Bord Gáis Energy Index

Understanding energy

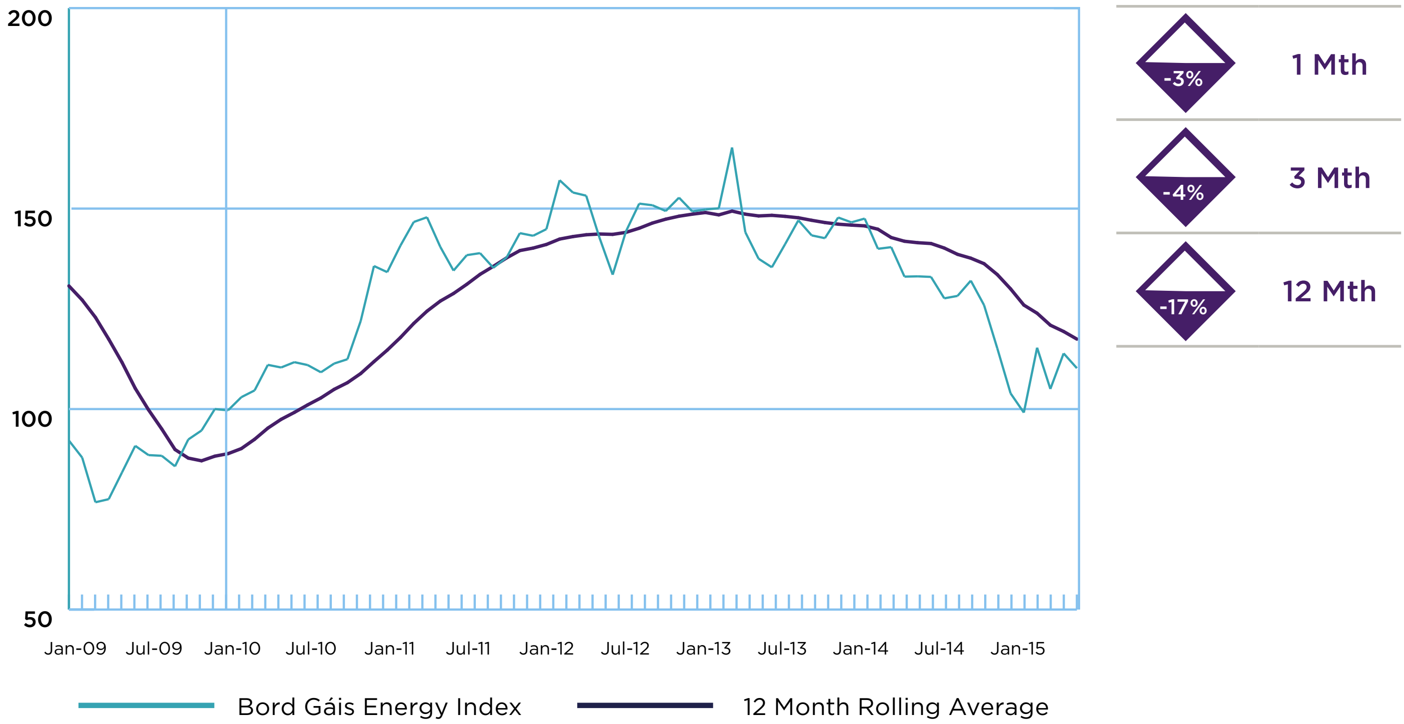
MAY 2015

BGE/EI/UE/0615

Bord Gáis Energy Index

Commentary

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



Summary

The May Bord Gáis Energy Index fell by 3% month-on-month due to weaker wholesale gas and electricity prices. The month-on-month fall would have been higher but for a weakening euro which supported commodity prices trading in Sterling and dollars.

Having traded in a volatile fashion over the last 12 months, the Brent crude price was unchanged month-on-month in May. Over the last few months oil prices have recovered from the 2015 closing low of US$46.59 on 13 January with the recovery particularly evident in April when the front month Brent crude price gained nearly US$12 month-on-month. However, these strong gains appear to have levelled out in May and further gains appear questionable given the glut in supply that currently exists.

In May 2015 the Index stood at 110.

