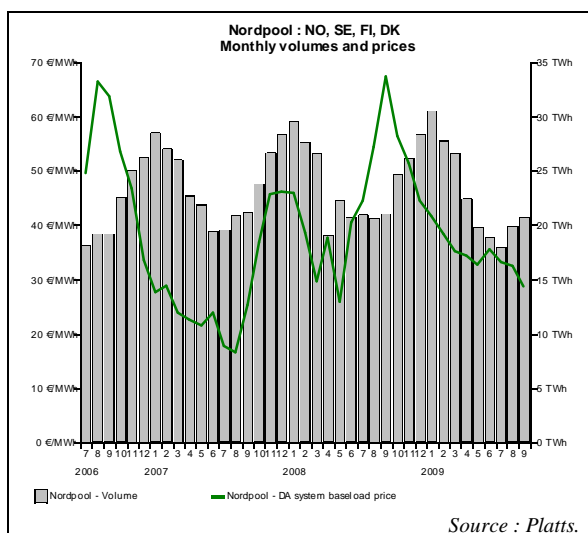


Northern Europe

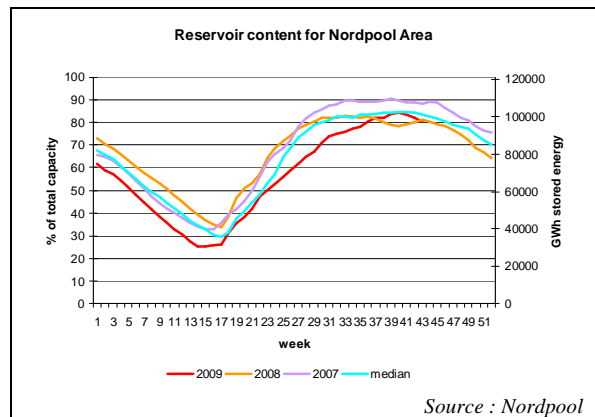
Third quarter day-ahead traded volumes on the Nordpool platform fell slightly in comparison to the previous quarter, though monthly volumes increased progressively throughout the quarter as expected given the clear seasonal pattern.

Year on year, quarterly volumes also fell, by 6.7%, as was the case also in the previous quarter, though by a smaller amount (1.5%).

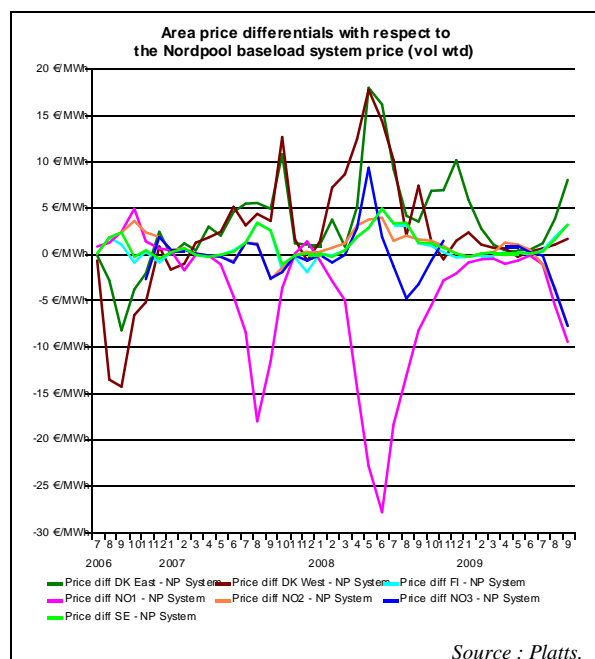
Unlike most other Power exchanges, the Nordpool system price in the third quarter fell in comparison to the previous quarter, with base and peak load prices respectively trading in ranges of €28 and €33/MWh and €31 - €35/MWh in comparison to €32 and €35/MWh for the base load and €35 and €37/MWh for the peak load in the previous quarter.



Q3 hydroelectric reservoir contents for the Nordpool area continued to remain below the long-term median value.

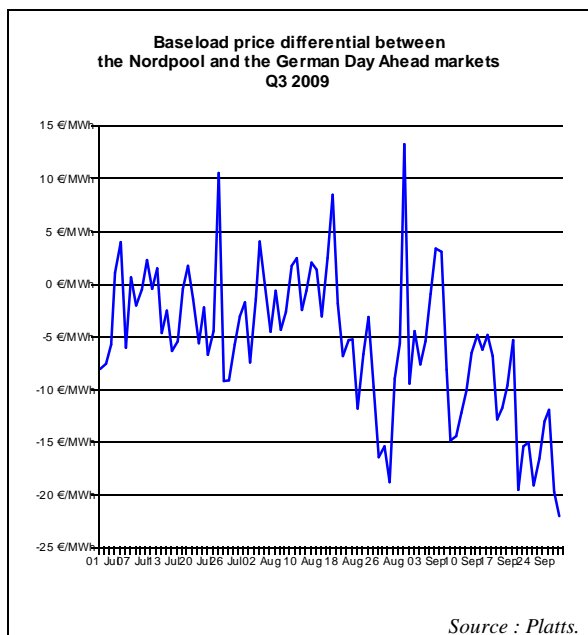


While area prices had remained very close to the Nordpool system price in the preceding quarter, this situation changed significantly in the third quarter, as can be seen in the graph below. This was in part reminiscent of the situation during much of 2008, with Danish prices and the Swedish price being higher than the system price and prices in the Southern part of Norway (NO1) being less than the system price.



As regards relative price differences with German EEX day-ahead prices, while in

the second quarter the Nordpool system price tended to trade at a slight premium to the German base load price, by the third quarter this was totally reversed, with the former in fact trading at a much discounted level compared to the German price. This wasn't a surprising result given the closeness of prices as well as opposing trends in price developments between the two markets in Q3.



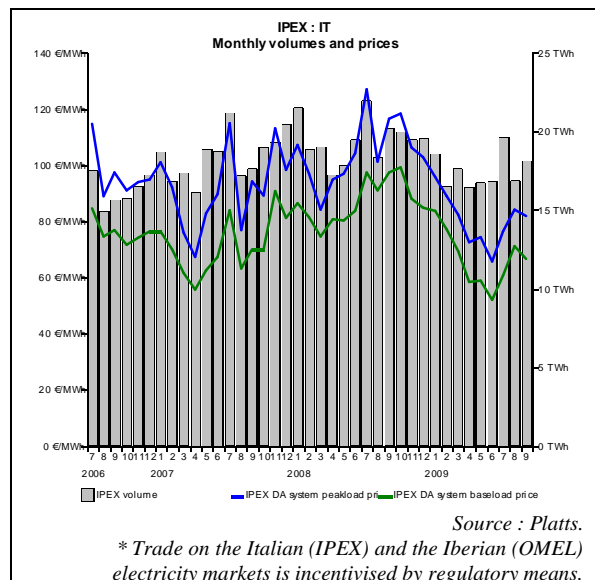
Apennine peninsula

Italy *

With respect to the previous quarter, day-ahead volumes traded on the IPEX, the Italian power exchange, grew by 9%. In contrast to other European exchanges however, year on year volumes traded actually fell in Q3, as was already the case in the previous quarter. This was in line with developments in electricity demand in Italy, which was down by 7.6% for the first

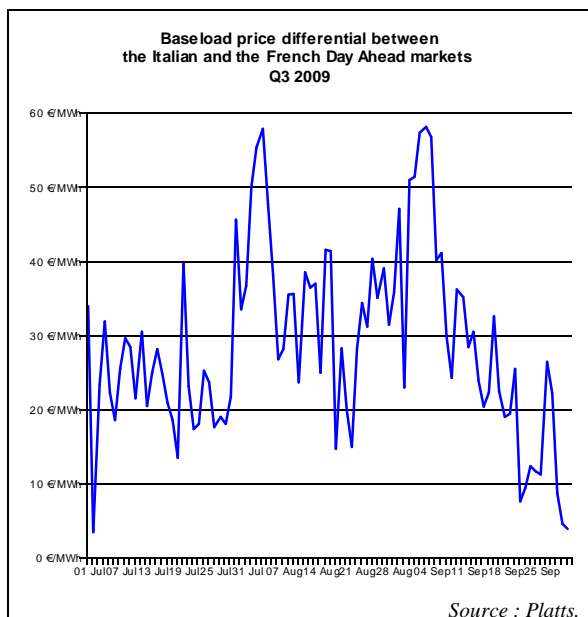
eight months of 2009 compared to the same period in 2008.

