

Bord Gáis
Energy Index
Understanding energy

AUGUST 2015

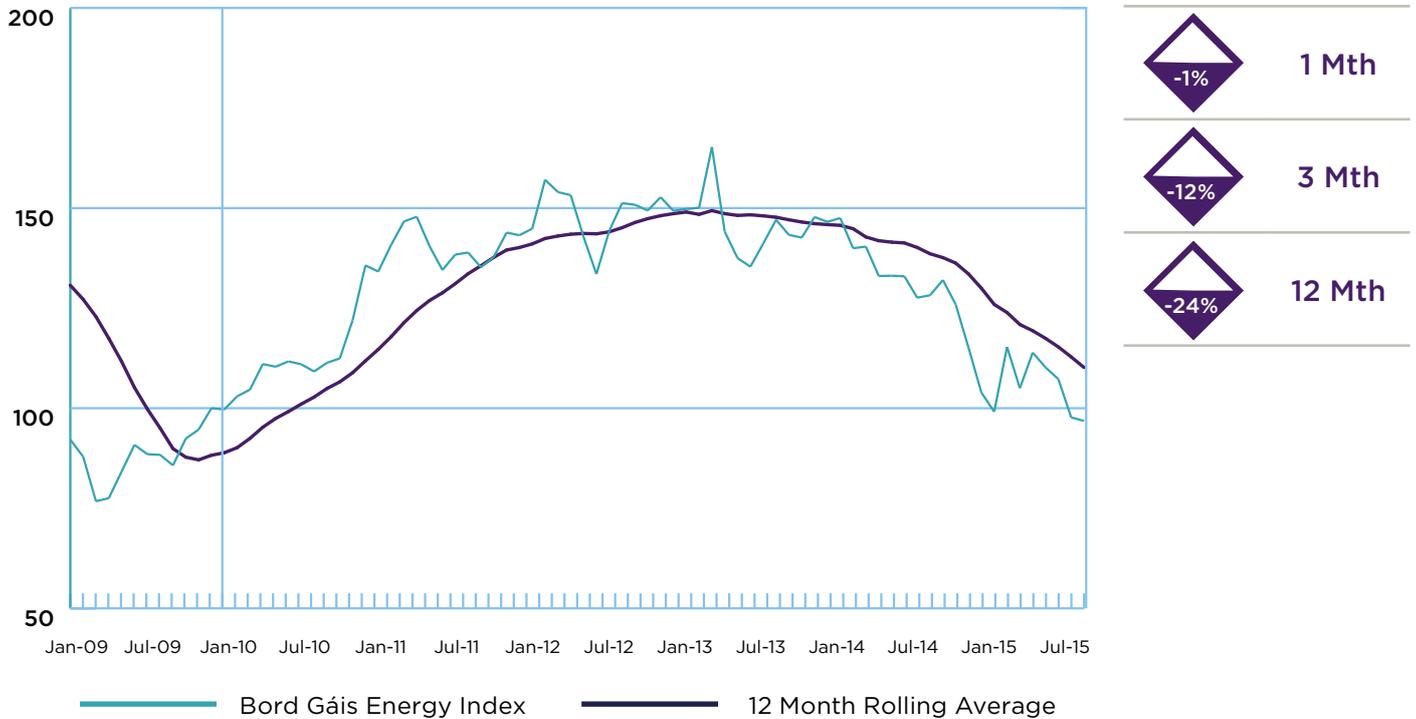
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Bord Gáis Energy Index

Commentary

Bord Gáis Energy Index (Dec 31st 2009 = 100)



Summary

The August 15 Bord Gáis Energy Index fell by 1% month-on-month. A modest month-on-month increase in the Brent crude oil price (at one point a 27% surge in Brent crude prices was recorded) was offset by the falling wholesale price of gas (-12% month-on-month), coal (-8% month-on-month) and electricity (-2% month-on-month).

Up until recently, the world had been experiencing a new era in commodity markets, spurred by insatiable demand from China. However the gears have now gone into reverse with many commodity prices having fallen below their levels of a decade ago. The real curse for producers is over-supply in almost all raw materials. According to the Economist, "so far this year, almost all major commodities—energy, industrial metals and agriculture—have fallen in a 10-20% range".

In August 2015 the Index stood at 97, which is a new record low for the Index having been set at 100 on 31 December 2009.