(Continued overleaf)

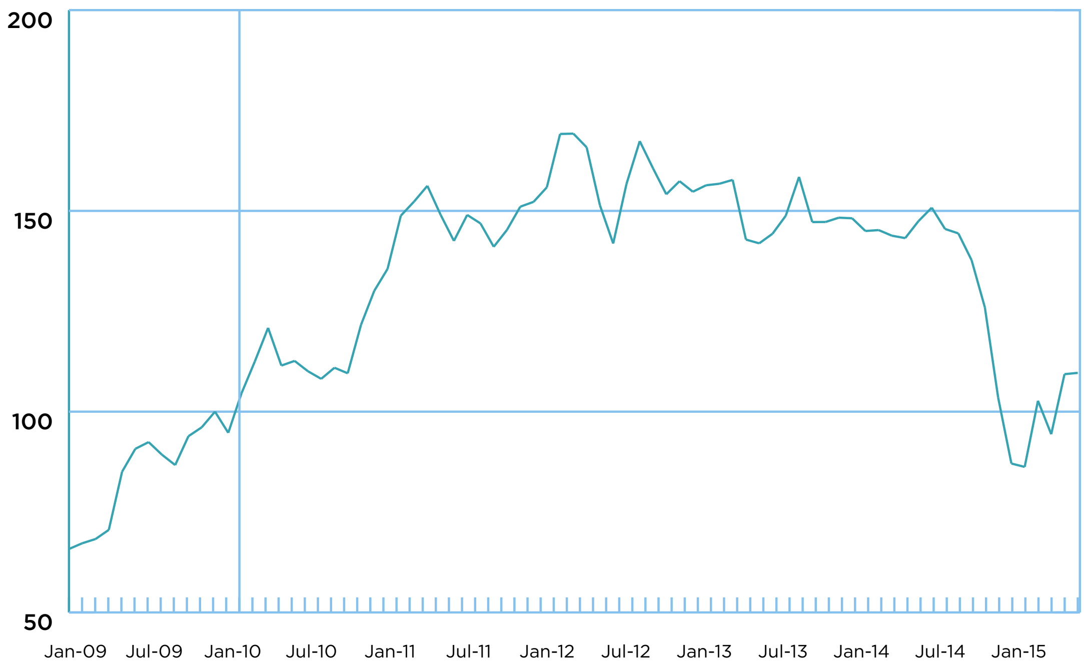
Bord Gáis Energy Index (continued)

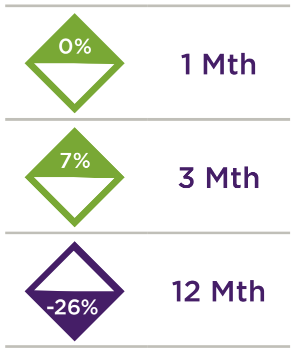
Gazprom recently released its full-year 2014 financial statements that revealed that the company suffered from a reduction in gas exports amid weaker European demand, higher costs, as well as a five-month halt in supplies to Ukraine. As a result, Gazprom's net profits plunged by 47% year-on-year. Looking ahead, Gazprom is likely to feel more of the ill effects from oil price collapses in the second half of 2014. The company's time-lagged, oil-indexed export pricing formula means that the full brunt of the oil price decline is still filtering through to Gazprom's gas contracts, with prices down in both Q1 and Q2 already and expected to fall further in Q3. However there is some good news for the giant gas exporter as European gas storage facilities are only about 30% full, down significantly from the 5-year average storage level at this point in the season. In addition, the likelihood is that the 2015-16 winter will be colder than 2014-15. IHS forecasts that Europe's overall gas demand will rise in 2015 to 494bcm of which 158bcm (or 32%) will be supplied by Russian exports.

Gazprom's ability to deliver this extra gas to Europe will again be dependent on hammering out yet another deal with Naftogaz Ukrainy to avoid a possible disruption in transit. Approximately 40% of Russian gas exports to Europe flowed through Ukraine in 2014. The continuing crisis in Ukraine, as well as the ongoing Gazprom-Naftogaz dispute over gas prices, supply terms and transit tariffs, means that European buyers will again be preparing themselves for a potential supply cut-off threat. The "winter-package" that allowed Naftogaz to buy Russian gas has secured supplies but this is due to expire at the end of June. According to IHS "there is no guarantee that Gazprom will consent to a further extension of the existing agreement in Q3". Against this backdrop of uncertainty in the key Russia-Ukraine relationship, the EU issued a "Statement of Objectives" against Gazprom in April, accusing the Russian firm of unfair pricing, restrictions on cross-border sales and engaging in practices intended to hinder competition, all in Eastern Europe. In response, Gazprom said that the claims were unsubstantiated. Gazprom now has until mid-July to propose policy changes to the EU that aim to remedy the alleged violations of antitrust law lest the company be hit by penalties and fines amounting to up to 10% of the company's annual turnover. Amid a dispute with Ukraine, a weakened financial state and the prospect of EU fines, questions are being raised as to the future for Gazprom in Europe. In the short-term, the Russia-EU gas relationship will continue as long as Europe needs Russian gas and Gazprom needs the revenue from European gas sales (exports to Europe made up nearly 60% of Gazprom's total gas sales revenue in 2014). However, Gazprom is determined to diversify its customer base with a strong push to target gas exports to China but the start of deliveries is still reportedly years away. The Russia-EU gas relationship is set to continue but, according to IHS, Gazprom may decide to pull back from its post-Soviet strategy of pursuing downstream integration in Europe. This view is supported by Gazprom's Turkish Stream proposal which signals its intention to deliver gas to EU borders and let Europe to invest in additional pipeline infrastructure to transport the gas to where it will be consumed. In addition, IHS are of the view that the EU's "Statement of Objectives" may lead to a more transactional gas relationship that will erode the political elements of the current relationship. The relationship in turn should evolve into a purely producer-supplier one that could ultimately enhance Gazprom's competitiveness in the European gas market.

