

# Organization of the Petroleum Exporting Countries

# Monthly Oil Market Report

*January 2013*

*Feature Article:  
Fiscal uncertainties persist*

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Helferstorferstrasse 17, A-1010 Vienna, Austria

Tel +43 1 21112 Fax +43 1 2164320 E-mail: [prid@opec.org](mailto:prid@opec.org) Web site: [www.opec.org](http://www.opec.org)



# Oil Market Highlights

§ The **OPEC Reference Basket** fell marginally in December to settle at \$106.55/b. In yearly terms, the Basket averaged \$109.45/b in 2012, a gain of \$1.99 over the previous year. In the crude futures markets, the front-month WTI contract rose in December but still registered its first annual loss since 2009, weighed down by rising US shale oil production. Despite slipping marginally in December, ICE Brent saw a further increase in 2012. Outages in the North Sea, geopolitical considerations, and increased trading volumes in the ICE Brent contract have all provided support for the Brent price. Money managed increased net long positions on the Nymex and ICE in December by 64,787 contracts to 289,004 lots, a gain of almost 30%. For the year, speculative activities and trading volumes in the ICE Brent market jumped 70% and 12% respectively, compared to a decline of 10% and 19% for Nymex WTI.

§ **World economic growth** is estimated at 3.0% in 2012 and 3.2% in 2013, unchanged from the previous report. Following last month's revision, US growth expectations for 2013 remain at 2.0%, down from an upwardly-revised 2.3% for last year. In Japan, fiscal and monetary stimulus might lift growth to 0.7%, after an estimated expansion of 2.0% in 2012. The Euro-zone is still forecast to recover to 0.1% after contracting by 0.4% last year. China is benefiting from increasing global trade and is forecast to expand by 8.0% in 2013, following 7.6% growth in 2012. After 5.5% growth last year, India is expected to grow at a higher 6.4% in 2013.

§ The forecast for **world oil demand** growth in 2013 remains unchanged at 0.8 mb/d, in line with the growth seen in the previous year. This year, the impact of economic turbulence on oil demand should be considerably milder than in previous years. The OECD region is expected to continue to contract this year by 0.2 mb/d, although at only half the rate seen in 2012. The non-OECD region is projected to consume about 1 mb/d more than last year. Transportation and industrial sectors are expected to provide most of the consumption this year and to be the source of most of the growth.

§ **Non-OPEC oil supply growth** in 2012 is estimated at 0.5 mb/d, broadly in line with the previous assessment. In 2013, non-OPEC supply is expected to increase by 0.9 mb/d. Growth is seen coming mainly from the US, Canada, South Sudan and Sudan, Brazil, and Australia, while Norway, Mexico, Syria, and the UK are seen declining in 2013. OPEC NGLs are expected to increase by 0.2 mb/d in 2013. In December 2012, total OPEC crude production averaged 30.37 mb/d, according to secondary sources, indicating a decline of 465 tb/d from the previous month.

§ **Product markets** in the Atlantic Basin continued to fall in December as sentiment remained bearish on increasing supplies, following the return of refineries from seasonal maintenance. A lack of support from the winter season – as mild weather dampened heating oil demand – hit cracks at the middle of the barrel and caused margins to fall further. In Asia, refinery margins exhibited a slight recovery on the back of rising seasonal demand, supporting middle distillates and fuel oil.

§ In the **tanker market**, average VLCC spot freight rates were stable, retaining the gains achieved last month. Suezmax freight rates rose on all reported routes as a result of increased activities. Aframax freight rates were mixed, but declined on average due to limited demand amid ample vessel supply. Clean tanker freight rates increased on the back of a rise in activities, heading into the year-end holidays. OPEC spot fixtures rose 2% to average 14.54 mb/d, while OPEC sailings increased 0.5% to average 24.38 mb/d.

§ Preliminary data for November shows that total **OECD commercial oil stocks** experienced a seasonal decline of 15.3 mb. Despite the fall in total stocks, inventories showed a surplus of 16.0 mb compared to the five-year average. However, components differed with crude showing a gain of 51 mb and products a draw of 29 mb. In days of forward cover, OECD commercial stocks stood at nearly 58 days in November, a gain of almost two days over the five year average. US total commercial oil stocks fell in December by 3.0 mb, but still showed a surplus of 35 mb over the five year average. The decline was attributed to crude, which fell by 11.8 mb, while products rose 8.8 mb.

§ **Demand for OPEC crude** in 2012 saw only a marginal revision from the previous assessment to stand at 30.1 mb/d, representing a decline of 0.2 mb/d from the previous year. Required OPEC crude in 2013 is forecasted to average 29.6 mb/d, down 0.4 mb/d from the previous year, following a downward adjustment of 0.1 mb/d from the previous report.

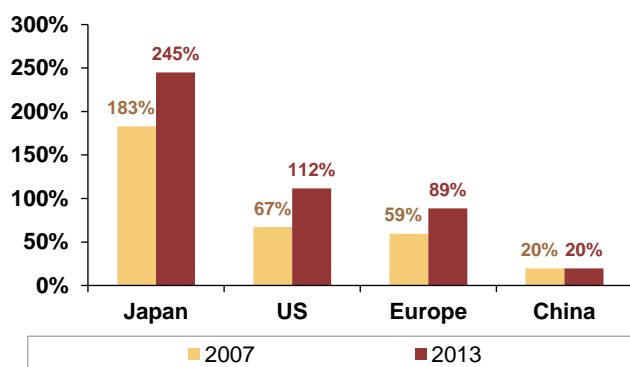


## Fiscal uncertainties persist

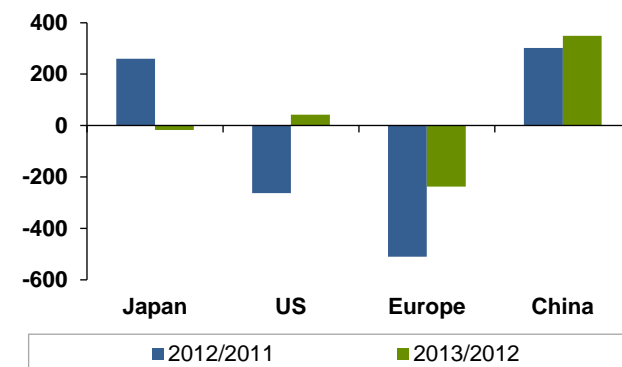
For the past weeks, the outcome of negotiations in the US to avoid the ‘fiscal cliff’ – a term that describes the automatic spending cuts and tax increases set to take place at the beginning of 2013 – has been a major uncertainty hanging over the US economy. Despite recent data showing an improvement in the country’s economy, the lack of clarity about the outcome of these talks over the past months led to a deceleration in business spending and investments at the end of the year, as well as a decline in consumer confidence.

Had it been triggered, the fiscal cliff was seen as representing a potential of drag of around 4 percentage points (pp) to US GDP. In the previous *MOMR*, the forecast growth of 2% for the US in 2013 anticipated a drag of around 1.5 pp. The current agreement – which extends tax cuts for all but high income brackets, continues unemployment benefits for an additional 12 months, and postpones spending cuts for another 2 months – is in line with this assumption, so this year’s growth forecast remains unchanged. If, however, no new solution is found when the postponed spending cuts come due, then an additional hit of around 0.5 pp to GDP will have to be accommodated.

**Graph 1: Gross debt to GDP ratio**



**Graph 2: Oil demand growth, y-o-y change, tb/d**



Looking ahead, two further challenges closely related to the fiscal cliff negotiations remain: authorization for 2013 Federal budget spending by 27 March and the raising of the debt ceiling. The debt ceiling would have already been breached at the end of last year had the US Treasury not taken some measures to push this off to allow time for an agreement. This is expected to provide an additional two months. As in 2011 and 2012, it is hoped that lawmakers in Congress will manage to arrive at a compromise.

The US is not the only country faced with fiscal challenges. In Japan, the newly-elected government has announced bold fiscal and monetary stimulus actions. Some 10.3 trillion yen in fresh fiscal stimulus spending should provide a boost to economic growth in Japan. This in combination with massive monetary stimulus by the Bank of Japan in connection with an inflation target of 2% is aimed at reviving lasting growth in the economy. It remains to be seen if these measures will have a profound impact in an economy faced with many structural issues and the highest gross debt ratio of the major economies of about 2.5 times its GDP (**Graph 1**). The forecast for Japan’s GDP has been raised from 0.6% to 0.7%, although developments will need to be monitored closely to see if a larger rise should be considered.

In the Euro-zone, the emergency facilities that were implemented in the previous year by Euro-zone leaders and the European Central Bank seem to have led to reduced government bond yields and have provided a base for growth in the economy for this year, which is forecast to expand by 0.1%. However, with general elections in Italy in February and in Germany later this year, there remains some uncertainty about the near-term future development.

The fragile recovery of the global economy in the second half of last year has already had a positive impact on the growth in exports of emerging economies. In December, India posted a monthly increase of 11.3% and China a rise of 11.0%. This may allow room for new fiscal policy developments in these important emerging economies in the current year.

In terms of oil demand (**Graph 2**), the US is expected to remain flat in 2013 after two consecutive years of declines. US consumption could return to negative territory if the economy were to suffer a setback due to fiscal issues. European consumption is forecast to shrink further in 2013, but at slower rate given the expected improvement in economic growth. In Japan, oil consumption is projected to remain flat this year due to the strong increase in oil demand last year resulting from high demand for crude for direct burning for electricity generation following the shutdown of Japan’s nuclear facilities. The recent stimulus plan should prevent the country’s oil demand from decreasing. Chinese oil demand in 2013 could be higher-than-expected as exports and investments are picking up.

As has been seen, a positive outcome in the countries undergoing fiscal transition could further support global economic growth this year – currently forecast at 3.2% – and thus provide a stimulating factor for global oil demand.



# Crude Oil Price Movements

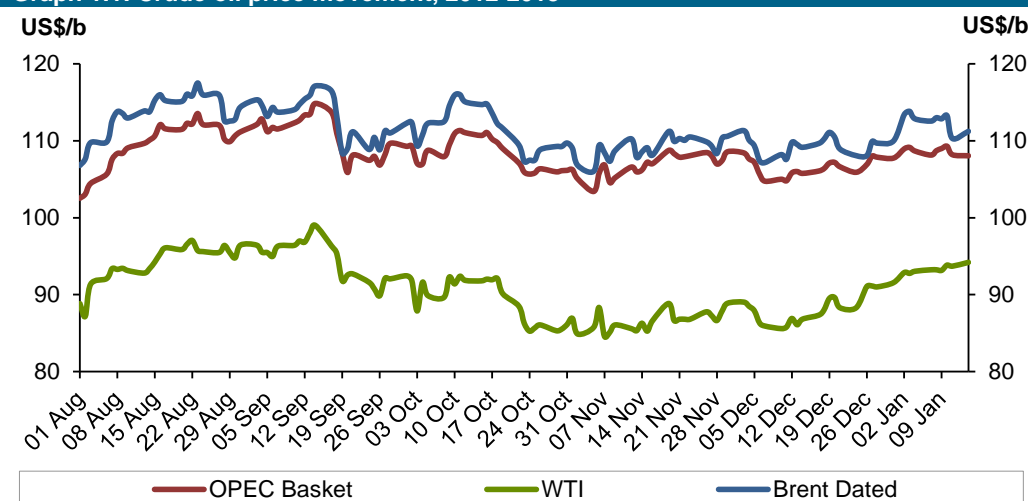
*The OPEC Reference Basket was down marginally in December*

## OPEC Reference Basket

In December the OPEC Reference Basket decreased marginally to settle at \$106.55/b. However, in annual terms, the Basket posted its third consecutive yearly gain to reach a record high of \$109.45/b in 2012. The Basket rose \$1.99 or 1.85% over the previous year. The y-o-y increase was well below the significant 30% rise witnessed in 2011. Despite the stagnation in global economic growth, the upward movement in 2012 prices were supported throughout the year by supply disruptions in the North Sea fields and geopolitical factors. In contrast, the downward movement of the Basket in December was driven mainly by the ease in winter crude oil demand, especially in Northeast Asia, which negatively affected the performance of the Dubai-related components of the Basket.

On a monthly basis, the OPEC Reference Basket slipped slightly to an average of \$106.55/b in December, representing a decline of 31¢/b or 0.29% from the previous month.

**Graph 1.1: Crude oil price movement, 2012-2013**



The performance of Basket components in December was mixed. While Brent-related crudes improved, Dubai-related Middle Eastern grades fell over the month along with Venezuela's Meroy. Light sweet Mediterranean crudes have been supported by healthy Atlantic Basin middle distillate demand, record low distillate stocks, and lack of certainty over West African and Libyan loading programmes, amid some production problems. Crudes that are benchmarked against the medium sour market in the Mediterranean also benefited from the improving Urals markets, amid tighter regional sour supply. Iraqi Kirkuk exports from Ceyhan were subject to numerous delays. Ecuador's Oriente, along with medium sour crudes in the US market, has been supported by strong demand on the US Gulf Coast as refiners have increased distillate output amid higher winter demand, low stocks, exports to South America and falling gasoline margins. The sour Middle Eastern crude components weakened as poor margins began to chip into crude oil buying requirements. Also, increasing Russian ESPO competition affected these grades' performance over the month.

Spot premiums above OSPFs for most grades moved from a premium into negative territory. Brent-related crudes, Saharan Blend, Es Sider and Bonny Light improved by almost 30¢. Middle Eastern spot components and multi-destination grade values fell by around 85¢ and 35¢, respectively. In Latin American, while the Oriente registered a hefty \$1.53 gain in December, Meroy values slipped over \$1.60 as WTS – which is used to calculate its pricing formula – is currently trading at a steep discount to WTI. For the year, all Basket components settled above to significantly higher than \$100/b, for the first time.

On 15 January, the Basket price stood at \$108.35/b, \$1.80 above December's average.

**Table 1.1: OPEC Reference Basket and selected crudes, US\$/b**

|                              | <u>Nov 12</u> | <u>Dec 12</u> | <u>Change<br/>Dec/Nov</u> | <u>2011</u>   | <u>2012</u>   |
|------------------------------|---------------|---------------|---------------------------|---------------|---------------|
| <b>OPEC Reference Basket</b> | <b>106.86</b> | <b>106.55</b> | <b>-0.31</b>              | <b>107.46</b> | <b>109.45</b> |
| Arab Light                   | 108.47        | 108.35        | -0.12                     | 107.82        | 110.22        |
| Basrah Light                 | 105.45        | 105.04        | -0.41                     | 106.17        | 107.95        |
| Bonny Light                  | 110.91        | 111.19        | 0.28                      | 114.15        | 113.68        |
| Es Sider                     | 109.01        | 109.29        | 0.28                      | 111.90        | 111.87        |
| Girassol                     | 108.91        | 108.92        | 0.01                      | 111.57        | 112.21        |
| Iran Heavy                   | 106.80        | 106.56        | -0.24                     | 106.11        | 109.05        |
| Kuwait Export                | 106.82        | 106.19        | -0.63                     | 105.63        | 108.93        |
| Marine                       | 107.12        | 106.25        | -0.87                     | 106.53        | 109.25        |
| Merey                        | 93.28         | 91.68         | -1.60                     | 97.94         | 100.03        |
| Murban                       | 109.69        | 108.90        | -0.79                     | 109.77        | 111.75        |
| Oriente                      | 97.15         | 98.68         | 1.53                      | 101.03        | 102.76        |
| Saharan Blend                | 109.36        | 109.89        | 0.53                      | 112.92        | 111.51        |
| <b>Other Crudes</b>          |               |               |                           |               |               |
| Brent                        | 109.11        | 109.29        | 0.18                      | 111.36        | 111.63        |
| Dubai                        | 107.22        | 106.34        | -0.88                     | 106.21        | 109.06        |
| Isthmus                      | 99.37         | 99.03         | -0.34                     | 105.64        | 106.53        |
| Mars                         | 102.95        | 103.96        | 1.01                      | 107.54        | 106.79        |
| Minas                        | 108.26        | 108.96        | 0.70                      | 114.79        | 116.56        |
| Urals                        | 108.23        | 108.21        | -0.02                     | 109.19        | 110.49        |
| WTI                          | 86.59         | 88.23         | 1.64                      | 94.99         | 94.09         |
| <b>Differentials</b>         |               |               |                           |               |               |
| WTI/Brent                    | -22.52        | -21.06        | 1.46                      | -16.38        | -17.55        |
| Brent/Dubai                  | 1.89          | 2.95          | 1.06                      | 5.15          | 2.58          |

Note: Arab Light and other Saudi Arabian crudes as well as Basrah Light preliminarily based on American Crude Market (ACM) and subject to revision.

Source: Platt's, Direct Communication and Secretariat's assessments.

### The oil futures market

Crude futures ended December and the year in a different direction

The crude oil futures markets ended December and the year moving in a different direction. While posting a gain in December, front-month WTI registered its first annual loss since 2009. In contrast, the front-month ICE Brent posted its third consecutive annual gain, despite slipping marginally in December. In 2012, increasing US shale oil production has weighed on WTI, while geopolitical considerations, outages in the North Sea and increased trading volumes in the ICE Brent contract have all supported the Brent price. Unlike 2011, crude oil prices in 2012 were generally stable, especially considering the political turmoil that spread through many countries in the key producing areas of the Middle East. Meanwhile, the boosted production in US shale oil was offset by the loss of production in North Sea, Sudan, Yemen and elsewhere.

In December, amid supportive US commercial crude stock data, strong economic indicators and perceived progress in the negotiation to prevent a possible US budgetary fiscal cliff, the Nymex WTI front-month contract managed a slight increase, ending the month with a return above \$90/b, the highest month-end settlement since mid-October. News that the Seaway pipeline would be expanded from 150,000 b/d to 400,000 b/d as soon as early January, also supported WTI prices. The expanded capacity will help bring more crude from Cushing to the Gulf Coast, alleviating the glut of discounted landlocked crude in the US. Furthermore, it was announced that the pipeline should reach its final designed capacity of 850,000 b/d as soon as 1Q14, suggesting that the expansion works are well underway.

In contrast, fears over the impact of the impending budgetary fiscal cliff in the US and persistent weakness in the Euro-zone dragged the ICE Brent front-month lower in December. Earlier in the month, the European Central Bank said the Euro-zone's economic outlook remains poor. The warning came on top of reduced growth forecasts for the UK.

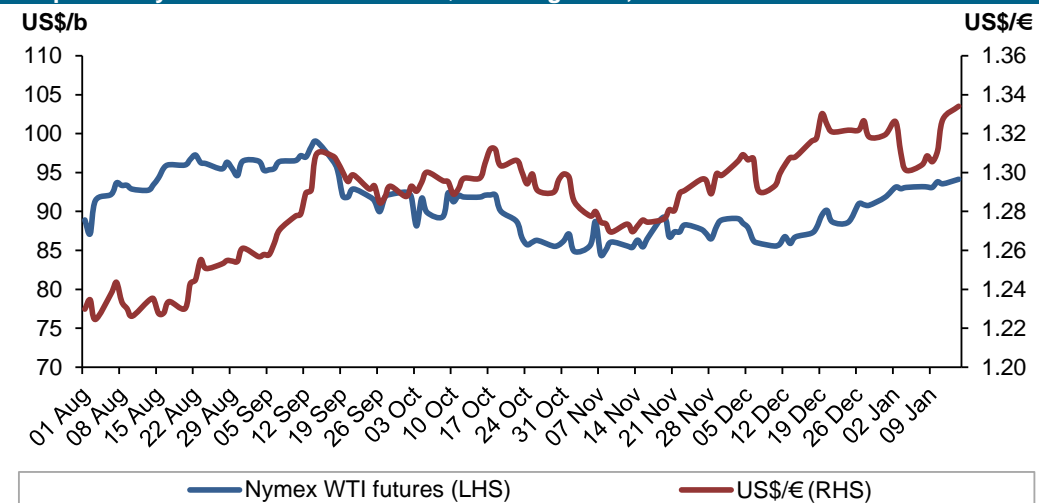
On Nymex, the WTI front-month improved by \$1.49 to average \$88.23/b in December, while ICE Brent decreased by 31¢ to average \$109.22/b, below the key \$110/b level. Compared to the gains of over 30% in the previous year, the front-month WTI average



was down by almost 1% in 2012 at \$94.20/b, while ICE Brent was slightly higher by 0.73% at \$111.70/b.

On 15 January, ICE Brent stood at \$110.30/b and Nymex WTI at \$93.28/b.

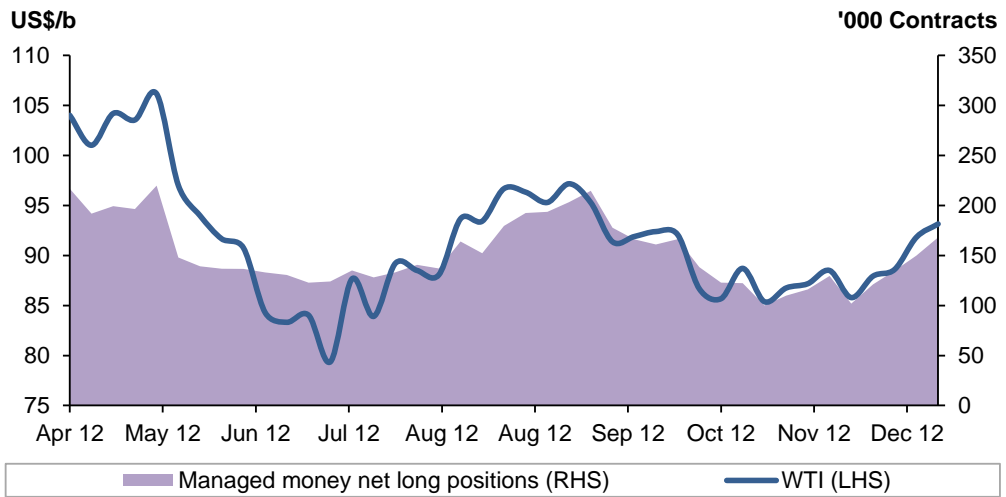
**Graph 1.2: Nymex WTI futures and US\$ exchange rate, 2012-2013**



Data from the US Commodity Futures Trading Commission (CFTC) showed that on average speculators increased their net long positions in US crude oil futures and options positions in the month of December. Hedge funds and other large investors increased their net long positions on the Nymex by 33,797 contracts to 149,893, an increase of almost 30%. This is the biggest increase since August, both in absolute and relative terms, and is in line with the recent announcement that the Seaway pipeline expansion is to start up next month. On the other hand, ICE Brent managed money net long positions in December have increased by 30,990 lots to 139,111 contracts. Moreover, lately the net length in Nymex WTI and ICE Brent managed money positions have been almost equal. Most recent data even indicates that Brent surpassed WTI in net length. While length in WTI positions has been ailing in recent months, ICE Brent positions are currently on the upside in a historical perspective. This is in line with an increase in total open interest in the ICE Brent crude contract. The contract is catching up with Nymex WTI as a growing number of commodity indices are increasing the weighting of ICE Brent and managed money is following. In addition to this, the backwardated structure of Brent encourages net length due to rollover profits. Compared to the last year the ICE Brent managed money net long positions increased by a hefty 70%, while Nymex positions were lowered by almost 10%. The total open interest volume in the two markets decreased in December by 52,540 contracts to 3.65 million lots.

The daily average traded volume during December for WTI Nymex contracts decreased by 95,648 lots to average 430,791 contracts. ICE Brent volume also dropped by 96,563 contracts to 439,984 lots. However, as noted above, the increasing importance of ICE Brent over 2012 was reflected in the substantial increase of the total volume traded during the year. In 2012, monthly trading volumes of ICE Brent have been constantly above those of Nymex WTI and in the January-December period, the daily average of ICE Brent trades was 13,760 lots, or 2.5%, above Nymex WTI. For the first time, ICE Brent trading volumes overtook those of Nymex WTI by more than 6.5 million contracts. In 2012, total traded Nymex WTI volume was 141 million contracts, compared to 175 million lots in 2011, 19% lower y-o-y. ICE Brent traded volume was 148 million lots versus 132 million contracts in 2011, a 12% increase y-o-y.

**Graph 1.3: Nymex WTI price vs. speculative activity, 2012**



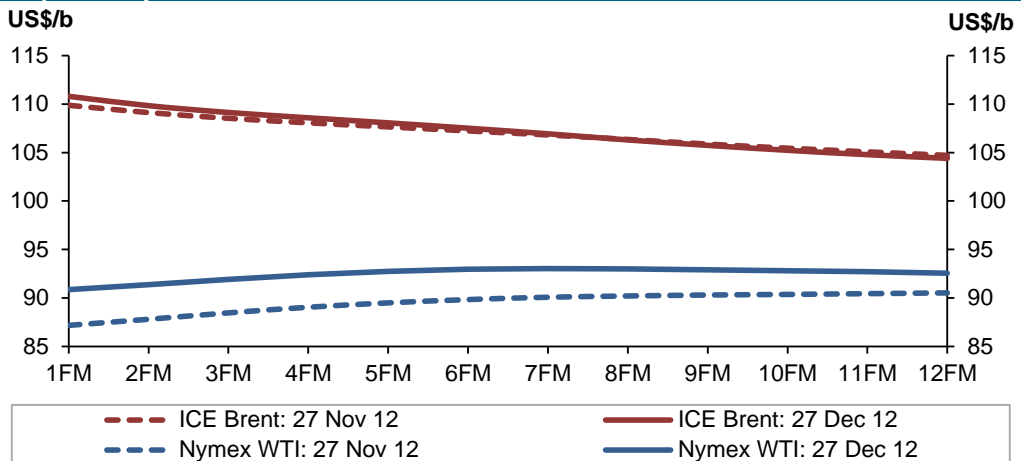
*Nymex structure remained in contango and ICE Brent further widened its backwardation*

**The futures market structure**

Nymex WTI market structure remained in contango in December, with the first month versus second month time spread averaging around 55¢/b, widening by 2¢ from November. However, the spread was steadily narrowing mid-month onward with the announcement of the start of the Seaway pipeline expansion by mid-January. The expansion of the Seaway pipeline to 400,000 b/d from 150,000 b/d should help reduce the crude oil glut around Cushing, Oklahoma, the delivery point of the US benchmark futures contract. Meanwhile, ICE Brent market structure widened its backwardation supported by healthy Atlantic Basin light sweet crude demand and supply distribution in West African and Libyan crudes. The spread between the second and the first month of the ICE Brent contract averaged around \$1/b in December compared to 95¢/b in the previous month.

The transatlantic (Brent vs. WTI) spread in December was at more than double the level from year ago. On average, the Brent-WTI differential was at \$20.99/b in December compared to \$9.15/b the same time in the previous year. But the reopening of the Seaway pipeline in mid-January, at an expected 400,000 b/d capacity, should alleviate some of the pressure on the overstocked midcontinent. The line runs from Cushing to the Texas Gulf Coast. Forward markets show the discount of WTI to the Brent complex tightening to \$7/b by the end of 2015.

**Graph 1.4: Nymex WTI and ICE Brent forward curve, 2012**



FM = future month.

**Table 1.2: Nymex WTI and ICE Brent forward price, US\$/b**

| <b>Nymex WTI</b> |               |               |               |               |                |  |
|------------------|---------------|---------------|---------------|---------------|----------------|--|
|                  | <u>1st FM</u> | <u>2nd FM</u> | <u>3rd FM</u> | <u>6th FM</u> | <u>12th FM</u> |  |
| 27 Nov 12        | 87.18         | 87.81         | 88.47         | 89.84         | 90.53          |  |
| 27 Dec 12        | 90.87         | 91.37         | 91.91         | 92.97         | 92.55          |  |
| <b>ICE Brent</b> |               |               |               |               |                |  |
|                  | <u>1st FM</u> | <u>2nd FM</u> | <u>3rd FM</u> | <u>6th FM</u> | <u>12th FM</u> |  |
| 27 Nov 12        | 109.87        | 109.12        | 108.53        | 107.23        | 104.71         |  |
| 27 Dec 12        | 110.80        | 109.83        | 109.13        | 107.51        | 104.40         |  |

FM= future month.

### The light-sweet/heavy-sour crude spread

The light-sweet/heavy-sour differentials were mixed, ranging from unchanged to slightly wider. While the healthy middle distillate cracks earlier in the month supported the performance of most light sweet crudes, supply issues and refineries returning from maintenance buoyed the medium/heavy sour grades in the second half of the month.

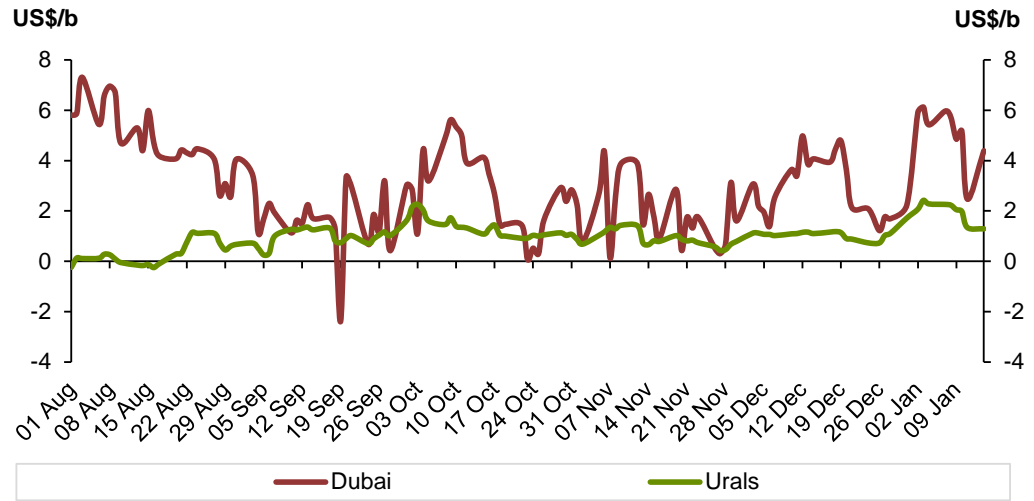
In Asia, heavy crude differentials were lower as crude demand started to wane with the region edging nearer spring maintenance. Light-sweet crudes fared better as improving middle distillate cracks buoyed differentials and Japanese direct-burning crude requirements kicked-in. Grades with a high-distillate yield are in strong demand in Asia as large parts of the region are forecast to experience a colder-than-average winter. Tapis monthly average premium to Dubai in December widened to \$8.46/b, compared to a premium of \$6.68/b in November, an increase of \$1.78/b.

In Europe, the premium of Dated Brent over Urals Med has narrowed considerably since early December when light sweet crudes were at centre stage amid healthy distillate margins. Nevertheless, on average the spread widened by 20¢ to \$1.08/b. A tighter total loading schedule for Russian grade and renewed supply concerns over competing Iraqi grades helped to lift Urals. Additionally, over the month, the regional fuel oil crack temporarily managed to pull off some gains, before easing again later in the month.

The US Gulf Coast (USGC) sweet and sour grades spread, represented by the LLS/Mars spread, remained volatile in December, but on average it was virtually unchanged. The premium of LLS over Mars reached more than \$6/b earlier in the month only to fall below the \$5/b mark. The widening in the spread came in line with the rebound of US light distillate cracks, although US shale production remains extensive. Mars discount to light sweet LLS then narrowed, finding support from the drop in sour crude shipments to the US Gulf coast ahead of year-end tax reckoning and the gradual startup of 325,000 b/d of new crude capacity at Motiva's upgraded 600,000 b/d Port Arthur refinery in Texas. The LLS-Mars spread averaged \$5.60/b in December. Meanwhile, the end of maintenance at the US refiner Philips 146,000 b/d Borger refinery in Texas helped to stabilize the medium sour WTS crude differential to WTI. Alaskan medium sour ANS has been rising relative to WTI ahead of the anticipated restart of Chevron's Richmond California refinery.

*Light-sweet/heavy-sour spread was unchanged to slightly wider*

**Graph 1.5: Brent Dated vs. Sour grades (Urals and Dubai) spread, 2012-2013**



# Commodity Markets

*A slight rise in commodity prices in December*

## Trends in selected commodity markets

In December 2012, energy and non-energy prices rose by 0.4% and 1.1% m-o-m, respectively. Agriculture prices declined by 0.6% m-o-m with food prices being down by 1.3% m-o-m. Precious metals fell by 2% m-o-m while base metals posted a sharp gain of 4.8% m-o-m.

Some commodity prices, especially base metals, benefited somewhat from an improvement in the macroeconomic data released in November and December, particularly on renewed positive sentiment on China and US GDP growth. Nevertheless, the remaining macroeconomic uncertainties represent a risk. Chinese exports to the EU declined 7.9% in 4Q12, and strong risk aversion still remains. The total open interest volume (OIV) in major commodity markets in the US fell with almost all groups posting a drop, which points to a bearish and cautious investor mood.