Both base and peak load prices on the Italian day-ahead market increased compared to the previous quarter. The increases recorded were altogether more impressive than other EU power exchanges (registering average prices of €66 and €81/MWh for the two peaks, respectively, compared to equivalent prices of €56 and €71/MWh in the previous quarter), thereby continuing to stretch the premium of Italian wholesale power prices compared to prices available on other European power exchanges.



Thus, compared to prices available on the French Powernext platform, premiums of Italian prices for the base and peak loads went from €18 and €24/MWh respectively at the end of the second quarter, to €26 and €32/MWh, respectively, for each the base and peak loads, at the end of the third quarter. The Italian premium in prices was such that it encouraged spot arbitrage trading into the Italian market.

Surges in demand and therefore prices are typical at this time of year in Italy due to the intensive use of air conditioning units as a consequence of hot temperatures. It is however interesting to note that relative to preceding years, both demand and prices for that quarter were relatively low (see graph). Specifically, average prices were the lowest recorded of the preceding four years for that time of the year.



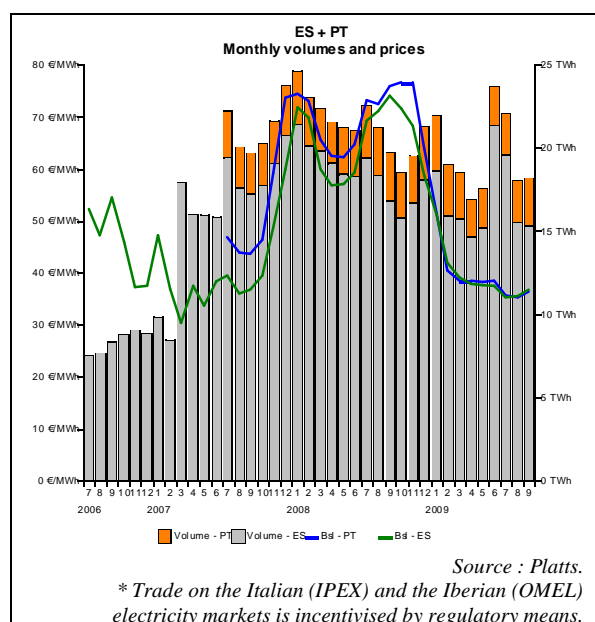
As elsewhere, the biggest price differences with neighbouring areas occurred during the weekends. At the beginning of August and September, the differential with the French system price was close to €60/MWh.

Iberian peninsula

Spain and Portugal*

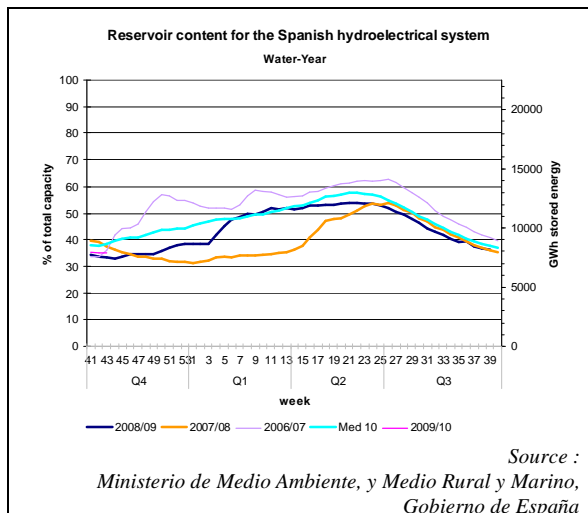
The level of day-ahead volumes traded on OMEL (the Iberian spot electricity market exchange) in the third quarter was equivalent to the previous quarter, with a spike experienced in July - exceeding 20 TWh - which was slightly less than for June, and levels of around 18 TWh recorded in the succeeding months of the quarter as a result of declining power demand. Volumes were largely equivalent to those recorded in the same quarter of the preceding year.

The decline in Spanish power demand was reported to have slowed down in August 2009, with a fall of 1.1% year on year recorded for that month, which represents the smallest year-on-year drop since the current downtrend in electricity consumption began one year ago.

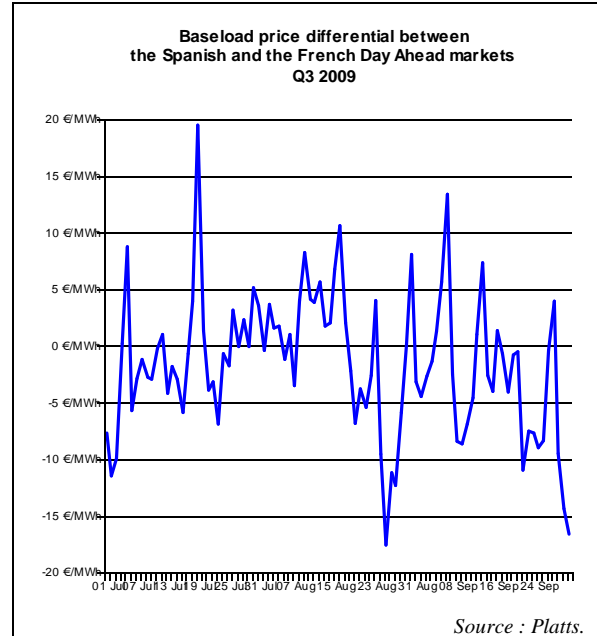


The evolution of prices on the OMEL exchange differed somewhat compared to most other EU wholesale markets in that prices registered a fall on a quarterly basis, whereas in many parts of the EU prices grew in Q3, despite falling hydro reserves being observed throughout the month of August following several months of below average rainfall. Hydroelectric stations provided 6.4% of Spanish power in August 2009.

The result was a growing differential between French and Spanish day-ahead prices, as the chart further below shows, with Spanish prices increasingly being traded at a discount to French prices.



Plotting both Spanish and Portuguese base load prices, as on the chart in the preceding page, provides clear evidence of the success of the OMEL platform in integrating prices across the Iberian region, with prices in both countries effectively trading at the same levels, indicating ample cross-border capacity.



Central Eastern Europe

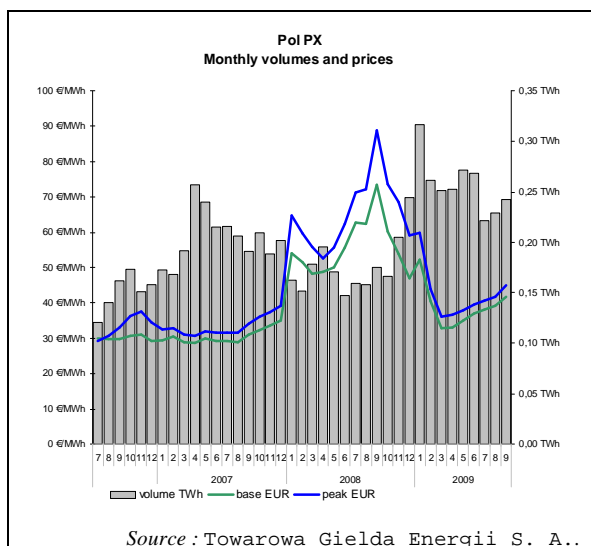
Poland

Day-ahead volumes on the Polish power exchange for Q3 grew by 41% year on year and fell by 17% compared to the previous quarter.