Commentary

Oil Index





*Index adjusted for currency movements.

Data Source: ICE

Oil

The front month Brent crude oil price traded in the tight range in May having opened the month at US$66.78 and closed at US$65.56. Over the last few months prices have recovered from the 2015 closing low of US$46.59 on 13 January with the recovery particularly evident in April when the front month Brent crude price gained nearly US$12 month-on-month. However, these strong gains appear to have levelled out in May and further gains appear uncertain.

During the month the front month Brent crude price recorded a 2015 high of US$69.63 on 5 May on a weaker dollar, more reported disruptions to Libyan oil exports and a higher official selling price set by Saudi Arabia for its benchmark Arab light grade to Europe by US$1.30/bbl from the previous month. The mini rally experienced since March appeared to be set to continue. However, having recorded a fresh 2015 high, prices trended softly lower for the remainder of the month. Brent crude prices experienced three bouts of modest weaknesses in the month. On 7 May prices fell 3% day-on-day on a resurgent US dollar (according to Thomson Reuters, the correlation between changes in the US currency and international oil prices rose to more than 60%) and investors reportedly returning their focus to signs of ample oil supply in physical markets with tens of millions of barrels of West African, Azeri and North Sea crude struggling to find buyers.

On 19 May prices fell another 3% day-on-day, again on strength in the US dollar and concerns that the recent rally in crude prices, particularly in April, would prolong the physical supply surplus. During the month the IEA reported that despite a slowdown in US oil output growth, global crude supply was up a staggering 3.2million barrels per day year-on-year in April whilst oil demand growth was far from spectacular. Total oil demand in May stood at 92.21million barrels per day, 200,000 lower than April but 1.37million barrels per day higher year-on-year. As it stands, the world remains oversupplied with oil by an estimated 1.7million barrels per day but despite this, prices have rallied and the market has started to question prices at these levels amid the glut. On 26 May further weakness materialised on reports that US drillers had cut the number of oil rigs in operation by just 1 rig in the previous week. A slowdown in the falling rig count combined with price recovery forced traders to reassess the value of a barrel of oil and prices softened.

Despite a general weakness in the benchmark oil prices, prices were supported on further Libyan production constraints (the Nafoura oil field closed in May as protests resulted in a blockage in the pipeline linking it to the eastern port of Zueitina, one of the few Libyan ports still exporting oil), news of the first recorded drawdowns in US crude inventories