The base metal price recovery in the last weeks of November and December resulted mainly from short-covering and the outlook for 2012 relied especially on a sustained economic and domestic demand growth in China. So far, the fundamentals of base metals have shown little sign of strengthening.

**Table 2.1: Commodity price data, 2012**

| Commodity  | Unit     | Monthly averages |          |          | % Change |         |         |
|--|----------|------------------|----------|----------|----------|---------|---------|
|  |          | Oct 12           | Nov 12   | Dec 12   | Oct/Sep  | Nov/Oct | Dec/Nov |
| <i>World Bank commodity price indices for low and middle income countries (2005 = 100)</i> |          |                  |          |          |          |         |         |
| <b>Energy</b>  |          | 183.7            | 180.9    | 181.6    | -2.6     | -1.5    | 0.4     |
| Coal, Australia  | \$/mt    | 81.9             | 85.9     | 92.9     | -8.0     | 4.9     | 8.1     |
| Crude oil, average   | \$/bbl   | 103.4            | 101.2    | 101.2    | -2.7     | -2.2    | 0.0     |
| Natural gas, US  | \$/mmbtu | 3.3              | 3.5      | 3.3      | 16.7     | 6.6     | -5.6    |
| <b>Non Energy</b>  |          | 188.8            | 184.9    | 186.9    | -1.6     | -2.0    | 1.1     |
| <b>Agriculture</b>   |          | 194.2            | 190.1    | 188.9    | -3.0     | -2.1    | -0.6    |
| <b>Food</b>  |          | 214.4            | 210.2    | 207.6    | -4.0     | -1.9    | -1.3    |
| Soybean meal   | \$/mt    | 601.0            | 579.0    | 580.0    | -7.0     | -3.7    | 0.2     |
| Soybean oil  | \$/mt    | 1,175.0          | 1,135.0  | 1,163.0  | -8.4     | -3.4    | 2.5     |
| Soybeans   | \$/mt    | 617.0            | 589.0    | 607.0    | -7.9     | -4.5    | 3.1     |
| <b>Grains</b>  |          | 261.1            | 261.8    | 253.7    | 0.1      | 0.3     | -3.1    |
| Maize  | \$/mt    | 321.2            | 321.6    | 308.6    | 0.1      | 0.1     | -4.0    |
| Wheat, US, HRW   | \$/mt    | 358.2            | 360.8    | 348.0    | 1.4      | 0.7     | -3.6    |
| Sugar World  | ¢/kg     | 44.8             | 42.6     | 42.6     | 1.6      | -4.8    | -0.2    |
| <b>Base Metal</b>  |          | 168.8            | 163.2    | 171.1    | -1.3     | -3.3    | 4.8     |
| Aluminum   | \$/mt    | 1,974.3          | 1,948.8  | 2,086.8  | -4.4     | -1.3    | 7.1     |
| Copper   | \$/mt    | 8,062.0          | 7,711.2  | 7,966.5  | -0.3     | -4.4    | 3.3     |
| Iron ore, cfr spot   | ¢/dmtu   | 114.0            | 120.4    | 128.5    | 14.6     | 5.6     | 6.8     |
| Lead   | ¢/kg     | 214.2            | 218.2    | 228.0    | -1.6     | 1.9     | 4.5     |
| Nickel   | \$/mt    | 17,168.7         | 16,335.4 | 17,448.5 | -0.7     | -4.9    | 6.8     |
| Tin  | ¢/kg     | 2,123.4          | 2,071.3  | 2,288.1  | 2.2      | -2.5    | 10.5    |
| Zinc   | ¢/kg     | 190.4            | 191.2    | 204.0    | -5.3     | 0.4     | 6.7     |
| <b>Precious Metals</b>   |          |                  |          |          |          |         |         |
| Gold   | \$/toz   | 1,746.6          | 1,721.6  | 1,684.8  | 0.1      | -1.4    | -2.1    |
| Silver   | ¢/toz    | 3,318.7          | 3,277.3  | 3,187.5  | -1.3     | -1.2    | -2.7    |

Source: World Bank, Commodity price data.

The **Henry Hub (HH) natural gas price index** declined by 5.6% m-o-m compared to a 6.7% fall in November due to warmer-than-normal winter weather and weak fundamentals on the supply side, as stocks have been increasing.

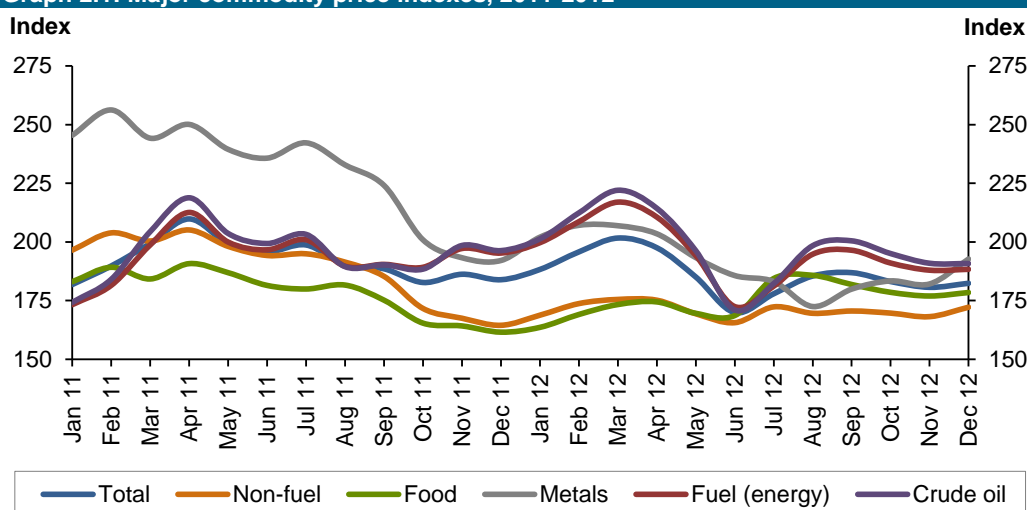
The **agricultural price index** decreased slightly by 0.6% m-o-m in December compared to a 2.1% drop in the previous month, with food prices retreating by 1.2% in December compared to a 1.9% fall in the previous month, due to strong price losses in grains, sugar and oilseed. Greater domestic supplies of grains in the coming months than had been expected in December weighed on these markets together with a selling off in the futures markets.

Imports from China in November for corn declined 15% m-o-m and for wheat by 66.4% m-o-m. Sugar imports also declined by 62% m-o-m and further weakness in the months ahead is expected, owing to record production of sugar in Brazil and good production in China. On a monthly basis, only cocoa, cotton, palm oil and soybean imports posted a rise.

ICE sugar prices reported major losses across soft commodities in early January due to ample supply, essentially due to high Brazilian production prospects.

A third consecutive global surplus is expected in 2012-13, which is forecast at 5.1 mn tonnes, with high production in Brazil continuing to weigh on prices. Data from Brazil's Unica reported that, as of 31 December, total sugar production rose by 8.4% y-o-y. Likewise, there was a 2.5% y-o-y rise in sugar output during October-December in India, according to the India Sugar Mills Association (ISMA). India, the world's largest sugar consumer and the second-largest producer after Brazil, imposes a 10% tax on sugar imports. Nevertheless, recent reports from Reuters suggested that the government has no immediate plans to raise the tax on sugar imports.

**Graph 2.1: Major commodity price indexes, 2011-2012**



**Commodity price index, 2005 = 100**

- Total: Includes both fuel and non-fuel.
- Non-fuel: Includes food and beverages and industrial inputs.
- Food: Includes cereal, vegetable oils, meat, seafood, sugar, bananas and oranges.
- Metals: Includes copper, aluminum, iron ore, tin, nickel, zinc, lead and uranium.
- Fuel (energy): Includes crude oil (petroleum), natural gas and coal.
- Crude oil: Is the simple average of three spot prices: Dated Brent, West Texas Intermediate and Dubai Fateh.

Source: International Monetary Fund.

*Base metal prices saw a strong rise in December mainly due to speculative activity*

The **World Bank's base metal price index** went up by 4.8% m-o-m in December following a fall in November. Additional positive macroeconomic data on China and the performance of the US, as well encouraging signs coming from Euro-zone leaders and agreement on the US fiscal cliff, boosted a short-lived rise in prices for December.

Base metal markets reacted to improving sentiment regarding Chinese and US growth. Nevertheless, falling foreign exports remain a challenge for Chinese growth in 2013. Chinese exports to the EU declined by 7.9% in 4Q12. Additional positive factors explaining the rebound of base metal prices in December were the reports that China is expected to soon resume stockpiling of base metals and expectations that China will announce a further series of stimulus measures, including a likely lowering of reserve requirements. Chinese industrial output, electricity production, retail sales, residential sales, fixed asset investment and consumer prices during November have been reported higher on a y-o-y basis.

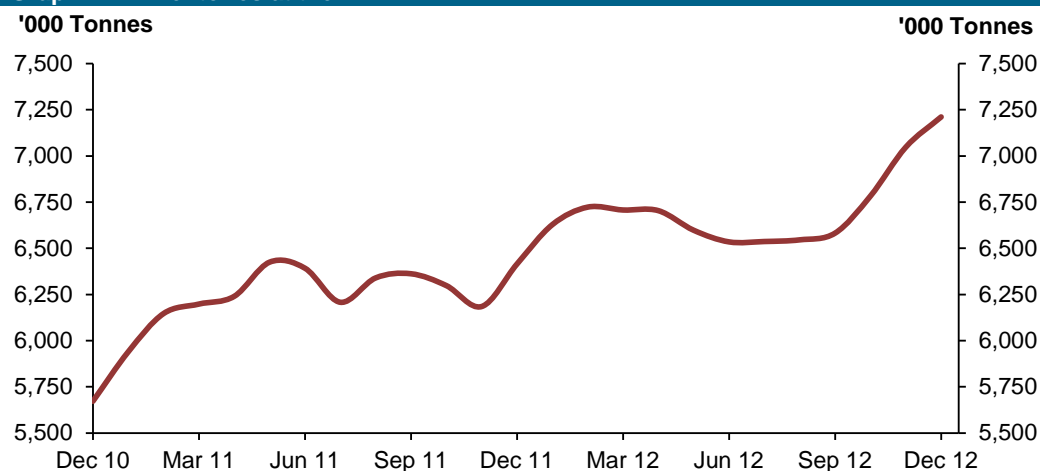
Concerning Chinese base metal imports for November, there has been a mixed trend in base metal imports from China for November. Copper demand remained weak with

rising estimated bonded warehouse stocks. Furthermore, growing base metal stocks in China, especially in copper, point to lower prices in 2013.

In the short term, base metals may increase on the chance to go short due to the outlook for surpluses in 2013. Nevertheless, ample inventories of several base metals in China make it very difficult to accurately forecast any demand improvement.

There is an outlook for surpluses in the base metals markets for 2013, except for tin.

**Graph 2.2: Inventories at the LME**



Source: London Metal Exchange.

**Gold prices** also declined by 2.1% compared to 1.4% in the previous month, owing to a better macroeconomic outlook, weak Asian demand and a steep decline in ETP buying. Nevertheless, the outlook for 2Q13 is that a potential catalyst still exists that could lead to higher prices at the end of 1Q13 while the US fiscal cliff issue persists.

#### Investment flows into commodities

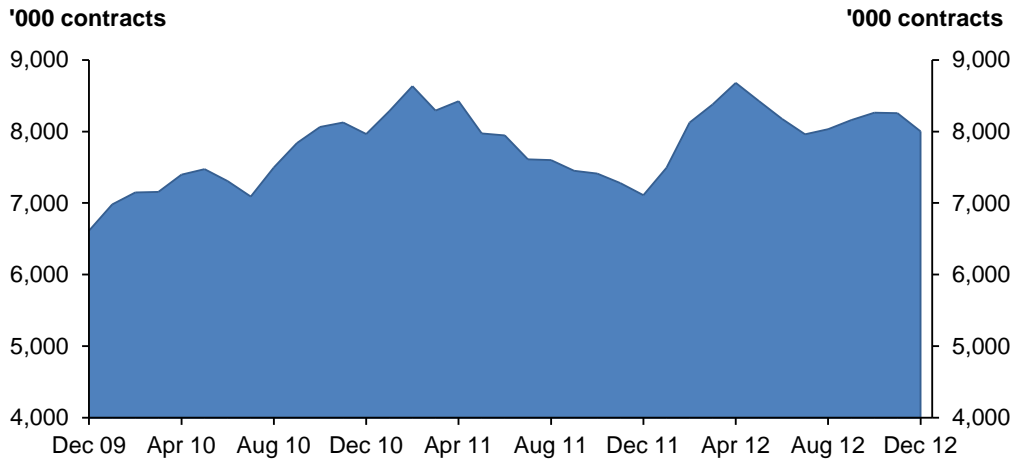
The **total open interest volume (OIV)** in major commodity markets in the US declined by 3.1% m-o-m to 8,001,675 contracts in December from 8,255,908 contracts in the previous month. Except for livestock, all market groups reported declines.

An extremely bearish investor mood since the second half of the last year continued in most US commodity markets amid the remaining risks on the global macroeconomic front.

Total net length speculative positions in commodities declined by 11.3% m-o-m to 692,825 contracts in December from 781,477 contracts in the previous month. Speculative long positions declined by 1.87% m-o-m to 1,624,154 contracts, while shorts rose by 6.8% m-o-m to 931,329 contracts.

*Investors remain extremely cautious in the commodity markets*

**Graph 2.3: Total open interest volume**

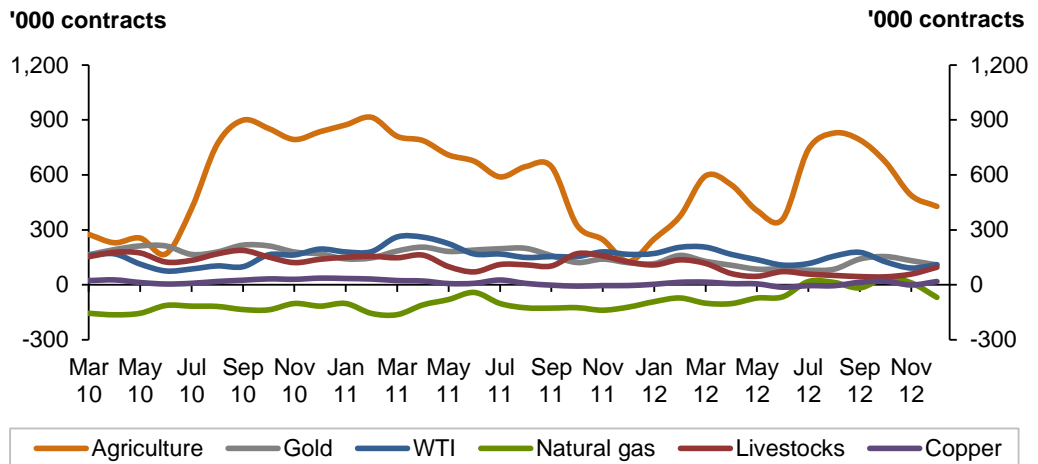


Source: US Commodity Futures Trading Commission.

The **agricultural** OIV declined further by 4.4% m-o-m to 4,143,808 contracts in December. Money managers' net long positions in agricultural markets posted a 12.4% m-o-m drop (versus -27.1% in November) to 427,983 contracts in December. This was the result of a 7% rise in short positions to 474,470 contracts, and a 3.2% fall in longs to 902,453 contracts.

The **HH natural gas** OIV decreased by 0.4% to 1,157,320 contracts, compared with a 1.7% loss in the previous month. Money managers' net length became negative in December standing at minus 68,459 contracts from 11,064 contracts in November. A 31.2% m-o-m rise in shorts combined with a 5.6% fall in longs.

**Graph 2.4: Speculative activity in key commodities, net length**

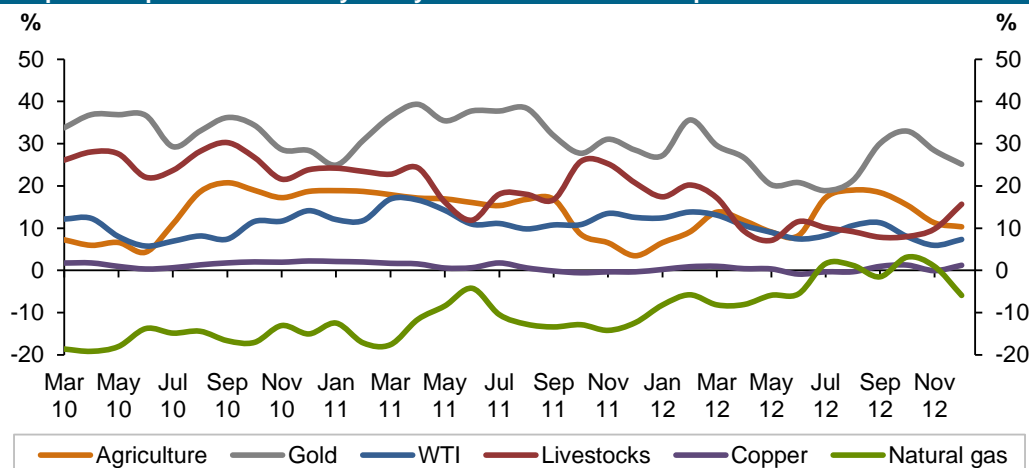


Source: US Commodity Futures Trading Commission.

The **copper OIV fell by 0.8% to 148,823 contracts in December, compared with a 1.9% drop in the previous month.** Strategic investments in copper rose to 18,209 contracts in December from minus 741 contracts. Money managers' net long positions decreased by 27.5% to 30,634 contracts. Shorts jumped by 39.9% to 18,855 contracts while longs also increased by 21% to 37,064 contracts.



**Graph 2.5: Speculative activity in key commodities as % of open interest**



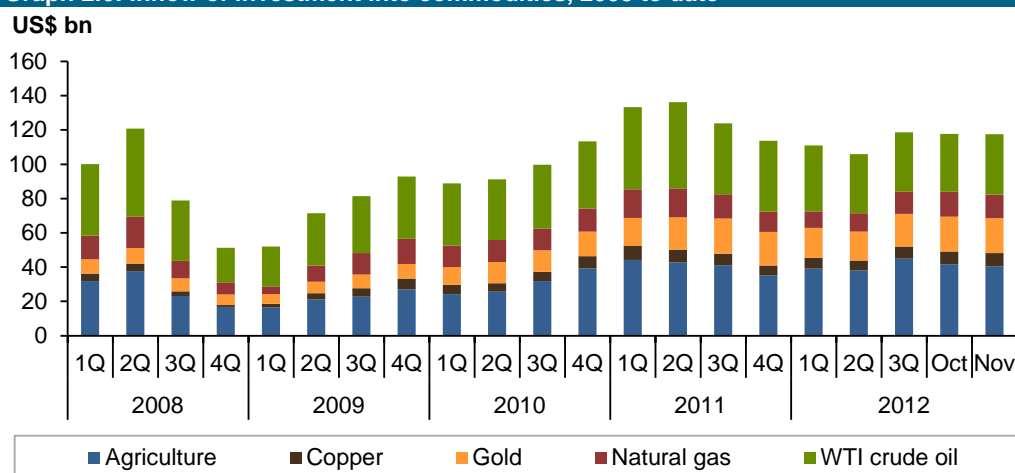
Source: US Commodity Futures Trading Commission.

The **gold** OIV dropped by 7.2% m-o-m to 431,607 contracts in December compared to a mild 0.6% drop in November. Strategic investments in gold declined further by 17.9% to 108,489 contracts. Shorts positions boomed by 93.5% m-o-m to 22,050 contracts while longs decreased by 9% m-o-m to 130,539.

**Table 2.2: CFTC data on non-commercial positions, '000 contracts**

|                 | Open interest |              | Net length |           |            |          |
|-----------------|---------------|--------------|------------|-----------|------------|----------|
|                 | Nov 12        | Dec 12       | Nov 12     | % OIV     | Dec 12     | % OIV    |
| Crude Oil       | 1,544         | 1,507        | 92         | 6         | 111        | 7        |
| Natural Gas     | 1,162         | 1,157        | 11         | 1         | -68        | -6       |
| Agriculture     | 4,337         | 4,144        | 489        | 11        | 428        | 10       |
| Precious Metals | 611           | 573          | 163        | 27        | 138        | 24       |
| Copper          | 150           | 149          | -1         | 0         | 18         | 12       |
| Livestock       | 598           | 613          | 59         | 10        | 96         | 16       |
| <b>Total</b>    | <b>8,402</b>  | <b>8,143</b> | <b>812</b> | <b>10</b> | <b>722</b> | <b>9</b> |

**Graph 2.6: Inflow of investment into commodities, 2008 to date**



Source: US Commodity Futures Trading Commission.

# World Economy

**Table 3.1: Economic growth rates 2012-2013, %**

|      | World | OECD | US  | Japan | Euro-zone | China | India |
|------|-------|------|-----|-------|-----------|-------|-------|
| 2012 | 3.0   | 1.4  | 2.3 | 2.0   | -0.4      | 7.6   | 5.5   |
| 2013 | 3.2   | 1.4  | 2.0 | 0.7   | 0.1       | 8.0   | 6.4   |

## Industrialised countries

### USA

*US growth forecast for 2013 remains unchanged at 2.0%. Fiscal cliff negotiations dominate economic affairs*

The major topic for the United States economy after the elections in November consisted of the negotiations on the so-called 'fiscal cliff', a combination of expiring tax-cuts and unemployment benefits, together with automatic spending-cuts in the Federal budget. A solution to some of the issues was found in a last-minute agreement at the end of the year. If no agreement had been found and the fiscal cliff on 31 December had come into being, then the economic impact could have been significant. The potential negative impact of all the fiscal cliff measures would have implied a drop of around 4 percentage points (pp) for US GDP growth. It was already suggested in the previous month's growth forecast that some of the fiscal cliff issues would be implemented and that not all the tax and spending cuts would go through. Therefore it had been assumed that the tax incentives for the higher-income bracket and some other measures would not be extended, which all added up to a 1.5% negative impact on this year's GDP growth forecast. The year-end agreement was in line with this assumption and therefore the 2013 forecast remains unchanged at the previous month's level of 2.0% for the time being.

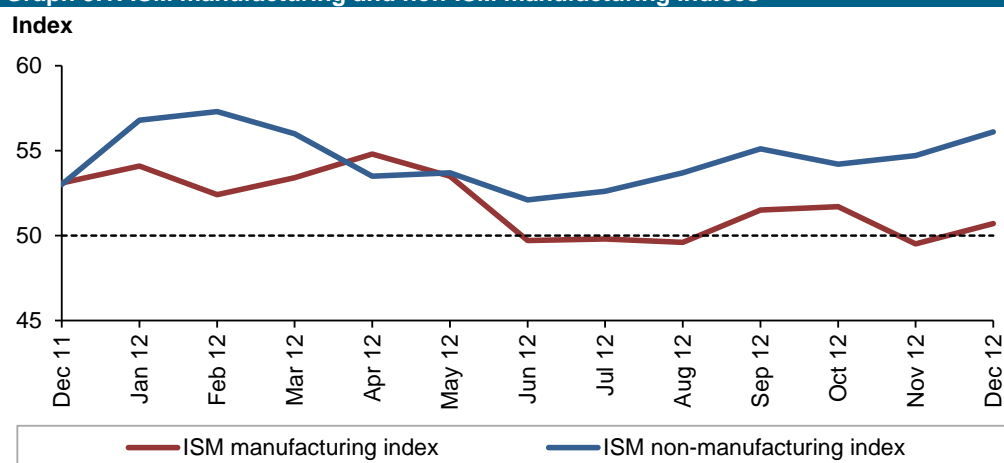
One important aspect, which is the automatic spending cuts, was delayed by two months, and, by the beginning of March at the latest, they should be implemented if no solution is found in the meantime. These spending cuts would have a negative impact on GDP growth of 0.5 pp and would consequently reduce the GDP forecast accordingly. Moreover, the undergoing discussions on raising the 'debt ceiling' should also be awaited. The US debt ceiling would have been already breached by the end of the previous year, were the Treasury not to have implemented measures that avoided this scenario. These measures have given some more time — according to the Treasury, around two months — for negotiating the raising of the debt ceiling. An additional aspect adjunctive to the fiscal cliff negotiations and the raising of the debt ceiling is the approval of the budget expenditure by 27 March. If no solution to all these issues is found, then the fiscal issues facing the US might again overshadow the improvements in the underlying economy.

After revised data had been published, the third-quarter GDP performance was announced as an impressive 3.1% quarterly growth, compared with the rather low level of 1.3% for the second quarter. The major support for government spending ahead of the elections was confirmed. After more than two years of negative quarterly government spending, this suddenly jumped by 3.9% in the third quarter of 2012 (3Q12). The majority of this increase came from the Federal budget, which rose by 9.5% on a quarterly base, by pushing up defence spending by 12.9% quarter-on-quarter and non-defence spending by 3.0%. This led to a contribution from government spending of more than 0.7 pp to the 3.1% quarterly growth, with the majority coming from the defence spending side, which contributed 0.64 pp. It is not expected that this government support will be repeated any time soon. This also makes it less likely that — without any other stimulating effect — the GDP figures in the near term will increase significantly from the current level of around 2% on average, and 4Q12 is forecast to be again at a lower level.

In the meantime, the labour market — despite being a lagging indicator — is improving, but only slowly. The unemployment rate stood again at 7.8% in December. Therefore it should come as no surprise to learn that that consumer confidence has fallen again. The consumer confidence index of the Conference Board fell to 65.1 in December from 71.5 in November.

Industrial production continues to expand. It grew by 2.5% in November, after 1.6% in October. Manufacturing orders rose again and point towards higher production figures, when they increased by 1.3% y-o-y in November, after a rise of 3.0% in October. The improvement in the manufacturing sector was also confirmed by the latest figures from the Institute of Supply Management (ISM), which provides the main purchase managers' index (PMI) for the US economy. The ISM figure for the manufacturing sector in November stood at 50.7 in December, after 49.5 in November. The ISM for the services sector even increased to 56.1, from 54.7 in November, and both sub-indices pushed up the composite index to 55.5 from 54.1 in November.

**Graph 3.1: ISM manufacturing and non-ISM manufacturing indices**



Source: Institute for Supply Management.

The very important housing sector continues improving. Pending home sales increased by 1.7% in November, lower than the 5.0% of October, according to the National Association of Realtors. Pending home sales are considered a leading indicator of progress in real estate because they track contract-signings. Positively, the yearly change to the house pricing index of the Federal housing finance agency (FHFA) maintained its rising trend with a monthly price rise of 5.6% in October, the largest increase since August 2006.

The current environment of political uncertainty might lead to muted growth in 2013, which is expected to be below the 2012 level. As already explained, consideration of the latest agreement on the fiscal cliff provides no need to change this year's growth forecast of 2.0%. If, on the other hand, a comprehensive agreement on the fiscal issue is worked out relatively soon, the economy should benefit via increased business spending and investment, which should lead to higher growth. The latest revisions to the third-quarter performance of last year have led to an increase in the 2012 estimate, from 2.2% to 2.3%.

### Japan

Elections were held in mid-December and the Liberal Democratic Party managed a landslide victory. The fight against inflation and the stimulation of the ailing economy were made core-topics by the newly elected Government. It called for unlimited monetary easing from the Bank of Japan (BoJ) to achieve an inflation target of 2%. In addition, the recently announced stimulus measures of 10.3 trillion yen are supposed to build an important base for future expansion. However, until the end of last year, it seemed that the Japanese economy would continue decelerating in major areas, with the fourth quarter of 2012 (4Q12) most probably also declining. In the current quarter, the economy is now expected to rebound due to the mainly improving global trading activity and the somewhat expected better domestic demand. This assumption is certainly gaining traction now, because of the sharp fall in the value of the Japanese yen over the past weeks. This impressive decline, which is supposed to help exports, has been triggered by the plans of the new Government to bring down the value of its currency vis-à-vis its most important trading partners and to initiate the inflation goal of 2% via the BoJ. However, the economy remains burdened by structural challenges

*Stimulus measures and rising global trade lead to revision of Japanese 2013 growth forecast from 0.6% to 0.7%*

and it remains to be seen whether these recently announced plans will be successful in the long term. Japan has issued many fiscal and monetary stimulus measures over the past two decades and invested a massive amount of its wealth to support the economy. Since 1999, the 14 emergency programmes have been around 75 trillion yen, according to Mizuho Securities, but most of these stimuli have fizzled out and were only partially successful, with the economy experiencing shortlived boosts by the various programmes at best, but unable to recover in the long run.

Despite the recent GDP revisions, the quarterly pattern has not changed. The economy continues to decelerate significantly from the impressive recovery-induced growth level of 1Q12 at 5.3% seasonally adjusted annualized growth. The most recently revised figures highlight the fact that this should have been the highest mark for quarterly growth for some time. The 2Q12 figure was revised down to a decline of 0.1%, while 3Q12 was below zero at -3.5%. This development was triggered by further declining exports and soft domestic demand. Despite the recent change in government and the announced plans to kick-start the economy again, most lead-indicators, like order numbers, still point to a decline. The levels have improved, but it remains to be seen whether a recovery will filter through, as a result of these recently announced measures. Still, it seems that the economy will grow at a much lower rate in the current year, when compared with 2012.

The reasons for the continued softening of the economy have been manifold and are in general triggered by structural problems, like an ageing population leading to ageing consumers and a declining workforce. Most recently, exports have suffered a negative impact from political tensions with China. The Euro-zone's continued deceleration and the still relatively low demand from the USA have been additional factors with regard to lower exports. Slowing domestic consumption — after consumer incentives ran out in 2H12 — was also pushing economic activity lower. Furthermore, the high sovereign debt level of the country at almost 2.5 times its GDP is putting some limitations on the ability to support the economy via fiscal means. Monetary stimuli and the lowering of the yen's value might be short-term enhancers for the economy to move back into growth territory, but, in the end, the base of the economy will need to provide again the opportunities for enterprises to operate in a profit-making environment.

Exports continued to fall in November, at 4.7% year-on-year (y-o-y), compared with October at -6.5%. While this was the sixth consecutive month of decline, it was also the lowest yearly fall and the weakness of the yen could provide a base for a recovery. With an increase in imports of 0.9% y-o-y, the trade balance has remained clearly negative at 868 billion yen on a non-seasonally adjusted base. It needs to be emphasised that export-dependent Japanese manufacturers also struggled to contend with the effects of the yen's sharp rise up to November, when it fell to levels clearly below ¥80.0/\$. Since then, it has weakened by more than 10% and reached a level of ¥89.0/\$. Although this is providing an improved competitive situation, officials have already warned that, while it may be beneficial for exporters, imports will become much more expensive too, without having enough time to adjust to these price rises. This could turn out as an important caveat, as Japan has decided to phase out its nuclear capacity and is currently largely compensating the shortfall in its electricity consumption via the burning of imported fossil fuels. So it seems that the current depreciation is satisfactory for the economy for the time being, but it should not continue at the same pace. Positively, the higher import prices might also provide support for higher inflation, as wished for by the newly elected government.

Retail sales increased by 1.3% y-o-y in November, after falling by 1.2% in October, which at that time was the largest decline for almost a year. Industrial production continued its slide, declining by another 7.0% in November, after a 6.8% fall y-o-y in October. The indications for future production also point to a continued deceleration in machinery orders as a lead indicator for industrial output in the coming months, having declined by 4.6% y-o-y in October. The purchasing managers' index (PMI) for manufacturing fell again and remained below the growth indicating level of 50 for the seventh consecutive month at 45.0 in December, compared with 46.5 in November. However, the services sector's PMI again offered some brighter reading at 51.5 in December, the second time it had been above 50 since April and the highest level

since then. Due to the lacklustre performance in manufacturing — which will potentially gain more momentum in the coming months — the composite PMI remains just below the 50 level at 49.3 in December.

Despite the currently lacklustre momentum of the Japanese economy, there is the possibility that it could gain some momentum again via the trade channel in 2013, if the major trading partners continue recovering and if the disputes with China can be solved. Moreover, the stimulus and adjunctive measures also provide some room on the upside to the current forecast of 0.7% for 2013, after the estimated GDP growth expectations for 2012 were revised up again from 1.6% to 2.0%, following the recent revisions.

### **Euro-zone**

While there is a perception that the Euro-zone sovereign debt issues and the challenges for the European financial industry have been largely overcome, the real economy is still lacking momentum. There is the likelihood that this year's economic performance will see a rebound from the fragile situation of the past year that led the Euro-zone into recession. Most recently, however, published economic data from 4Q12 and lead indicators have been highlighting that the drag could be longer and lead into the current year, delaying an economic recovery from 1Q13 to a later stage. This has been reflected already in the latest forecast of the OECD Secretariat, which assumes 2013 growth in the Euro-zone at only minus 0.1%. The most recent forecast by the European Central Bank (ECB) foresees a decline of 0.3% and the Bundesbank has also revised down its forecast for Germany to only 0.4% for 2013.