(Continued overleaf)

Bord Gáis Energy Index

Commentary

Bord Gáis Energy Index (continued)

HOT TOPIC

In August the US administration made tentative steps toward ending America's ban on crude oil exports. Following this decision, in an article dated August 22 titled *Nafta naphtha*, the Economist Magazine examined the history behind the ban, the reasons why this protectionist ban needs to be lifted and explored the potential obstacles to its total demise as well as the economic and political benefits. The following is an extract from the article:

In 1975, just after the first oil shock, America banned crude-oil exports in order to stabilise domestic prices. Because of this, the country's oil refineries are still configured to deal with the heavy, sulphur-laden crude oil it used to import. The shale revolution has provided the US with oil that is lighter and less sulphuric than traditional imports. And there are not many refineries in America that can deal with it efficiently.

An obvious solution would be to export this light tight oil for refining elsewhere but the ban means it cannot be exported. As a result of the glut of crude oil building up in the US "the price of domestically produced US oil is kept at a hefty discount to the world price—currently over US\$6 per barrel. That has become particularly painful since OPEC's excess production has sent global benchmark prices tumbling.

American oilmen are fuming that their potential export markets are being sacrificed to the interests of America's refining industry. In addition others would benefit too from its wholesale demise if the world markets were to receive US light tight oil. Supporters of the ban say it keeps American petrol prices low.

The consensus among economists is that prices of refined products such as petrol are set in the world market. With American crude bringing that price down, the cost of fuel may even fall a bit for Americans. On August 14 the US made a decision to allow American firms to swap some oil with Mexico, so easing the historic and politically sensitive restraint. Mexico's national oil company, Pemex, has long wanted to send its heavy crude to America and import lighter American oil to turn into petrol. The Commerce Department will allow about 100,000 barrels a day of light crude and condensates to flow into Mexico, in exchange for a similar amount of heavier Mexican crude heading to American refineries. It is not the first breach of the ban.

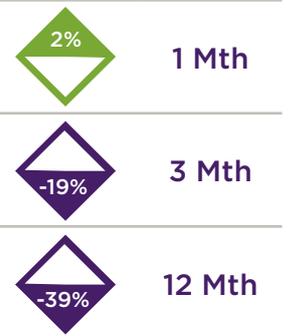
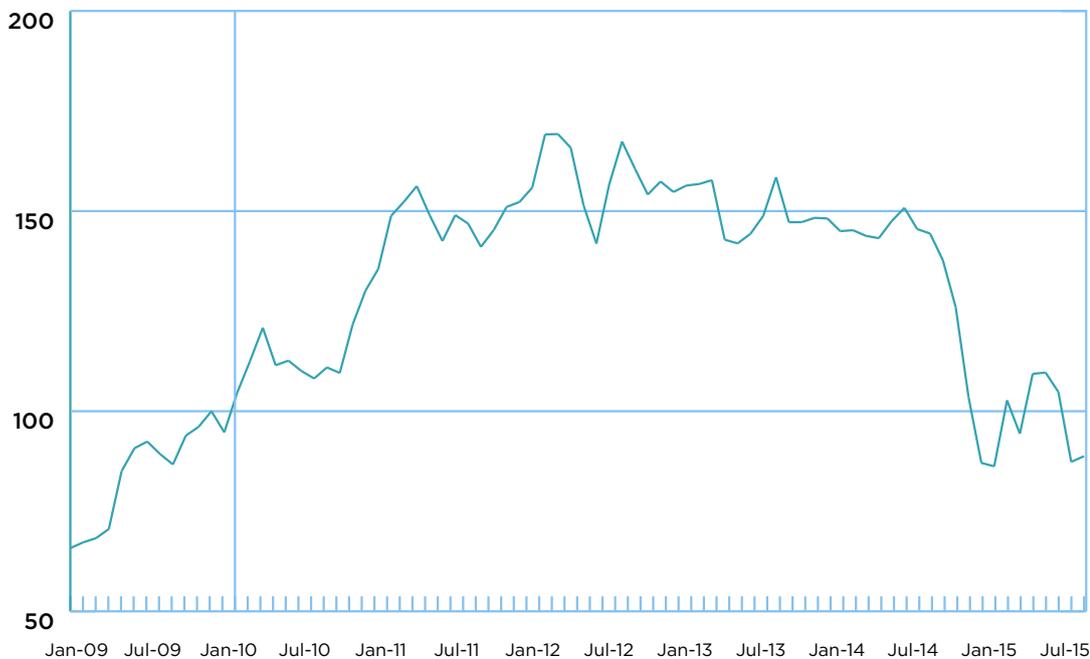
The definition of what constitutes crude oil owes more to art (and bureaucratic fiat) than science. America has already allowed the export of some kinds of ultralight crude. Canada has long enjoyed a privilege similar to the one now granted to Mexico. Opposition to the ban is also growing among lawmakers. The Economist argues that its scrapping would delight America's allies: the ban undermines America's moral authority on trade. Better yet, it would also hurt unfriendly petrostates such as Russia, Venezuela and Iran. Despite obvious benefits to lifting the ban, the details will still be tricky. America's cosseted crude-oil refiners would be willing to see an end to artificially cheap raw materials in exchange for other concessions.