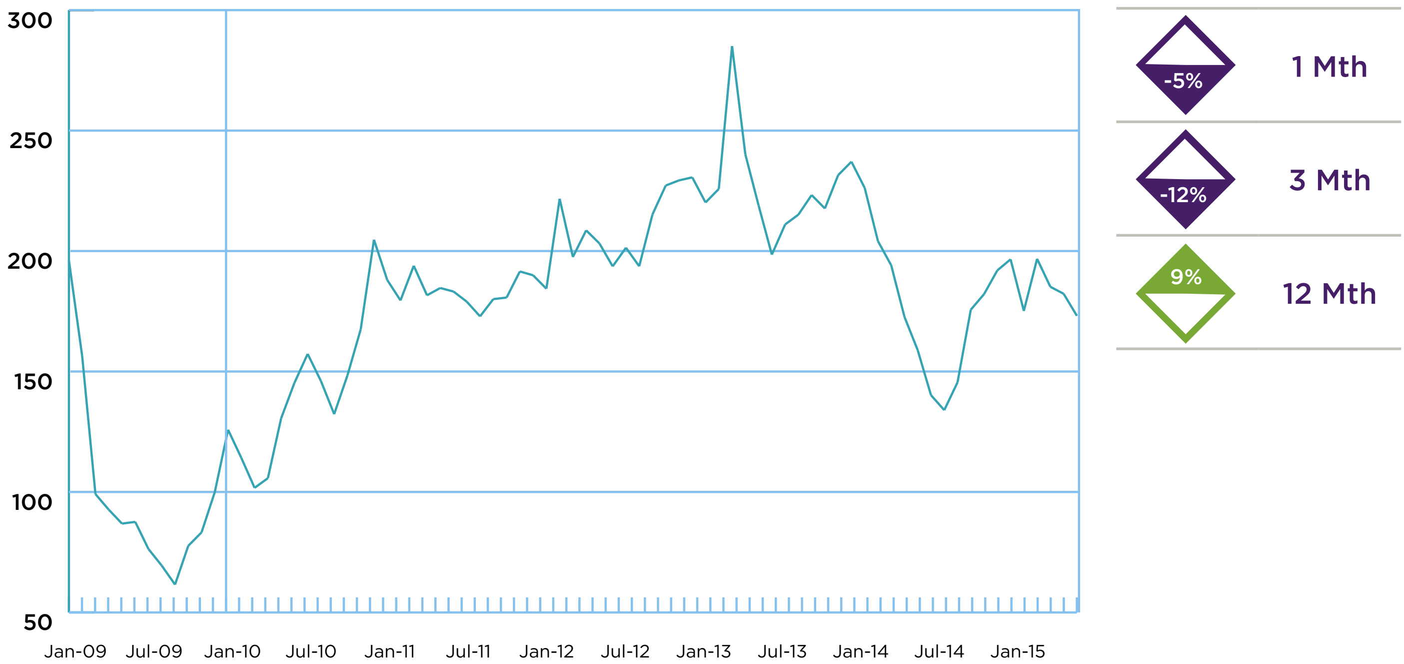
(Continued overleaf)

Oil Index (continued)

since January due to increased refinery runs and the number of the US rig counts actively drilling falling for the 25th week in a row. Saudi-Iranian tensions continue to manifest themselves in Yemen and May saw the deadliest month for the conflict, with Saudi air strikes reportedly responsible for the death of at least 80 people in one day.

Commentary

Natural Gas Index



*Index adjusted for currency movements.