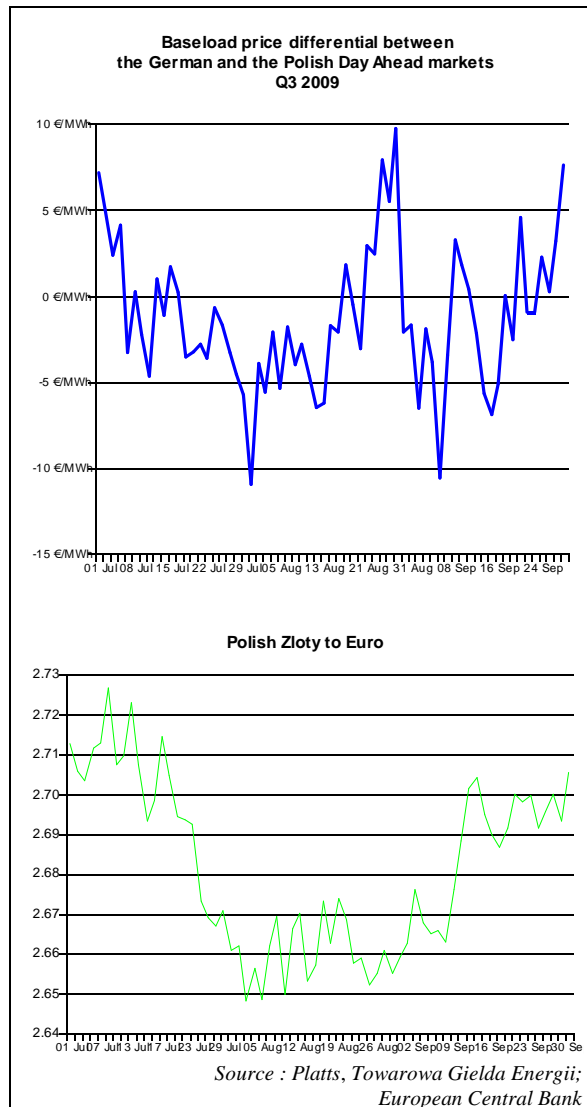
By September 2009, both base and peak load prices registered their sixth consecutive month of uninterrupted growth, although these were still somewhat below prices registered in the same period of the previous year, as with other parts of Europe.

Looking at 2009 data, in comparison to German day-ahead prices, in the last few months Polish base load prices (in euros) have been trading very close to their German equivalent, while German peak load prices in the last two quarters have typically traded at a premium to Polish

peak load prices by between €1 and €/TWh. Note that the value of the Zloty relative to the euro, at between 2.65 and 2.72 Zlotys per euro, was fairly stable over the period.



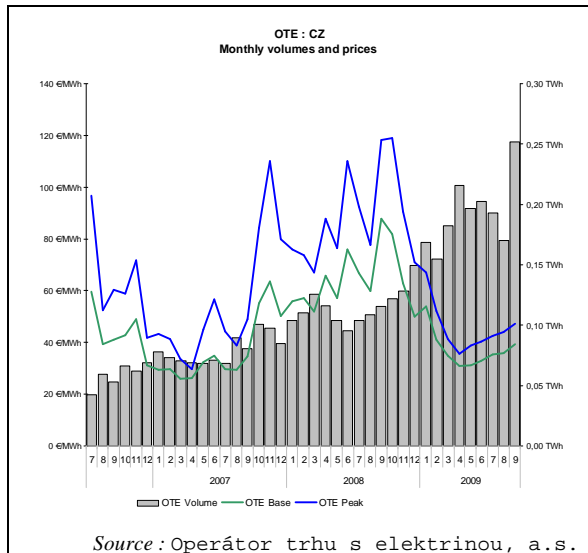
In August, traders on the Polish power exchange noted with optimism the Polish government's proposed amendments to the country's energy law, which would require an obligation to sell a proportion of Polish power either on power exchanges or through public tenders.



Czech republic

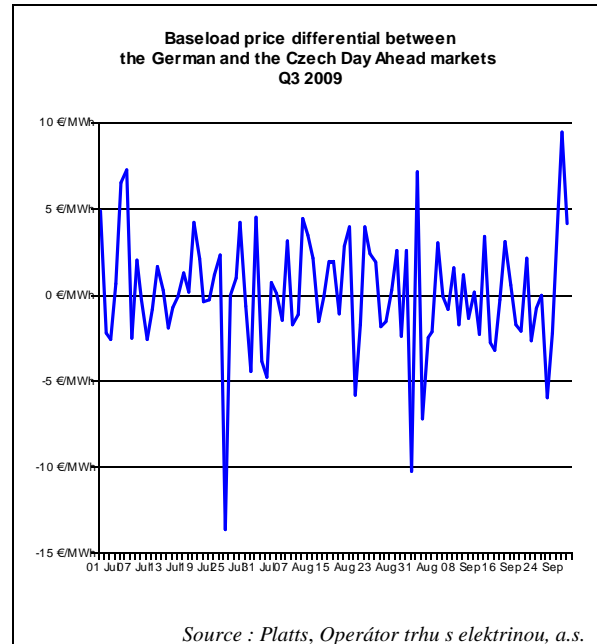
Day ahead volumes on the Czech exchange continued their impressive growth, with a dip in August volumes being more than made up by a historical record monthly level being attained in the following month of September. The 0.25 TWh level achieved that month represents a twofold increase on volumes traded in September of the preceding year, demonstrating that more and more Czech electricity is being traded on the Central European power

exchange (PXE). However, the relative part of wholesale turnover remained modest with respect to domestic consumption.



Net electricity consumption in the Czech Republic in the first half of this year fell 7% year on year, according to figures released by the Energy Regulatory Office. The year on year decline is however slowing down, suggesting that demand is picking up. A contrasting signal was however received with worse than expected industrial output for July communicated by the Czech Statistics Bureau, revealing a fall in industrial output of 18.4% year-on-year, accelerating from a 12.2% decline in June.

Meanwhile, prices followed the same upward path as most other European wholesale markets, registering an impressive 27% growth in base load prices from its lowest level in the month of April. Thus, the average difference between German and Czech prices remained in a range of between -€5 and €5, while it grew to represent a €10 discount by the end of Q3.



British Isles

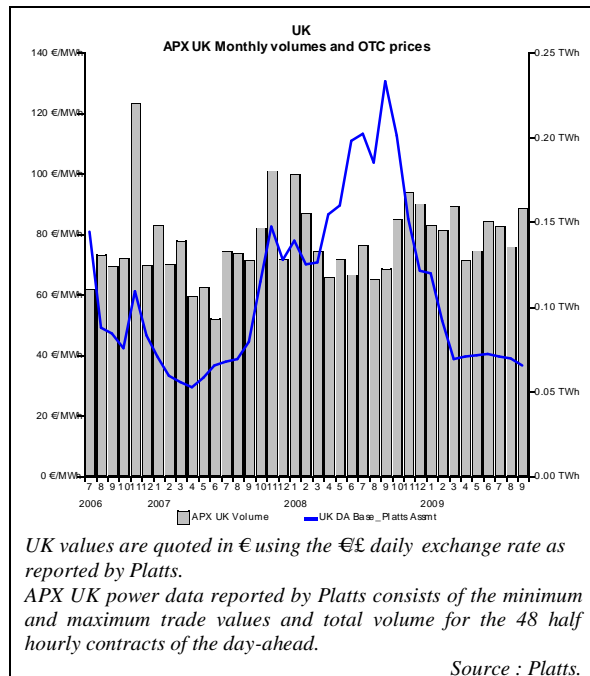
UK

Monthly day-ahead volumes on the APX UK exchange averaged 0.15 TWh over the course of the third quarter, equivalent to the upper band of the previous quarter and exceeding monthly traded volumes observed during the same period of the previous years. On a quarterly basis, volumes grew by 7.4% in Q3 relative to Q2, and by 18% year on year.