A wholesale solution to this elderly quirk in the world oil market may still be some time off. But by lowering trade barriers for Mexican oil, the Obama administration will at least improve the functioning of the world oil market—and highlight the potential benefits of more dramatic reforms.

Bord Gáis Energy Index

Commentary

Oil Index



*Index adjusted for currency movements.

Data Source: ICE

Oil

Month-on-month the Brent crude oil price rose by US\$1.94 from US\$52.21 on July 31 to close at US\$54.15 on August 31. However, intra-month prices hit a closing low of US\$42.69 on August 24, levels not seen since the height of the financial crisis back in February 2009. On this day the Chinese stock exchange crashed on what was called 'Black Monday'. The Shanghai composite index lost 8.5% that day, the worst fall since 2007. The dramatic weakness seen in the oil price during most of the month was highly correlated to concerns about the strength of China's economy given that China is the world's biggest importer of crude oil. Of course, the Chinese stock market is not directly responsible for oil's fall during the month but it has reinforced concerns about whether China's economic growth is going to slow very abruptly, and has undermined expectations about future oil sales - driving down the price now.

Oil prices did recover toward the end of the month as a result of a three-day rally in which prices rose faster than at any time since Iraq invaded Kuwait in 1990. Among the flimsy arguments used to justify the 27% surge (as prices rallied from US\$42.69 to US\$54.15): an OPEC platitude that it was "ready to talk" with other producers; an empty comment by non-OPEC Russia about possible co-operation; and a slight downward revision of American oil output.

However, for some analysts the bottom line was that hedge funds had been betting on further price falls, and chickened out at the merest whisper of upward price pressures. Speculation and other external influences aside, the reality is that OPEC stalwarts Saudi Arabia, Iraq and Iran are still pumping hard, and show no sign of stopping despite weak demand. As a result, global crude oil and product stocks are now at their highest levels since the Great Recession of 2008-09. IHS expects crude stocks entering refinery maintenance season to be as much as 100 MMbbl above the September 2014 level. So far, US production growth has slowed to a halt, but it has yet to turn strongly downward. OPEC production in turn has not just remained steady since the November 2014 meeting, where the group took the decision not to cut in the face of oversupply, but has instead increased by 1.4 MMb/d (most of these volumes are from Saudi Arabia and Iraq, with Iran likely to add further barrels next year.)

As a result, even with demand growth of 1.4 MMb/d this year (more than double last year's) and 1.1 MMb/d next year, US output would have to fall to 9.0MMb/d or lower to bring global production in line with demand. To drop to this low level, IHS estimate that WTI prices would need to average around US\$45/bbl or lower for two consecutive quarters. In August, rig count in the US increased.

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Bord Gáis Energy Index

Commentary

Oil (continued)