Data Source: Spectron Group

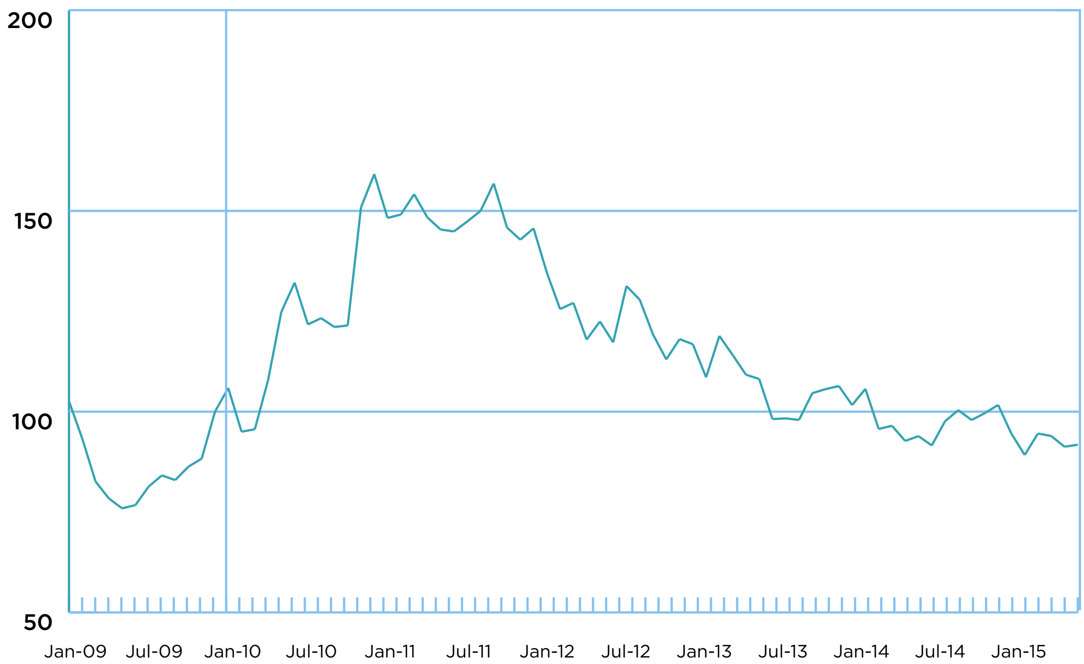
Natural Gas

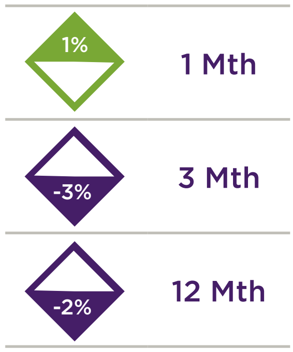
UK NBP wholesale gas prices in May were, on average, lower month-on-month as steady LNG deliveries continued and demand eased with rising temperatures. The Day-ahead contract averaged 43.78 pence/therm during May, down 5% on April in euro terms. Gas for front-month June delivery throughout May was down 7% month-on-month. The steady run of LNG deliveries into the UK continued in May with 10 arrivals, after 11 in March and nine in April. Asian LNG prices were marginally higher over the month but remain 40% below Asian LNG prices in the same period last year. If Asian LNG prices, which are indexed to oil prices, remain subdued, we expect strong LNG deliveries into the UK to continue. The lower prices in May also came despite planned and unplanned Norwegian maintenance works which impacted production. While lost volumes to the UK via the Norwegian Langeled pipeline were similar from April to May in 2014, flows via the St Fergus Total terminal were higher, seeing the UK better supplied with Norwegian gas this May compared with last year. The UK received an average 22 million cubic meters/day via Langeled in May, down from 30 million cu m/d in April – similar to the 7 million cu m drop to 21 million cu m in 2014. But, on average, 8 million cu m/d was processed through the St Fergus Total terminal, compared with zero last year, data from Eclipse Energy showed. Total Norwegian deliveries this May were 9 million cu m higher year on year at 49 million cu m/d. Gas for LDZ demand, largely driven by heating, fell from a daily average of 125 million cu m/d in April to 102 million cu m/d in May. The May figure was higher than the same month in the particularly warm 2014 which was 92 million cu m/d, but lower than the two years prior to that. Storage facilities are set to take advantage of lower spot prices during the IUK maintenance with more favourable price spreads and inject gas into storage ahead of next winter, however Norwegian flows may fall back as gas is redirected to continental Europe. BBL flows from the continent continued at zero as the Dutch market held gas to compensate for lower Groningen production. Uncertainty continues in relation to production at the Dutch Groningen gas field. A scientific study, commissioned in response to increased seismic activity, is due to report in July and remains a supply risk for markets. Forward prices continued to weaken over the month as the market remained confident that demand could be met comfortably over the coming months. However, risks remain and the price outturn will very much depend on outages, LNG and Russian flows into Europe and developments in relation to production at the Groningen field.

Bord Gáis Energy Index

Commentary

Coal Index





*Index adjusted for currency movements.