Prices continued their downward trajectory, with the APX average price trading in a range between €43 and €46/TWh in comparison to a range in the previous quarter of between €54 and €56/TWh. This is in contrast to prices observed on most other European power exchanges, which have either remained stable or have edged up in the past quarter,

and represents the biggest correction of prices since 2008 (for any EU power exchange), trading at nearly four times their current levels by the end of the third quarter last year. Note that throughout the third quarter, the euro/sterling exchange rate remained very stable.

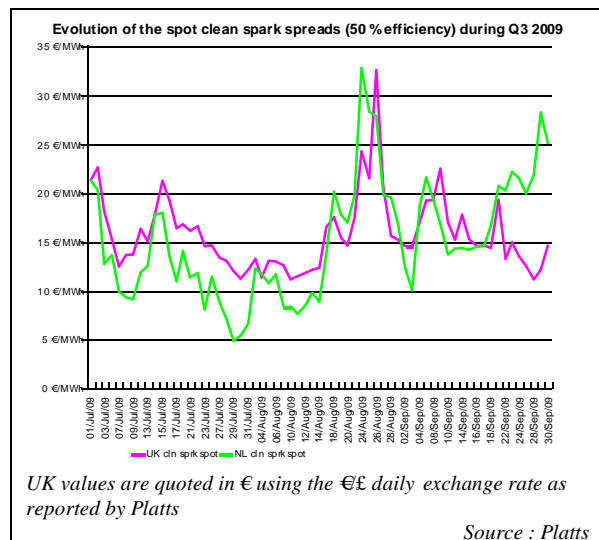
Wholesale power prices were helped downwards by the competitiveness of gas-fired power which led to increases in supply.



The competitiveness of gas could be seen in the levels of clean spark spreads³.

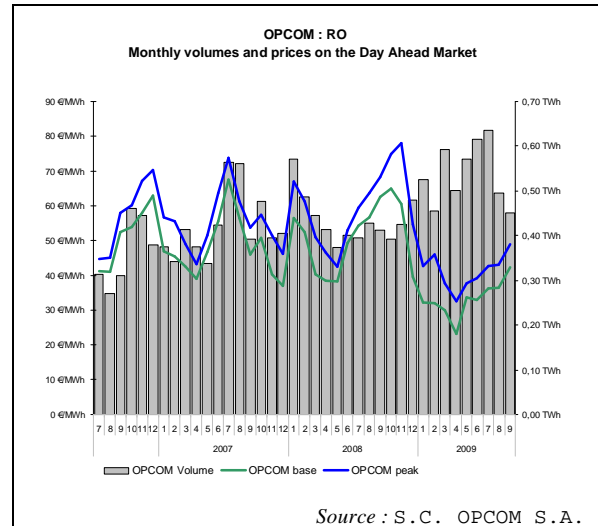
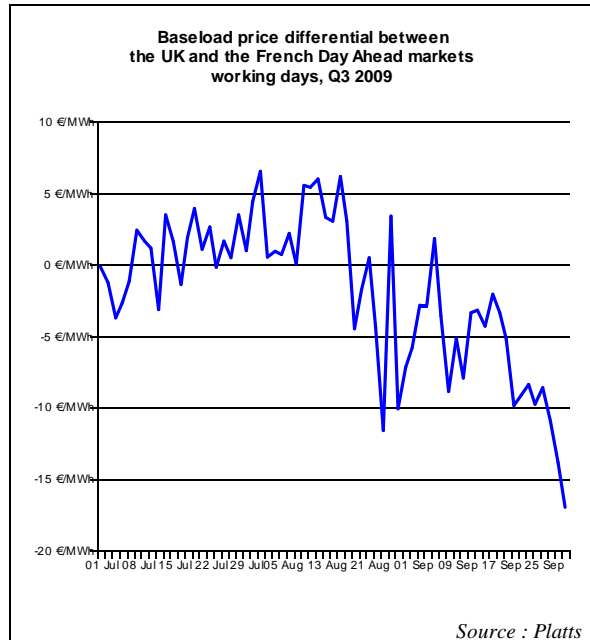
³ Spark spreads are indicative prices showing the average difference between the cost of gas delivered on the gas transmission system and the power price. As such, they do not include operation, maintenance or transport costs. The spark spreads are calculated for gas-fired plants with standard efficiencies of 50% and 60%. This report uses the 50% efficiency. Spreads are quoted for the UK, German and Benelux markets.

Initially at €20/MWh at the start of the third quarter, these then declined until the second week of August when they increased again to reach a high of €30/MWh at the end of the month, to end up at the end of the quarter at levels between €10 and €15/MWh, on a par with the range observed in the second quarter. Clearly, the falling prices in gas is continuing to benefit gas power plants and has been leading to more gas-fed power generation being favoured in place of some of the marginal coal generation. Forward prices seem to suggest that this is likely to continue in the foreseeable future (see next section).



Since the start of the year, the UK day-ahead contract has been trading at a premium on average to the French base load. This premium disappeared during the course of the third quarter, to attain a €15/MWh discount by the end of the period. This reflects opposing trends in prices between the two power exchanges.

Clean spark spreads are defined as the average difference between the cost of gas and emissions, and the equivalent price of electricity.



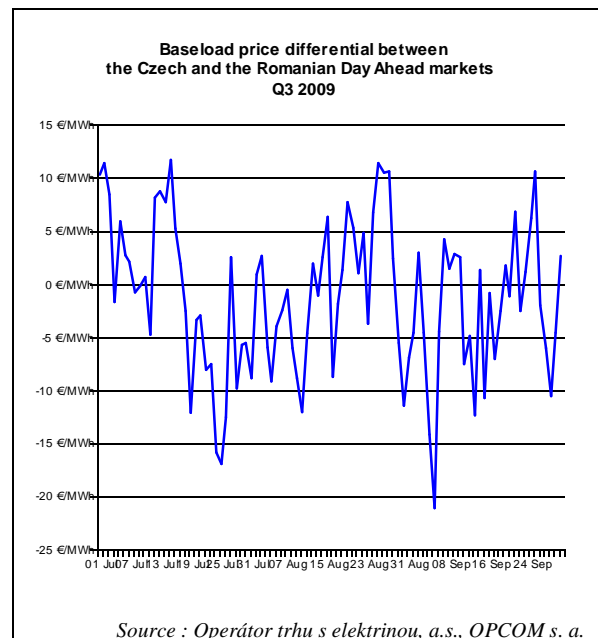
As for the previous quarter, while Romanian day-ahead prices traded at relatively the same levels as Czech prices on average, daily variations were quite wide, extending as far as €20/MWh.

South Eastern Europe

Romania

Day-ahead volumes on the Romanian power exchange reached their highest ever monthly levels in July 2009, registering 0.64 TWh, before falling back to levels of 0.50 and 0.45 TWh in the subsequent months of the third quarter. Year on year, Q3 volumes grew by an impressive 28%, while these actually fell relative to Q2 volumes, by 6.3%.