Although it seems rather early for such pessimistic views, there are nevertheless some developments that will need close monitoring in the coming months. The most important reason for a continued decline might be a slowdown in the German economy, which, together with France, has been compensating for the shortfalls in the declining Southern European economies. In a positive scenario, it could turn out that the deceleration in Germany will be shortlived and that the improvements in the peripheral economies will continue. Mainly Italy, with elections coming up at the end of February, and Spain will be in the spotlight. The discussion about the emergency facilities and to-be-implemented European institutions, like a euro-centric banking supervisory, centralized budget authority and so on, will be debated intensively this year, as Germany will also be holding a general election in September or October. As some Euro-zone officials say that the peak of the crisis has been overcome already, it remains to be seen whether, with the fading pressure for reform, the momentum for a more integrated market will continue.

Spain's ten-year government bond yields fell from their average peak level last year of 6.8% in July to 5.25% at the end of December. It is still not clear whether Spain will apply for the support of the emergency umbrella of the Euro-zone, as it currently seems that its intention is to sidestep a bailout. The significantly reduced yield does, indeed, provide some room for manoeuvre, but it could end up in an even worse situation as yields might rise quickly in an again-deteriorating real economic situation. The budget deficit has increased in the meantime and even the lower yields at best neutralize the increased financial needs. If yields, therefore, move back to more elevated levels, the result for the economy could mean a worsening and the request for the support package would be inevitable.

The ECB again kept its key policy rate at 0.75% at its January meeting, but, amid the continuation of the slowdown, it might reduce the rate further to 0.5% in the coming months. Such a rate cut might also be triggered by the dire situation in the credit sphere. Lending of financial intermediaries to the private sector has been negative since the beginning of the previous year and fell by 0.8% y-o-y in November, which was only slightly better than the highest decline on a yearly basis, which was recorded in September at -1.1%. Credit to non-financial corporations in the Euro-zone reached a multi-year low in November, when it dropped by a stunning 2.5%. This was hardly supportive at a time when industrial production was decelerating, and lead indicators — while slightly improving — point to a continued deceleration.

*Forecast for  
Euro-zone economy  
remains at 0.1%  
growth for 2013*

Industrial production fell in all of the past 12 months, reaching its largest decline in the recently released figures for November at -3.5% y-o-y. The main indicator for future production developments — the PMI — points to some improvements in the near-future, while still highlighting the negative trend as it remains below the growth-indicating level of 50. The latest PMI figures for manufacturing, published by Markit, stood at 46.1 in December, almost the same level as the 46.2 of November. The PMI for the services sector improved to stand at 47.8 from 46.7 in November. This gentle positive trend has lifted the composite PMI to 47.3 now from 46.5. It seems that much more momentum will be needed to lift the index above the 50 mark and get the economy growing again. This low level of industrial activity led to a record high unemployment rate of 11.8% in November, again the highest on record.

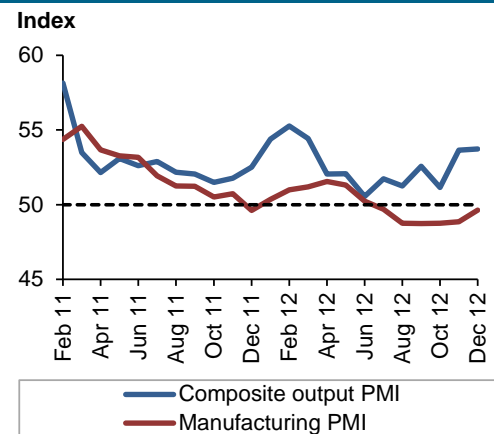
The current positive assessment that the economy will rebound in 2013 should be reviewed in the coming months when the final figures for 4Q12 are available and lead indicators offer a better understanding. In the meantime, the 2013 forecast remains at 0.1% growth and the 2012 forecast at -0.4%.

### Emerging markets

The global economic expansion was soft in 2012 with growth expectations somewhat higher for 2013.

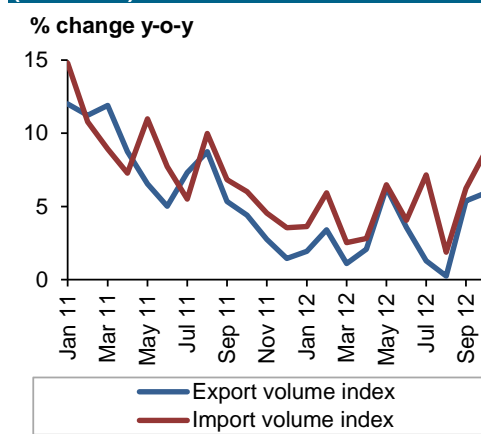
*Moderate optimism about reviving performance of global economy in 2013*

**Graph 3.2: JP Morgan global PMI**



Source: JP Morgan, Markit and Haver analytics.

**Graph 3.3: Emerging and developing countries' import and export volumes (2000=100)**



Source: Netherlands bureau for economic policy analysis and Haver analytics.

The Euro-zone's troubles have had a negative effect on economic growth in the **Eastern European countries**, Russia and the Commonwealth of Independent States (CIS). The troubles in the Euro-zone continue to overshadow economic prospects in Eastern Europe. Growth has weakened as the Euro-zone, the region's most important market and source of investment, has gone back into recession. The economies of several countries — including the Czech Republic, Hungary, Slovenia, Bosnia and Hercegovina (BiH), and Croatia — have contracted in 2012. The CIS is the sub-region least affected, as its trade and investment links to Western Europe are less strong and its economies have reaped benefits from high energy prices. But even here there has been a marked slowdown, as exemplified by the recent sluggish performance of Russia, the region's largest economy. Recession and concern about the future of the Euro-zone are acting as a brake on economic activity in Eastern Europe, through declines in trade, investment and bank-financing. Fiscal consolidation is under way in much of the region and might need to be accelerated if market sentiment towards the region sours further (Economic Intelligence Unit, January, 2013). Recession in Europe is also curbing foreign direct investment, some of which is typically debt-financed. Weak Western growth has affected **Asia's economies**, as external demand has been a major factor behind economic growth in emerging Asia. The region's two largest economies, China and India, have both decelerated. China's slowdown in particular has consequences for other countries in the region, given its size and role as a catalyst

of regional and global growth. Even so, Asia will retain its status as the world's fastest-growing region. We expect GDP growth to accelerate to 4.1% in 2013 in the region, as the growth rebound in China was promising in December last year, even though China had entered a new phase of its development which will be characterized by more balanced and slower output growth. Asia's economic fundamentals are sound. Levels of debt (both government and private) are low, compared with those in the West and Asian banks are mostly in good shape.

In **Latin America**, growth is expected to pick up after the slowdown in 2012. We estimate that growth in Latin America will rebound to 3.3% in 2012 from 2.6% last year. Activity in the region has been adversely affected by the debt-crisis and recession in the Euro-zone, slower growth in China and the sluggish performance of the US economy. Brazil — with around 40% of regional GDP valued at market exchange rates — has been among those economies most severely affected. The forecast recovery in China's growth this year will benefit South American producers of soft and hard commodities. Concern about the risk of a hard landing in China has also been a factor, through the impact on commodity demand and prices. Most of the region's currencies have recouped part of their losses in the past few months, as the US Federal Reserve (the Fed) further loosened monetary policy with a third large programme of quantitative easing and a commitment to keeping its policy rate exceptionally low.

Economic growth in the **Middle East and North Africa** will be impacted in 2013 by ongoing developments in the region. Expansionary fiscal policies are likely to sustain strong rates of growth in the many of the region's oil exporting countries. In North Africa, exports of goods and services — tourism in particular — will be hampered by weak demand in Europe. As oil prices continue to stabilize at acceptable levels, stronger economic growth in the second half of the year is expected in the region.

**Table 3.2: Summary of macroeconomic performance of BRIC countries**

|               | GDP growth rate |      | Consumer price index, % change y-o-y |      | Current account balance, US\$ bn |       | Government fiscal balance, % of GDP |      | Net public debt, % of GDP |      |
|---------------|-----------------|------|--------------------------------------|------|----------------------------------|-------|-------------------------------------|------|---------------------------|------|
|               | 2012            | 2013 | 2012                                 | 2013 | 2012                             | 2013  | 2012                                | 2013 | 2012                      | 2013 |
| <b>Brazil</b> | 1.5             | 3.3  | 5.5                                  | 5.4  | -51.6                            | -59.8 | -2.9                                | -2.3 | 59.3                      | 59.6 |
| <b>China</b>  | 7.6             | 8.0  | 2.7                                  | 3.2  | 226.6                            | 215.3 | -2.2                                | -2.0 | 16.2                      | 16.6 |
| <b>India</b>  | 5.5             | 6.4  | 9.4                                  | 7.7  | -71.3                            | -61.9 | -6.1                                | -5.5 | 50.8                      | 51.0 |
| <b>Russia</b> | 3.7             | 3.4  | 6.6                                  | 5.8  | 88.2                             | 60.7  | 0.1                                 | -0.3 | 7.8                       | 7.8  |

Source: Data Services Department, OPEC Secretariat for GDP growth rates; Consensus Forecasts, December 2012, for prices and current accounts; Economic Intelligence Unit, December 2012 and January 2013, for government fiscal balance.

Figures for India are from the fiscal year 2012-2013 and 2013-2014.

### Brazil

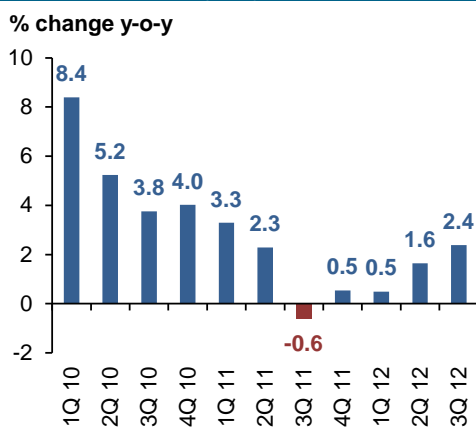
The economic activity mood remains bearish at the beginning of 2013. In addition to the signals of weak manufacturing output at the end of last year, concern about inflation is rising, limiting the room for further monetary easing, as well as from an exchange rate policy perspective. There are signs that the factors behind the accelerating inflationary pressures remain in place. Energy prices, including those for electricity, are also most likely to increase significantly. The Government, in an attempt to support economic growth by reducing taxes and increasing its expenditure, has abandoned its primary fiscal surplus target of 3.1% for 2013. This could impact the central bank's inflation projection, creating inflation expectations. In this context, a further reduction of the interest rate, currently at 7.25%, seems unlikely.

Because of the lower annual rainfall, water reservoir levels have fallen to those seen in 2001 that were associated with extended power blackouts. Although the increased capacity of thermal power generation since then has reduced the sensitivity of the energy supply to shocks to hydroelectric sources, the risk has not been eliminated. With 75% of the total electrical plants in Brazil dependent on hydroelectric energy, as reservoir levels fall, electricity prices must rise, in order to meet the higher cost of electricity-generation by thermal power plants. However, the Government has been trying to curb the hike in energy prices by reducing energy tariffs. This might crowd out

*Acceleration of inflation amid sluggish GDP growth remains major concern for Brazil in early 2013*

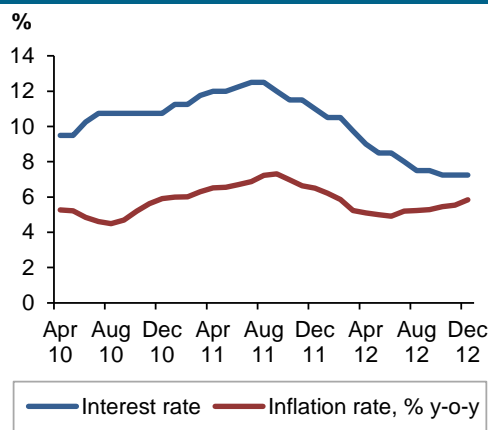
the Government resources intended to promote economic activity, which could also affect production and investment by squeezing profit margins, as well as by hurting confidence.

**Graph 3.4: Brazilian GDP growth (SAAR = seasonally adjusted annual rate)**



Source: Instituto Brasileiro de Geografia e Estatística and Haver analytics.

**Graph 3.5: Brazilian inflation and interest rates**



Source: Banco Central do Brasil and Haver analytics.

Accelerating inflation, together with the sluggish economic growth experienced in 2012, if sustained in the coming months of the new year, might call for a thorough review of the economic policy mix by the Government. The Government attempted to control inflationary pressures amid its monetary easing, which was adopted to stimulate economic activity by reducing VAT on food and gasoline. However, the depreciation of the real, estimated at 16 per cent, had a reverse impact on the Government's fight against inflation and price levels exceeded the central bank's target in the last quarter of 2012. There were also a spike on food prices and a 14.2% increase in minimum wages. With signs of gradually improving domestic demand, the debate about economic growth and the way to support potential growth by containing inflation will continue. It is argued that the old consumption-led model of development is now less likely to deliver the impressive rates of growth in Brazil. Household balance sheets are stretched and wages have grown ahead of productivity for too long. A jump in defaults last year, when loans that were overdue by more than 90 days rose to the highest level since records began in 2000, prompted Brazil's traditionally conservative banks to slow the pace of lending. Core retail sales have shown signs of slowing as a result, growing by 0.8% in October from September, according to the latest data. And many believe unemployment, now close to a record low at 4.9%, will rise as the economy slows.

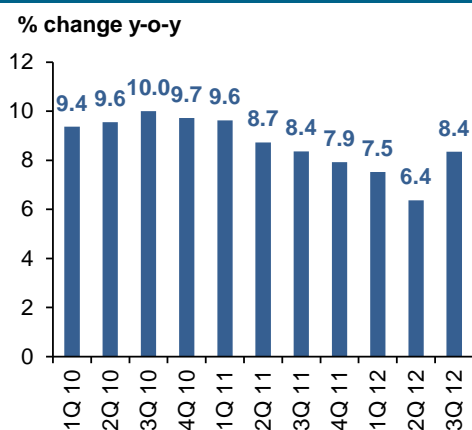
**China**

The Chinese economy is expected to have rebounded towards 8% growth in the fourth quarter of last year. That rebound would follow seven consecutive quarters of slowing growth. China has entered a new phase of its development, which will be characterized by more balanced and slower output growth. However, the strong performance of the economy in the last quarter of 2012 has contained the growing concern of last summer about global economic gloom. In late 2012, China witnessed a rebound in its exports and imports that point towards stronger growth both at home and abroad. Exports rose 14.1% in December from a year earlier, the fastest in seven months and well above November's 2.9%. Imports increased 6% in December from a year earlier. Both figures outstripped most forecasts. The Government's announcement that it was cautiously optimistic about a brighter outlook for the economy dampened worries that the rebound would be shortlived. China registered a \$31.6 billion trade surplus for the month, up from \$19.6 bn in November. For 2012 as a whole, China's trade surplus is estimated to be around \$226.6 bn, breaking a streak of three straight annual declines.

*Positive signs of GDP growth rebound in China, with exports and service activities expanding faster than expected*

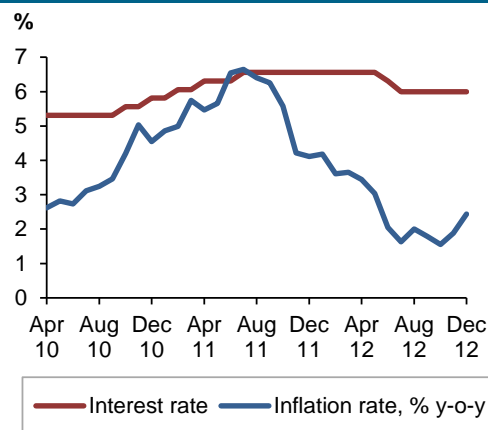


**Graph 3.6: Chinese GDP growth (SAAR)**



Source: China's National Bureau of Statistics and Haver analytics.

**Graph 3.7: Chinese inflation and interest rates**



Source: China's National Bureau of Statistics and Haver analytics.

The more subdued import growth compared with exports could be an indication of the large inventories accumulated during the soft demand earlier in 2012. In spite of the slowing growth, China still reported record highs on the year for its imports of crude oil, iron ore and copper. The question now for China is whether the rebounds in both exports and imports will be sustainable. External demand remains a key risk to China's growth outlook.

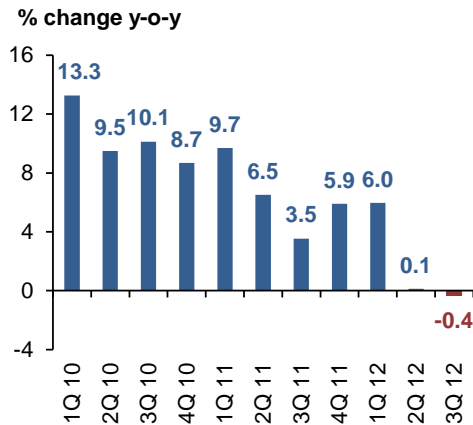
Within China, it is also unclear whether the Government will prioritise its efforts to control inflation or whether it will step up its growth-supportive measures, which would provide a boost for imports. The latest data on inflation indicated tamed inflationary pressures, although it is expected that, in 2013, the inflation rate will increase again due to the monetary easing policy of last year and growing domestic demand. Chinese economic data began to point upward in September after the Government ramped up spending on infrastructure projects and presided over a cautious loosening of monetary policy.

**India**

India's economy slowed further in the three months to September 2012, adding to the challenges facing the Government as it struggles to push controversial economic reforms through Parliament. Year-on-year growth in Asia's third-largest economy is believed to have declined to 5.5% on an annual basis. This would be one of the country's weakest years for economic growth for a decade. The near-term outlook remains challenging with sticky inflation, sluggish growth and high fiscal and current account deficits. The Federation of Indian Chambers of Commerce and Industry questioned market assumptions that growth had bottomed out, given the sluggishness of manufacturing, indicating that they saw little reason for optimism that growth would re-accelerate next year. The problem is that, unlike many other emerging economies, India has little room for policy stimulus. Nevertheless, the prospects for the economy remain robust. Indian financial markets ended 2012 in a buoyant mood amid predictions that the economy would recover from its lows in the coming year. Stocks rose to a 19-month high.

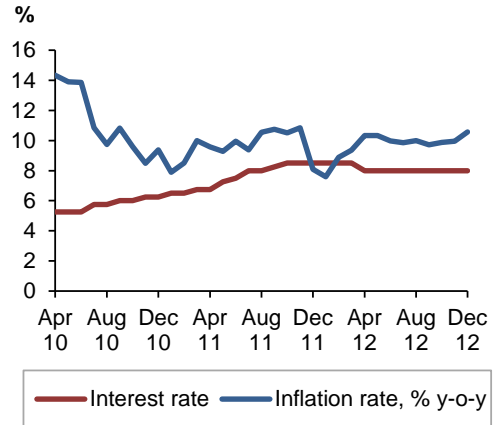
*High inflation and large public debt limit India's means to stimulate economic growth*

**Graph 3.8: Indian GDP growth (SAAR)**



Source: Central statistical office of India and Haver analytics.

**Graph 3.9: Indian inflation and interest rates**



Source: Reserve Bank of India and Haver analytics.

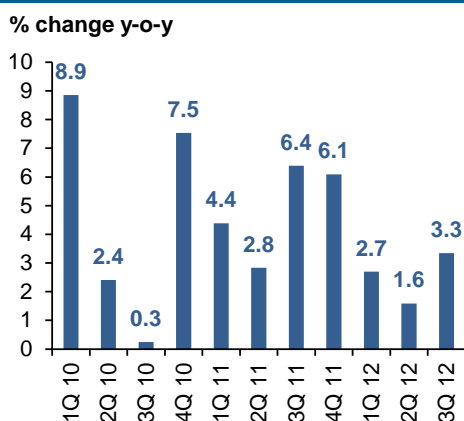
Prime Minister Manmohan Singh and his new Finance Minister, Papaniappan Chidambaram, have launched a series of economic reforms in the past four months to try to revive foreign and domestic investment while cutting the fiscal deficit. But their drive to privatize state companies and open sectors such as retail and insurance to greater foreign investment has met stiff resistance from opposition politicians preparing for a general election in early 2014. Mr Singh’s Government has been obliged to agree to a non-binding vote in Parliament on its plans to allow foreign direct investment of up to 51% in big city supermarkets and department stores in states where the authorities allow it. While the recent reforms are a major positive first step, the continued momentum in reform is essential to tackle India’s gaping fiscal deficit, financial sector weakness, stifling bureaucracy, power sector deficiencies and infrastructure shortfalls.

**Russia**

Russian markets re-opened on Tuesday after the country’s nine-day New Year’s hibernation holiday. Boosted by an improvement in global sentiment, the Micex index rose 2.7% in its biggest one-day gain since mid-September. The rouble appreciated 0.3% against the dollar-euro basket. Meanwhile, the oil price is also rallying with the price of Russian Urals crude hovering around \$110/b — its highest price since September. Russian equities are still the poor cousins of global markets, trading at a big discount to European and many emerging market peers. This longstanding gap persisted throughout 2012, despite some positive factors: high oil prices, reasonably strong economic growth (the increase in GDP is expected to come out at over 3%) and the end of political uncertainty surrounding the March 2012 presidential elections. One report, released recently by the state-owned Russian Direct Investment Fund, Ernst & Young and a research centre at Moscow state university, indicates that Russian capital outflows are not actually as large as reported. However, Russia’s capital outflows are still significant, compared with most emerging markets that usually register inflows. Russia’s current account surplus in recent years, due to favourable oil prices, might have been a factor buffering concern about the country’s capital outflow.

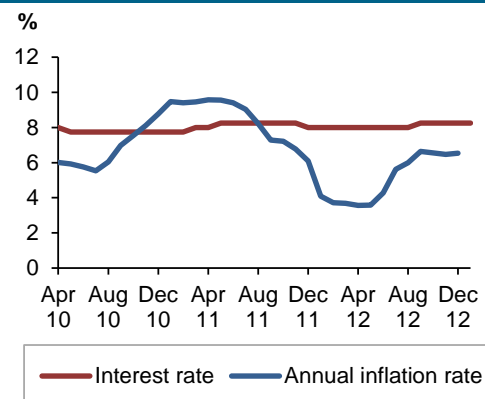
*Economy in Russia is slowing, despite record oil output*

Graph 3.10: Russian GDP growth (SAAR)



Source: Federal State Statistics Service and Haver analytics.

Graph 3.11: Russian inflation and interest rates



Source: Central Bank of the Russian Federation, Federal State Statistics Service and Haver analytics.

In December, inflation reached 6.6% from a year earlier, slightly above the central bank's target, but lower than market expectations. Food inflation made a small step up to 7.5% on an annual basis, after staying at 7.3% for three months. It is expected that the base effects will remain effective through April 2013, pushing the year-ago inflation rate higher. Another wave of excise tax increases — mainly alcohol, tobacco and gasoline — from January this year may also add to the year-ago inflation rate at the start of the year.

According to JP Morgan (11 January 2013), in December the manufacturing PMI fell sharply to 50.0 from 52.2. All the key components weakened, with output (to 50.6 from 54.6), export orders (to 46.5 from 50.9) and employment (to 46.9 from 49.8) experiencing big declines. New orders, however, were slightly more resilient (to 52.1), while inventories were reduced somewhat, which suggests that manufacturing is not on the verge of contraction and that output is likely to continue growing, albeit at a much slower pace in the coming months. After this decline, the manufacturing PMI has become more aligned with the hard data on output. Despite the positive signals from the PMI survey this fall, where the index averaged 52.5 from September to November, the industrial production index growth in fact slowed to a mere 0.5% on a quarterly basis. A fall in the rail cargo load in December, the first decline since 2009, is another sign that the industrial sector is slowing. Along the same lines, business confidence in the industrial sector deteriorated visibly in December, with confidence in mining and quarrying dropping most notably. Manufacturing appears to have remained more resilient, declining only modestly. Business activity in services has remained more robust, decreasing only slightly to 56.1 from 57.1, according to the services PMI survey.

### Oil prices, US dollar and inflation

*US dollar weakened against all major currencies in December, with exception of the yen. The adjusted Basket price fell by 1.4% or \$0.93/b to \$64.96/b*

The US dollar weakened against all the major currencies in December with the exception of the Japanese yen. On an average monthly base, the dollar fell by 2.3% against the Euro, 1.8% against the Swiss franc and 1.1% against the pound sterling. With the most recent undertakings by the newly elected Japanese Government, the yen lost 3.4% on a monthly average base. This notable development has continued into January and it was indeed the major event in the currency market recently, as, since the end of the year, it has fallen again by around 7% — i.e. the yen has lost more than 10% against the dollar in recent weeks.

As the Japanese Government probably intends to weaken the yen further — enhancing export-oriented sectors — action might follow words this year and it could breach the ¥90/\$ level soon. However, some observers in Japan have voiced concern that a continuation of this decline could have a severe impact on Japan's import bill, particularly given the increased imports of expensive fossil fuels for burning in compensation for the missing nuclear energy.

In nominal terms, the price of the OPEC Reference Basket fell by \$0.31/b or 0.3% from \$106.86/b in November to \$106.55/b in December. In real terms, after accounting for inflation and currency fluctuations, the Basket price fell by 1.4% or \$0.93/b to \$64.96/b from \$65.88/b (base June 2001=100). Over the same period, the US dollar lost 0.9% against the import-weighted modified Geneva I + US dollar basket while inflation increased by 0.2%.\*

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\* The 'modified Geneva I+US\$ basket' includes the euro, the Japanese yen, the US dollar, the pound sterling and the Swiss franc, weighted according to the merchandise imports of OPEC Member Countries from the countries in the basket.

# World Oil Demand

World oil demand growth in 2013 forecast at 0.8 mb/d, in line with last year's estimated growth

## World oil demand

World economic turbulence has affected oil demand in the past few years. Nevertheless, its effect on this year's oil demand is not expected to be as sharp as last year, but instead considerably milder. As in the previous year, oil demand will grow in 2013, but not without some degree of uncertainty. The US economy is seen to achieve 2.0% growth, leading to more stable oil consumption. The Euro-zone was able to somewhat contain its unknown fate of uncertainty. The spill-over effect on other economies will certainly be felt, especially in China. Given the positive momentum in some OECD economies, China's exports and investments are picking up and showing better results. The OECD region will consume less oil than last year; however, the decline will be reduced by almost a half. The non-OECD region will consume about one million barrels per day more than last year. It is worth noting that some parts of the non-OECD region will experience less economic prosperity than anticipated. Their demand will grow, but at a slightly slower pace than last year. The transportation and industrial sectors will consume most of the oil this year, and most of the growth will be related to both industries.

Graph 4.1: Regional shares in diesel consumption 2012

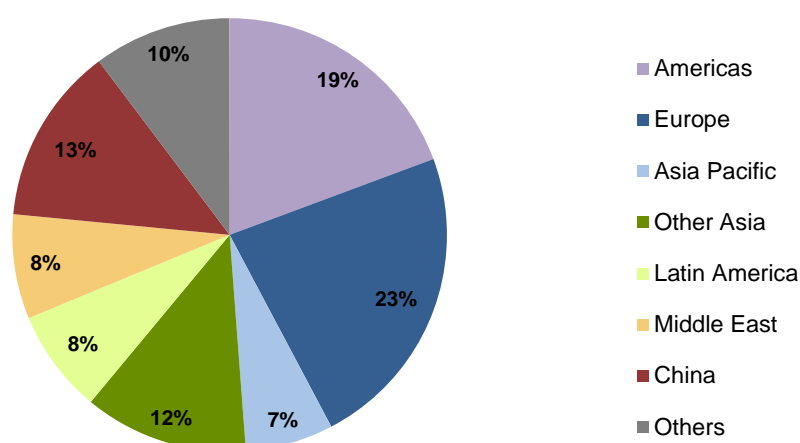


Table 4.1: World oil demand estimate for 2012, mb/d

|                              | 2011         | 1Q12         | 2Q12         | 3Q12         | 4Q12         | 2012         | Change 2012/11 |              |
|------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|--------------|
|                              |              |              |              |              |              |              | Growth         | %            |
| Americas                     | 24.06        | 23.51        | 23.81        | 23.93        | 24.04        | 23.82        | -0.24          | -0.99        |
| Europe                       | 14.31        | 13.75        | 13.78        | 13.82        | 13.86        | 13.80        | -0.51          | -3.56        |
| Asia Pacific                 | 8.13         | 9.08         | 7.97         | 8.23         | 8.66         | 8.48         | 0.35           | 4.36         |
| <b>Total OECD</b>            | <b>46.50</b> | <b>46.33</b> | <b>45.56</b> | <b>45.98</b> | <b>46.56</b> | <b>46.11</b> | <b>-0.39</b>   | <b>-0.84</b> |
| Other Asia                   | 10.46        | 10.51        | 10.79        | 10.87        | 10.83        | 10.75        | 0.29           | 2.74         |
| Latin America                | 6.06         | 5.98         | 6.21         | 6.47         | 6.36         | 6.26         | 0.19           | 3.20         |
| Middle East                  | 7.30         | 7.47         | 7.44         | 7.87         | 7.46         | 7.56         | 0.26           | 3.51         |
| Africa                       | 3.36         | 3.37         | 3.39         | 3.28         | 3.43         | 3.37         | 0.01           | 0.29         |
| <b>Total DCs</b>             | <b>27.19</b> | <b>27.32</b> | <b>27.83</b> | <b>28.49</b> | <b>28.08</b> | <b>27.94</b> | <b>0.75</b>    | <b>2.74</b>  |
| FSU                          | 4.29         | 4.24         | 4.09         | 4.51         | 4.72         | 4.39         | 0.10           | 2.36         |
| Other Europe                 | 0.64         | 0.63         | 0.60         | 0.63         | 0.72         | 0.65         | 0.00           | 0.53         |
| China                        | 9.41         | 9.45         | 9.88         | 9.54         | 9.97         | 9.71         | 0.30           | 3.21         |
| <b>Total "Other regions"</b> | <b>14.34</b> | <b>14.32</b> | <b>14.57</b> | <b>14.68</b> | <b>15.42</b> | <b>14.75</b> | <b>0.41</b>    | <b>2.84</b>  |
| <b>Total world</b>           | <b>88.04</b> | <b>87.98</b> | <b>87.95</b> | <b>89.16</b> | <b>90.06</b> | <b>88.80</b> | <b>0.76</b>    | <b>0.86</b>  |
| Previous estimate            | 88.04        | 87.98        | 87.95        | 89.16        | 90.06        | 88.80        | 0.76           | 0.86         |
| Revision                     | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00         | 0.00           | 0.00         |

Totals may not add up due to independent rounding.

The new OECD classifications are now reflected in the world oil demand tables.

World oil demand growth is estimated at 0.8 mb/d in 2012 and forecast to see similar growth in 2013, to average 89.6 mb/d.