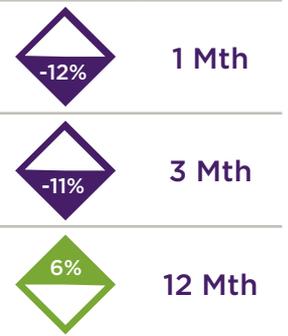
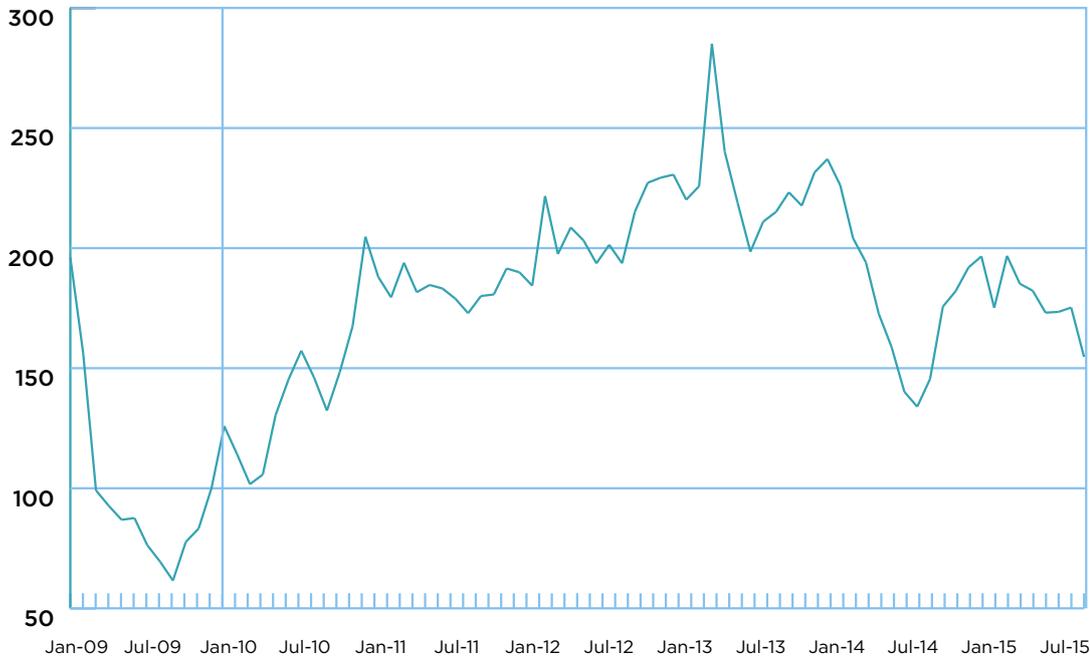
OPEC is more than maintaining its high production and its market share, with July output estimated at 32.0MMb/d—an increase of 0.2 MMb/d over June. Saudi Arabia's output likely stayed at or above June's 10.6MMb/d level given that in July and August demand for crude in power generation is generally higher than earlier in the summer. All other OPEC countries, including Kuwait and the United Arab Emirates, are producing essentially at capacity; and Libya remains mired around 400,000b/d, with no sign that production will recover in any consistent way. Two significant factors sustaining and growing OPEC production are additional barrels from Iraq, including the Kurdistan Regional Government (KRG), and the return of Iran's embargoed exports to world markets. On Iranian production, analysts expect that crude oil export restrictions are lifted in March of next year and that exports climb slowly from the current 2.85 MMb/d to 3.40 MMb/d at the end of 2016. This is a much less rapid pace than some Iranian representatives have discussed, but there is substantial uncertainty about timing and quantities in resuming the country's embargoed exports.

With no end in sight to the global oil glut, Middle Eastern producers fear a repeat of the 1970s and 1980s. Back then, giddy prices drove the search for oil elsewhere. The world was soon pumping so much that prices crashed, and stayed low for 20 years. For the Middle East that meant rising unemployment and for some countries, such as Algeria, unrest and civil war. Since then a decade of high prices has given regional producers a US\$2.5 trillion cushion. But the past year's halving of prices has forced them to deplete their hoard—even to borrow. For the richest that is fine: they can forgo income while their low-cost oil recoups market share from costlier sources, such as shale. For poorer ones like Algeria and Iraq, the squeeze will come sooner. According to data from the EIA, the global supply demand differential stood at 2.27 MMb/d in July with supply being recorded at 96.39 MMb/d compared to a demand figure of 94.12 MMb/d.

Bord Gáis Energy Index

Commentary

Natural Gas Index



*Index adjusted for currency movements.