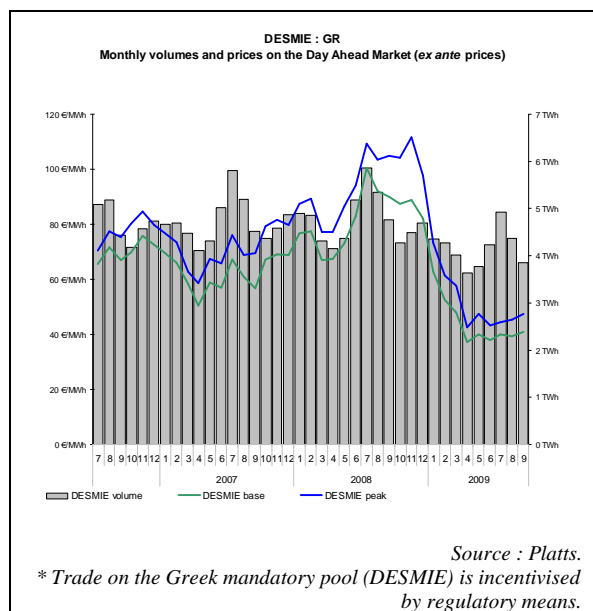
In parallel, average base and peak load prices for the quarter increased respectively by 27% and 22% compared to Q2.



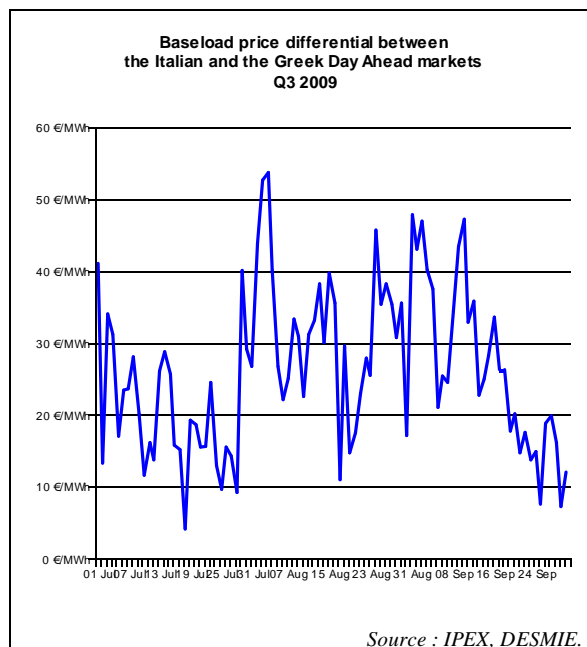
Greece *

In Greece a slight increase in day-ahead volumes traded on DESMIE, the Greek wholesale electricity market, was observed in the third quarter, while year on year, volumes were quite considerably lower.

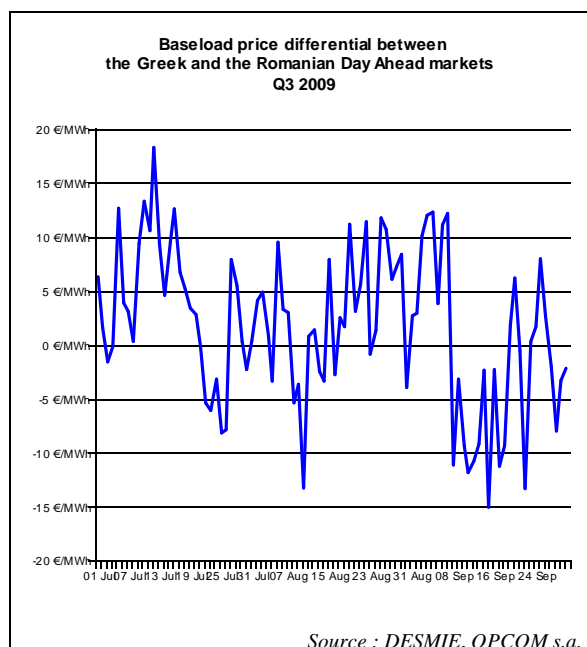
With regard to price developments, both base and peak load prices on DESMIE followed the general upward trend witnessed across most parts of the EU in this past quarter.



Differences between Greek prices and prices on the Italian exchange increased somewhat as Italian prices registered impressive gains, such that Greek prices were typically trading at a discount to Italian prices in a range between €20 and €40 in the third quarter. This was reduced by the end of the quarter as Italian prices fell in September.



Relative to Romanian prices, the very impressive gains recorded in the last quarter on the Romanian exchange meant that Greek prices which ended the last quarter at a slight discount to Romanian prices (after typically trading at a premium) actually traded for pretty much half of Q3 at a discount of between €5 and €10/MWh.

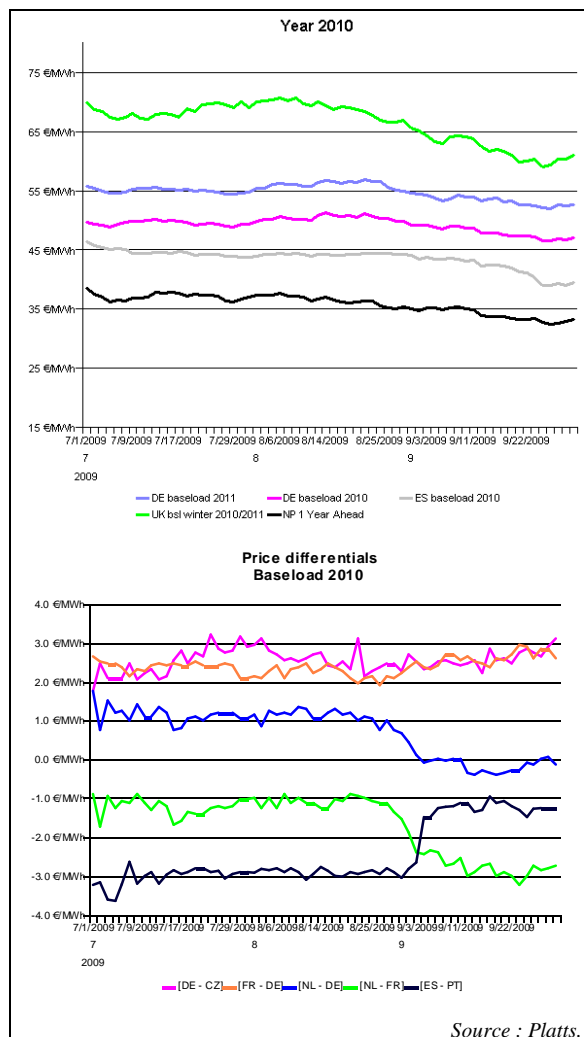


A.1.2 Forward markets

One year forward contracts on the European power exchanges continued to display the usual relationship of UK priced at a premium to the German, itself at a premium to the Spanish, while the Nordic contracts were the cheapest. The UK premium to the German contract has been reducing however, from a €20 to €30/MWh premium in the first quarter of the year, to a €15 to €20/MWh premium in the latest quarter. The typical discount of the Spanish contract to the German contract of €10/MWh could however be observed by the end of the period, while the Nordic year ahead contract traded in a range of around €15/MWh discount to the German contract, somewhat less than usual.

In the same period, the range between the German, Dutch, French and Czech contracts continued to remain relatively small, though with some growing disparity being witnessed between the Dutch contracts in comparison to both the French and German contracts.

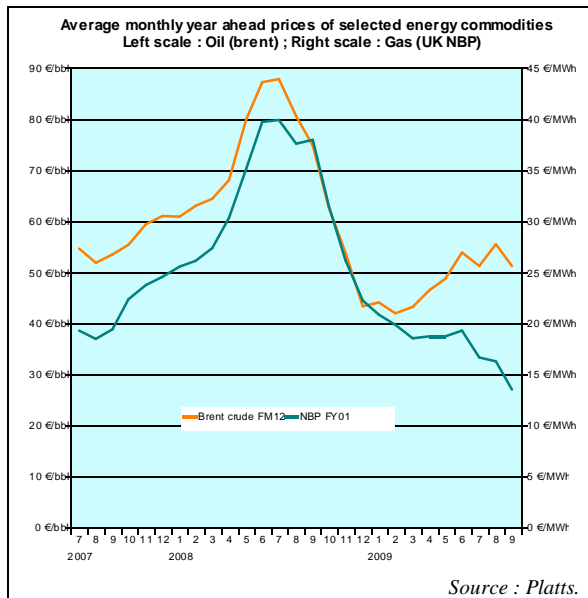
In comparison to spot prices, it seems that the upward trajectory experienced across most parts of Europe were not reflected in the forward prices, which followed instead a similar trend to the UK and Nordpool spot prices. It would appear that rising economic sentiment and business indicators as well as an actual return to positive growth already in the second quarter for EU economies such as Germany and France, did not suffice to lift forward markets. A lift in forward prices will be more likely once renewed growth in industrial production is witnessed.