**Table 4.2: First and second quarter world oil demand comparison for 2012, mb/d**

|                              |              |              | Change 2012/11 |              |              |              | Change 2012/11 |             |
|------------------------------|--------------|--------------|----------------|--------------|--------------|--------------|----------------|-------------|
|                              | 1Q11         | 1Q12         | Volume         | %            | 2Q11         | 2Q12         | Volume         | %           |
| Americas                     | 24.24        | 23.51        | -0.73          | -3.02        | 23.81        | 23.81        | 0.00           | 0.02        |
| Europe                       | 14.27        | 13.75        | -0.53          | -3.70        | 14.16        | 13.78        | -0.38          | -2.70       |
| Asia Pacific                 | 8.60         | 9.08         | 0.48           | 5.63         | 7.36         | 7.97         | 0.60           | 8.19        |
| <b>Total OECD</b>            | <b>47.11</b> | <b>46.33</b> | <b>-0.78</b>   | <b>-1.65</b> | <b>45.33</b> | <b>45.56</b> | <b>0.22</b>    | <b>0.50</b> |
| Other Asia                   | 10.27        | 10.51        | 0.24           | 2.30         | 10.54        | 10.79        | 0.25           | 2.40        |
| Latin America                | 5.77         | 5.98         | 0.21           | 3.68         | 6.03         | 6.21         | 0.19           | 3.08        |
| Middle East                  | 7.23         | 7.47         | 0.24           | 3.31         | 7.18         | 7.44         | 0.26           | 3.60        |
| Africa                       | 3.39         | 3.37         | -0.03          | -0.83        | 3.38         | 3.39         | 0.01           | 0.44        |
| <b>Total DCs</b>             | <b>26.66</b> | <b>27.32</b> | <b>0.66</b>    | <b>2.47</b>  | <b>27.12</b> | <b>27.83</b> | <b>0.71</b>    | <b>2.62</b> |
| FSU                          | 4.14         | 4.24         | 0.10           | 2.42         | 3.98         | 4.09         | 0.11           | 2.76        |
| Other Europe                 | 0.63         | 0.63         | 0.00           | -0.36        | 0.59         | 0.60         | 0.01           | 1.19        |
| China                        | 9.13         | 9.45         | 0.32           | 3.53         | 9.54         | 9.88         | 0.35           | 3.62        |
| <b>Total "Other regions"</b> | <b>13.90</b> | <b>14.32</b> | <b>0.42</b>    | <b>3.02</b>  | <b>14.10</b> | <b>14.57</b> | <b>0.46</b>    | <b>3.28</b> |
| <b>Total world</b>           | <b>87.68</b> | <b>87.98</b> | <b>0.30</b>    | <b>0.35</b>  | <b>86.56</b> | <b>87.95</b> | <b>1.40</b>    | <b>1.62</b> |

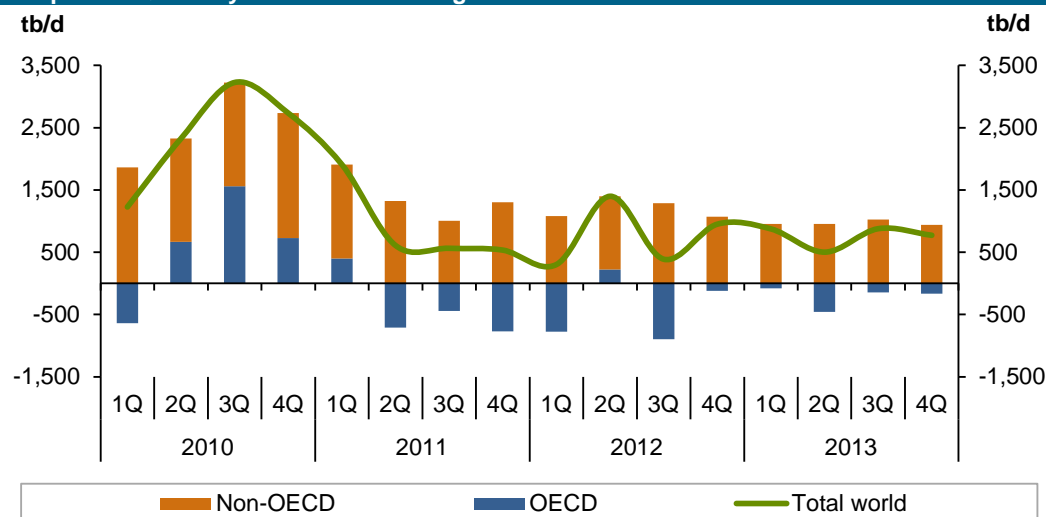
Totals may not add up due to independent rounding.

**Table 4.3: Third and fourth quarter world oil demand comparison for 2012, mb/d**

|                              |              |              | Change 2012/11 |              |              |              | Change 2012/11 |              |
|------------------------------|--------------|--------------|----------------|--------------|--------------|--------------|----------------|--------------|
|                              | 3Q11         | 3Q12         | Volume         | %            | 4Q11         | 4Q12         | Volume         | %            |
| Americas                     | 24.21        | 23.93        | -0.28          | -1.15        | 23.99        | 24.04        | 0.05           | 0.21         |
| Europe                       | 14.70        | 13.82        | -0.88          | -5.96        | 14.11        | 13.86        | -0.25          | -1.78        |
| Asia Pacific                 | 7.98         | 8.23         | 0.26           | 3.22         | 8.58         | 8.66         | 0.08           | 0.94         |
| <b>Total OECD</b>            | <b>46.88</b> | <b>45.98</b> | <b>-0.90</b>   | <b>-1.91</b> | <b>46.68</b> | <b>46.56</b> | <b>-0.12</b>   | <b>-0.26</b> |
| Other Asia                   | 10.44        | 10.87        | 0.43           | 4.16         | 10.61        | 10.83        | 0.22           | 2.08         |
| Latin America                | 6.26         | 6.47         | 0.21           | 3.44         | 6.20         | 6.36         | 0.16           | 2.62         |
| Middle East                  | 7.55         | 7.87         | 0.32           | 4.25         | 7.25         | 7.46         | 0.21           | 2.84         |
| Africa                       | 3.25         | 3.28         | 0.03           | 1.02         | 3.42         | 3.43         | 0.02           | 0.55         |
| <b>Total DCs</b>             | <b>27.49</b> | <b>28.49</b> | <b>1.00</b>    | <b>3.65</b>  | <b>27.47</b> | <b>28.08</b> | <b>0.61</b>    | <b>2.21</b>  |
| FSU                          | 4.40         | 4.51         | 0.11           | 2.50         | 4.64         | 4.72         | 0.08           | 1.83         |
| Other Europe                 | 0.63         | 0.63         | 0.00           | 0.35         | 0.72         | 0.72         | 0.01           | 0.93         |
| China                        | 9.37         | 9.54         | 0.17           | 1.81         | 9.60         | 9.97         | 0.37           | 3.88         |
| <b>Total "Other regions"</b> | <b>14.40</b> | <b>14.68</b> | <b>0.28</b>    | <b>1.96</b>  | <b>14.96</b> | <b>15.42</b> | <b>0.46</b>    | <b>3.10</b>  |
| <b>Total world</b>           | <b>88.77</b> | <b>89.16</b> | <b>0.39</b>    | <b>0.44</b>  | <b>89.11</b> | <b>90.06</b> | <b>0.95</b>    | <b>1.07</b>  |

Totals may not add up due to independent rounding.

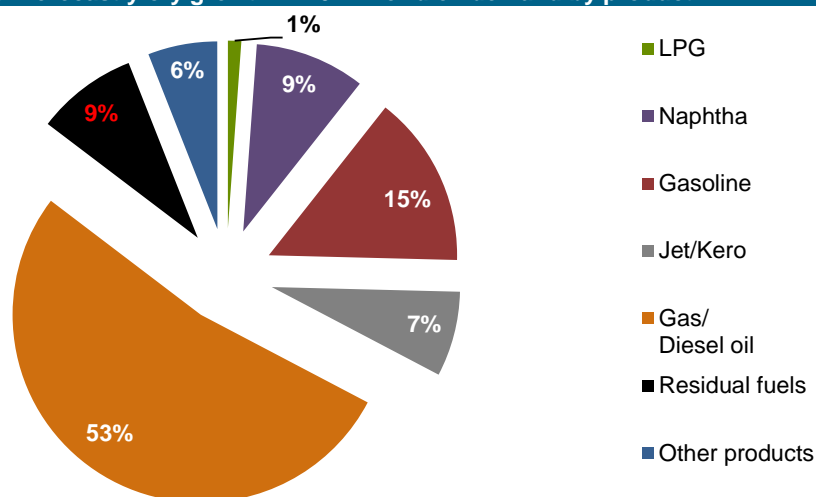
**Graph 4.2: Quarterly world oil demand growth**



## Americas

The latest US monthly oil consumption data for October saw a continuation of the recent downward trend, showing decreases of 0.6% y-o-y. However, this was less than in previous months. All the main product categories were marked by declines. The largest decline was in residual fuel oil and distillates, as a result of decreasing industrial activity. After taking into consideration weekly data for November and December, the year 2012 turned out to be generally quite disappointing for US consumption, with contractions taking place in product categories. The main factors influencing US consumption for most of 2012 were weak industrial production, the struggling economy, high fuel prices in the first half of the year, and fuel-switching, particularly towards natural gas.

**Graph 4.3: Forecast y-o-y growth in 2012 world oil demand by product**



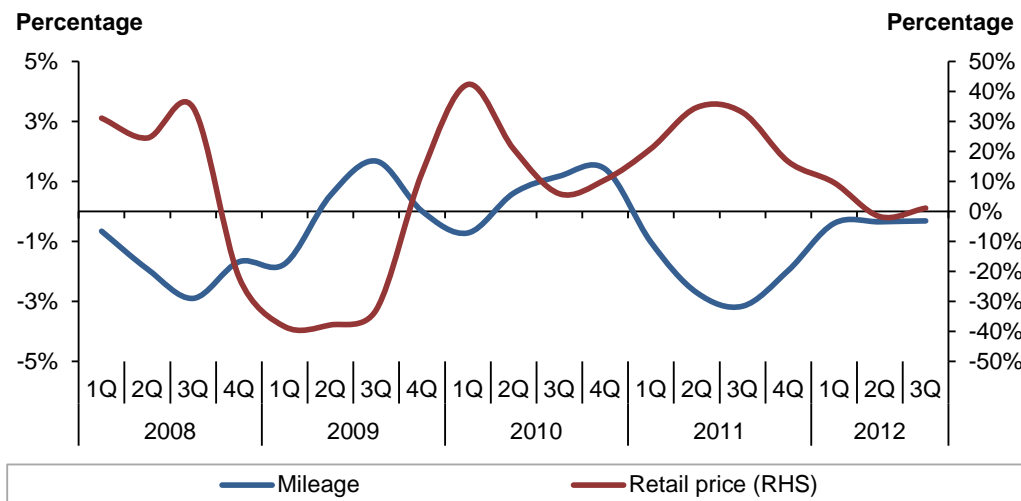
Preliminary weekly data showed a slight increase in US oil consumption for December at 1.8%. In November, gasoline consumption increased for the first time since August. The outlook for US consumption in 2013 remains rather pessimistic, especially taking into consideration economic developments. However, the momentum from rather stable economic factors has injected some hope into the country's oil demand for this year. Indeed, the fate of US demand will be greatly influenced by the country's economic developments.

The latest reports about Mexico's November oil consumption showed a significant increase of around 5.2%, compared with the same month last year. Improved industrial and economic activity in general provided the main factors behind this increase. Residual fuel oil and distillates were the most consumed products in November. Moreover, gasoline faced small shrinkages, as a result of seasonal trends.

Similarly, Canadian data showed oil demand increasing by a strong 9.3%, compared with last year; oil usage in transportation, as well as some industrial products, dominated this increase.

Given the decline in US oil demand, demand in the region is estimated to have decreased by 0.24 mb/d in 2012, while consumption during 2013 is projected to increase marginally by 0.04 mb/d.

**Graph 4.4: US mileage vs. prices**



The latest information for December showed auto sales up by 9% year-on-year (y-o-y), the best performance for five years, as a result of an improving economy, easing unemployment and the replacement of aging cars. Moreover, holiday sentiment pushed up sales during December. There was a strong increase of 13% in 2012, making this the strongest year since 2007. Currently improving sentiment projects sales for 2013 at around 5%. This will depend on the development of the overall economy.

The latest data for Canada showed disappointing December auto sales with a decrease of 5% y-o-y, while overall sales for 2012 were up by 6% over 2011. Moreover, this broad level of growth, at around 7%, is projected to continue during 2013. Gasoline prices have been a key concern for cost-conscious buyers and this has helped push the growth of a smaller, more fuel-efficient car category higher than the truck segment.

In Mexico, auto production, exports and sales rose by a strong 15%, 10% and 11% respectively in November, y-o-y. During the first 11 months of 2012, they were up by 14%, 12% and 11% from the same period of 2011. The country's auto market is expected to continue growing at the same pace for the whole of 2013.

**OECD — Europe**

European oil consumption contracted in November for the 15th month in a row, reflecting the region's struggling economy. Consumption in the 'Big Four' countries – Germany, France, Italy and UK – fell, with the bulk of the decreases seen in transportation and industrial fuels, as a result of the weak economy. Undoubtedly, the short- and medium-term development of European consumption does not appear to be positive, as continuing debt problems in several European economies do not seem to have been settled. The Big Four's demand decreased by 0.12 mb/d y-o-y in November.

As for the entire 2012, European consumption is expected to have shrunk by 0.51 mb/d, as a result of the economic turbulence in several of the region's economies, while consumption in 2013 is projected to fall again, but at a slower rate of 0.24 mb/d. The slowing decline is due to two main factors. The first is that efficiency has reached its bottom level for the medium term. Additionally, the continent's economy is expected to perform slightly better than last year.

According to the latest figures, European new passenger car registrations continued their decreasing trend for the 14th consecutive month in November, falling by 8.9% y-o-y. They fell in all the major markets — by 3.5% in Germany, 19.2% in France, 20.1% in Italy and 20.3% in Spain — with the exception of the United Kingdom, which posted solid growth of 11.3% y-o-y. During the first 11 months of 2012, sales were down by 7.6% from the previous year, the UK being the only major market to expand (5.4%), while Germany (-17%), Spain (-12.6%), France (-13.8%) and Italy (-19.7%) all contracted.

*European oil consumption estimated to have shrunk by 0.51 mb/d in 2012*



The European auto industry seems to be facing its second severe market downturn in recent years, which could have a further dramatic impact on a sector that is already facing huge challenges. In an economy dominated by consumer uncertainty, as a result of the on-going euro crisis, leading to high unemployment, the outlook for 2013 remains pessimistic, with shrinkage expectations as high as 6% y-o-y and with some markets coming close to their 20-year lows. Moreover, given the weaker auto sales demand, the European auto industry is struggling against existing excess production capacity, which has created poorly utilized and uncompetitive plants. This has forced manufacturers towards deeper price discounts. Inevitably, automobile production in Europe would need to be adjusted towards future lower demand, with all the implied consequences.

**Table 4.4: Europe Big 4\* oil demand, mb/d**

|                | <b>Nov 12</b> | <b>Nov 11</b> | <b>Change from Nov 11</b> | <b>Change from Nov 11, %</b> |
|----------------|---------------|---------------|---------------------------|------------------------------|
| LPG            | 351           | 397           | -47                       | -11.8                        |
| Gasoline       | 1,175         | 1,196         | -21                       | -1.7                         |
| Jet/Kerosene   | 723           | 716           | 7                         | 1.0                          |
| Gas/Diesel oil | 3,342         | 3,284         | 57                        | 1.7                          |
| Fuel oil       | 338           | 399           | -62                       | -15.4                        |
| Other products | 1,021         | 1,081         | -60                       | -5.5                         |
| <b>Total</b>   | <b>6,949</b>  | <b>7,073</b>  | <b>-124</b>               | <b>-1.8</b>                  |

\* Germany, France, Italy and the UK.

### OECD — Asia Pacific

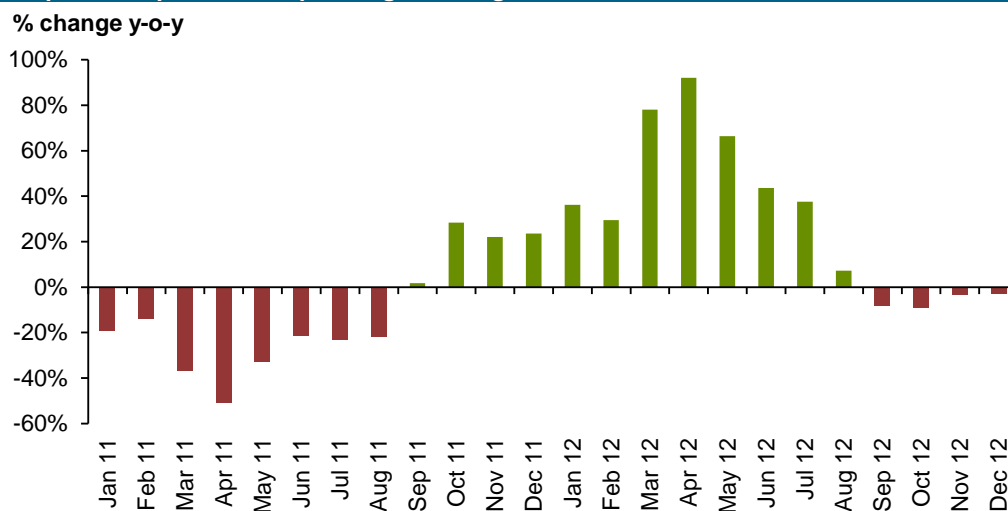
The latest monthly data for November for Japan showed decreasing and flat consumption of crude and residual fuel oil direct use, as a result of the high baseline and mild weather. The consumption of other product categories differed; gasoline and jet fuel fell slightly, while liquefied petroleum gas (LPG) and distillates were flat and kerosene increased sharply. Our earlier prognosis that direct crude and residual fuel burning for electricity production would continue at least throughout 2012 has certainly been verified. As for 2013, current indications suggest that the usage of fossil fuel for electricity generation will continue to be the only available option — apart from nuclear — to cover the country's large electricity requirements.

In South Korea, oil demand increased by 1.2% y-o-y in October. The rises occurred in transportation fuels, especially gasoline and industrial products, notably naphtha.

OECD Asia Pacific oil consumption is estimated to have grown by 0.35 mb/d in 2012, with the bulk of the increase resulting from direct crude/fuel oil burning for electricity generation and substituting nuclear plants in Japan. During 2013, OECD Asia Pacific's consumption is projected to remain at the same levels as in 2012. Japan is not expected to use more crude oil than its consumption level of 2012. Furthermore, the latest approved stimulus plan for Japan could provide added impetus to the economy. Rebuilding efforts, along with improving economic activity, are expected to prevent the country's oil demand from further decline.

*OECD Asia Pacific consumption estimated to have grown by 0.35 mb/d in 2012*

**Graph 4.5: Japanese new passenger car registrations**



*During 2013, minor growth of 1–3% expected for Japanese auto sales*

Japanese auto demand had two phases during 2012. Very strong growth of 55% was observed during the first half of 2012, driven by strong tax incentives and subsidies, as well as the low baseline caused by the catastrophic earthquake and tsunami. Thereafter, as the low baseline effect and government incentives diminished, sales growth became negative, with the largest declines of the year being minus 10% in October, minus 3% in November and, from the latest data, minus 3.1% in December. For the whole of 2012, auto sales grew by 27% y-o-y. During 2013, minor growth of 1–3% is expected for the country’s auto sales, with projections depending strongly on the evolution of the Japanese economy. Nevertheless, the recently announced economic stimulus plan might push up the current forecast further.

South Korea’s automobile sales during 2012 increased by a solid 6% as production recovered from labour strikes at the country’s top two automakers, Hyundai and Kia. However, the South Korean domestic auto market shrank by 4% in 2012, despite strong overseas demand. The market is also expected to decline by about 1% in 2013 due to a slowdown in the economy; there are no plans for new car releases and the fading out of tax reduction benefits. The South Korean government cut special consumption taxes on vehicles temporarily last month in a bid to boost domestic demand.

**Developing countries**

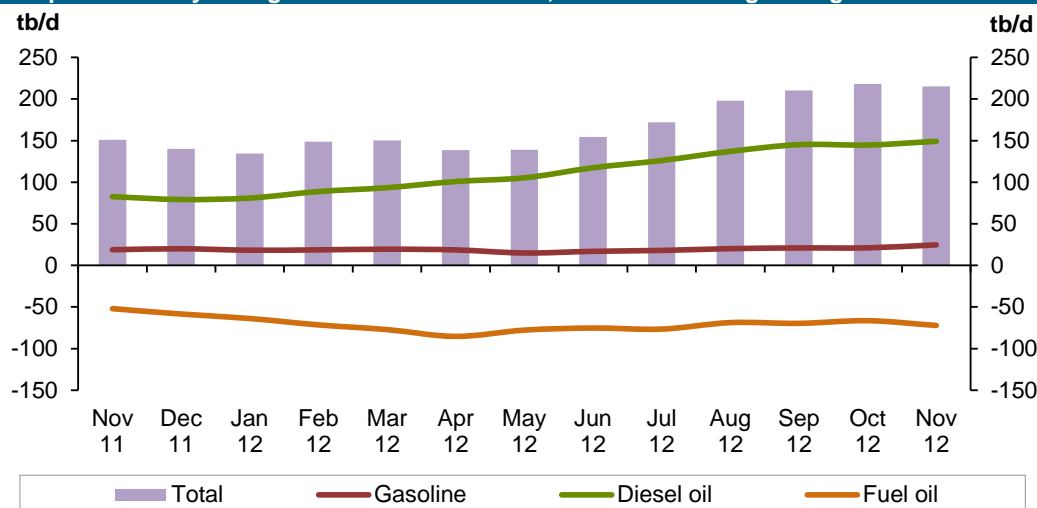
*DCs oil demand growth estimated at 0.7 mb/d in 2012, to average 28.0 mb/d*

This past summer in India, a massive power shutdown pushed the country’s diesel demand past the 200 tb/d growth level for three months. Nevertheless, this trend was repeated last month, resulting from different factors. Indian diesel demand bounced back strongly due to industrial, transport and agricultural sector activity, increasing by 7% or 0.2 mb/d in November y-o-y. This led to the country’s total oil demand growing by more than 0.3 mb/d during the month. Therefore, demand for 2012 exceeded early forecasts by 0.1 mb/d. As for this year, Indian demand is not expected to experience the same summer electricity shutdown; therefore, the country’s demand forecast is around 4%.

*India’s oil demand exceeded early forecasts by 0.1 mb/d in 2012*

According to the data released by the Society of Indian Automobile Manufacturers, car sales in India saw a sharp fall of 8% in November y-o-y, as a result of rising fuel prices, high borrowing costs and concern about the development of the country’s economy. Despite these recent sales decreases, the country’s auto sales for the year are estimated to have grown by an overall 4%, while 2013 forecasts stand lower, at 1–3%.

**Graph 4.6: Yearly changes in Indian oil demand, 12 month moving averages**



Given strong Indian demand, 'Other Asia's' oil demand growth is estimated at 0.3 mb/d in 2012

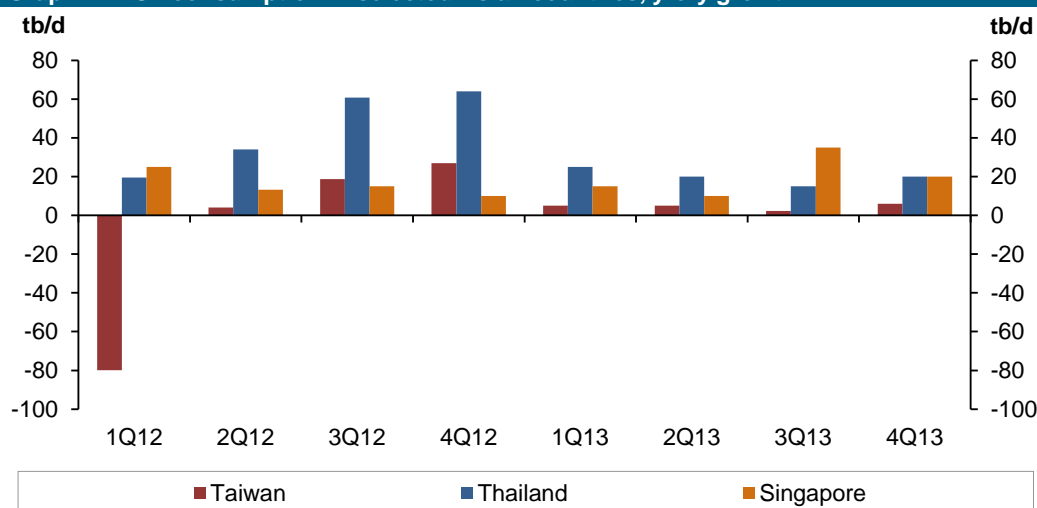
Indonesian oil demand grew by 4% in October, because of the massive consumption of transport fuel. Gasoline usage grew by more than 10% in October y-o-y. This was attributed to a growing economy and minor subsidies for some oil product consumption. Indonesia was estimated to consume 1.4 mb/d by the end of 2012, denoting 4.5% annual y-o-y growth.

Given the strong Indian oil demand, 'Other Asia's' oil demand growth is estimated at 0.3 mb/d y-o-y in 2012. As for the new year, demand is forecast to grow according to the normal trend; hence the region's oil demand growth will return to 0.2 mb/d.

**Table 4.5: Consumption of petroleum products in Indonesia, tb/d**

|                | Oct 12       | Oct 11       | Change    | Change, %  |
|----------------|--------------|--------------|-----------|------------|
| LPG            | 175          | 153          | 22        | 14.7       |
| Gasoline       | 515          | 467          | 49        | 10.4       |
| Jet/Kerosene   | 94           | 101          | -6        | -6.4       |
| Gas/Diesel Oil | 502          | 524          | -22       | -4.2       |
| Fuel Oil       | 47           | 59           | -12       | -21.0      |
| Other Products | 53           | 30           | 23        | 78.1       |
| <b>Total</b>   | <b>1,386</b> | <b>1,333</b> | <b>53</b> | <b>4.0</b> |

**Graph 4.7: Oil consumption in selected Asian countries, y-o-y growth**

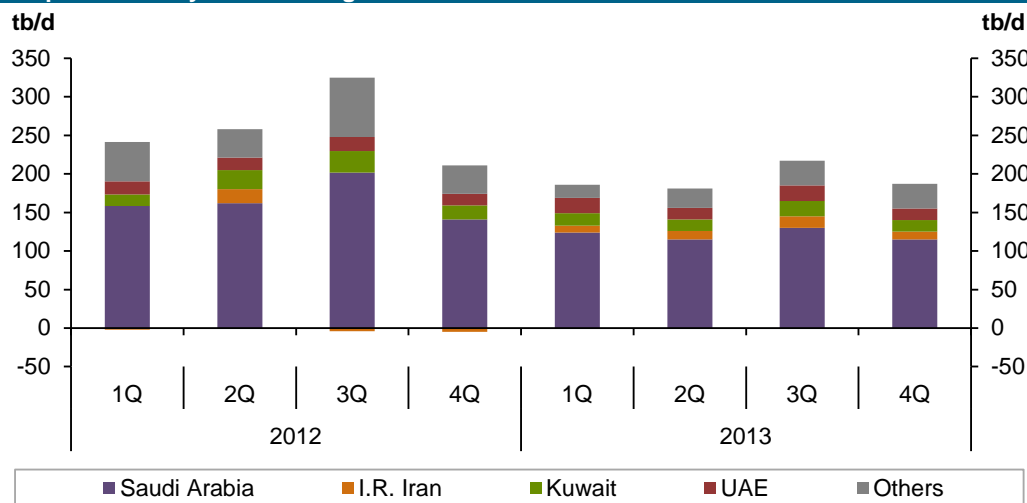


Middle East estimated to consume 7.6 mb/d at end of 2012, denoting growth of 0.26 mb/d for the year

Saudi oil demand growth eased as the summer ended and demand for electricity slowed. Hence, direct crude burning shrunk by 20% in November y-o-y. As for the entire year, the country's oil demand was forecast to have exceeded 5.5% growth at the end of the year.

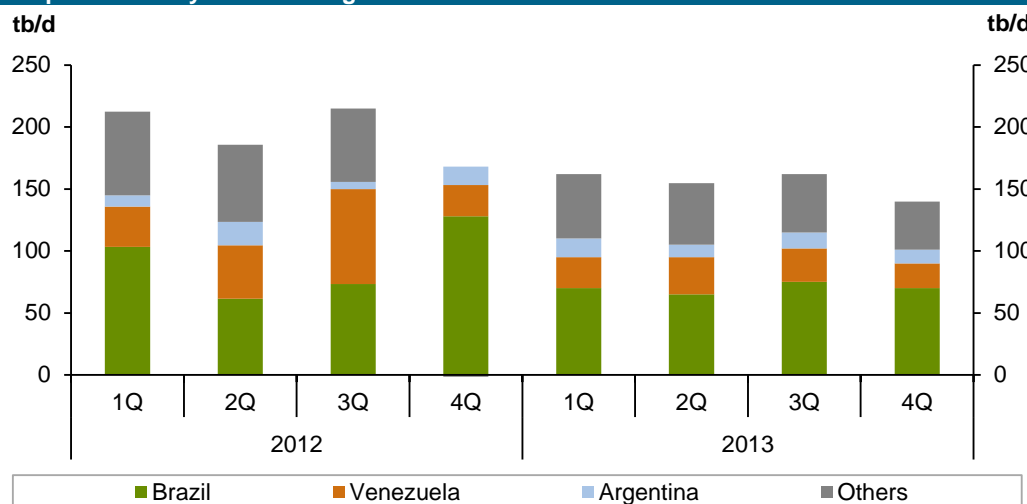
Oil consumption within the Middle East has grown strongly, reaching around 2.9% annually. Most of the growth is attributed to the transport and industrial sectors. It was forecast that the Middle East would consume 7.6 mb/d in 2012, denoting growth of 0.26 mb/d for the year, y-o-y. As for 2013, the region's demand growth will be in the same range, albeit at a slight lower level. Energy-intensive long-term projects are keeping oil demand at a similar level in the mid-term.

**Graph 4.8: Yearly oil demand growth in the Middle East**



Pushed by transport fuel demand, Venezuelan oil demand is forecast to achieve total annual growth of 20% in 2012. Heavy subsidies for domestic fuel use resulted in strong oil demand growth within the country. A booming economy also contributed to this growth in fuel usage.

**Graph 4.9: Yearly oil demand growth in the Latin America**



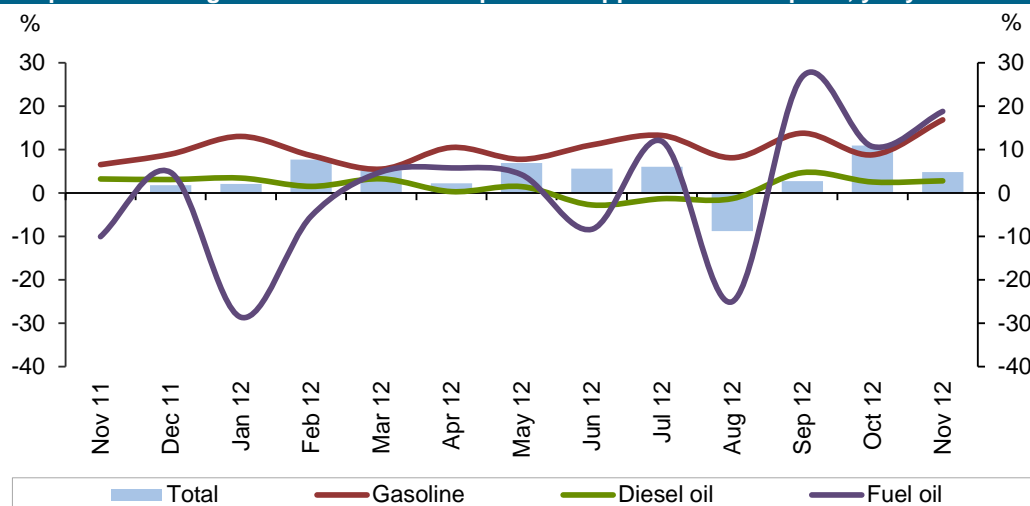
Developing countries' oil demand growth is estimated at 0.7 mb/d y-o-y in 2012, to average 28.0 mb/d.

China's oil demand growth estimated at 3.2% in 2012

### Other regions

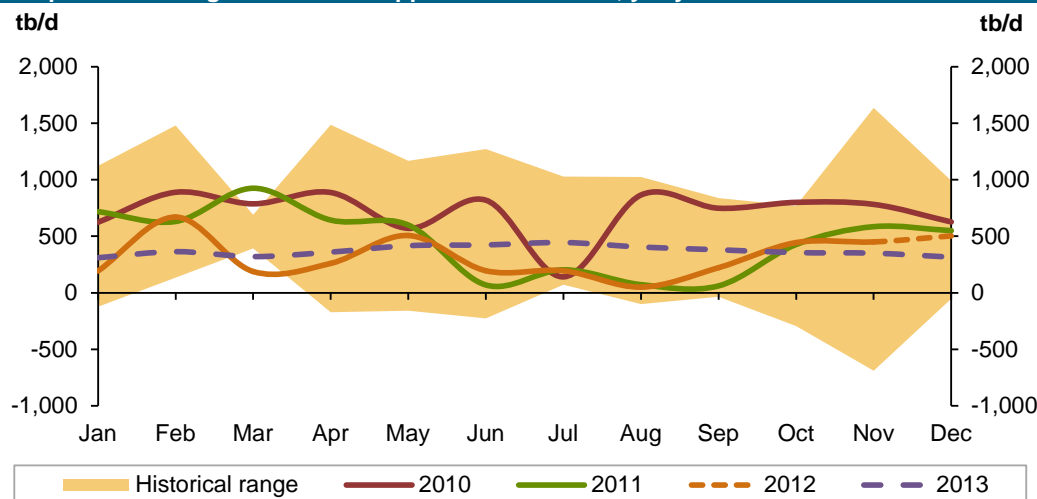
China's oil demand inched up in November to 4.7% growth, adding another 0.45 mb/d y-o-y. This level of growth fell within the forecast range. It was attributed to gasoline (315 tb/d), fuel oil and diesel (100 tb/d each). Demand was forecast to grow by 3.2% in 2012 y-o-y. The same trend is expected for this year, provided that there are no new government policies directed towards a reduction in transport fuel consumption. China's demand has followed a trend, however; in the past two years, the third quarter weakened a bit as manufacturing activity slowed. A healthy manufacturing purchasing managers' index (PMI) would drive up the country's diesel demand this year. Diesel demand is dependent mostly upon the transport and industrial sectors. China's economic development, along with government policies, will determine the fate of the country's oil demand movements this year.