Data Source: Spectron Group

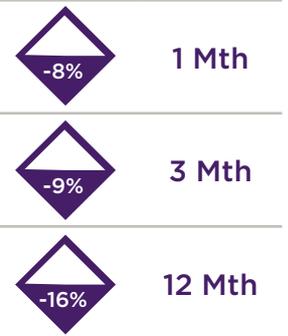
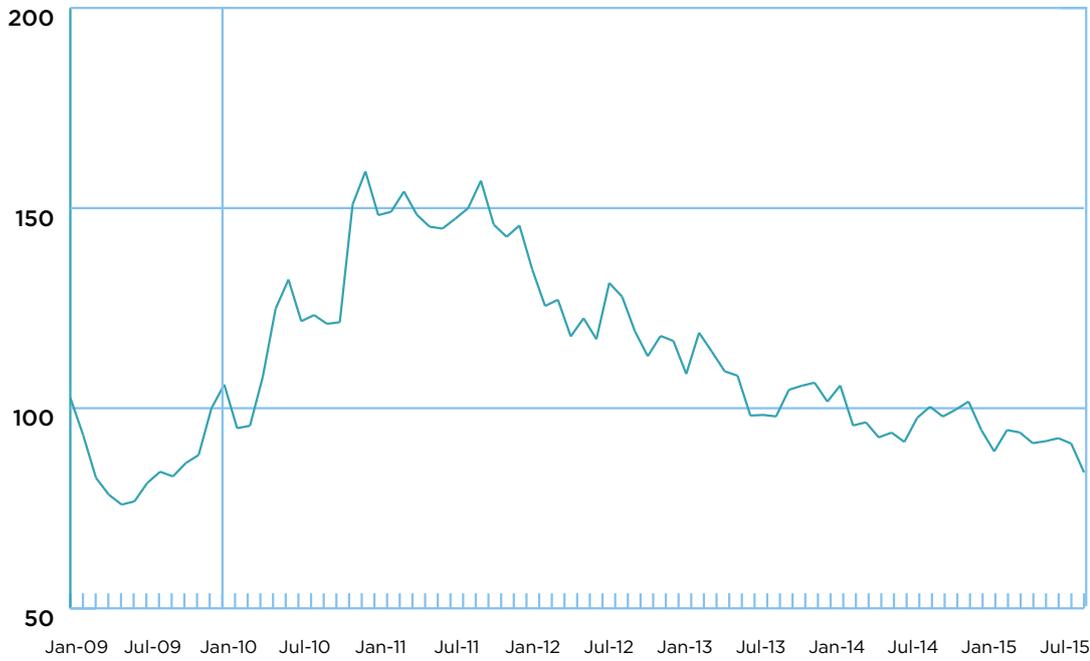
Natural Gas

The average day ahead price for August was 39.77 pence per therm, this is over 8% lower than the previous month out-turn of 43.36 pence per therm. In euro terms the month-on-month drop was 12%. UK demand in August averaged 188mcm, this is 41mcm above seasonal normal demand as calculated by National Grid. This higher demand was partly attributed to higher interconnector exports to the continent, which averaged 39mcm in August, compared to an average of 28mcm in July. The ramp up in exports was due to a planned maintenance on the Europipe 1 pipeline between the Dutch and German border which meant that part of the additional Norwegian gas was re-routed through the UK back to the continent. LNG supply in August reached a three year high of 61mcm on the August 18, with average send out of 50mcm for the second-half of the month. Injections into storage continued in August, with stocks by the end of August standing at 80% full and the Rough storage facility moved to a single train mode, limiting injections to 11mcm/day. The facility is scheduled to go down for planned maintenance for 2 weeks in September. Forward prices over the month tracked the softer prompt contracts, with the front season winter 15 contract opening the month at 45 pence per therm, and finishing the month over 1 pence per therm lower.

Bord Gáis Energy Index

Commentary

Coal Index



*Index adjusted for currency movements.