Data Source: ICE

Coal

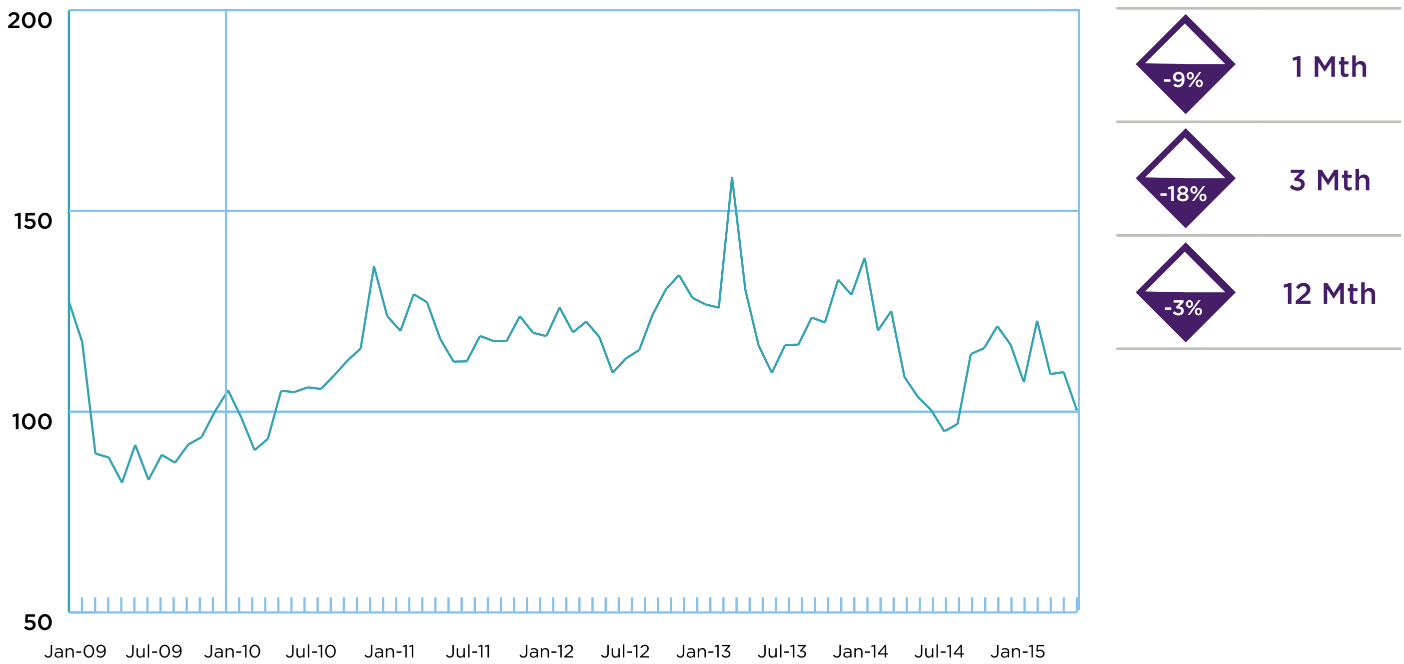
The ICE Rotterdam Monthly Coal Futures Contract continued to weaken in May, dropping nearly US$1 month-on-month to close at US$58.85 on 29 May. This weakness continued in June and the coal futures price closed at US$56.75 on 9 June, a level not seen since March 2009. Weakness in the spot physical market is reportedly due to a combination of a lack of buying interest due to the low coal burn in Europe and a lot of supply still on offer, particularly from Colombia.

Softening global prices have been relentless over the last number of years as consumption slows down. The biggest surprise is the slowdown in consumption in China, which burns half of the world's coal. In the first four months of 2015 China's consumption fell 8% year-on-year. The economic slowdown is hitting demand for the high quality coal used in steelmaking but environmental concerns are also spurring China to increase energy efficiency and boost its use of natural gas and renewables, particularly wind power. China's move away from coal was confirmed by the recent announcement that Beijing's last coal plant will be closed in 2016. Beijing has, for decades, been powered by four large coal plant complexes but pollution in the capital is extreme. As a result the city has announced the closure of all four complexes which are to be replaced by natural gas fired generators. China has also banned the construction of new coal plant in a number of metropolitan areas. Not so long ago China was completing a new coal-fired plant a week. Another big blow to the coal industry comes from cheap natural gas in North America. Between early last year and the end of next year, coal-fired stations equivalent to more than a tenth of America's power-generation capacity will close or be switched to gas. Rising mining and generation costs, often with regulatory causes, have also weakened the competitive position of coal over the past decade. European coal consumption is dropping too. In the EU it fell by 4.7% overall, and in electricity generation by 4.2% between 2008 and 2013, according to Carbon Tracker as renewables bloom. As the west and China moves away from the black stuff, it still has friends in many poorer Asian countries as coal remains the only option for affordable power and where avoiding coal use for environmental reasons is an unaffordable luxury. While the substitutive options make coal unpopular, prices continue to weaken and investors are taking fright.