Changes in the levels of economic activity also drive commodity prices, which have an important influence on power future prices. For instance, the UK forward prices seem to be driven by oil and gas prices, while oil prices also have a strong influence on Spanish, Dutch, French and German markets. Prices on the latter are also heavily influenced by coal prices.

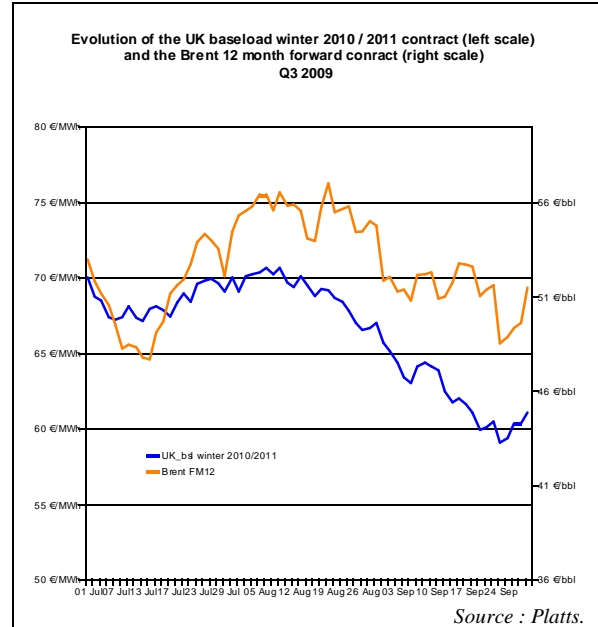
The prices for the 12 month-ahead Brent and UK NBP gas contracts continued to move independently. The divergence which began in the second quarter extended further in the third quarter.

Market participants continued to remain bullish on the future oil price and bearish on the future gas price, probably pricing in expectations of a continued supply glut in gas.



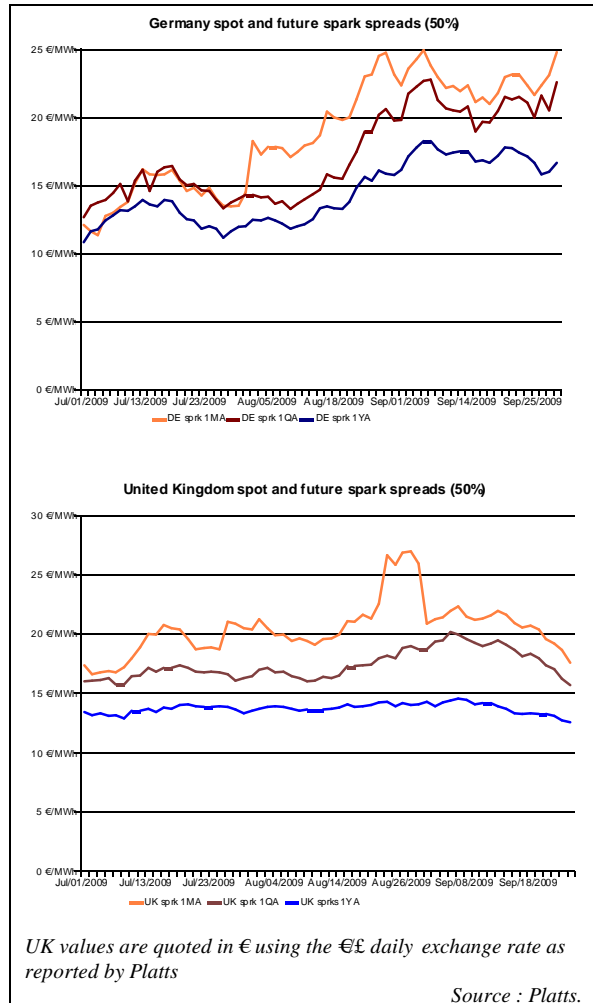
The price divergence between the two commodities has become a real concern for the buyers of natural gas locked in to long-term gas contracts index-linked to the price of oil even as the spot price of gas has fallen significantly.

It is clear from the graph below that the forward price of gas is continuing to have a stronger impact than the price of oil on UK forward electricity prices, which followed its downward trajectory of the previous quarter. Bearish gas prices have also been responsible for declining values in Dutch Cal 10 baseload prices. As the UK, gas-fired power supplies are important for the Netherlands.



Looking at the evolution of German and UK spark spreads for different future delivery dates, it is interesting to note that a clear situation of backwardation⁴ can be observed in both markets. Thus, expectations in both markets are that the future margins of gas-fired power plants will be lower than in the near-term or mid-term.

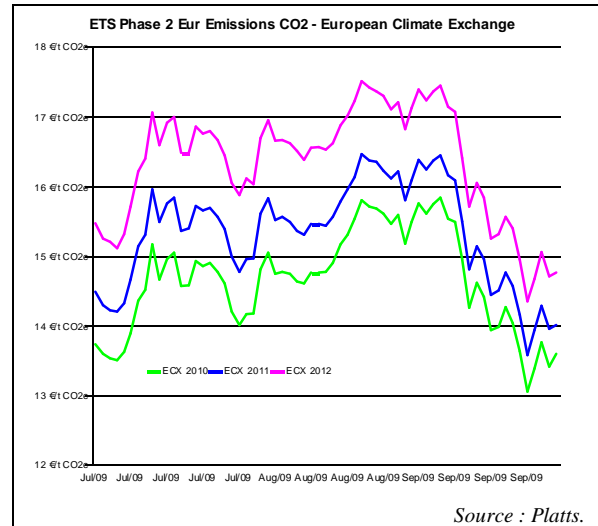
⁴ Backwardation occurs when the closer-to-maturity contract is priced higher than the contract which is longer to maturity.