Data Source: ICE

Coal

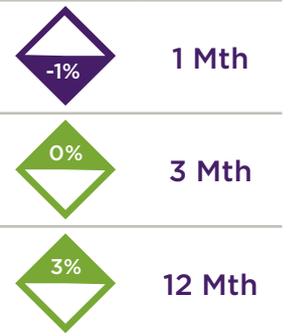
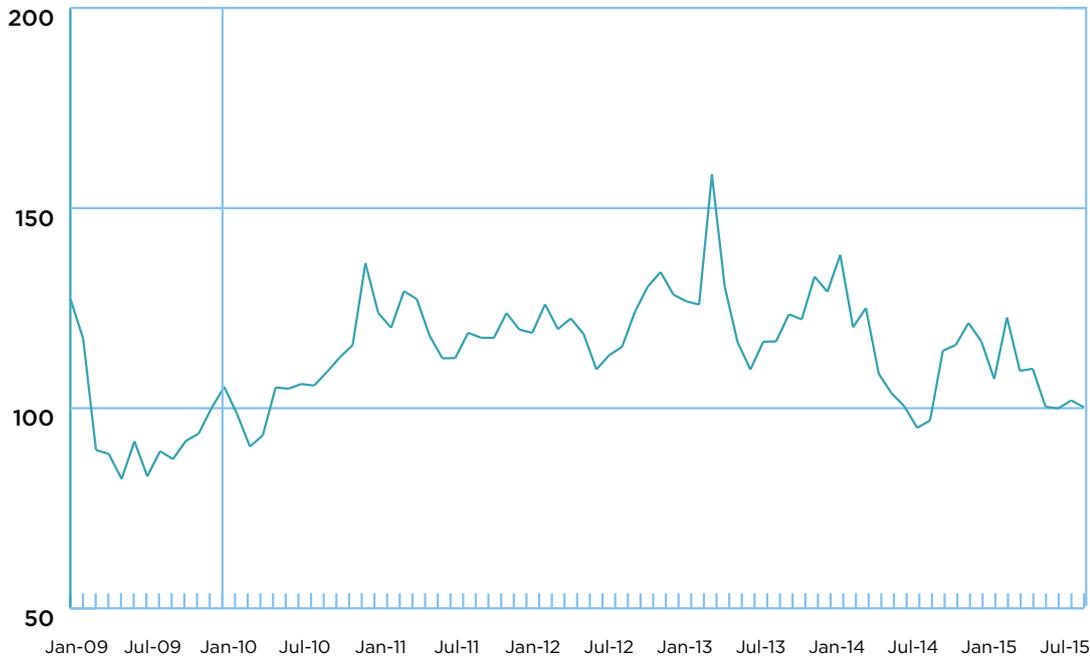
The ICE Rotterdam Monthly Coal Futures Contract continued its remarkable slow decline in August. Having closed July at US\$58.45/mt, prices continued to ease in August to close the month at US\$54.95. Similar to oil, European coal prices have not been at these levels since February 2009. The crude oil market was the main referent for price direction in the coal market during the month, as coal supply-demand fundamentals remained generally unchanged.

The industry's biggest worry remains the state of the Chinese economy and the ripple effects of its slowdown on developed economies like Australia. China, the world's largest buyer of coal, imported 17.49 million tonnes of the fuel in August, down 17.7 per cent from the previous month, and down 31.3 per cent year on year, with already weak demand affected by a currency devaluation that has made foreign coal more expensive. China has been trying to tackle an immense supply glut that has weighed on prices. As well as urging big local producers to cut output, it has drawn up new quality standards aimed at restricting low-grade imports. A broad government push toward more environmentally sustainable sources of energy has also weighed heavily on producers. "Under the impact of the [currency] devaluation, the price advantages of imported coal will gradually narrow, and we are forecasting imports coming under further pressure in September," said analysts with Guangfa Securities. With fewer global supplies finding a home in China, the global coal glut remains. The weakness in global coal trade is evident in falling bulk-freight rates. The slump in Chinese demand for commodities has created huge overcapacity. The main gauge of bulk-freight rates, the Baltic Dry Index, sagged in August.

Bord Gáis Energy Index

Commentary

Electricity Index



Data Source: SEMO

Electricity

Month-on-month the average wholesale price of electricity fell by 2%. Excluding supplier capacity payments, the average wholesale price for August was €50.29 compared to €51.31 in July, a fall of just over €1/MWh on the average monthly wholesale price.