Bord Gáis Energy Index

Commentary

Electricity Index



Data Source: SEMO

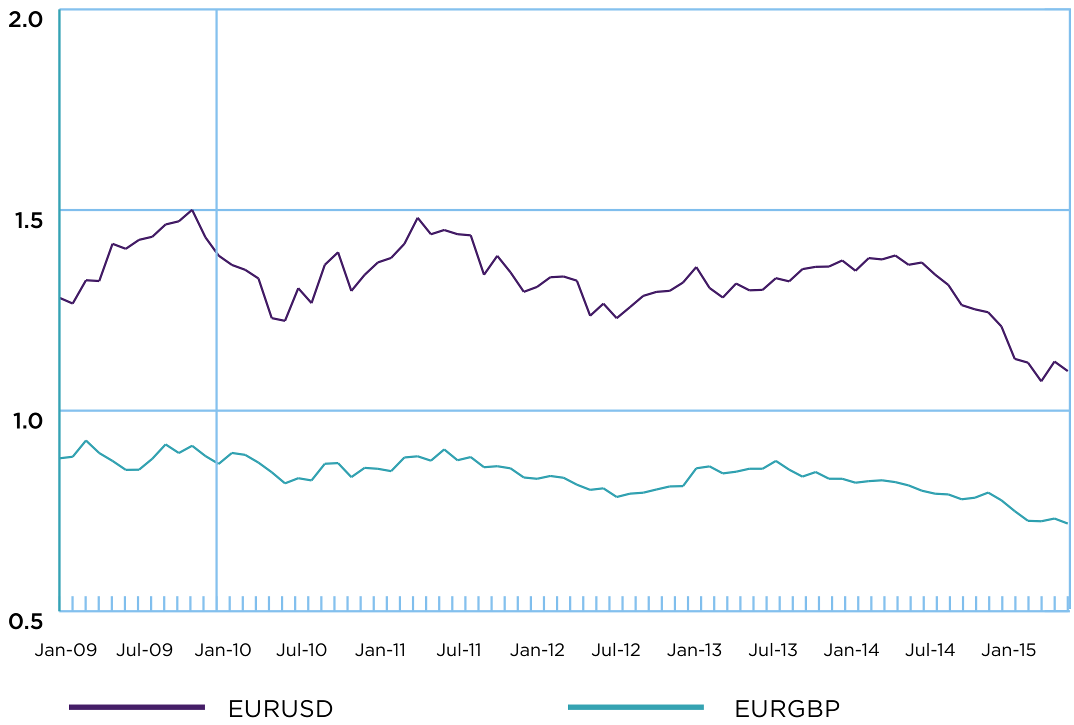
Electricity

Month-on-month the average wholesale price of electricity fell 9%. Excluding supplier capacity payments, the average wholesale price for May was €50.23/MWh compared to €55.51/MWh in April, a fall of over €5/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. At a high level, the fall in the cost of power can be explained by the drop in the wholesale cost of gas imported from the UK over the month. The Day-ahead contract averaged 43.78 pence/therm during May, down 5% on April 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. In addition to falling wholesale gas prices, the spark element was also lower month-on-month. Relatively steady running of plants contributed to lowering spark as it limited the number of plant starts and associated costs which feed through to the wholesale cost of power. A combination of falling demand and strong wind resulted in patchy running for gas plants at times, particularly at weekends. For example, in the second half of the month there were a couple of occasions where only the cheapest gas plant made it into the merit order to produce power and this was ultimately reflected in wholesale prices. High wind volumes typically force more expensive thermal plant off the system and this reduces the revenues to traditional plant which now have to spread fixed costs over a far lower volumetric output, placing further question on their commercial viability in the current market structure. As well as reduced running for essential gas powered plants, lower sparks reduce the revenue earned by many supply companies who are hedged by such generation assets.

Bord Gáis Energy Index

Commentary

FX Rates



EURUSD

-2%	1 Mth
-2%	3 Mth
-19%	12 Mth

EURGBP

-2%	1 Mth
-1%	3 Mth
-12%	12 Mth

FX Rates

During May the euro weakened against both the US dollar (oil and coal are traded in dollars) and Sterling (Ireland imports the vast bulk of its gas from the UK which is priced in Sterling). Because of the euro's weakness the wholesale price falls seen over the month were not fully captured by euro zone buyers of these internationally traded commodities. The US dollar strengthened during the month, registering a 2% gain versus the euro. Weakness in global growth and concerns over the euro zone have prompted some flight to safe haven assets. A strengthening housing and jobs market in the US has supported the appreciation in the US dollar. However, inflation continues to under-shoot the Fed's 2% target. This has led to some questioning the likelihood of a September hike in interest rates. The last time the Fed raised interest rates, George W Bush was a first term President and Greece was at the top in Europe, winning the European Cup. The recent minutes of the Fed April meeting showed members concerned about the US economic performance. With inflation still quiescent, markets believe rates will remain on hold until December. As discussed in the Oil Section, the recent rally in the US dollar has coincided with a modest fall in oil prices. Given the fundamental relationship between the two assets, an expected tightening in monetary policy later this year should apply downward pressure on crude prices.