**Graph 4.10: Changes in Chinese main oil products apparent consumption, y-o-y**

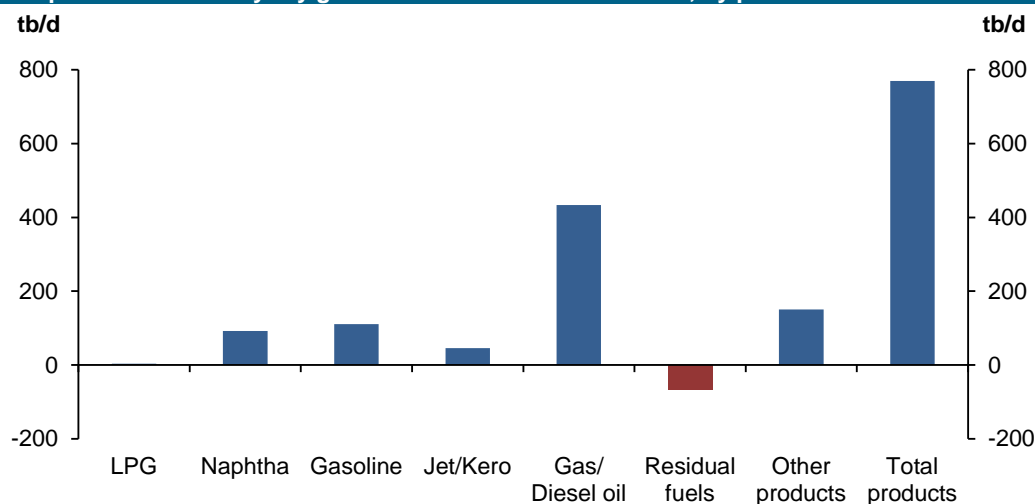


According to the statistics and analysis of the China Association of Automobile Manufacturers, the country's automobile sales increased by 8% in November, while sales of Japanese-branded cars fell as a result of the recent political dispute over a group of islands in the East China Sea. Overall sales in China for the first 11 months of 2012 reached 17.5 million cars, which was 4% higher than in the same period of 2011. As for the entire year of 2012, this is expected to have seen growth of 4%. In 2013, auto sales are projected to grow by 3%, depending on government regulatory constraints against private car-ownership.

**Graph 4.11: Changes in Chinese apparent oil demand, y-o-y**



**Graph 4.12: Forecast y-o-y growth in 2013 world oil demand, by product**

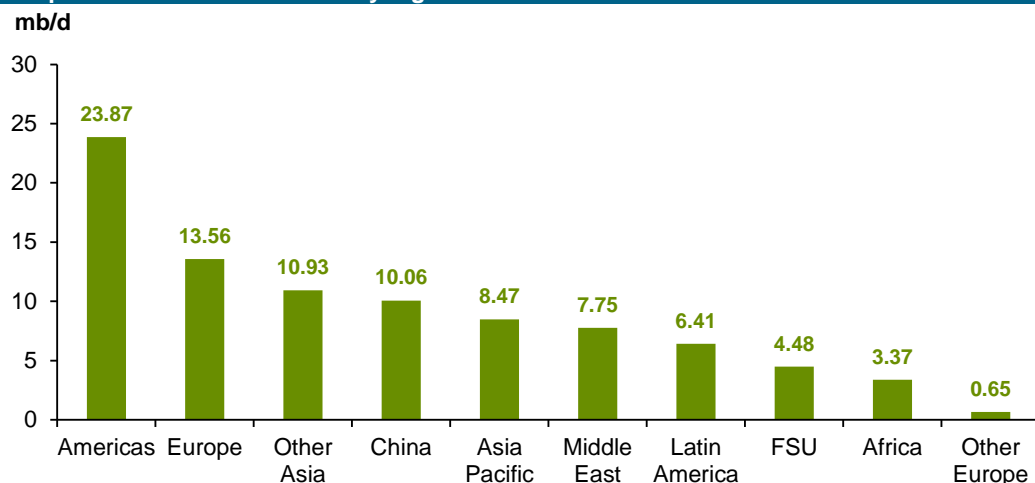


**Table 4.6: World oil demand forecast for 2013, mb/d**

|                              | 2012         | 1Q13         | 2Q13         | 3Q13         | 4Q13         | 2013         | Change 2013/12 |              |
|------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|--------------|
|                              |              |              |              |              |              |              | Growth         | %            |
| Americas                     | 23.82        | 23.65        | 23.72        | 24.02        | 24.08        | 23.87        | 0.04           | 0.18         |
| Europe                       | 13.80        | 13.56        | 13.51        | 13.56        | 13.63        | 13.56        | -0.24          | -1.72        |
| Asia Pacific                 | 8.48         | 9.05         | 7.88         | 8.25         | 8.69         | 8.47         | -0.02          | -0.22        |
| <b>Total OECD</b>            | <b>46.11</b> | <b>46.26</b> | <b>45.10</b> | <b>45.84</b> | <b>46.40</b> | <b>45.90</b> | <b>-0.21</b>   | <b>-0.46</b> |
| Other Asia                   | 10.75        | 10.69        | 10.96        | 11.06        | 11.00        | 10.93        | 0.18           | 1.67         |
| Latin America                | 6.26         | 6.14         | 6.37         | 6.63         | 6.50         | 6.41         | 0.15           | 2.47         |
| Middle East                  | 7.56         | 7.66         | 7.62         | 8.09         | 7.64         | 7.75         | 0.19           | 2.55         |
| Africa                       | 3.37         | 3.37         | 3.40         | 3.28         | 3.43         | 3.37         | 0.00           | 0.06         |
| <b>Total DCs</b>             | <b>27.94</b> | <b>27.86</b> | <b>28.34</b> | <b>29.07</b> | <b>28.58</b> | <b>28.46</b> | <b>0.53</b>    | <b>1.89</b>  |
| FSU                          | 4.39         | 4.33         | 4.17         | 4.59         | 4.82         | 4.48         | 0.09           | 1.96         |
| Other Europe                 | 0.65         | 0.64         | 0.60         | 0.64         | 0.73         | 0.65         | 0.00           | 0.73         |
| China                        | 9.71         | 9.77         | 10.25        | 9.91         | 10.31        | 10.06        | 0.35           | 3.59         |
| <b>Total "Other regions"</b> | <b>14.75</b> | <b>14.74</b> | <b>15.01</b> | <b>15.13</b> | <b>15.86</b> | <b>15.19</b> | <b>0.44</b>    | <b>2.98</b>  |
| <b>Total world</b>           | <b>88.80</b> | <b>88.86</b> | <b>88.46</b> | <b>90.04</b> | <b>90.84</b> | <b>89.55</b> | <b>0.76</b>    | <b>0.85</b>  |
| Previous estimate            | 88.80        | 88.90        | 88.45        | 90.05        | 90.83        | 89.57        | 0.77           | 0.87         |
| Revision                     | 0.00         | -0.05        | 0.00         | -0.01        | 0.01         | -0.01        | -0.01          | -0.01        |

Totals may not add up due to independent rounding.

**Graph 4.13: World oil demand by regions for 2013**



**Table 4.7: First and second quarter world oil demand comparison for 2013, mb/d**

|                              | <u>1Q12</u>  | <u>1Q13</u>  | <u>Change 2013/12</u> |              | <u>2Q12</u>  | <u>2Q13</u>  | <u>Change 2013/12</u> |              |
|------------------------------|--------------|--------------|-----------------------|--------------|--------------|--------------|-----------------------|--------------|
|                              |              |              | <u>Volume</u>         | <u>%</u>     |              |              | <u>Volume</u>         | <u>%</u>     |
| Americas                     | 23.51        | 23.65        | 0.14                  | 0.60         | 23.81        | 23.72        | -0.10                 | -0.40        |
| Europe                       | 13.75        | 13.56        | -0.19                 | -1.38        | 13.78        | 13.51        | -0.27                 | -1.96        |
| Asia Pacific                 | 9.08         | 9.05         | -0.03                 | -0.33        | 7.97         | 7.88         | -0.09                 | -1.13        |
| <b>Total OECD</b>            | <b>46.33</b> | <b>46.26</b> | <b>-0.08</b>          | <b>-0.17</b> | <b>45.56</b> | <b>45.10</b> | <b>-0.46</b>          | <b>-1.00</b> |
| Other Asia                   | 10.51        | 10.69        | 0.18                  | 1.75         | 10.79        | 10.96        | 0.17                  | 1.58         |
| Latin America                | 5.98         | 6.14         | 0.16                  | 2.71         | 6.21         | 6.37         | 0.15                  | 2.49         |
| Middle East                  | 7.47         | 7.66         | 0.19                  | 2.49         | 7.44         | 7.62         | 0.18                  | 2.43         |
| Africa                       | 3.37         | 3.37         | 0.00                  | 0.12         | 3.39         | 3.40         | 0.00                  | 0.13         |
| <b>Total DCs</b>             | <b>27.32</b> | <b>27.86</b> | <b>0.54</b>           | <b>1.96</b>  | <b>27.83</b> | <b>28.34</b> | <b>0.51</b>           | <b>1.83</b>  |
| FSU                          | 4.24         | 4.33         | 0.09                  | 2.14         | 4.09         | 4.17         | 0.08                  | 1.93         |
| Other Europe                 | 0.63         | 0.64         | 0.01                  | 0.95         | 0.60         | 0.60         | 0.00                  | 0.50         |
| China                        | 9.45         | 9.77         | 0.32                  | 3.39         | 9.88         | 10.25        | 0.37                  | 3.69         |
| <b>Total "Other regions"</b> | <b>14.32</b> | <b>14.74</b> | <b>0.42</b>           | <b>2.91</b>  | <b>14.57</b> | <b>15.01</b> | <b>0.45</b>           | <b>3.07</b>  |
| <b>Total world</b>           | <b>87.98</b> | <b>88.86</b> | <b>0.87</b>           | <b>0.99</b>  | <b>87.95</b> | <b>88.46</b> | <b>0.50</b>           | <b>0.57</b>  |

Totals may not add up due to independent rounding.

**Table 4.8: Third and fourth quarter world oil demand comparison for 2013, mb/d**

|                              | <u>3Q12</u>  | <u>3Q13</u>  | <u>Change 2013/12</u> |              | <u>4Q12</u>  | <u>4Q13</u>  | <u>Change 2013/12</u> |              |
|------------------------------|--------------|--------------|-----------------------|--------------|--------------|--------------|-----------------------|--------------|
|                              |              |              | <u>Volume</u>         | <u>%</u>     |              |              | <u>Volume</u>         | <u>%</u>     |
| Americas                     | 23.93        | 24.02        | 0.09                  | 0.39         | 24.04        | 24.08        | 0.04                  | 0.15         |
| Europe                       | 13.82        | 13.56        | -0.26                 | -1.87        | 13.86        | 13.63        | -0.23                 | -1.66        |
| Asia Pacific                 | 8.23         | 8.25         | 0.02                  | 0.24         | 8.66         | 8.69         | 0.03                  | 0.30         |
| <b>Total OECD</b>            | <b>45.98</b> | <b>45.84</b> | <b>-0.15</b>          | <b>-0.32</b> | <b>46.56</b> | <b>46.40</b> | <b>-0.17</b>          | <b>-0.36</b> |
| Other Asia                   | 10.87        | 11.06        | 0.19                  | 1.76         | 10.83        | 11.00        | 0.17                  | 1.60         |
| Latin America                | 6.47         | 6.63         | 0.16                  | 2.50         | 6.36         | 6.50         | 0.14                  | 2.20         |
| Middle East                  | 7.87         | 8.09         | 0.22                  | 2.76         | 7.46         | 7.64         | 0.19                  | 2.51         |
| Africa                       | 3.28         | 3.28         | 0.00                  | 0.13         | 3.43         | 3.43         | 0.00                  | -0.13        |
| <b>Total DCs</b>             | <b>28.49</b> | <b>29.07</b> | <b>0.57</b>           | <b>2.01</b>  | <b>28.08</b> | <b>28.58</b> | <b>0.50</b>           | <b>1.76</b>  |
| FSU                          | 4.51         | 4.59         | 0.08                  | 1.67         | 4.72         | 4.82         | 0.10                  | 2.10         |
| Other Europe                 | 0.63         | 0.64         | 0.01                  | 0.79         | 0.72         | 0.73         | 0.01                  | 0.69         |
| China                        | 9.54         | 9.91         | 0.37                  | 3.88         | 9.97         | 10.31        | 0.34                  | 3.41         |
| <b>Total "Other regions"</b> | <b>14.68</b> | <b>15.13</b> | <b>0.45</b>           | <b>3.07</b>  | <b>15.42</b> | <b>15.86</b> | <b>0.44</b>           | <b>2.88</b>  |
| <b>Total world</b>           | <b>89.16</b> | <b>90.04</b> | <b>0.88</b>           | <b>0.98</b>  | <b>90.06</b> | <b>90.84</b> | <b>0.77</b>           | <b>0.86</b>  |

Totals may not add up due to independent rounding.

# World Oil Supply

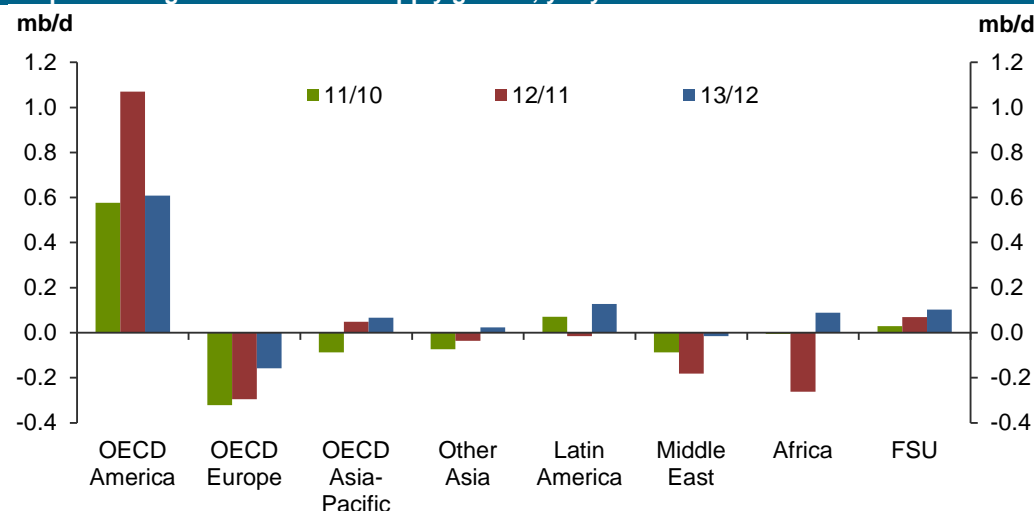
Non-OPEC supply estimated at 52.98 mb/d in 2012, representing growth of 0.54 mb/d

## Non-OPEC Estimate for 2012

Non-OPEC oil supply is estimated to have averaged 52.98 mb/d in 2012, an increase of 0.54 mb/d over 2011, indicating an upward revision of 50 tb/d from the previous assessment. Higher-than-expected output in part of the fourth quarter influenced this month's estimates, as current production data became available. Further revisions are expected in the coming period as more data is received. In 2012, non-OPEC supply experienced various improvements and setbacks throughout the year. The initial forecast called for growth of 0.68 mb/d; however, different upstream dynamics brought many changes to the original outlook. Despite the possibility of further revisions to the total figure, the forecast remains within a relatively close range of the initial projections.

Non-OPEC supply in 2012 met two contrary developments. Strong growth from OECD America and unexpected declines from all the other regions, except the former Soviet Union (FSU), OECD Asia Pacific and China, were the main features of non-OPEC supply in 2012. OECD America's oil supply growth estimate of 1.07 mb/d in 2012 was the highest on record, while, in the opposite direction, the declines of 0.26 mb/d and 0.18 mb/d respectively in Africa and the Middle East were also the largest contractions. The strong growth in OECD America was supported by shale and oil sand developments, while the declines in the other regions were driven mainly by political, technical and weather factors. Disruptions were mainly seen affecting output from South Sudan and Sudan, Syria, the UK, Norway, Indonesia, Yemen, Azerbaijan and Brazil. On a quarterly basis, non-OPEC supply in 2012 is estimated at 53.22 mb/d, 52.65 mb/d, 52.47 mb/d and 53.59 mb/d respectively.

Graph 5.1: Regional non-OPEC supply growth, y-o-y



## Revisions to the 2012 estimate

The non-OPEC supply estimates for the first half of 2012 remain relatively steady, compared with the previous *MOMR*, with only a minor downward revision of 10 tb/d for the first quarter. Second-half oil supply estimates were revised up by a significant 100 tb/d. On an annual basis, the 2012 supply estimates for the USA, Australia, Colombia, Russia and China were revised up from the previous month, while the supply figures for Canada, Norway, the UK, Denmark, Malaysia, Argentina, South Sudan and Sudan, and Azerbaijan were revised lower. Almost all the revisions were introduced to adjust for updated production data. The upward revisions outpaced the downward adjustments, resulting in an overall upward revision of 50 tb/d from the previous *MOMR*. Fourth-quarter supply for 2012 is now the highest, compared with the other quarters of the year, with a 0.6 mb/d increase from the first quarter. The increase is supported by the continued strong growth in OECD America on higher oil sand and tight oil output, as well as the return of much North Sea output from heavy maintenance and the shutdown period.



The US oil supply estimate for 2012 was revised up by 100 tb/d from the previous assessment. Supply growth is seen at 0.91 mb/d in 2012 to average 9.95 mb/d, the largest increase among all the non-OPEC countries. This revision affected all the quarters of 2012, with the largest upward revision coming in the fourth quarter. The estimated growth in 2012 was the highest annual growth so far recorded for the USA. Strong growth from shale developments supported the upward revision, as well as increases from the Gulf of Mexico during the early part of the fourth quarter. North Dakota's oil supply reached a new record in October, and, according to preliminary data, is expected to have hit further highs in November and December. In addition, Texas production continued to show healthy growth, further supporting the upward revision. Canada's oil supply estimate for 2012 experienced a minor downward revision of 15 tb/d from the previous *MOMR*. This was to adjust for updated production data for the early part of the fourth quarter that turned out to be slightly below expectations. The low figure came partly on the back of unplanned shutdowns at some oil sand facilities.

Updated production data for the fourth quarter of 2012 required various upward and downward revisions. The supply outlooks for Australia, Colombia, Russia and China were revised up on updated production data, while supply estimates for Norway, the UK, Denmark, Malaysia, Argentina, South Sudan and Sudan, and Azerbaijan were revised down to adjust for updated production data that was below expectations. Russia's oil supply in 2012 is estimated at 10.37 mb/d, an increase of 110 tb/d from the previous year and an upward revision of 10 tb/d from the previous *MOMR*. This revision was undertaken to adjust for updated production data. Brazil's oil supply is estimated to have averaged 2.61 mb/d in 2012, a drop of 20 tb/d from the previous year and steady from the previous *MOMR*, despite a minor downward revision in the fourth quarter to adjust for updated production data.

**Table 5.1: Non-OPEC oil supply in 2012, mb/d**

|                                  | <u>2011</u>  | <u>1Q12</u>  | <u>2Q12</u>  | <u>3Q12</u>  | <u>4Q12</u>  | <u>2012</u>  | <b>Change</b><br><b>12/11</b> |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|-------------------------------|
| Americas                         | 15.55        | 16.51        | 16.42        | 16.49        | 17.06        | 16.62        | 1.07                          |
| Europe                           | 4.07         | 4.07         | 3.91         | 3.49         | 3.63         | 3.77         | -0.29                         |
| Asia Pacific                     | 0.57         | 0.51         | 0.53         | 0.69         | 0.73         | 0.62         | 0.05                          |
| <b>Total OECD</b>                | <b>20.19</b> | <b>21.09</b> | <b>20.86</b> | <b>20.66</b> | <b>21.42</b> | <b>21.01</b> | <b>0.82</b>                   |
| Other Asia                       | 3.63         | 3.65         | 3.56         | 3.59         | 3.57         | 3.59         | -0.04                         |
| Latin America                    | 4.73         | 4.81         | 4.67         | 4.64         | 4.75         | 4.72         | -0.02                         |
| Middle East                      | 1.69         | 1.44         | 1.54         | 1.53         | 1.53         | 1.51         | -0.18                         |
| Africa                           | 2.59         | 2.40         | 2.30         | 2.31         | 2.31         | 2.33         | -0.26                         |
| <b>Total DCs</b>                 | <b>12.65</b> | <b>12.30</b> | <b>12.08</b> | <b>12.07</b> | <b>12.16</b> | <b>12.15</b> | <b>-0.49</b>                  |
| FSU                              | 13.24        | 13.36        | 13.24        | 13.23        | 13.41        | 13.31        | 0.07                          |
| Other Europe                     | 0.14         | 0.14         | 0.15         | 0.14         | 0.14         | 0.14         | 0.00                          |
| China                            | 4.11         | 4.16         | 4.16         | 4.20         | 4.29         | 4.20         | 0.09                          |
| <b>Total "Other regions"</b>     | <b>17.49</b> | <b>17.66</b> | <b>17.54</b> | <b>17.57</b> | <b>17.84</b> | <b>17.65</b> | <b>0.16</b>                   |
| <b>Total Non-OPEC production</b> | <b>50.32</b> | <b>51.05</b> | <b>50.48</b> | <b>50.30</b> | <b>51.42</b> | <b>50.81</b> | <b>0.49</b>                   |
| Processing gains                 | 2.12         | 2.17         | 2.17         | 2.17         | 2.17         | 2.17         | 0.05                          |
| <b>Total Non-OPEC supply</b>     | <b>52.45</b> | <b>53.22</b> | <b>52.65</b> | <b>52.47</b> | <b>53.59</b> | <b>52.98</b> | <b>0.54</b>                   |
| Previous estimate                | 52.45        | 53.23        | 52.65        | 52.40        | 53.44        | 52.93        | 0.48                          |
| Revision                         | 0.00         | -0.01        | 0.00         | 0.07         | 0.15         | 0.05         | 0.06                          |

*The new OECD classifications are now reflected in non-OPEC oil supply tables.*

### Forecast for 2013

In 2013, non-OPEC supply is forecast to increase by 0.93 mb/d over the previous year to average 53.92 mb/d. The current supply expectation indicates an upward revision of 85 tb/d to total non-OPEC supply, while anticipated growth was revised up by 30 tb/d from a month earlier. The upward revision to total non-OPEC supply was due to the carry-over of some of the revisions introduced to the 2012 supply estimates, as well as to various updates to individual supply profiles. On a quarterly basis, non-OPEC supply is expected to average 53.84 mb/d, 53.61 mb/d, 53.91 mb/d and 54.49, respectively.

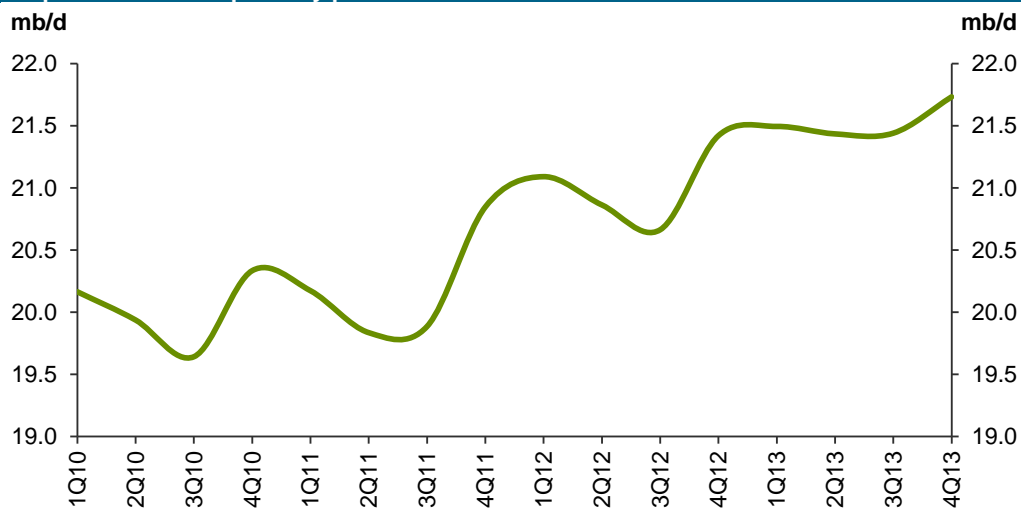
*Non-OPEC supply to increase by 0.93 mb/d in 2013 to average 53.92 mb/d*

*OECD production to increase by 0.52 mb/d in 2013 to average 21.53 mb/d*

**OECD**

OECD total oil supply in 2013 is expected to average 21.53 mb/d, the highest level since 2003, indicating an increase of 0.52 mb/d over the previous year and an upward revision of 0.18 mb/d from the previous report. The upward revision came from OECD America and OECD Asia Pacific, while the OECD Europe forecast experienced a minor downward revision. Within the OECD, supply in America and Asia Pacific is forecast to show growth in 2013, while that of Europe is expected to decline. On a quarterly basis, total OECD supply is seen to stand at 21.49 mb/d, 21.43 mb/d, 21.44 mb/d and 21.73 mb/d respectively. According to preliminary data, OECD supply averaged 21.42 mb/d in the fourth quarter of 2012, showing growth of 0.57 mb/d over the same period of 2011.

**Graph 5.2: OECD's quarterly production**



**North America**

OECD America's oil supply is projected to increase by 0.61 mb/d in 2013 over the previous year, the highest growth among all the non-OPEC regions, to average 17.23 mb/d, representing an upward revision of 0.18 mb/d from the previous month. Both US and Canadian supply are expected to grow in 2013, while that of Mexico is estimated to decline. On a quarterly basis, OECD America's oil supply is forecast to average 17.10 mb/d, 17.17 mb/d, 17.24 mb/d and 17.40 mb/d respectively.

**USA**

US oil supply is projected to increase by 0.49 mb/d in 2013, the highest figure among all the non-OPEC countries, to average 10.44 mb/d, representing an upward revision of 0.18 mb/d from the previous MOMR. This revision was supported by that of 2012. In addition, the increase in capital expenditure (capex) in 2012, as well as for 2013, is supporting this growth. The forecast supply growth is backed by an expected strong increase in tight oil from the Bakken, Barnett, Permian and Eagle Ford formations. Also, offshore projects, such as the Cascade and Chinook and Mars B, are seen to support US production in 2013.

The recently experienced increased percentage of oil rigs, compared with gas rigs, is seen as a positive factor for supply in 2013. Furthermore, the improvement in permit-issuing for Gulf of Mexico drilling is expected to increase the output of the region in 2013. Also this year, US oil supply is expected to be enhanced further, mainly from Texas, North Dakota and the Gulf of Mexico. On the other hand, Alaska's oil supply is expected to continue its 'mature' decline, and this is likely to be offset by the supply growth in other areas. However, a high level of uncertainty continues to surround US oil output in 2013, on the back of weather conditions, decline rates, and environmental and price factors. On a quarterly basis, US oil supply is expected to stand at 10.35 mb/d, 10.42 mb/d, 10.45 mb/d and 10.53 mb/d respectively.

*US oil output to increase by 0.49 mb/d in 2013 to average 10.44 mb/d*

*Canadian oil production to increase by 0.18 mb/d in 2013 to average 3.92 mb/d*

### **Canada and Mexico**

Canada's oil production is forecast to average 3.92 mb/d in 2013, growth of 0.18 mb/d over the previous year and unchanged from the previous month. Despite the downward revision that had an impact on the 2012 supply estimates, Canada's oil production outlook in 2013 remained steady on expected healthy oil sand growth, as well as oil from shale developments. The start-up of the Kearl oil project in early 2013 is seen to strongly support output throughout the year. Furthermore, growth is expected to come from Christina Lake as the operators prepare to introduce new solutions to improve the extraction rate. Moreover, the increase in shale oil output from Alberta is expected to continue in 2013. However, the risk to the forecast is on the high side on logistics and economic concerns, as well as unplanned shutdowns, which had a negative impact on growth in 2012. On a quarterly basis, Canada's supply is expected to average 3.84 mb/d, 3.87 mb/d, 3.93 mb/d and 4.02 mb/d respectively.

*Mexico's supply to average 2.86 mb/d in 2013, a decline of 70 t/d*

Mexico's oil supply is expected to decline by 70 tb/d in 2013 from 2012 to average 2.86 mb/d, indicating a minor downward revision of 10 tb/d from the last *MOMR*. Despite the relatively healthy output in 2012, the lowest decline since 2004, where supply remained steady on the back of output-stabilization efforts, Mexico's production in 2013 has been forecast to decline. The lack of significant new developments is the main factor behind this expected fall. Output from Mexico's main producing field, the Ku-Malooop-Zaap (KMZ), has reached a peak and is expected to remain at that level in 2013. Also, the decline is expected despite the ramp-ups of the Yaxche, Chuhuc, Tsimis and Xux fields. In addition, the national operator is expected to auction six blocks in the Chicontepec project. Moreover, in November 2012, Mexico's crude oil supply reached a 22-month high, supported by the return from maintenance and the start-up of new projects. However, an output decline is still forecast for 2013, despite an expected increase in capex. Nonetheless, the uncertainty surrounding the 2013 forecast remains on both sides, especially related to the decline rate and new volume. On a quarterly basis, Mexico's supply is seen to average 2.89 mb/d, 2.86 mb/d, 2.85 mb/d and 2.83 mb/d respectively.

### **Western Europe**

OECD Europe's oil supply is seen to decline by 0.16 mb/d from the previous year to average 3.62 mb/d in 2013, indicating a downward revision of 20 tb/d from the previous *MOMR*. Output from the region in 2013 is expected to continue the downward trend, yet at a lower rate than the unplanned shutdown effect on output in 2012. OECD Europe is expected to see quarterly supply of 3.73 mb/d, 3.57 mb/d, 3.50 mb/d and 3.66 mb/d respectively.

*Norway's supply expected to decline by 80 tb/d in 2013 to average 1.83 mb/d*

Norway's oil supply is forecast to drop by 0.08 mb/d from the previous year to average 1.83 mb/d in 2013, indicating a minor downward revision of 10 tb/d from the previous *MOMR*. This revision comes on the back of weak production figures in the early part of the fourth quarter of 2012 that were carried over to 2013. The decrease in 2013 is expected on the back of the natural decline of mature fields, coupled with limited new developments and expected shutdowns and maintenance. Despite the plan by operators to fast-track some fields, mostly small and satellite projects, the new volume is not expected to be enough to offset the anticipated natural decline. The start-up of the Skarv field is seen to strongly support Norway's oil supply in 2013. However, maintenance and declines are seen to have a heavier impact on output in 2013. The risk to the forecast relies on the ability of producers to reduce their production shutdowns in 2013. On a quarterly basis, Norway's production is seen to average 1.90 mb/d, 1.81 mb/d, 1.76 mb/d and 1.86 mb/d respectively.

*UK supply to decline by 50 tb/d in 2013 to average 0.91 mb/d*

UK oil output is forecast to average 0.91 mb/d in 2013, the lowest level since 1977 and representing a decline of 50 tb/d from the previous year, while being flat from the previous *MOMR*. This has come about despite the low level of output in October 2012, which indicated a 30% decrease from the same period a year earlier. The restart of Elgin-Franklin output has been delayed from the end of 2012 to 2013, and this is seen to support output. However, the expected decline in 2013 is driven by natural declines and limited new developments. The projected production drop in 2013 is significantly lower than the decline estimated in 2012, since supply is seen to experience fewer unplanned shutdowns in 2013, compared with 2012, in addition to a smaller impact from maintenance and mature declines. Furthermore, developments such as

Huntington, Kinnoull and Islay are expected to support output in 2013. On a quarterly basis, UK oil output is expected to average 0.94 mb/d, 0.88 mb/d, 0.87 mb/d and 0.93 mb/d respectively.

**Asia Pacific**

OECD Asia Pacific's oil supply is expected to increase by 70 tb/d in 2013 to average 0.68 mb/d, representing an upward revision of 20 tb/d from the previous month. Australia's oil supply is likely to drive growth in 2013, while New Zealand's production is forecast to remain unchanged from a year earlier. On a quarterly basis, total OECD Asia Pacific's oil supply is expected to average 0.67 mb/d, 0.69 mb/d, 0.69 mb/d and 0.68 mb/d respectively.