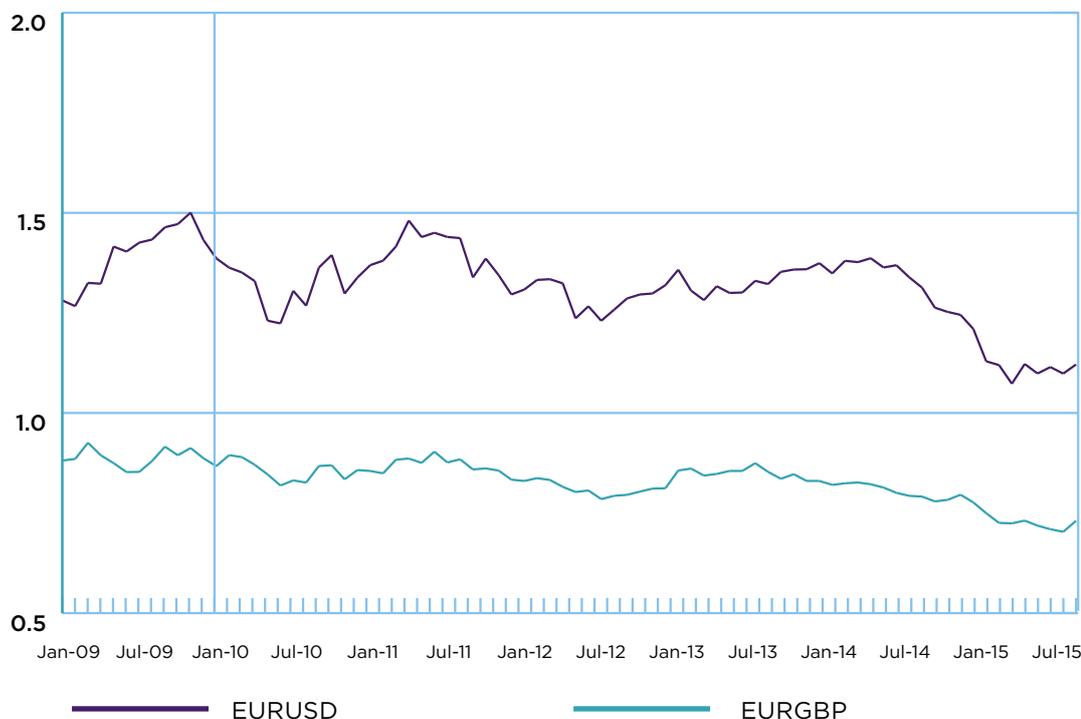
In general, the wholesale price of electricity can be assessed by examining three components: the UK wholesale cost of gas, the European wide price of emitting one tonne of carbon and spark. August manifested the competing effects of these components. On one hand, the fall in the cost of power was driven by a significant drop in the wholesale cost of prompt gas imported from the UK over the month. Day-ahead contracts during August were down 12% on July in euro terms. The UK Day-ahead gas price has a strong influence in the wholesale price of power in Ireland as the majority of gas is imported from the UK and gas powered plants tend to set the wholesale price of power.

At the same time, a monthly clean spark of €8.24/MWh was recorded for August which is up markedly from the low level of €5.75/MWh observed in July. Significant outages for a number of coal plants, two in Moneypoint and one in Kilroot, resulted in a greater reliance on gas plants during the month of August. With demand levels remaining subdued, wind powered production also dropped from approximately 18% in July to 14% in August. All these factors resulted in relatively expensive thermal plants making it into the merit order and tending to prop up wholesale prices. In spite of these, the overall SMP fell due to the greater effect of the drop in the wholesale cost of gas during the period.

Bord Gáis Energy Index

Commentary

FX Rates



EURUSD



EURGBP



FX Rates

Market watchers are still wondering whether the Federal Reserve will raise interest rates on September 17. The most recent US non-farm payroll figures gave ammunition to both hawks and doves: unemployment dropped unexpectedly to 5.1%, but wage pressures remained subdued. The Fed's chief, Janet Yellen, regularly emphasises the importance of job-market data to this decision. The IMF has called again for the Fed to keep rates low, pointing to subdued inflation and threats to global growth from China's slowdown and a rising dollar. A rate rise would have global effects, luring capital into America in search of higher returns (which would strengthen the US dollar); emerging-market currencies are already suffering, with the Malaysian ringgit reaching its lowest point since 1998. If American investors seek comfort, they won't find it in China. In early September China trimmed its GDP growth figure for 2014 and reported a record fall in reserves. It also revealed a sharp drop in imports and exports last month. The market has been worrying about China's economic health as much as about Fed policy. These additional weak barometers follow 'Black Monday' or the day the Chinese stock exchange crashed and the Shanghai composite index lost 8.5% on the day. Until September 17, analysts and the markets will have to continue pondering. With the timing of a US rate rise in the balance the ECB clearly faces different challenges with the sluggishness of the euro area's recovery continuing to cause concerns. GDP grew by 0.4% in late 2014 and early 2015, but by only 0.3% in the second quarter—about one-third of America's rate. At the most recent ECB meeting, no action was taken but more support could be offered in the future with Mario Draghi hinting that the European Central Bank stands ready to bolster its Quantitative Easing programme.