During the month the euro also weakened versus the pound (losing 2% month-on-month), falling from a monthly close in April of .7311 to .7186 at the end of May. With the Conservatives winning a majority of seats there is potential clarity in government policy that appears to have supported sterling. A number of positive economic releases on the UK economy also contributed to the upbeat mood. Business managers in Britain's dominant service sector are buoyant. Managers in the UK's manufacturing and construction sectors also reported a modest rebound in activity in May. The UK's unemployment rate fell again in the three months to March, reaching 5.5%. Wages are up 1.9% year-on-year and with UK inflation still down at zero (UK consumer prices fell by 0.1% in April compared to the same month last year), real earnings growth continues to rise. Output in the UK's production industries also rose, by 0.7% year-on-year in March with electricity and gas leading the way. Retail sales growth was also described as "robust". Business investment also turned in a good performance in the first quarter of 2015, growing by 1.7% quarter-on-quarter. However, it wasn't all good news on the UK economic front with the economy expanding by a lacklustre 0.3% in the first quarter of 2015. This was half the rate recorded in the last quarter of 2014 and unexpectedly brings to an end the UK's run of above-

(Continued overleaf)

FX Rates (continued)

trend growth. With the Bank of England focusing once again on the amount of “slack” in the labour market in its latest Inflation Report, it is being reported that the markets don’t expect a rate rise for another year.

Given the political and economic uncertainty surrounding Greece and the potential impact on the euro zone and its currencies, the euro has again weakened in early June versus Sterling and the US dollar which has a negative impact for euro zone buyers of British gas and imported oil and coal which trade in dollars.

Market Outlook

The world remains oversupplied with oil by an estimated 1.7million barrels per day but despite this, prices have rallied in April and in the first half of May. However, there is a potential supply overhang that could push prices lower in the form of substantial US stocks (more than 100million barrels above normal seasonal levels) and the US inventory of drilled but uncompleted wells. These wells could quickly bring on 200,000 – 300,000 barrels per day on to the market if oil prices were to rise. According to IHS, if the US benchmark price of oil moves sustainably above US$65 in the short term, it will trigger more hedging and more completions as well as an outright increase in active rigs. Additional supply could also come from Iran if sanctions are soon removed, along with indications that demand will start slowing down after its rapid start in the first quarter.

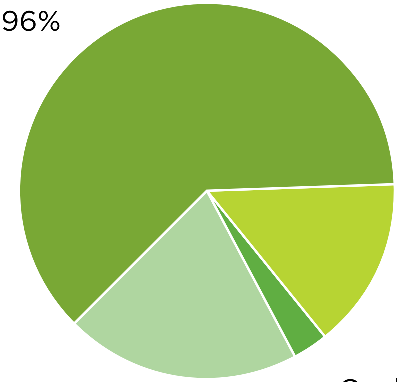
Further supplies are possible based on reports that Iraq plans to increase exports to 3.75million barrels per day in June. The additional shipments are equal to about 800,000 barrels per day, or more than what comes from Qatar. And of course, OPEC's robust production levels at between 30 and 31million barrels per day, principally from Saudi Arabia maintaining output at 10+million barrels per day, are a main reason behind the supply glut. Other OPEC members are also producing as much as they can in an attempt to maintain market share and revenues (OPEC pumped an estimated 31.22million barrels a day in May, exceeding their collective target for the 11th consecutive month and hitting its highest level since it pumped 31.53million barrels per day in August 2012). Any excess over the 30million OPEC groupwide target is helping to keep markets well supplied, especially given that the call on the organisation is estimated at only 29.2million barrels per day currently. In this context, in early June OPEC decided to collectively stick to its policy of unconstrained output for another six months. The group will now keep its collective output level unchanged at 30million barrels per day. This is the second time in six months that OPEC decided to take no action amid a global glut of crude and weak oil prices. The cartel will meet again on 4 December.

For some OPEC orchestrated a global price slump that was meant to shut down America's debt-laden, high-cost frackers, restoring OPEC's clout. But the American producers of unconventional oil have proved thrifty, innovative and resilient. Falling prices did bring a mild shake-out, but it also cut operating costs for the survivors—by a fifth, says Pioneer Natural Resources, a leading shale producer. Goldman Sachs now reckons that Brent crude will fall to US$55 by 2020. The big oil companies are burning cash, squeezed between dividend-hungry investors and depleting oil fields which they can ill afford to replace. Their big bets in the Arctic, in the Canadian oil sands and deep offshore look way too costly on current prices. An investment drought will bring a supply crunch, which may eventually lift the price, especially if demand grows. But in the short run only war, revolution or disaster can plausibly make oil much dearer. No one sane wants any of those.

Whilst the world struggles to digest record quantities of oil production, the G7 has said that fossil fuel should not be burned in any sector of the economy by the end of the century. According to the BBC "the world's leaders have effectively signalled the end of the fossil fuel era that has driven economies since the Industrial Revolution". How the world makes the transition, especial amid an oil boom and low prices, is the burning question.

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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