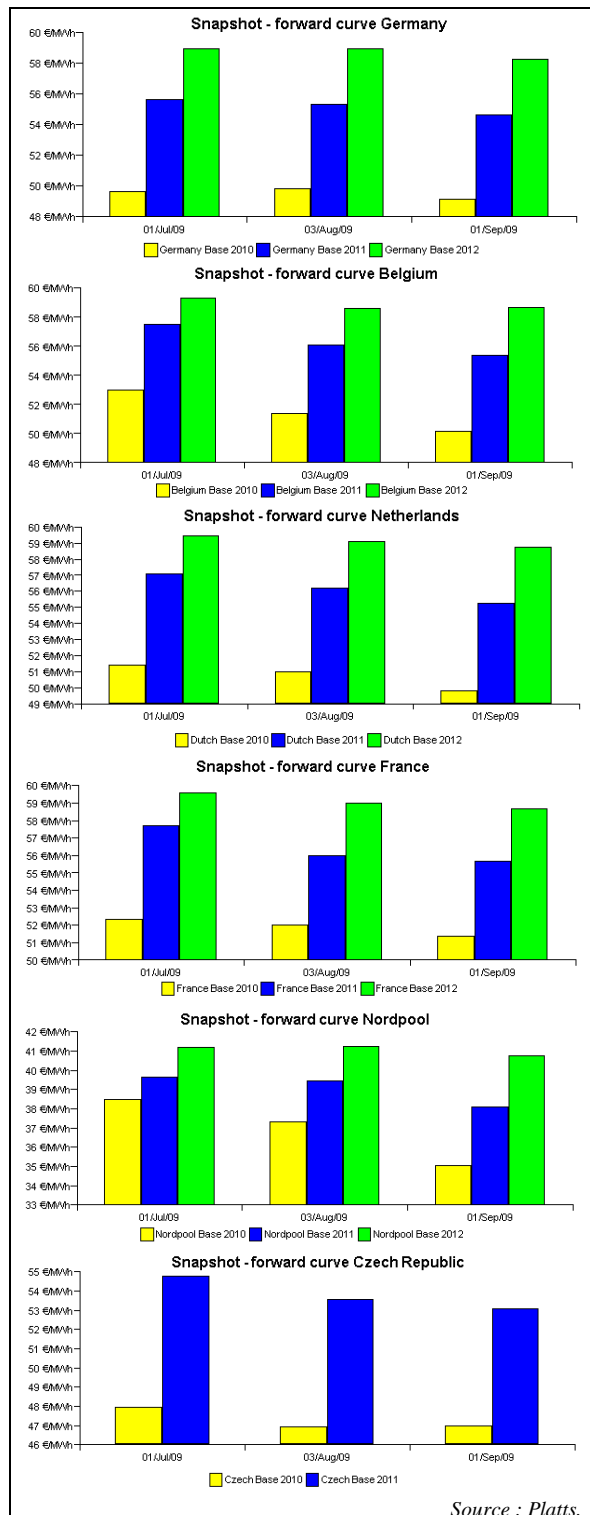


With regard to forward power curves, a clear situation of contango⁵ could be observed in Q3 across EU power exchanges with respect to contracts for delivery next year, the year after next and in 2012. The same was also true with regard to yearly contracts for emission allowances. Both the power and carbon markets are therefore continuing to price in an economic recovery as early as next

⁵ A situation of contango arises in the when the closer to maturity contract has a lower price than the contract which is longer to maturity on the forward curve.

year, which would drive up the prices of power and emission allowances.





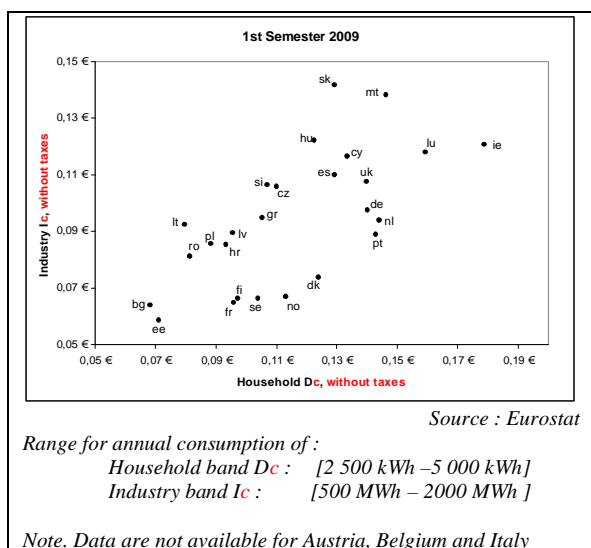
Source : Platts.

A.2 Retail markets

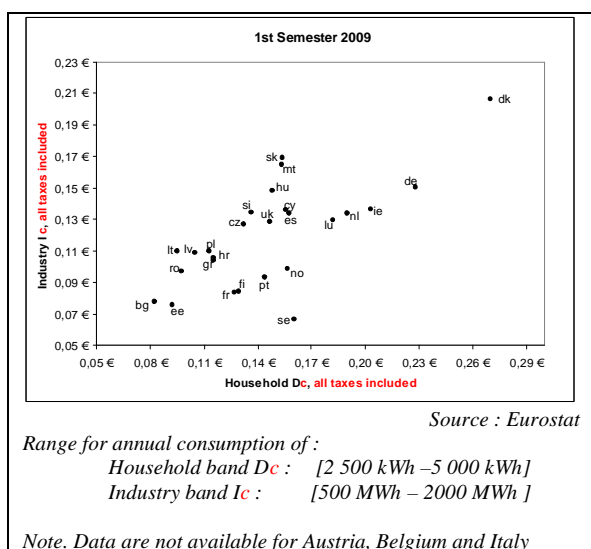
A.2.1 Prices by Member state

In the first semester of 2009 electricity price changes of both median level household and industrial consumption (D_c and I_c bands) showed a high degree of variance among different Member States. Notable household price increases were observed in Portugal (34.2%), Luxembourg and Slovenia (both 16.4%). Price falls occurred in Cyprus (23.8%), Poland (12.1%) and Romania (11.5%).

The above-mentioned wide variety of price changes also holds true in the case of industrial prices. In Luxembourg, Portugal and Slovenia significant price increases could be observed (18.2%, 14.0% and 11.2%, respectively). Industrial electricity prices for median consumers fell in Greece (41.2%) and in Cyprus (34.8%), while in Denmark and Romania price decreases were less steep, but significant enough to be mentioned (16.6% and 14.6%). It is also worth mentioning that in Greece, despite the huge fall in industrial prices, household consumers kept on experiencing an increase (5.0%).



Compared to the previous semester, the final household and industry prices (including all taxes) showed fairly similar movements. Portugal was among the few exceptions, with prices decreasing by 5.6% and 1.7% respectively.



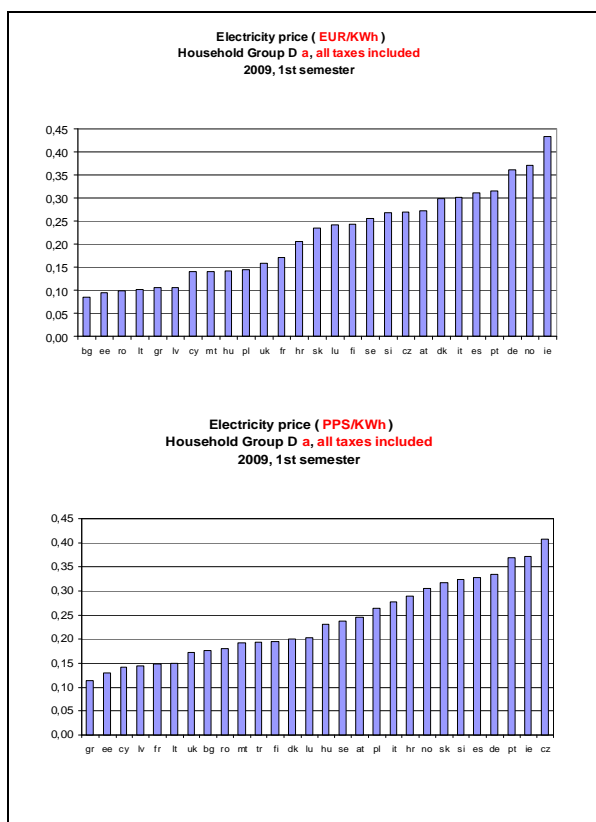
In Sweden industrial consumers practically pay the same price after including taxes (plus 0.8% price increase impact), and in the UK household consumers face a

relatively low tax burden, driving prices higher only by 4.8%.

A.2.2 Cross-panel data on household electricity consumption

New member states tend to be concentrated on the 'cheaper end' of the ranking order of Member States with respect to prices paid by the smallest household consumers (D_a band, including all taxes). Six out of the ten countries having the lowest prices are among the countries joining the EU after 2004, the seventh one is Croatia (currently a candidate country).

Among the ten most expensive countries only one new member state (Cyprus) can be found. The price difference between the most expensive country (Ireland) and the cheapest one (Bulgaria) is more than five-fold, reflecting beside market price differences the fact that old member states tend to levy higher taxes on energy products.