In the month the Bank of England kept rates at 0.5%, with only one MPC member voting for an increase to 0.75%. Rapidly rising wages had prompted speculation that more members would vote to raise rates, but the strengthening pound and subdued prospects for inflation kept the other eight at bay. This was the first dissenting vote of 2015 and although the likely timing of the first rate rise is drawing closer, the overwhelming message was of a Committee in no rush. The list of reasons invoked by the MPC for keeping rates low is a long one. This time inflation was the main focus. The Bank of England expects it will take two years to get back to 2% - the Bank's target. But there's plenty of reasons to think it could take even longer. For one the oil prices remain weak. That could change of course, but a persistent drag on inflation has been China, whose slowdown seems likely to exert further downward pressure on prices.

Bord Gáis Energy Index

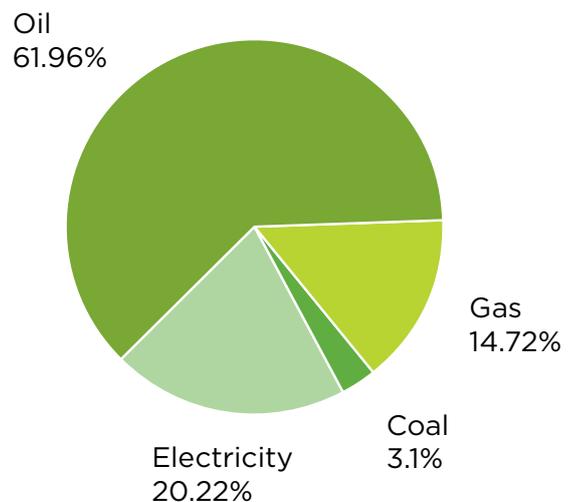
Commentary

Market Outlook

According to Barclays, producers in US tight oil plays will be extremely challenged to continue to see the kind of additional cost deflation needed to ramp up new drilling if prices remain at US\$45 WTI. Therefore, an anticipated delay to Iran's return, Iraqi loading issues and a US oil supply response should bring Brent prices to average in the mid-US\$60 range during 2016. Barclays expect Iran's contribution to slip for several reasons because of delays to implementation day, discussions in the US Congress concerning the imposition of additional sanctions and the verification of the IAEA's report in late 2015 to cast doubt on the pace and timing of sanctions relief. The second reason Barclays forecast higher prices in 2016 is due to an expected adjustment to non-OPEC supplies. Barclays expect, at US\$65 Brent prices, the existing non-OPEC supply stack to decline 4-5% per year through 2018, implying a reduction in supply of 2-2.5 MMb/d. Third, Barclays see growing risks to OPEC supply levels. Barclays point out that Iraq's exports have already declined as a result of technical transport issues in the south and sabotage on pipelines in the north. In the coming months, Saudi Arabia is likely to reduce its wellhead output, rather than intentionally pressure markets further downward, when refining throughput enters a seasonal downturn. Fourth, Barclays forecast that the oil market balance is expected to tighten. In the fourth quarter, Barclays expect only a 0.2 mb/d MMB/d margin between OPEC supplies and the demand for OPEC crude, in contrast to a 2 mb/d margin in Q1-Q3. Barclays think further upwards adjustments to demand and downward adjustments to supply are yet to come, based on historical precedent. Despite this expectation of rising prices in 2016, in the short-term Money Managers increased their gross short positions of roughly 53 MMb/d for WTI and 49 MMb/d for Brent since late May. This, according to Reuters, demonstrates that hedge funds are expecting oil markets to remain oversupplied.

Re-weighting of Bord Gáis Energy Index

Following the SEAI's 2011 review of energy consumption in Ireland, there was a 6.4% drop in overall energy consumption. Oil continues to be the dominant energy source with most of the oil used in transport and the remainder being used for thermal energy. For the purposes of the Bord Gáis Energy Index, the total final energy consumption in Ireland fell 1,089 ktoe (toe: a tonne of oil equivalent is a unit of energy, roughly equivalent to the energy content of one tonne of crude oil) between 2009 and 2011. This fall was made up of a 1,022 ktoe drop in oil consumption (down 13.5%), a 20 ktoe drop in natural gas (down 12.6%), a 7 ktoe drop in electricity (down 0.3%) and a 40 ktoe drop in coal (down 10.98%). The Bord Gáis Energy Index has been re-weighted in January 2013 to reflect the latest consumption data. The impact has been minimal and has resulted in slight reductions in the share of oil and gas and a slight increase in the weighting of electricity in the overall Index.



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