*Australia's oil supply is expected to increase by 70 tb/d in 2013 to average 0.60 mb/d*

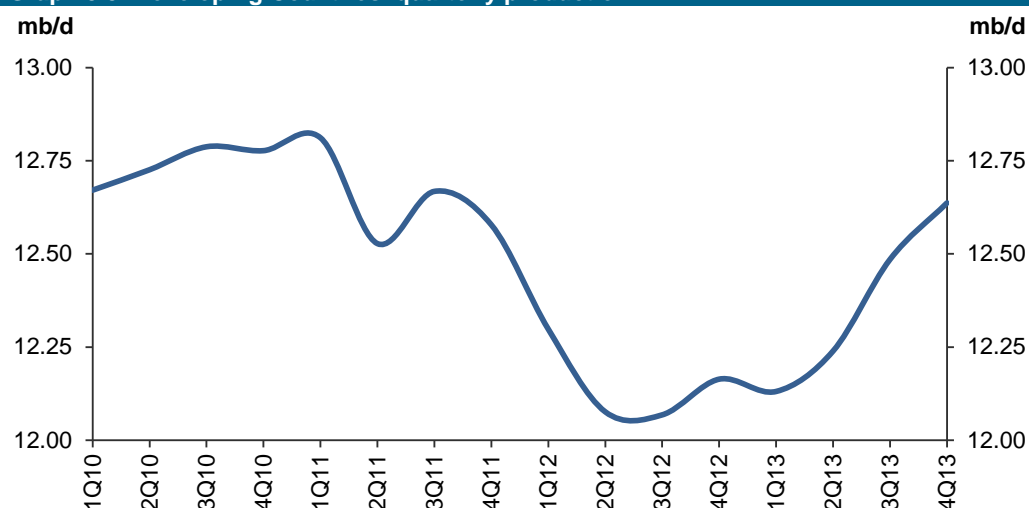
Australia's oil supply is forecast to increase by 70 tb/d in 2013 to average 0.60 mb/d, indicating an upward revision of 20 tb/d from the last *MOMR*. This revision is supported by the healthy production level in the fourth quarter of 2012, on the back of reduced maintenance in the North Western Shelf and the ramp-up of Pyrenees output. The expected increase is supported by ramp-ups of developments, such as the Pyrenees and Montara projects. However, the risk to the forecast is on the high side, as part of the growth in 2013 is expected to come from the return to normal output levels that had been subjected to the cyclone seasons in 2011 and 2012. On a quarterly basis, Australia's oil supply is seen to stand at 0.59 mb/d, 0.61 mb/d, 0.61 mb/d and 0.60 mb/d respectively.

**Developing countries**

*DC supply is seen to increase by 0.22 mb/d in 2013 to average 12.37 mb/d*

Total developing countries' (DCs') oil production is projected to grow by 0.22 mb/d over the previous year to average 12.37 mb/d in 2013, representing a downward revision of 90 tb/d from the previous month. This growth is supported mainly by Latin America, Africa and 'Other Asia', while Middle East supply is seen to drop during the year. The growth in 2013 is expected after the significant decline in 2012, which was due mainly to political, technical and weather factors. On a quarterly basis, total oil supply in the DCs is projected to average 12.13 mb/d, 12.24 mb/d, 12.49 mb/d and 12.64 mb/d respectively. According to preliminary data, it averaged 12.16 mb/d in the fourth quarter of 2012, a decline of 0.41 mb/d from the same period in 2011.

**Graph 5.3: Developing Countries' quarterly production**



*Malaysia's supply growth in 2013 to offset declines from other countries*

Other Asia's oil production is expected to increase by 20 tb/d in 2013 to average 3.62 mb/d, representing a downward revision of 50 tb/d from the previous *MOMR*. This revision was made to the forecasts for Indonesia, Malaysia, Thailand and Vietnam. Other Asia's supply was revised down during the fourth quarter 2012 and this was partly carried over to 2013. India's oil supply is expected to increase by 10 tb/d in 2013 to average 0.89 mb/d, unchanged from the previous month. This minor growth is expected on the continued ramp-up of the Rajasthan fields, as further exploration is expected in 2013. Thailand's production is expected to average 0.34 mb/d in 2013, a minor decline of 10 tb/d from the previous year and a downward revision of 10 tb/d from the previous *MOMR*. The revision comes on the back of updated production figures in the fourth quarter of 2012, despite the start-up of the

Bualuang field which is expected to reach around 12 tb/d in 2013. On a quarterly basis, Other Asia's supply is forecast to average 3.59 mb/d, 3.61 mb/d, 3.61 mb/d and 3.64 mb/d respectively.

Indonesia's oil production is expected to decline by 40 tb/d in 2013 to average 0.92 mb/d, representing a minor downward revision of less than 10 tb/d from the previous *MOMR*. This revision was due to updated production figures in the fourth quarter of 2012, which was carried over to 2013. Government officials reported that the country's production will fall in 2013 due to natural declines and limited upstream developments in the deepwater aspects. Malaysia's supply is projected to experience the largest increase in the region in 2013 of 40 tb/d to average 0.69 mb/d, constituting a downward revision of 20 tb/d from the last *MOMR*. The expected growth is supported by the ramp-up of the Gumusut-Kakap project in 2013. Vietnam's supply is forecast to increase by 10 tb/d in 2013 to average 0.40 mb/d. This minor growth will come on the continued ramp-up of fields started in 2012, where output achieved a healthy annual growth rate of almost 10%.

*Brazil and Colombia to support a 0.13 mb/d increase in Latin American supply in 2013*

Latin America's oil supply is forecast to grow by 0.13 mb/d in 2013, the second-highest growth level among all the non-OPEC regions, to average 4.84 mb/d, representing a minor downward revision of 10 tb/d from the previous *MOMR*. This revision came mainly from Argentina on the back of updated production data in 2012. The expected growth is supported by Brazil and Colombia, while output from Argentina is likely to experience a minor decline in 2013 of 10 tb/d in 2013 to average 0.70 mb/d. The minor decline is due to the projected biodiesel growth offsetting most of the declines in mature producing areas. It will take place despite the expectations of the start of a shale oil exploration programme, as well as a government change to the export tax system which is aimed at increasing investment. Colombia's supply is forecast to grow by 50 tb/d in 2013 to average 1.01 mb/d. This is supported by the La Cira-Infantas, Quifa and Rubiales developments. The expected increase in capex in 2013 supports the forecast supply growth, as the country reached the 1.0 mb/d output mark by the end of 2012. On a quarterly basis, Latin America's supply is expected to stand at 4.76 mb/d, 4.78 mb/d, 4.89 mb/d and 4.95 mb/d respectively.

Brazil's supply is projected to average 2.72 mb/d in 2013, an increase of 0.10 mb/d over the previous year and unchanged from the previous *MOMR*. The increase is supported by new developments, such as Aruana, Baleia Azul, Sapinhola and Papa Terra. The Sapinhola field is expected to reach its peak output of 120 tb/d in the first half of 2014. Furthermore, an increase in biofuel production is anticipated in 2013. However, the risk to the forecast is expected to be high on weather, shutdown and delay issues, as in 2012 output is estimated to have declined on the back of maintenance and start-up delays. On a quarterly basis, Brazil's supply is expected to stand at 2.65 mb/d, 2.66 mb/d, 2.76 mb/d and 2.80 mb/d respectively.

*Middle East supply expected to decline by 20 tb/d in 2013 with a high level of risk*

Middle East oil supply is estimated to decrease by 20 tb/d in 2013 from the previous year to average 1.50 mb/d, steady from the previous *MOMR*. Oman's supply is expected to increase by 30 tb/d in 2013 to average 0.94 mb/d. Growth is supported by the ramp-up of the Mukhaizna, Qarn Alam and Daleel developments. Syria's output is expected to drop by 70 tb/d in 2013 to average 0.14 mb/d. This is projected on the back of the political situation, which is associated with a high level of risk. Yemen's production is expected to average 0.20 mb/d in 2013, an increase of 20 tb/d from 2012; however, the continued attacks on infrastructure place the supply forecast at a high risk level. The Middle East's supply forecast is associated with a very high level of risk which could dramatically change the outlook in both directions, mainly due to political factors. On a quarterly basis, Middle East supply is seen to average 1.47 mb/d, 1.46 mb/d, 1.50 mb/d and 1.55 mb/d respectively.

*African supply expected to average 2.42 mb/d in 2013*

Africa's oil supply is projected to average 2.42 mb/d in 2013, an increase of 90 tb/d from the previous year and a downward revision of 30 tb/d from the previous *MOMR*. South Sudan and Sudan's supply is expected to average 0.24 mb/d in 2013, an increase of 0.12 mb/d from the previous year and a downward revision of 20 tb/d from the previous *MOMR*. The downward revision came on the back of updated estimated production data for the fourth quarter of 2012 that was partly carried over to 2013. The expected growth from South Sudan and Sudan is associated with a high level of risk, as the agreement between the two nations regarding oil transport is yet to be realized.

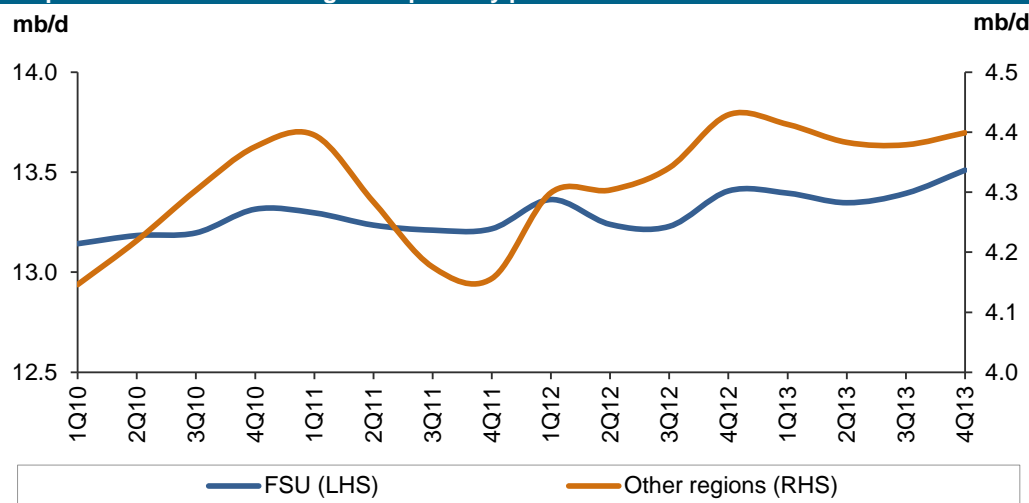
Ghana's supply is expected to increase in 2013 on the back of full production from the Jubilee project during the year. Oil supply from Chad, Egypt, Equatorial Guinea, Gabon and South Africa is expected to experience a minor decrease in 2013 due to natural declines and limited new developments. On a quarterly basis, Africa's oil supply is expected to average 2.32 mb/d, 2.40 mb/d, 2.47 mb/d and 2.49 mb/d respectively.

**FSU, Other regions**

Total FSU oil supply is projected to increase by 0.10 mb/d in 2013 to average 13.41 mb/d, depicting a minor downward revision of 15 tb/d from the previous month. This revision was due mainly to updated production figures for the fourth quarter of 2012 that carried over partly to 2013. Some of the expected growth comes from the assumption that output will return to normal levels from the maintenance and shutdown-inflicted output in 2012 in the Caspian. All the major producers in the FSU are expected to show supply growth in 2013, except for Azerbaijan. On a quarterly basis, total supply from the FSU is seen to average 13.40 mb/d, 13.35 mb/d, 13.39 mb/d and 13.51 mb/d respectively. China's supply is expected to grow by 50 tb/d in 2013 to average 4.26 mb/d and 'Other Europe' is likely to remain steady in 2013 at 0.14 mb/d.

*FSU supply forecast to grow by 0.10 mb/d in 2013 to average 13.41 mb/d*

**Graph 5.4: FSU and other region's quarterly production**



**Russia**

Russia's oil supply is expected to increase by 50 tb/d in 2013 to average 10.42 mb/d, representing a minor downward revision of 10 tb/d from the previous MOMR. This reflects updated decline rate estimates for 2013. The forecast increase is supported by new volumes from developments, such as the Prirazlom, Uvat, Pyakyakhinskoye and Vankor. The Vankor project, which was mainly responsible for the growth achieved in previous years, is expected to reach its peak output of more than 0.5 mb/d in 2013. The development of natural declines at mature fields will play an important role in the outcome of Russian oil supply in 2013, as the new expected volumes are seen to offset the anticipated declines in mature fields. Accordingly, Russia's supply forecast in 2013 has a high level of risk and uncertainty, mainly on decline, price, taxation and delay issues. According to preliminary data, Russia's supply averaged 10.47 mb/d in the fourth quarter of 2012, an increase of 0.13 mb/d on the same period of 2011. On a quarterly basis, Russian supply is projected to average 10.43 mb/d, 10.42 mb/d, 10.42 mb/d and 10.42 mb/d respectively.

*Russia's supply to increase by 50 tb/d in 2013 to average 10.42 mb/d*

**Caspian**

Kazakhstan's oil supply is predicted to increase by 70 tb/d over the previous year to average 1.66 mb/d in 2013, indicating an upward revision of 10 tb/d from the previous MOMR. This is due to updated production data in the early part of the fourth quarter of 2012 that was carried over to 2013. The expected growth in 2013 is supported by the anticipated start-up of the Kashagan field in the late second quarter. In addition, the start-up of the second phase of the Dunga project is seen to support the outlook. Uncertainties surrounding the start-up of the Kashagan field and strike actions in some oil-producing areas could affect output in 2013. On a quarterly basis, Kazakhstan's supply is expected to average 1.62 mb/d, 1.61 mb/d, 1.65 mb/d, and 1.73 mb/d respectively.

*Kazakh supply expected to increase by 70 tb/d in 2013*

*Azeri supply to drop by 40 tb/d in 2013*

Azerbaijan's oil supply is forecast to decrease by 40 tb/d over the previous year to average 0.87 mb/d in 2013, representing a downward revision of 15 tb/d from the previous *MOMR*. This revision was partly carried over from updates to the 2012 estimate. The operator of the Azeri-Chirag-Guneshli (ACG) field signed an agreement to stabilize the output at 620–670 tb/d in 2013. The field's production declined in 2012 and is expected to have an impact on Azeri production in 2013. On a quarterly basis, Azerbaijan's oil supply is seen to stand at 0.90 mb/d, 0.86 mb/d, 0.85 mb/d and 0.87 mb/d respectively.

*China's supply to increase by 50 tb/d in 2013 to average 4.26 mb/d*

### China

China's oil production is projected to increase by 50 tb/d over the previous year to average 4.26 mb/d in 2013, indicating an upward revision of 15 tb/d to the previous month. This revision was introduced to adjust for updated production from China in the fourth quarter of 2012. The expected growth is supported by new volumes from the Tarim, Liuhua and Fanyu fields in 2013. The resumption of full production from the Peng Lai field will also play a vital role shaping China's supply in 2013. On a quarterly basis, China's supply is forecast to average 4.27 mb/d, 4.24 mb/d, 4.24 mb/d and 4.26 mb/d respectively.

**Table 5.2: Non-OPEC oil supply in 2013, mb/d**

|                                  | <u>2012</u>  | <u>1Q13</u>  | <u>2Q13</u>  | <u>3Q13</u>  | <u>4Q13</u>  | <u>2013</u>  | Change<br><u>13/12</u> |
|----------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|------------------------|
| Americas                         | 16.62        | 17.10        | 17.17        | 17.24        | 17.40        | 17.23        | 0.61                   |
| Europe                           | 3.77         | 3.73         | 3.57         | 3.50         | 3.66         | 3.62         | -0.16                  |
| Asia Pacific                     | 0.62         | 0.67         | 0.69         | 0.69         | 0.68         | 0.68         | 0.07                   |
| <b>Total OECD</b>                | <b>21.01</b> | <b>21.49</b> | <b>21.43</b> | <b>21.44</b> | <b>21.73</b> | <b>21.53</b> | <b>0.52</b>            |
| Other Asia                       | 3.59         | 3.59         | 3.61         | 3.62         | 3.64         | 3.62         | 0.02                   |
| Latin America                    | 4.72         | 4.76         | 4.78         | 4.89         | 4.95         | 4.84         | 0.13                   |
| Middle East                      | 1.51         | 1.47         | 1.46         | 1.50         | 1.55         | 1.50         | -0.02                  |
| Africa                           | 2.33         | 2.32         | 2.40         | 2.47         | 2.49         | 2.42         | 0.09                   |
| <b>Total DCs</b>                 | <b>12.15</b> | <b>12.13</b> | <b>12.24</b> | <b>12.49</b> | <b>12.64</b> | <b>12.37</b> | <b>0.22</b>            |
| FSU                              | 13.31        | 13.40        | 13.35        | 13.39        | 13.51        | 13.41        | 0.10                   |
| Other Europe                     | 0.14         | 0.14         | 0.14         | 0.14         | 0.14         | 0.14         | 0.00                   |
| China                            | 4.20         | 4.27         | 4.24         | 4.24         | 4.26         | 4.26         | 0.05                   |
| <b>Total "Other regions"</b>     | <b>17.65</b> | <b>17.81</b> | <b>17.73</b> | <b>17.77</b> | <b>17.91</b> | <b>17.81</b> | <b>0.15</b>            |
| <b>Total Non-OPEC production</b> | <b>50.81</b> | <b>51.43</b> | <b>51.40</b> | <b>51.70</b> | <b>52.28</b> | <b>51.71</b> | <b>0.89</b>            |
| Processing gains                 | 2.17         | 2.21         | 2.21         | 2.21         | 2.21         | 2.21         | 0.04                   |
| <b>Total Non-OPEC supply</b>     | <b>52.98</b> | <b>53.64</b> | <b>53.61</b> | <b>53.91</b> | <b>54.49</b> | <b>53.92</b> | <b>0.93</b>            |
| Previous estimate                | 52.93        | 53.48        | 53.48        | 53.81        | 54.54        | 53.83        | 0.90                   |
| Revision                         | 0.05         | 0.16         | 0.14         | 0.10         | -0.05        | 0.09         | 0.03                   |

### OPEC natural gas liquids and non-conventional oils

OPEC NGLs and non-conventional oils are estimated to average 5.75 mb/d in 2012, representing growth of 0.38 mb/d over the previous year. In 2013, OPEC NGLs are projected to average 5.99 mb/d, an increase of 0.24 mb/d over the previous year.

**Table 5.3: OPEC NGLs + non-conventional oils, 2010-12**

|                   | <u>2010</u> | <u>2011</u> | Change       |             |             |             | <u>2012</u> | Change       |             | Change       |      |
|-------------------|-------------|-------------|--------------|-------------|-------------|-------------|-------------|--------------|-------------|--------------|------|
|                   |             |             | <u>11/10</u> | <u>1Q12</u> | <u>2Q12</u> | <u>3Q12</u> | <u>4Q12</u> | <u>12/11</u> | <u>2013</u> | <u>13/12</u> |      |
| <b>Total OPEC</b> | <b>4.98</b> | <b>5.37</b> | 0.39         | 5.56        | 5.68        | 5.81        | 5.94        | <b>5.75</b>  | 0.38        | <b>5.99</b>  | 0.24 |

### OPEC crude oil production

According to secondary sources, total OPEC crude oil production averaged 30.37 mb/d in December, a decline of 0.46 mb/d over the previous month. Crude oil output saw an increase from Nigeria and Angola while production fell in Saudi Arabia, Iraq, and Iran. According to secondary sources, OPEC crude production, not including Iraq, stood at 27.35 mb/d in December, a decrease of 0.27 mb/d over the previous month.

*OPEC crude oil production decreased 0.46 mb/d in December*

**Table 5.4: OPEC crude oil production based on secondary sources, tb/d**

|                        | 2011          | 2012          | 2Q12          | 3Q12          | 4Q12          | Oct 12        | Nov 12        | Dec 12        | Dec/Nov       |
|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| Algeria                | 1,240         | 1,211         | 1,214         | 1,209         | 1,190         | 1,183         | 1,188         | 1,200         | 12.5          |
| Angola                 | 1,667         | 1,734         | 1,738         | 1,709         | 1,726         | 1,718         | 1,720         | 1,740         | 20.2          |
| Ecuador                | 490           | 496           | 493           | 500           | 499           | 498           | 499           | 500           | 1.6           |
| Iran, I.R.             | 3,628         | 2,970         | 3,086         | 2,742         | 2,666         | 2,665         | 2,677         | 2,656         | -20.4         |
| Iraq                   | 2,665         | 2,980         | 2,956         | 3,135         | 3,120         | 3,145         | 3,208         | 3,011         | -196.3        |
| Kuwait                 | 2,538         | 2,798         | 2,793         | 2,810         | 2,820         | 2,825         | 2,818         | 2,815         | -3.3          |
| Libya                  | 462           | 1,399         | 1,424         | 1,466         | 1,491         | 1,507         | 1,481         | 1,485         | 4.3           |
| Nigeria                | 2,111         | 2,070         | 2,143         | 2,110         | 1,955         | 1,961         | 1,882         | 2,019         | 136.6         |
| Qatar                  | 794           | 755           | 748           | 745           | 741           | 741           | 738           | 744           | 5.4           |
| Saudi Arabia           | 9,293         | 9,772         | 9,919         | 9,818         | 9,526         | 9,738         | 9,632         | 9,211         | -420.8        |
| UAE                    | 2,516         | 2,624         | 2,607         | 2,653         | 2,650         | 2,646         | 2,651         | 2,654         | 3.1           |
| Venezuela              | 2,380         | 2,357         | 2,367         | 2,348         | 2,332         | 2,330         | 2,337         | 2,330         | -7.5          |
| <b>Total OPEC</b>      | <b>29,785</b> | <b>31,166</b> | <b>31,488</b> | <b>31,243</b> | <b>30,715</b> | <b>30,955</b> | <b>30,829</b> | <b>30,365</b> | <b>-464.6</b> |
| <b>OPEC excl. Iraq</b> | <b>27,119</b> | <b>28,187</b> | <b>28,532</b> | <b>28,108</b> | <b>27,595</b> | <b>27,810</b> | <b>27,622</b> | <b>27,354</b> | <b>-268.3</b> |

Totals may not add up due to independent rounding.

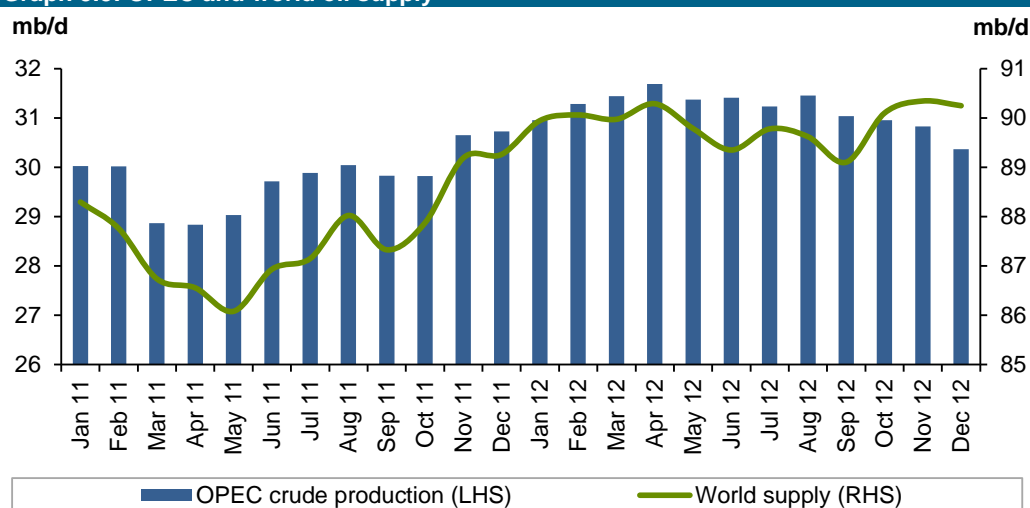
**Table 5.5: OPEC crude oil production based on direct communication, tb/d**

|                        | 2011          | 2012          | 2Q12          | 3Q12          | 4Q12          | Oct 12        | Nov 12        | Dec 12        | Dec/Nov     |
|------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|-------------|
| Algeria                | 1,173         | 1,203         | 1,213         | 1,201         | 1,184         | 1,207         | 1,175         | 1,170         | -5.0        |
| Angola                 | 1,618         | 1,704         | 1,716         | 1,677         | 1,690         | 1,674         | 1,640         | 1,753         | 113.0       |
| Ecuador                | 500           | 504           | 500           | 509           | 503           | 503           | 504           | 503           | -0.8        |
| Iran, I.R.             | 3,576         | 3,740         | 3,758         | 3,746         | 3,713         | 3,721         | 3,708         | 3,710         | 2.0         |
| Iraq                   | 2,653         | 2,942         | 2,936         | 3,150         | 3,052         | 3,035         | 3,190         | 2,935         | -255.0      |
| Kuwait                 | 2,660         | 2,977         | 2,990         | 2,957         | 2,967         | 2,930         | 2,985         | 2,988         | 3.2         |
| Libya                  | 462           | 1,449         | 1,503         | 1,504         | 1,493         | 1,562         | 1,544         | 1,375         | -168.6      |
| Nigeria                | 1,896         | 1,928         | 1,971         | 2,032         | 1,831         | 1,786         | 1,915         | 1,794         | -120.4      |
| Qatar                  | 734           | 734           | 737           | 726           | 727           | 725           | 730           | 726           | -3.8        |
| Saudi Arabia           | 9,311         | 9,763         | 10,002        | 9,760         | 9,413         | 9,724         | 9,492         | 9,025         | -466.7      |
| UAE                    | 2,565         | 2,652         | 2,615         | 2,727         | 2,664         | 2,647         | 2,674         | 2,673         | -0.6        |
| Venezuela              | 2,795         | 2,804         | 2,818         | 2,820         | 2,785         | 2,779         | 2,807         | 2,769         | -38.2       |
| <b>Total OPEC</b>      | <b>29,942</b> | <b>32,401</b> | <b>32,758</b> | <b>32,808</b> | <b>32,022</b> | <b>32,292</b> | <b>32,363</b> | <b>31,422</b> | <b>-941</b> |
| <b>OPEC excl. Iraq</b> | <b>27,290</b> | <b>29,459</b> | <b>29,823</b> | <b>29,658</b> | <b>28,970</b> | <b>29,257</b> | <b>29,173</b> | <b>28,487</b> | <b>-686</b> |

Totals may not add up due to independent rounding.

## World oil supply

Preliminary data indicates that global oil supply dropped 0.10 mb/d in December compared to the previous month. The decline in OPEC crude oil production in December impacted the global oil output which was partially offset by the increase in non-OPEC supply. The share of OPEC crude oil in global production declined slightly to 33.6% in December. The estimate is based on preliminary data for non-OPEC supply, estimates for OPEC NGLs and OPEC crude production from secondary sources.

**Graph 5.5: OPEC and world oil supply**

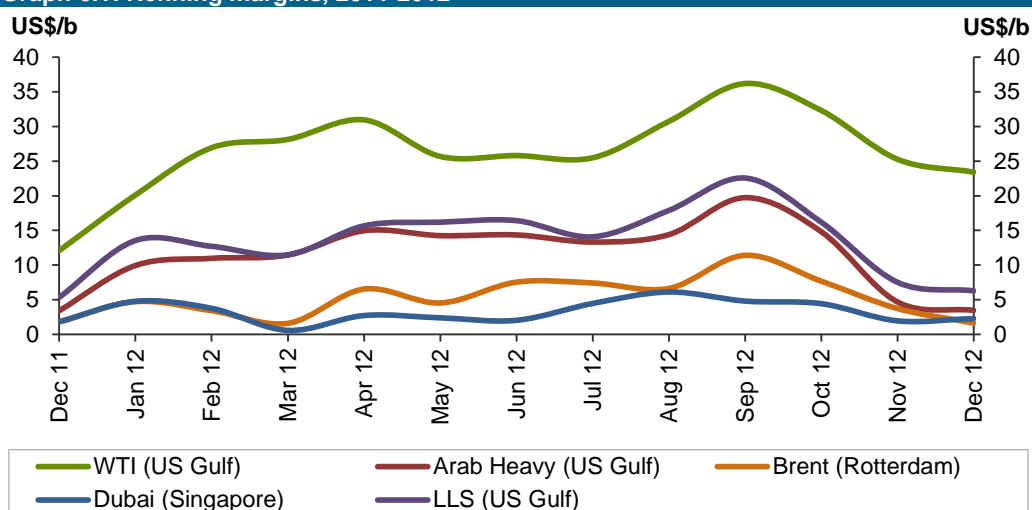


# Product Markets and Refinery Operations

*Refinery margins continued to fall in the Atlantic basin amid lack of demand*

Product markets in December continued declining in the Atlantic Basin as sentiment remained bearish with supplies increasing, following the return of refineries from seasonal maintenance. A lack of support from the winter season, with the mild weather keeping heating oil demand lacklustre, hit the cracks in the middle of the barrel and caused the margins to fall further. Meanwhile, in Asia, refinery margins exhibited a slight recovery on the back of rising seasonal demand, supporting middle distillates and fuel oil.

**Graph 6.1: Refining margins, 2011-2012**



US Gulf Coast refining margins continued to fall during December, due mainly to middle distillates losing ground again during the month as demand fell below the five-year average, despite some support coming from a combination of disruptions caused by Hurricane Sandy.

Inventories also continued to fuel bearish sentiment, with higher-than-average temperatures across the USA contributing to the current unsupportive environment for middle distillates.

The margin for West Texas Intermediate (WTI) fell \$2 to remain at around \$23/b. The margins for Light Louisiana Sweet and Arabian Heavy crude on the US Gulf Coast lost \$1 to stand at around \$6/b and \$4/b respectively in December, the lowest levels seen this year.

Refining margins in Northwest Europe and the Mediterranean declined again this month, as supplies increased following the return of some European refineries from seasonal maintenance and with demand remaining weak.

European gasoil cracks took a hit during December as mild weather helped suppress demand, with demand yet to pick up in the important heating oil market. Meanwhile, lower demand for diesel continued to be reported in several European countries.

The refinery margin for Brent crude in Northwest Europe showed a sharp loss of \$2 to average \$1.6/b, the lowest level seen this year.

Refinery margins in Asia showed a slight recovery on the back of firm seasonal demand supporting middle distillates and fuel oil. In addition, the expectations of tighter regional supplies allowed the cracks to improve across the barrel.

The gasoline crack moved up marginally over the month, supported by healthy regional demand. Light distillate naphtha also gained ground, mainly on the back of healthy buying interest from the petrochemical sector, despite falling LPG prices.

*Refinery runs on the rise worldwide*

These developments caused refinery margins in Singapore to show a slight recovery of 30¢ to average \$2.3/b in December. Although this level remains low, it was the only margin which did not fall during December.

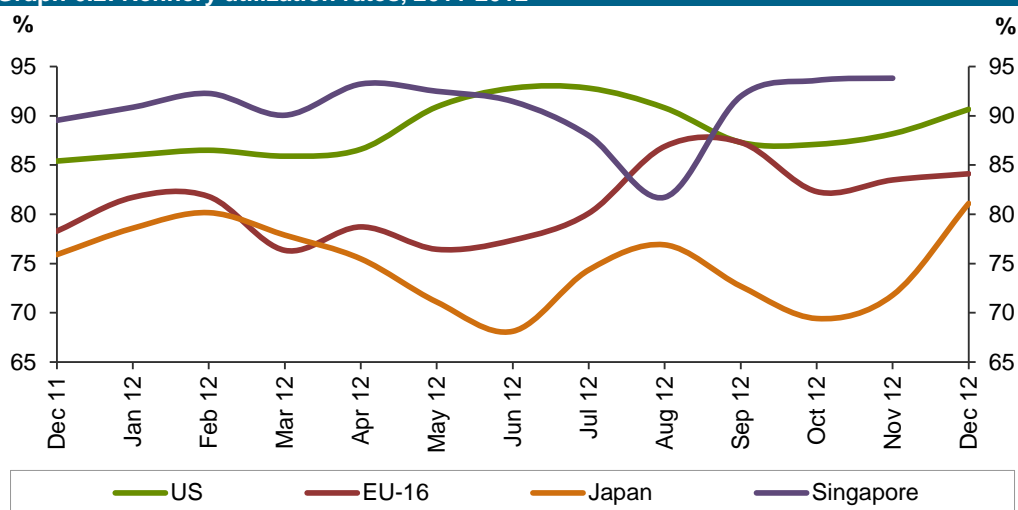
### Refinery operations

**US refinery utilization rates hit a four-month high as most of the refineries recovered from the effects of Hurricane Sandy. In addition, in recent weeks, several refineries around the globe returned from maintenance, thus increasing product supply.**

**US refinery runs recovered from the damage caused by the hurricane and rose by 2.5% of throughput to reach 91% of capacity, a four-month high level. This rise could continue with the start of Valero's Port Arthur and Motiva refineries.**

This situation, along with low domestic demand, allowed product inventories to continue recovering, and gasoline reached a level of inventories above the five-year average, while middle distillates continued to recover, although below average.