Notes

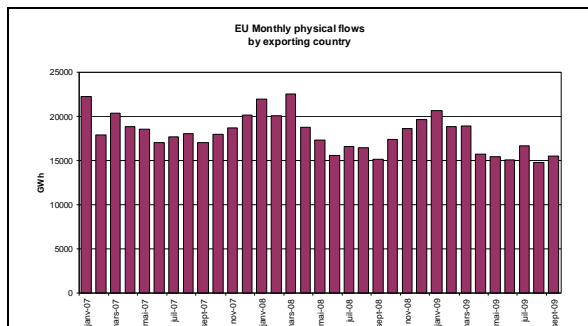
- 1) Data are not available for Belgium, Italy, Netherlands
- 2) Range for annual consumption of :
Household band *Da* : [0 kWh – 1 000 kWh]
Industry band *Ia* : [0 MWh – 20 MWh]
- 3) The purchasing power standards (PPS) data are provisional for all Member States.

Source : Eurostat

Introducing the purchasing power parity based price corrections the price ranking order of countries are re-shuffled; the distribution of new and old member states become less evident as in case of pure price data. The price ratio of the most and the least expensive country (Czech Republic and Greece) is less than 4.

B. Building the internal market for electricity: cross border flows and trade

In the third quarter of 2009 the volume of monthly physical flows (regarding the export volumes) of the whole EU remained close to its historical low level registered in the second quarter, around 46-47 TWh. In August 2009 the monthly volume of export flow fell slightly below the 15 TWh value for the first time since monthly volumes are published by ETSO.



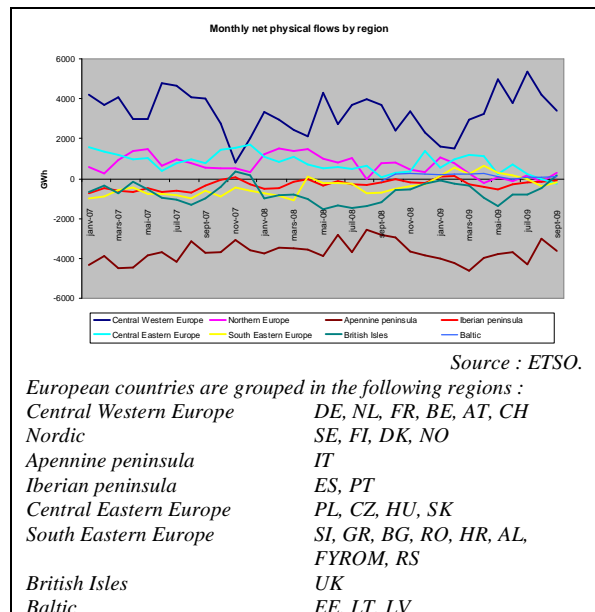
Source : ETSO.

Note. Data on IE, MT and CY is missing. Data on EE, LT and LV is available for September 2008. Data on physical flows from and to LU is incorporated in LU's neighbouring countries : DE, BE, FR. Data for a number of Member States is still partial, particularly for Member States in the South East European Region.

However, in September 2009 for the first time since 1st quarter of 2008 monthly flow volumes turned into a positive range in year-on-year comparison (+2.5%). In August the flow volume was 9.8% less than a year earlier, while in July practically the same level could be observed.

In an annual comparison only two regions' cross border flow volume data, namely the Central Eastern Europe and South Eastern Europe, showed remarkable increase (6.4% and 11.7%, respectively), while in the other remaining regions volume

contraction still persisted. Comparing the flow volume data to electricity consumption in most of the EU countries national consumption data were lagging behind those of registered in third quarter of 2008. However, in most cases they were higher than respective data of the second quarter of 2009.



Taking a closer look at the net positions of different EU regions, it is obvious for the first sight that with the exception of Central Western Europe, which is a significant exporter region and Apennine peninsula, where export is negligible and thus it heavily depends on imports, the other regions are more or less balanced, having a net 'close to zero' position. These latter regions' net position seems to converge; which might be the impact of the elimination of supply-demand differences, stemming from lower flow volumes due to the economic crisis.

The overall position of the whole EU continues to be on the negative side (net

import position), varying between 1.4 TWh and 2.3 TWh during the 3rd quarter of 2009. However, this net import balance could be considered not so significant compared to monthly consumption values, being slightly less than 250 TWh between July-September 2009.

The monthly physical flow net position of the Central Western European Region reached a peak in July (5.4 TWh), then began to decline but remained close to its historical high levels during the third quarter of 2009. In contrast, the Italian market that can be characterized as strong net importer, reached a local low point in July, close to its low levels recorded in March, then showed an upward movement.

C. "Focus on market transparency"

The clear and wide availability of information on trade, transactions and fundamental data on generation capacity, grids, storage and consumption is crucial for the good and competitive functioning of European electricity markets.

This is particularly important given that electricity markets are pan-European in scope. Wholesale electricity markets are increasingly becoming interconnected and price movements on national markets can and do affect regional and European markets.

In order to identify and prevent practices which opaque markets foster such as insider trading and market manipulation, regulators need the dissemination of non-commercially sensitive data on transactions while market operators need the disclosure of fundamental (physical) data on generation, grids, storage and consumption as a base for their economic decisions.

This becomes all the more challenging in current markets given that the rising number of trading platforms which have emerged across the EU offer a large variety of spot and derivative products. Furthermore, some of these products may have complex features combining elements related to the secure operation of the grid (like the physical delivery of energy for the day ahead) with elements which are common to the financial markets (like financial settlement of a forward contract). To add to the complexity, it is often the case that different regulatory regimes exist for spot, derivative and forward markets.

Potential gaps and inconsistencies in the regulatory oversight framework of electricity wholesale markets were recognised by the Commission during the preparatory phase for the 3rd Internal Energy Market Package, in particular concerning market transparency and integrity. These are issues of key public interest, since price signals from electricity wholesale markets determine end-consumer prices and also future investments in energy infrastructure.

In December 2007 the Commission issued a joint mandate to the Committee of European Securities Regulators (CESR) and the European Regulators' Group for Electricity and Gas (ERGEG), seeking advice on transparency of transactions in electricity and gas supply contracts and derivatives.

According to the findings of CESR/ERGEG, the level of information about a market depends highly on the regulatory oversight applied to the different trading venues (e.g. on exchanges or bilaterally). Indeed, direct bilateral trade is generally not subject to any

supervision, whereas on-exchange trades in physical and financial markets are respectively supervised by securities and energy regulators.

In addition, current financial regulations, such as the Markets in Financial Instruments Directive (MiFID) and the Market Abuse Directive (MAD), do not contain specific transparency and integrity obligations applicable to traded energy markets:

- MiFID sets general obligations for fair and orderly trading while spot markets are not within its scope;
- MAD prohibits insider transactions and market manipulation, but its definitions are not properly designed to be applied to traded energy markets since they do not apply to physical market products. Furthermore, MAD deals with financial instruments traded on regulated markets, and as such multilateral trading facilities are not covered.

The CESR/ERGEG advice highlights that market operators consider post-trade transparency data to be more relevant than pre-trade transparency data. However, even if some platforms already publish post-transparency data, under national obligations or on a voluntary basis, they are not necessarily uniform and complete. They add that adequate and reliable information should include price, quantity, trading day and time and facilitate appropriate identification of the supply contract or derivative, avoiding the disclosure of commercially sensitive data.

CESR/ERGEG also advise that a framework carefully tailored for the needs of particular energy and energy derivatives markets should be designed. They explain that the publication of post-trade information should be done as close to real-time as possible, and that efficiency could be enhanced by having a centralized data exchange approach.

The advice of CESR/ERGEG will enable the European Commission to reflect on issues of market transparency and to consider in particular the need for additional transparency requirements on trading activities.