**Graph 6.2: Refinery utilization rates, 2011-2012**



During the last quarter, gasoline demand dropped in the Atlantic Basin, causing margins to fall from the high levels seen in previous months. In addition, the mild weather had not supported demand in the Atlantic so far this winter season and the margins in Europe kept falling, causing the region's refineries to continue their moderated throughputs. The refinery utilization averaged above 82% in December.

In Asia, activity in most of the refineries rose during the last few months after a heavy maintenance season, with Singapore, China and India all continuing to run above 93% of capacity to meet the increasing demand in the region during the winter season. Chinese refineries, in particular, hit a record high throughput of above 10 mb/d in November. Japanese throughputs increased by 9% to average around 81% of capacity in December, rising to face increasing seasonal demand.

#### US market

US gasoline demand stood at around 8.5 mb/d in December, falling 90 tb/d from the previous month and down by around 125 tb/d from the same month the year before.

US gasoline demand continued to be seasonally low, although the gasoline crack posted a slight gain.

In Latin America, gasoline demand was healthy from countries like Brazil and Argentina, which, along with the lack of arbitrage from Europe to the East Coast, allowed the gasoline crack to strengthen.

*Mild weather kept heating oil demand depressed in US market*

Despite imports weakening considerably, higher runs and seasonally low demand pushed gasoline stocks up to reach the highest level since the first quarter of 2012 (1Q12), capping the recovery. Also, some support came from the supply side as the fluid catalytic cracking unit at Trainer, Pennsylvania, was offline. The gasoline crack averaged \$30/b in December, a slight increase of \$2 from the previous month's average.

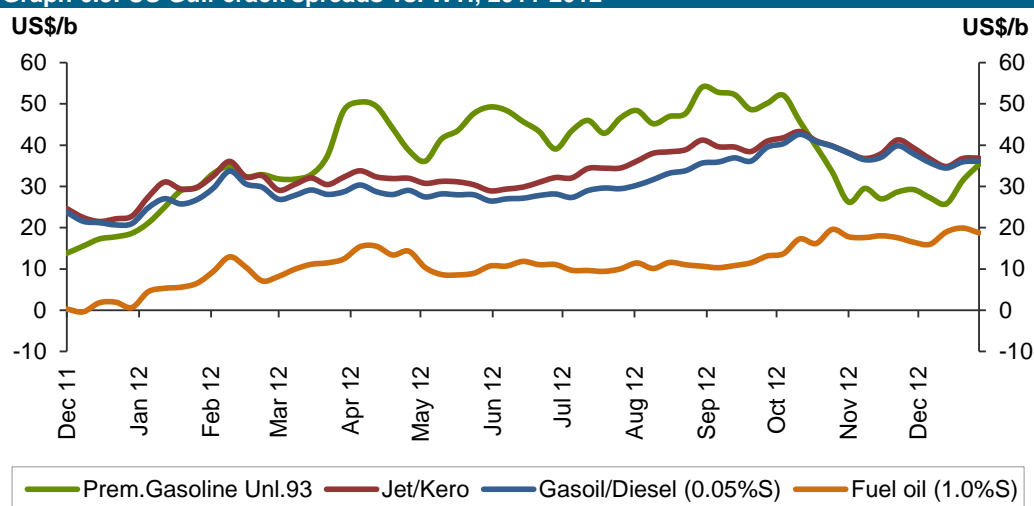
The middle of the barrel continued losing ground over the month.

Middle distillate demand stood at around 3.7 mb/d in December, which was 250 tb/d below the previous month and around 180 tb/d below the same month the year before.

Diesel was on a downward trend on low demand, which fell below the five-year average after some support came from a combination of disruptions caused by Hurricane Sandy.

Higher-than-average temperatures across the USA contributed to the current unsupportive environment for middle distillates.

**Graph 6.3: US Gulf crack spreads vs. WTI, 2011-2012**



According to the Energy Information Administration (EIA), the US average heating degree days in 4Q12 are estimated to be 1.4% higher than the five-year average, while temperatures at the beginning of December were reported to be nine degrees above the 30-year average. This contributed to a rebalancing of stock levels in PADD1, which had fallen after the disruptions caused by Hurricane Sandy and a few snowstorms in November.

On the other hand, Commodity Futures Trading Commission (CFTC) data showed that managed money net long positions on the Nymex heating oil contract had eased over the month, revealing that persistently low demand might dent market participants' confidence in rising prices over the winter season.

The gasoil market received some support from the strong export opportunities to Latin America, mainly Chile and Venezuela.

The gasoil crack on the US Gulf Coast lost almost \$2 to stand at around \$35/b in December.

At the bottom of the barrel, fuel oil cracks trended slightly upwards over the month, with support coming from demand for straight-run fuel oil to run secondary units.

Furthermore, the spread between low and high sulphur had been especially high in the last few months on demand for low-sulphur fuel oil (LSFO), following the start of the North American emission control area zone in August. As the shipping industry adjusts to the new regulation and imports are also corrected, the spread is slowly coming down. Further pressure on LSFO in the USA is coming from the sluggish shipping

*Product cracks hit by increasing supplies in Europe*

environment, with the Baltic Dry Index, a reflection of shipping activity, dropping more than 20% during mid-December.

The fuel oil crack averaged \$18.3/b in December, a slight gain of \$1 on the previous month.

**European market**

**Product market sentiment remained bearish in Europe, as supplies increased following the return of refineries from seasonal maintenance and a lack of support from the winter season, with the mild weather keeping heating oil demand lacklustre.**

The gasoline crack in Northwest Europe showed some recovery from the low level seen the month before, on the back of improving exports. Supportive factors included demand from the Gulf and West Africa. Also, some support came from Latin America, with the pickup in outflows to Mexico and Brazil, although this could be limited in the coming months, as the Brazilian Government is expected to raise the mandatory ethanol blending rate back to 25% during 2013, after it was reduced to 20% in October 2011.

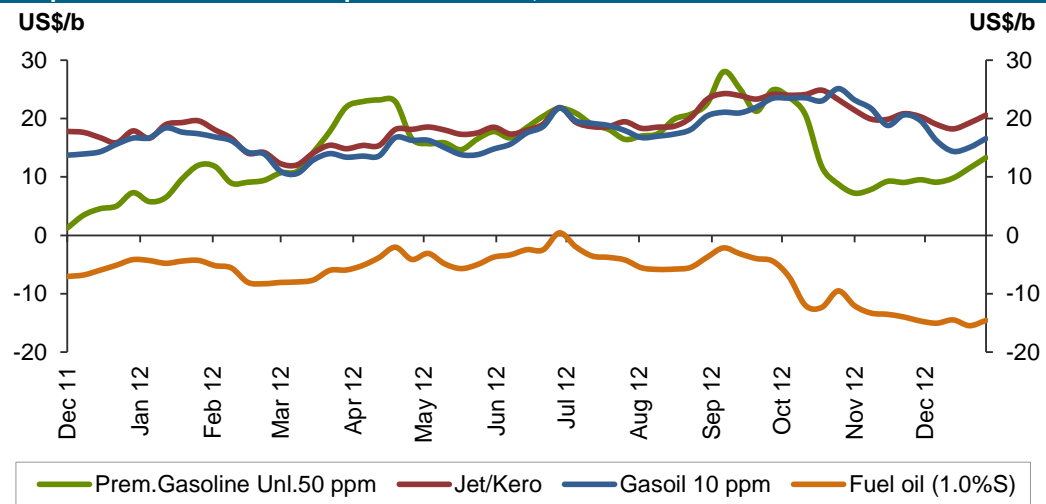
Nevertheless, massive stockbuilds observed across the Atlantic in recent weeks kept US import requirements depressed, fuelling bearish sentiment and capping gains.

The gasoline crack spread against Brent crude showed a recovery of \$2 to average around \$10.7/b in December.

The naphtha crack in Europe marginally maintained the ground gained in recent months, as the market was supported by pockets of demand from gasoline blenders at the Amsterdam-Rotterdam-Antwerp (ARA) trading hub; however, the naphtha market came under pressure from the declining price of propane, removing one of naphtha's main supporting factors in recent months. Propane prices plummeted in recent weeks as unseasonably mild weather dented heating demand. This price advantage stirred the interest of petrochemical firms, which can easily switch between cracking propane and naphtha.

Meanwhile, increasing stock levels at ARA also weighed on the naphtha market, with arrivals from Russia and the UK helping boost stocks.

**Graph 6.4: Rotterdam crack spreads vs. Brent, 2011-2012**



The middle-of-the-barrel crack continued losing ground this month as supplies in the region began to pick up, following the return to operations of several refineries in the area, while weakening demand also put pressure on the market. In addition, inflows from India into Europe were reported to be healthy.

The gasoil/diesel market continued bearish as mild weather helped suppress demand, with heating oil demand yet having to pick up in the important German heating oil

market. Meanwhile, lower demand for gasoil continued to be reported in France, Switzerland and the Benelux countries.

In contrast, the supply side exerted pressure on ultra-low sulphur diesel (ULSD) over the month, as increased production, following the autumn refinery maintenance season, began to affect the market.

Looking ahead, Russian exports of ULSD from Primorsk are estimated to be increasing, and this should add further pressure to the European market in the coming months.

The gasoil crack spread against Brent crude at Rotterdam sharply lost \$5 to average \$15.4/b in December.

At the bottom of the barrel, both fuel oil cracks continued losing ground during the month. The Northwest European fuel oil market continued to be affected by over-supply, while low demand and high Russian inflows added further length to the market. Meanwhile, while weak bunker demand continued.

On the supply side, the Grangemouth-Scotland and Pembroke-Wales refineries, returning from maintenance during December, added further pressure to the market.

The Northwest European fuel oil crack-spread against Brent lost \$1.2 in December, to stand at minus \$14.9/b.

#### **Asian market**

**The Asian market showed a slight recovery on the back of firm seasonal demand supporting middle distillates and fuel oil. Furthermore, the expectations of tighter regional supplies allowed the cracks to improve across the barrel.**

The gasoline crack moved up marginally over the month, as the market was supported by healthy requirements from Indonesia, Pakistan and Vietnam and the prospects of tightening supplies due to upcoming refinery maintenance in the Asia-Pacific region.

Meanwhile, supplies were observed rising in the region as Singapore onshore light distillate stocks expanded. On the other hand, in Sri Lanka, gasoline retail prices have recently been increased by 6.7% to a record high, which could have an adverse impact on gasoline demand.

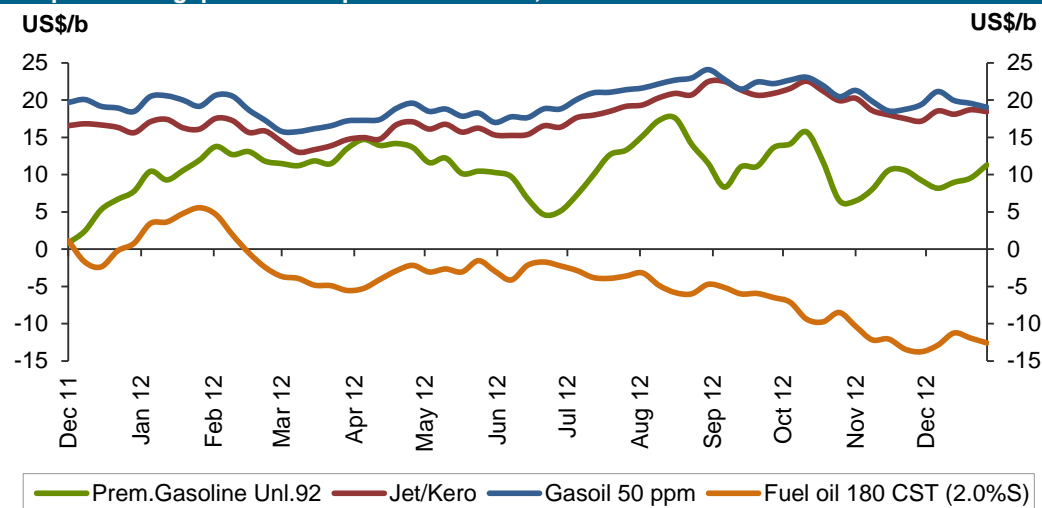
These factors allowed gasoline to slightly recover ground, and the gasoline crack-spread against Dubai crude in Singapore gained 60¢ to average \$9.6/b in December.

Fellow light distillate naphtha also gained ground, mainly on the back of healthy buying interest from South Korea and Taiwan, in concert with limited supplies from the Middle East.

Fundamentals are likely to have received support from Malaysian buying interest for the petrochemical sector, and, additionally, Japanese naphtha imports have increased in recent months. However, falling LPG prices could dent demand for naphtha as a feedstock in the coming period and could also lead to increased Western arbitrage inflows into Asia, exerting pressure on the naphtha market.

*Firm demand supporting product cracks in Asia*

Graph 6.5: Singapore crack spreads vs. Dubai, 2011-2012



In the middle of the barrel, gasoil cracks improved slightly, partly due to expectations of potentially tightening supplies in the coming weeks, with refineries in the region focusing on kerosene production for the winter requirements. Additionally, India's Reliance is expected to undergo maintenance next month, which is likely to curb exports from the country.

On the demand side, buying interest was seen from Sri Lanka, Australia and the Philippines and, in the Middle East, from Egypt. Furthermore, Chinese diesel demand also remained upbeat, in line with gradually improving manufacturing and industrial activity.

Kerosene became stronger, with the main supporting factor being healthy demand amid colder temperatures. Demand for heating was high, especially in South Korea and Japan, with temperatures in Seoul reaching the lowest levels seen in 27 years.

The gasoil crack-spread in Singapore against Dubai averaged around \$20/b in December, a gain of 80¢ from the previous month.

Looking forward, the market could receive support from a potential increase in diesel demand in China, ahead of the Lunar Year holidays.

At the bottom of the barrel, the fuel oil crack posted an uptick over the month, despite weak fundamentals. Supplies continued to be ample in the region and the western fuel oil arbitrage volumes remained high, while demand from the bunker market stayed largely weak, causing the Singapore onshore fuel oil stocks to rise and stand at a five-month high.

The fuel oil crack-spread in Singapore against Dubai increased by 50¢, so as to average -\$12.2/b in December.

Looking ahead, some support should come from seasonally higher demand from utilities, while upbeat demand from Pakistan should add a lending hand over the coming weeks; however, the over-supply will keep putting pressure on the market.

**Table 6.1: Refinery operations in selected OECD countries**

|                | Refinery throughput, mb/d |        |         | Refinery utilization, % |        |         |
|----------------|---------------------------|--------|---------|-------------------------|--------|---------|
|                | Nov 12                    | Dec 12 | Dec/Nov | Nov 12                  | Dec 12 | Dec/Nov |
| <b>US</b>      | 15.03                     | 15.41  | 0.38    | 88.18                   | 90.65  | 2.47    |
| <b>France</b>  | 1.14                      | 1.13   | -0.01   | 66.56                   | 65.74  | -0.81   |
| <b>Germany</b> | 1.96                      | 1.91   | -0.05   | 81.04                   | 78.89  | -2.15   |
| <b>Italy</b>   | 1.46                      | 1.46   | 0.00    | 62.47                   | 62.47  | 0.00    |
| <b>UK</b>      | 1.16                      | 1.24   | 0.08    | 65.41                   | 69.94  | 4.53    |
| <b>Euro-16</b> | 10.42                     | 10.51  | 0.08    | 83.49                   | 84.11  | 0.63    |
| <b>Japan</b>   | 3.22                      | 3.61   | 0.39    | 71.80                   | 81.10  | 9.30    |

Sources: OPEC statistics, Argus, Euroilstock inventory report, IEA, EIA/DoE, METI and PAJ.

**Table 6.2: Refined product prices, US\$/b**

|                                       | Oct 12 | Nov 12 | Dec 12 | Change<br>Dec/Nov |
|---------------------------------------|--------|--------|--------|-------------------|
| <b>US Gulf (Cargoes):</b>             |        |        |        |                   |
| Naphtha                               | 116.75 | 116.92 | 118.67 | 1.75              |
| Premium gasoline<br>(unleaded 93)     | 129.93 | 115.02 | 118.19 | 3.17              |
| Regular gasoline<br>(unleaded 87)     | 119.72 | 108.59 | 107.54 | -1.05             |
| Jet/Kerosene                          | 130.70 | 124.81 | 124.42 | -0.39             |
| Gasoil<br>(0.05% S)                   | 130.22 | 123.91 | 123.69 | -0.21             |
| Fuel oil<br>(1.0% S)                  | 103.41 | 101.06 | 98.81  | -2.25             |
| Fuel oil<br>(3.0% S)                  | 96.18  | 92.96  | 92.65  | -0.30             |
| <b>Rotterdam (Barges FoB):</b>        |        |        |        |                   |
| Naphtha                               | 105.62 | 103.00 | 103.83 | 0.83              |
| Premium gasoline<br>(unleaded 10 ppm) | 111.35 | 103.68 | 105.57 | 1.89              |
| Premium gasoline<br>(unleaded 95)     | 126.60 | 117.89 | 120.03 | 2.14              |
| Jet/Kerosene                          | 135.41 | 129.34 | 128.37 | -0.96             |
| Gasoil/Diesel<br>(10 ppm)             | 135.41 | 129.48 | 124.71 | -4.78             |
| Fuel oil<br>(1.0% S)                  | 101.15 | 95.37  | 94.35  | -1.02             |
| Fuel oil<br>(3.5% S)                  | 96.86  | 92.46  | 91.16  | -1.30             |
| <b>Mediterranean</b>                  |        |        |        |                   |
| Naphtha                               | 102.58 | 100.19 | 100.52 | 0.32              |
| Premium gasoline<br>(50 ppm)          | 128.34 | 119.82 | 118.38 | -1.45             |
| Jet/Kerosene                          | 128.08 | 122.95 | 121.71 | -1.24             |
| Gasoil/Diesel<br>(50 ppm)             | 115.83 | 110.35 | 108.72 | -1.62             |
| Fuel oil<br>(1.0% S)                  | 99.47  | 93.92  | 92.87  | -1.06             |
| Fuel oil<br>(3.5% S)                  | 95.78  | 91.40  | 90.04  | -1.36             |
| <b>Singapore (Cargoes):</b>           |        |        |        |                   |
| Naphtha                               | 104.91 | 102.64 | 103.21 | 0.57              |
| Premium gasoline<br>(unleaded 95)     | 124.07 | 119.61 | 118.85 | -0.77             |
| Regular gasoline<br>(unleaded 92)     | 120.42 | 116.47 | 115.89 | -0.58             |
| Jet/Kerosene                          | 130.17 | 125.21 | 124.75 | -0.46             |
| Gasoil/Diesel<br>(50 ppm)             | 130.92 | 126.57 | 126.20 | -0.37             |
| Fuel oil<br>(180 cst 2.0% S)          | 102.19 | 97.48  | 96.74  | -0.75             |
| Fuel oil<br>(380 cst 3.5% S)          | 99.89  | 94.59  | 94.20  | -0.39             |

# Tanker Market

Global spot fixtures increased by 2% in December to average 19.39 mb/d. OPEC spot fixtures also increased by 5.3% from the previous month to average 14.54 mb/d

In December, global spot fixtures increased by a slight 2% from the previous month to average 19.39 mb/d. OPEC spot fixtures saw a greater increase of 5.3% to average 14.54 mb/d, up by 0.74 mb/d from the month before. The increase was attributed mainly to higher fixtures from the Middle East to East, which increased by 1.07 mb/d to average 7.15 mb/d, while fixtures from the Middle East to East and fixtures from outside the Middle East both experienced drops, in comparison with November fixtures, of 9.5% and 0.4% respectively. On an annual basis, OPEC spot fixtures in December were 16% higher than the same month a year earlier, while Middle East-to-East and Middle East-to-West fixtures were 8% and 35% higher than the previous year. Sailings from OPEC increased in December by 0.13 mb/d or 0.5% to stand at 24.38 mb/d, up by 4% from a year earlier. In the same line, Middle East sailings stood at 17.88 mb/d, up by 0.15 mb/d or 0.8% from the previous month and 1.9% higher than a year earlier. As for arrivals, North America and Far East arrivals increased by 10.6% and 1.2% respectively in December. Arrivals in Europe and West Asia dropped by 6.3% and 2.1% respectively and decreased annually by 2% and 0.2% respectively.

**Table 7.1: Tanker chartering, sailings and arrivals, mb/d**

|                        | <u>Oct 12</u> | <u>Nov 12</u> | <u>Dec 12</u> | <u>Change<br/>Dec/Nov</u> |
|------------------------|---------------|---------------|---------------|---------------------------|
| <b>Spot Chartering</b> |               |               |               |                           |
| All areas              | 16.80         | 19.01         | 19.39         | 0.38                      |
| OPEC                   | 12.15         | 13.80         | 14.54         | 0.74                      |
| Middle East/East       | 6.20          | 6.08          | 7.15          | 1.07                      |
| Middle East/West       | 2.15          | 3.33          | 3.01          | -0.32                     |
| Outside Middle East    | 3.81          | 4.39          | 4.37          | -0.02                     |
| <b>Sailings</b>        |               |               |               |                           |
| OPEC                   | 23.68         | 24.26         | 24.38         | 0.13                      |
| Middle East            | 17.28         | 17.88         | 18.03         | 0.15                      |
| <b>Arrivals</b>        |               |               |               |                           |
| North America          | 8.54          | 9.58          | 10.60         | 1.01                      |
| Europe                 | 12.38         | 12.64         | 11.84         | -0.80                     |
| Far East               | 8.53          | 8.63          | 8.73          | 0.10                      |
| West Asia              | 4.56          | 4.45          | 4.35          | -0.10                     |

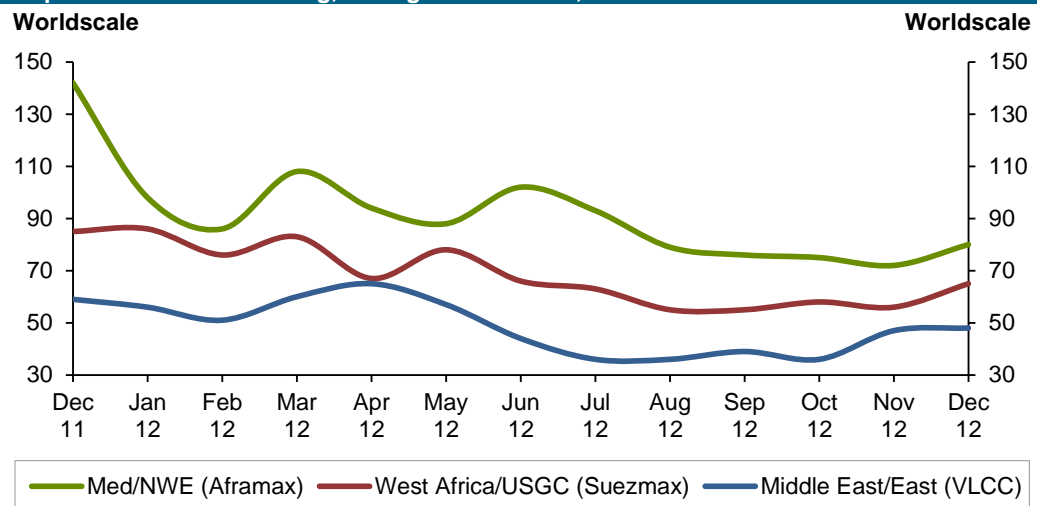
Source: "Oil Movements" and Lloyd's Marine Intelligence Unit.

Freight rates for both dirty and clean tanker sectors increased in December as a result of heightened pre-holiday activity

Spot freight rates for the dirty tanker sector saw a general increase on several reported routes in December. Average spot freight rates for VLCCs increased by 1.6% from a month earlier to stand at 42 WS points. Generally, VLCC freight rates were stable as the gains achieved in November were maintained in December. Also, the demand seen for VLCCs was adequate, although lower than what was usually predicted for the time of year, while Suezmax saw a greater increase of 12.3% from the previous month to average WS60 points. The increase in freight rates came as a result of enhanced tonnage demand for West Africa loadings. Other factors also contributed to shortening the positions list and thus balancing the vessel availability. On the other hand, Aframax showed a negative performance as its average spot freight rates declined by 3.6% from a month earlier to stand at WS87 points. The monthly negative average was a result of a mixed performance in December. While freight rates seen in the Mediterranean firmed as the positions list shortened, all gains were offset by the rates seen in the Caribbean, which dropped or remained flat, at best.



Graph 7.1: Tanker chartering, sailings and arrivals, mb/d



*VLCC freight rates were mostly unchanged on average*

December started with **VLCC** activity waning as the market was relatively quiet for the time of year. Freight rates would have started to decline if it had not been for the owners who showed a constant resistance to lower rates, under pressure from charterers taking advantage of the market situation and its limited requirements. Despite improved circumstances in the third week of December, as a result of a pre-Christmas flow of activity, the increased inquiries caused only a marginal rise in VLCC rates as the sufficient tonnage supply, along with chartered efforts, prevented rates from achieving measurable gains, even given a healthier market situation. On average, spot freight rates for VLCCs operating on the Middle East-to-East and West Africa-to-East routes saw close gains of 2.1% and 2.2% from the previous month to average WS48 and WS47 respectively. On the other hand, VLCCs operating on the Middle East-to-West route ended the month flat to average WS30 points, unchanged from the previous month. During the Christmas holidays, the market was quiet with no inquiries from the West. Generally, the number of fixtures in December was found to be low, indeed considerably lower than expected.

December was a fruitful month for the **Suezmax** class. Although the month started quietly, Suezmax freight rates were not able to register any gains as demand remained limited versus vessel supply. The beginning of the month maintained the same low rates as a month earlier, yet, by the second week, rates had picked up as demand for West Africa loading increased and tonnage availability was tighter for certain dates. Although the December fixtures were completed by that time, some prompt requirements were needed as replacements for ships running late, and these were done at higher rates, supporting the firming trend in the market. January inquiries came alongside the seasonal pre-Christmas rush, which gave a positive push to the market, boosting Suezmax rates. The upward trend was seen mostly in the west, as freight rates on the East-of-Suez routes remained mostly stable. Tanker-owners did try to maximize the benefits of the season's demand by showing resistance to the existing freight rates in an effort to push them to higher levels, taking advantage of the balanced position list, the healthy requirements for Suezmax for West Africa loadings, and the usual winter season demand on the ice-class vessels. In December, some delays in the Turkish Straits supported rates. Spot freight rates for Suezmax trading from West Africa to the US Gulf Coast increased by 16.1% from the previous month to average WS65 points. Rates for vessels operating on Northwest Europe-to-USA routes rose by 8% from a month earlier to average WS54 points in December. Despite the monthly gain, on an annual basis average spot freight rates on both reported routes saw declines of 24% and 30% respectively. The firmer Suezmax market for West Africa loadings did affect rates on other routes, as charterers accepted higher rates to keep the owners interested in operating on different routes, instead of concentrating on a sole route. The spillover effect did have an impact on rates in Northwest Europe and the Caribbean. Rates in the East saw a slight improvement in December, as vessel availability was balanced, although remaining sufficient at all times.

The **Aframax** performance in December could not compete with other tanker classes in the dirty sector, although Aframax activity did increase on certain routes and freight rates did register some gains as well. However, the size of the gains was lower than expected for the time of year. Although the beginning of the month witnessed a sluggish start for Aframax in terms of inquiries and demand, things sped up later as charterers rushed to meet their requirements before the holidays. In December, Aframax spot freight rates were mixed, increasing on some routes, while dropping on others or remaining flat. Aframax tankers trading on the Indonesia-to-East route remained flat, with no changes from last month, to average WS92 points. Rates seen for the Mediterranean-to-Mediterranean and Mediterranean-to-Northwest Europe routes rose by 9% and 11% respectively, on the back of a shorter positions list. In comparison with a year earlier, rates on both Mediterranean routes showed large drops of 40% and 44%. Rates on the Caribbean-to-USA route were negative, decreasing by 24% from the previous month to average WS90 points. Rates seen in the Caribbean were reported flat at best, as they did not pick up at any stage of the month due to limited activity. In general, supply remained abundant and therefore freight rates could not meet the expectations for the season.

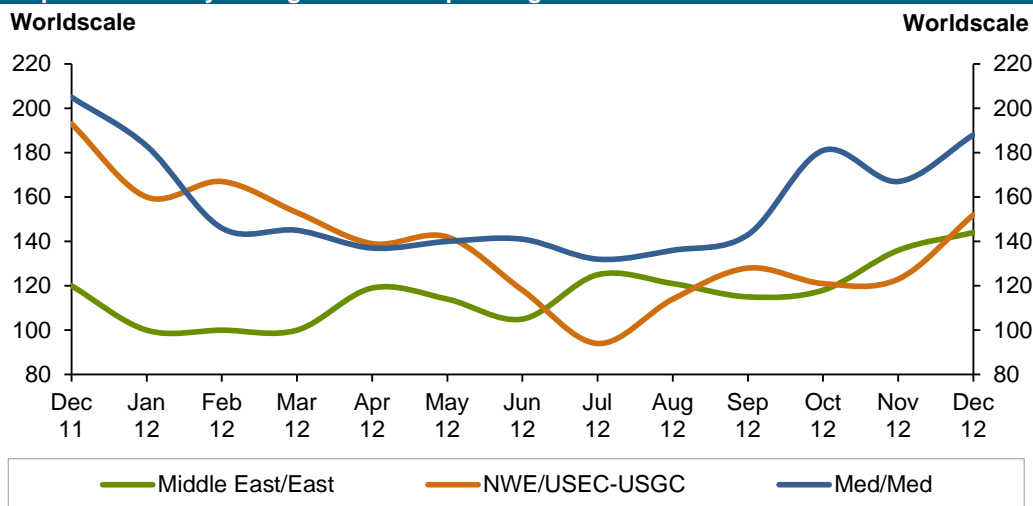
**Table 7.2: Spot tanker crude freight rates, Worldscale**

|                                 | Size<br>1,000 DWT | Oct 12 | Nov 12 | Dec 12 | Change<br>Dec/Nov |
|---------------------------------|-------------------|--------|--------|--------|-------------------|
| <b>Crude</b>                    |                   |        |        |        |                   |
| Middle East/East                | 230-280           | 36     | 47     | 48     | 1                 |
| Middle East/West                | 270-285           | 25     | 30     | 30     | 0                 |
| West Africa/East                | 260               | 40     | 46     | 47     | 1                 |
| West Africa/US Gulf Coast       | 130-135           | 58     | 56     | 65     | 9                 |
| NW Europe/USEC-USGC             | 130-135           | 51     | 50     | 54     | 4                 |
| Indonesia/US West Coast         | 80-85             | 96     | 92     | 92     | 0                 |
| Caribbean/US East Coast         | 80-85             | 94     | 118    | 90     | -28               |
| Mediterranean/Mediterranean     | 80-85             | 77     | 78     | 85     | 7                 |
| Mediterranean/North-West Europe | 80-85             | 75     | 72     | 80     | 8                 |

Source: Galbraith's Tanker Market Report and Platt's.

In the clean sector, following last month's surge in the medium-range market, December started with medium-range rates flattening across different routes, as demand thinned and freight rates softened accordingly. Yet, by mid-month, the market firmed as activity increased, in order for charterers to cover all their requirements before the holiday season. The increase in seasonal activity was translated into WS points gained on different routes. In a monthly comparison, all reported routes saw a positive performance this month as different elements supported freight rates, such as ships running late and last-minute replacements which narrowed the positions list and established better rates. Clean East-of-Suez spot freight rates gained 3.8% in December to average WS151 points, while the gain in West-of-Suez rates was 15.2% higher to stand at WS179 points. Rates for tankers operating on the Middle East-to-East route increased by 5.9%, and rates for the Singapore-to-East route rose by 1.9% in December, compared with the previous month. Rates seen on the Northwest Europe-to-USA route registered the highest gain to increase by 23.6% and average WS152 points. The Mediterranean-to-Mediterranean and Mediterranean-to-Northwest Europe routes saw similar gains of 12.6% and 11.9% respectively.

**Graph 7.2: Monthly averages of clean spot freight rates**



**Table 7.3: Spot tanker product freight rates, Worldscale**

| <b>Products</b>                 | <b>Size<br/>1,000 DWT</b> | <b>Oct 12</b> | <b>Nov 12</b> | <b>Dec 12</b> | <b>Change<br/>Dec/Nov</b> |
|---------------------------------|---------------------------|---------------|---------------|---------------|---------------------------|
| Middle East/East                | 30-35                     | 118           | 136           | 144           | 8                         |
| Singapore/East                  | 30-35                     | 145           | 155           | 158           | 3                         |
| NW Europe/USEC-USGC             | 33-37                     | 121           | 123           | 152           | 29                        |
| Mediterranean/Mediterranean     | 30-35                     | 181           | 167           | 188           | 21                        |
| Mediterranean/North-West Europe | 30-35                     | 189           | 177           | 198           | 21                        |

Source: Galbraith's Tanker Market Report and Platt's.

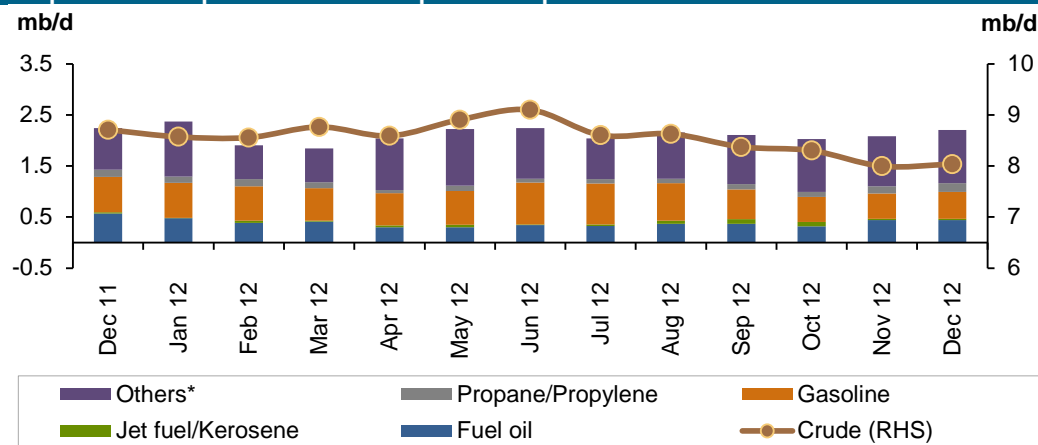
# Oil Trade

*US crude oil imports remained almost unchanged from a month earlier*

## USA

According to preliminary data, US crude oil imports averaged 8.03 mb/d in December, up by 39.5 tb/d, or 0.5%, from a month earlier and down by 674 tb/d or 8%, from the same month last year. In 2012, US crude oil imports averaged 8.5 mb/d, reflecting a decline of 416 tb/d, or 5%, from the same period last year. US product imports increased by 125 tb/d, or 6%, from the previous month, while they decreased on an annual basis by 144 tb/d, or 6%, from a year ago. US product exports increased by 99 tb/d, or 4%, m-o-m, yet registered a decline of 741 tb/d, or 20%, y-o-y. **US net imports decreased in December to average 7.3 mb/d, reflecting a monthly and annual gain of 0.9%.**

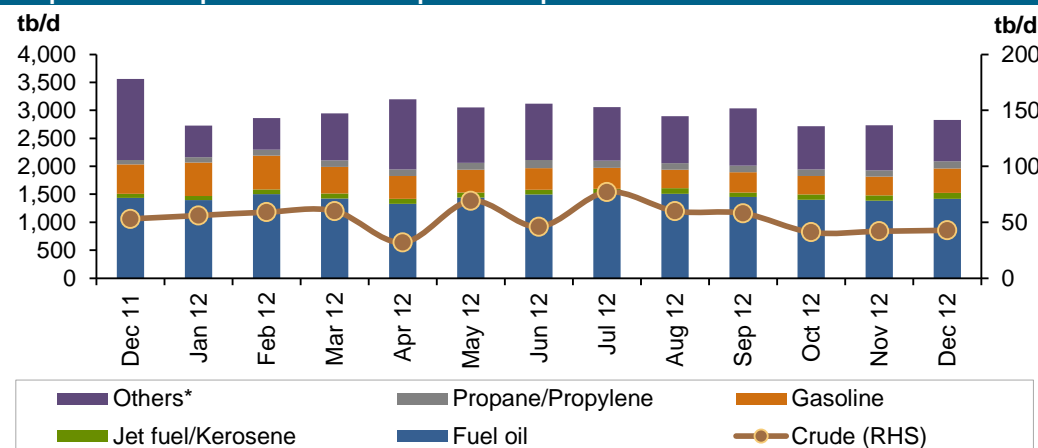
**Graph 8.1: US imports of crude and petroleum products**



\*Others: Contains natural gas liquids, liquefied refinery gases (LRG's), other liquids and all finished petroleum products except gasoline, jet fuel/kerosene, fuel oil and propane/propylene.

As per the latest monthly government release, crude oil imports in October stood at 8.0 mb/d, down by 284 tb/d from September. Canada continued to be the top supplier of crude to the US in October, averaging 2.2 mb/d, 71 tb/d, or 3%, less than the previous month. Canada accounted for 27.5% of total US crude imports. Imports from Saudi Arabia, the second largest supplier to the US, were also lower than a month earlier, accounting for 15.5% of total US crude imports with monthly imports in October, which was 3% lower m-o-m. Mexico came in third position, with a share of 12%, yet lower monthly imports by 3%. Venezuela came in fourth position to average 10 mb/d, 4% lower m-o-m. On an annual comparison, all top suppliers quantities were found to be lower than the same period a year ago, ranging between 1-7%. The only exception was Saudi Arabia, which increased its volumes from last year by 12%.

**Graph 8.2: US exports of crude and petroleum products**



\*Others: Contains natural gas liquids, liquefied refinery gases (LRG's), other liquids and all finished petroleum products except gasoline, jet fuel/kerosene, fuel oil and propane/propylene.

Crude imports from OPEC Member Countries (MCs) declined as well on a monthly and an annual basis, by 2% and 1%, respectively, accounting for 49% in October. US product imports from OPEC MCs decreased by 17 tb/d, or 8%, from the previous month to average 188 tb/d, accounting for 9.5% of total US product exports. As to product supplier share, Canada and Russia maintained their position as top suppliers to the US holding a share of 23% and 22%, respectively. However, both countries saw a decline in their exports to the US on a monthly comparison, by 12% and 13%, respectively. The UK was the third largest product supplier to the US in October. However, it decreased its monthly product exports to the US by a slight 9 tb/d, or 8%, from the previous month.

**Table 8.1: US crude and product net imports, tb/d**

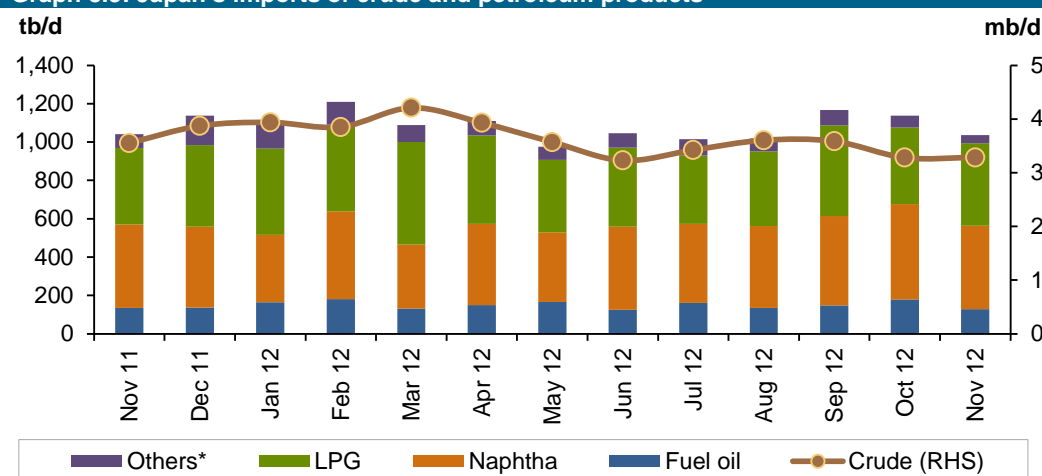
|                                 | Oct 12       | Nov 12       | Dec 12       | Change<br>Dec/Nov |
|---------------------------------|--------------|--------------|--------------|-------------------|
| Crude oil                       | 8,050        | 7,956        | 7,994        | 39                |
| Total products                  | -733         | -691         | -664         | 27                |
| <b>Total crude and products</b> | <b>7,529</b> | <b>7,264</b> | <b>7,330</b> | <b>65</b>         |

### Japan

*In November, Japan's crude imports remained unchanged to average 3.3 mb/d*

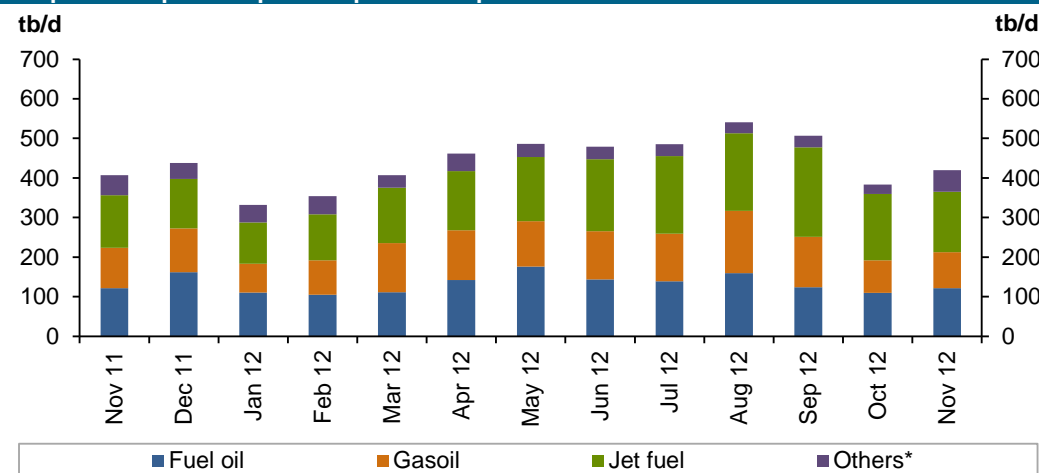
In November, Japan remained unchanged, to average 3.3 mb/d. On an annual comparison, crude imports dropped by 269 tb/d or 8%. As to crude supplier share, Saudi Arabia and the United Arab Emirates maintained their position as top crude supplier to Japan as seen in October, accounting for 34% and 22%, respectively. Qatar was in the third position with a share of 8% of total crude oil imports. However, it was down by 42 tb/d, or 13.4%, m-o-m and 172 tb/d, or 39%, y-o-y. Product imports declined in November both on a monthly and an annual basis. M-o-m, the decline is equal to 133 tb/d, or 18%, while on a yearly comparison it amounts to 38 tb/d or 6%. Product exports increased in November by 37 tb/d, or 10%, m-o-m and by 9 tb/d, or 2.3%, y-o-y. Year-to-date, product exports were 59 tb/d, or 12%, lower. As a result, **Japan net trade imports declined by 165 tb/d, or 4.5%, to average 3.5 mb/d, the lowest level of net imports seen since June 2012.** Additionally, this reflects a higher drop of 8% on an annual basis.

**Graph 8.3: Japan's imports of crude and petroleum products**



\*Others: Contains gasoline, jet fuel, kerosene, gasoil, asphalt and paraffin wax.

**Graph 8.4: Japan's exports of petroleum products**



\*Others: Contains LPG, gasoline, naphtha, kerosene, lubricating oil, asphalt and paraffin wax.

**Table 8.2: Japan's crude and product net imports, tb/d**

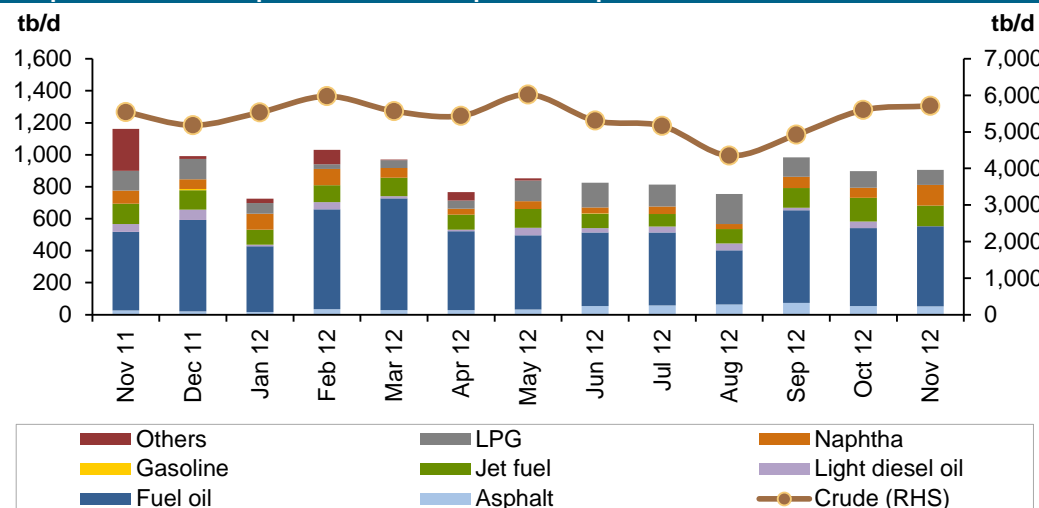
|                                 | Sep 12       | Oct 12       | Nov 12       | Change Nov/Oct |
|---------------------------------|--------------|--------------|--------------|----------------|
| Crude oil                       | 3,586        | 3,280        | 3,285        | 5              |
| Total products                  | 194          | 362          | 192          | -170           |
| <b>Total crude and products</b> | <b>3,780</b> | <b>3,643</b> | <b>3,477</b> | <b>-165</b>    |

*China crude oil imports rose for the third consecutive month in November to average 5.7 mb/d*

**China**

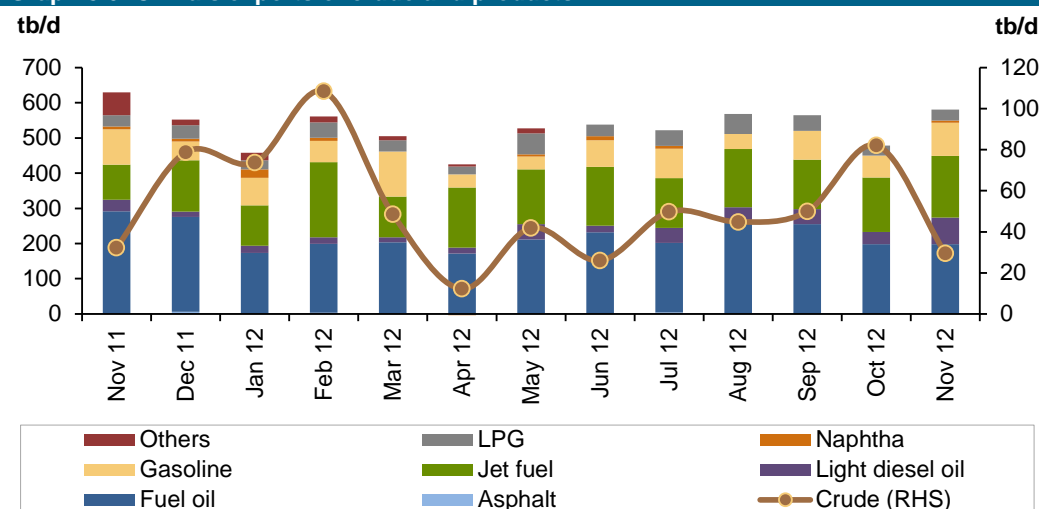
China's crude oil imports rose for the third consecutive month in November by 111 tb/d, or 2%, to average 5.7 mb/d, the highest level since May 2012. On an annual comparison, crude imports increased by 165 tb/d, or 3%, from last year's level. Year-to-date, the numbers show an increase of 369 tb/d or 7.3%. China's crude imports increased in November as the crude refining volumes soared to a record-high level and as refineries add to their stocks in preparation for the Chinese New Year Holidays in February. Regarding crude import origins, in November all top suppliers to China maintained their position as in the previous month. Saudi Arabia, Angola and Oman were the first, second and third supplier to China, accounting for 23%, 13% and 9%, respectively, of total Chinese imports. On a monthly comparison, Saudi Arabia increased its exports to China by 18%, while exports from Angola were stable and Oman saw a decline in its exported volumes by 8%. Iran and the United Arab Emirates came as fourth and fifth suppliers to China, each accounting for 7%.

**Graph 8.5: China's imports of crude and petroleum products**



China product imports also rose from the previous month to average 888 tb/d, the highest level since March 2012, gaining 101 tb/d, or 13%, m-o-m, while dropping by 275 tb/d, or 24%, y-o-y. Similarly, China product exports saw a monthly gain of 97 tb/d, or 20%, while decreasing by 84 tb/d, or 13%, from the previous year. Accordingly, **China's net oil trade increased by 169 tb/d, or 3%, on a monthly basis while it declined by 23 tb/d, or 0.4%, from a year ago.**

**Graph 8.6: China's exports of crude and products**



**Table 8.3: China's crude and product net imports, tb/d**

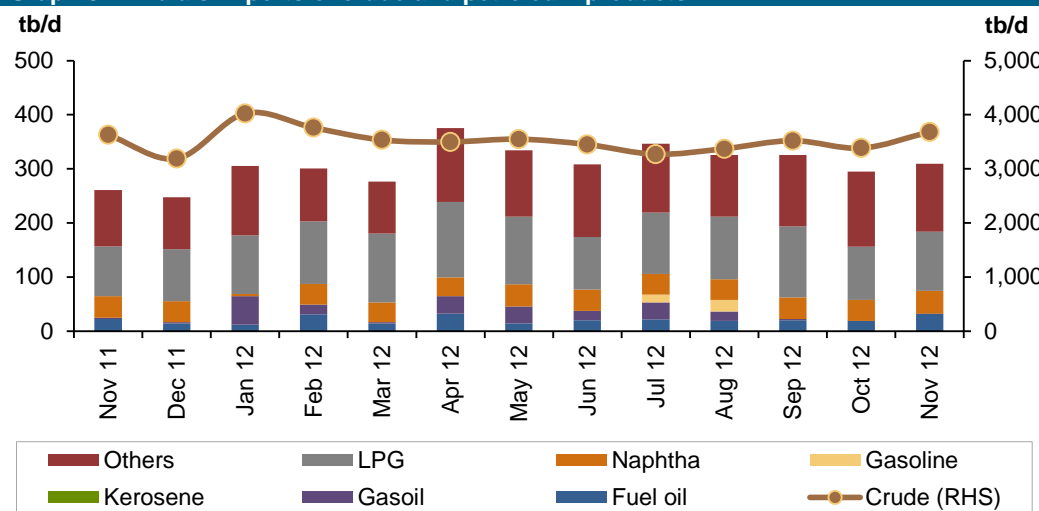
|                                 | Sep 12       | Oct 12       | Nov 12       | Change Nov/Oct |
|---------------------------------|--------------|--------------|--------------|----------------|
| Crude oil                       | 4,872        | 5,517        | 5,681        | 164            |
| Total products                  | 346          | 337          | 342          | 5              |
| <b>Total crude and products</b> | <b>5,218</b> | <b>5,854</b> | <b>6,022</b> | <b>169</b>     |

**India**

*India's crude oil imports increased in November by 9% m-o-m to average 3.69 mb/d.*

India's crude oil imports increased in November both on a monthly and an annual basis. M-o-m, the increase is equal to 298 tb/d, or 9%, while y-o-y it saw a slight increase of 1.5% to average 3.69 mb/d.

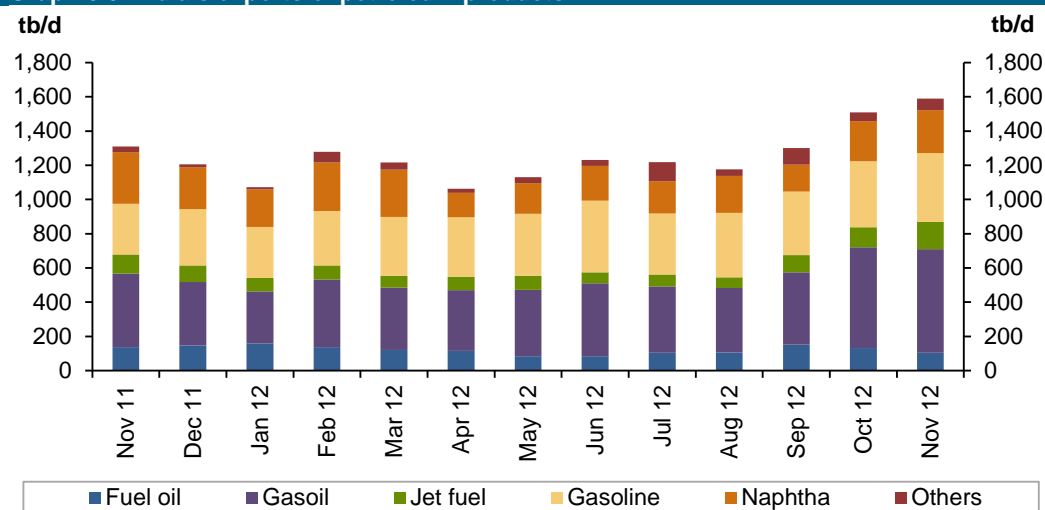
**Graph 8.7: India's imports of crude and petroleum products**



India's product imports increased as well in November by 15 tb/d, or 5.1%, to average 310 tb/d, a drop of 15 tb/d, or 5%, from an annual perspective. The product imports' monthly gain came as a result of increased imported volumes of fuel oil, naphtha and LPG. Fuel oil saw the greatest increase in the monthly import volume, growing by 68% from the previous month as a result of its increased usage for power generation. With

regard to India's product exports, the figure reflects a gain, both on a monthly and an annual basis. In November, India's product exports increased by 5.4% to average 15.29 mb/d, a record-high level not seen before, while the increase from a year earlier equaled 279 tb/d or 21%. The monthly gain in product exports resulted from higher export volumes of all products, except fuel oil exports, which declined by 21% from a month earlier. As a result, **India's net trade imports increased by 233 tb/d, or 10.7%, m-o-m, while declining by 241 tb/d, or 9%, y-o-y in November to average 24 mb/d.**

**Graph 8.8: India's exports of petroleum products**



**Table 8.4: India's crude and product net imports, tb/d**

|                                 | Sep 12       | Oct 12       | Nov 12       | Change Nov/Oct |
|---------------------------------|--------------|--------------|--------------|----------------|
| Crude oil                       | 3,521        | 3,384        | 3,682        | 298            |
| Total products                  | -974         | -1,213       | -1,279       | -66            |
| <b>Total crude and products</b> | <b>2,547</b> | <b>2,170</b> | <b>2,403</b> | <b>233</b>     |

Note: India data table does not include information for crude import and product export by Reliance Industries.

**FSU**

Total crude oil exports from FSU declined by 62 tb/d or 0.97% to average 6.4 mb/d.

**In November, total FSU crude oil exports declined by 62 tb/d, or 0.97%, to average 6.4 mb/d.** Crude exports through Russian pipelines declined by 220 tb/d, or 5%, to average 4 mb/d. Crude exports from the Black Sea, the Baltics and Druzhba all declined in November by a percentage of 16%,10% and 3%, respectively, while exports from Kozmino increased by 27%. Outflows from Russian rail saw a slight decline of 3 tb/d, or 1.4%, from a month earlier, while Kazakh rail supplies increased by 4 tb/d, or 2.2%, in November. The Caspian CPC blend and Russian Fareast blend increased by 16%, 27% and 21%, respectively.

On the other hand, total product exports increased in November by 543 tb/d, or 21.3%, to average 3.1 mb/d. Exports rose for all products by a percentage ranging between 13% to 30% from the previous month. The only exception was seen on jet fuel and VGO, which fell by 74% and 6%, respectively, from a month earlier.



**Table 8.5: Recent FSU exports of crude and products by sources, tb/d**

|                            | <u>2010</u>  | <u>2011</u>  | <u>1Q12</u>  | <u>2Q12</u>  | <u>3Q12</u>  | <u>Oct 12</u> | <u>Nov 12*</u> |
|----------------------------|--------------|--------------|--------------|--------------|--------------|---------------|----------------|
| <b>Crude</b>               |              |              |              |              |              |               |                |
| <b>Russian pipeline</b>    |              |              |              |              |              |               |                |
| Black Sea                  | 994          | 935          | 876          | 900          | 932          | 847           | 714            |
| Baltic                     | 1,564        | 1,461        | 1,444        | 1,725        | 1,611        | 1,847         | 1,674          |
| Druzhba                    | 1,126        | 1,170        | 1,243        | 1,109        | 1,006        | 1,001         | 971            |
| Kozmino                    | 309          | 306          | 307          | 317          | 315          | 312           | 397            |
| <b>Total</b>               | <b>4,005</b> | <b>4,178</b> | <b>4,161</b> | <b>4,356</b> | <b>4,174</b> | <b>4,289</b>  | <b>4,069</b>   |
| <b>Other routes</b>        |              |              |              |              |              |               |                |
| Russian rail               | 330          | 173          | 176          | 137          | 87           | 218           | 215            |
| Russian-Far East           | 276          | 279          | 269          | 265          | 249          | 231           | 279            |
| Kazakh rail                | 123          | 157          | 167          | 128          | 78           | 178           | 182            |
| Vadandey                   | 152          | 82           | 46           | 41           | 57           | 103           | 54             |
| Kaliningrad                | 24           | 23           | 24           | 18           | 22           | 15            | 16             |
| CPC                        | 743          | 679          | 622          | 685          | 654          | 564           | 719            |
| BTC                        | 775          | 695          | 727          | 681          | 638          | 574           | 593            |
| Kenkiyak-Alashankou        | 204          | 222          | 207          | 186          | 213          | 257           | 218            |
| Caspian                    | 239          | 170          | 169          | 168          | 198          | 170           | 197            |
| <b>Total crude exports</b> | <b>6,750</b> | <b>6,500</b> | <b>6,401</b> | <b>6,538</b> | <b>6,292</b> | <b>6,421</b>  | <b>6,359</b>   |
| <b>Products</b>            |              |              |              |              |              |               |                |
| Gasoline                   | 141          | 149          | 155          | 113          | 113          | 110           | 134            |
| Naphtha                    | 253          | 243          | 277          | 295          | 307          | 329           | 373            |
| Jet                        | 18           | 10           | 3            | 5            | 12           | 23            | 6              |
| Gasoil                     | 809          | 716          | 848          | 744          | 734          | 663           | 861            |
| Fuel oil                   | 1,129        | 1,201        | 1,260        | 1,277        | 1,415        | 1,167         | 1,476          |
| VGO                        | 228          | 198          | 180          | 264          | 281          | 262           | 246            |
| <b>Total</b>               | <b>2,578</b> | <b>2,518</b> | <b>2,723</b> | <b>2,697</b> | <b>2,863</b> | <b>2,554</b>  | <b>3,097</b>   |
| <b>Total oil exports</b>   | <b>9,328</b> | <b>9,018</b> | <b>9,124</b> | <b>9,235</b> | <b>9,154</b> | <b>8,975</b>  | <b>9,456</b>   |

\* Preliminary

Totals may not add due to independent rounding.

Source: Nefte Transport, Global Markets, Argus Fundamentals, Argus FSU and OPEC.

# Stock Movements

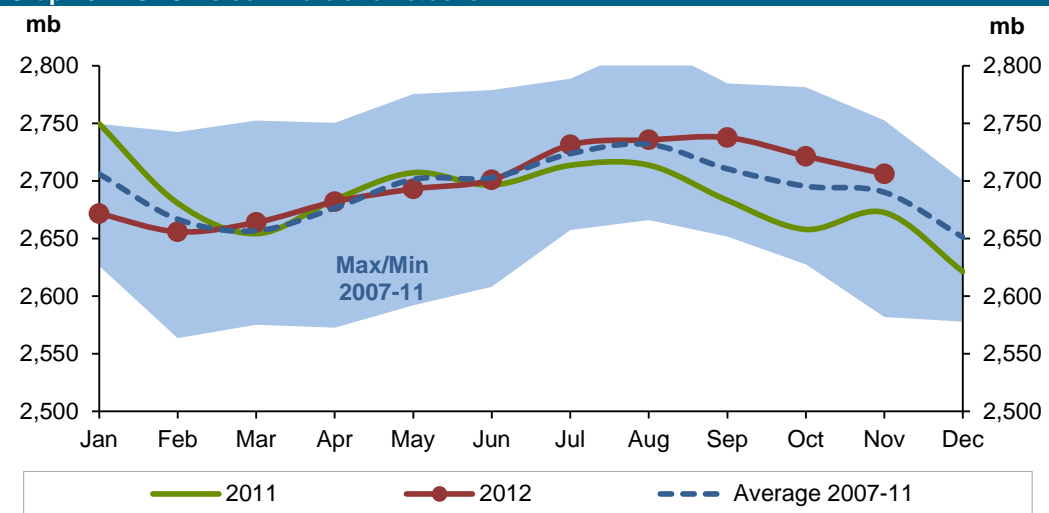
*Total OECD commercial oil stocks fell seasonally by 15.3 mb, according to preliminary data for November*

## OECD

Preliminary data for November shows that total OECD commercial oil stocks fell seasonally by 15.3 mb to stand at 2706 mb. Despite the fall in total stocks, inventories showed a surplus of 33.6 mb over a year ago and a gain of 16.0 mb compared to the five-year average. The total stock-draw came from products as they declined by 16.0 mb with crude showing a small build of 0.7 mb. Within the components, crude stocks stood at comfortable levels, indicating a surplus of 51.0 mb with last year and nearly 48.7 mb with the seasonal norm. However, products remained tight showing a deficit of 28.8 mb with the previous year and 32.7 mb with the seasonal norm.

On a regional basis, North America's stocks declined in November by 8.8 mb, with crude and products falling by 3.7 mb and 5.1 mb, respectively. The fall in US commercial crude stocks in November reflected a higher refinery utilization rate combined with lower crude imports, averaging less than 8.0 mb/d. At 690 mb, North America's commercial crude oil stocks stood at comfortable levels, denoting a surplus with the five-year average of 65.6 mb, as well as being 51.0 mb more than a year ago. However, product stocks remained 8.1 mb below the historical average and 15.5 mb less than a year ago. Middle distillates accounted for the bulk of the deficit, indicating 32 mb below the seasonal norm, while gasoline stocks started to improve, showing a surplus of 6.0 mb with the five-year average.

**Graph 9.1: OECD's commercial oil stocks**



OECD Europe's inventories saw a build of 4.2 mb in November, reversing the fall of the last two months, driven mainly by the build of 8.1 mb in crude, as products abated this build and declined by 3.9 mb. Despite this total stock build, the region's commercial stocks remained at 44 mb below the five-year average and stood 9.7 mb below year ago at the same time. Both crude and products showed a deficit with the five-year average at 19.0 mb and 27 mb, respectively. Product stocks stood at 15.0 mb below a year earlier, while crude stocks indicated a surplus of 5.3 mb with the previous year.

In November, total commercial oil stocks in OECD Pacific declined by 10.7 mb after remaining almost unchanged in October and ending the month at 417 mb. Despite this stock draw, the region's commercial stocks stood at 2.6 mb above the last five-year average and were 7.7 mb higher than at the same time a year ago. Both crude and product stocks went down in November by 3.7 mb and 7.0 mb, respectively. Within the components, commercial crude stood 2.1 mb above the historical average and 6.1 mb higher than over the same period a year ago. Product stocks in the OECD Pacific at the end of November showed a slight surplus of 0.5 mb with the five-year average and 1.7 mb with a year earlier.

In terms of days of forward cover, OECD commercial stocks in October stood at nearly

58 days, a loss of one day compared to the previous month, but they displayed a gain of nearly two days over the last five-year average and a gain of around one day over the average a year ago at the same time.

**Table 9.1: OECD commercial stocks, mb**

|                              | <u>Sep 12</u> | <u>Oct 12</u> | <u>Nov 12</u> | <u>Change</u><br><u>Nov 12/Oct 12</u> | <u>Nov 11</u> |
|------------------------------|---------------|---------------|---------------|---------------------------------------|---------------|
| Crude oil                    | 1,305         | 1,303         | 1,304         | 0.7                                   | 1,241         |
| Products                     | 1,433         | 1,419         | 1,403         | -16.0                                 | 1,432         |
| <b>Total</b>                 | <b>2,738</b>  | <b>2,722</b>  | <b>2,706</b>  | <b>-15.3</b>                          | <b>2,673</b>  |
| <b>Days of forward cover</b> | <b>58.8</b>   | <b>58.8</b>   | <b>58.0</b>   | <b>-0.8</b>                           | <b>57.2</b>   |

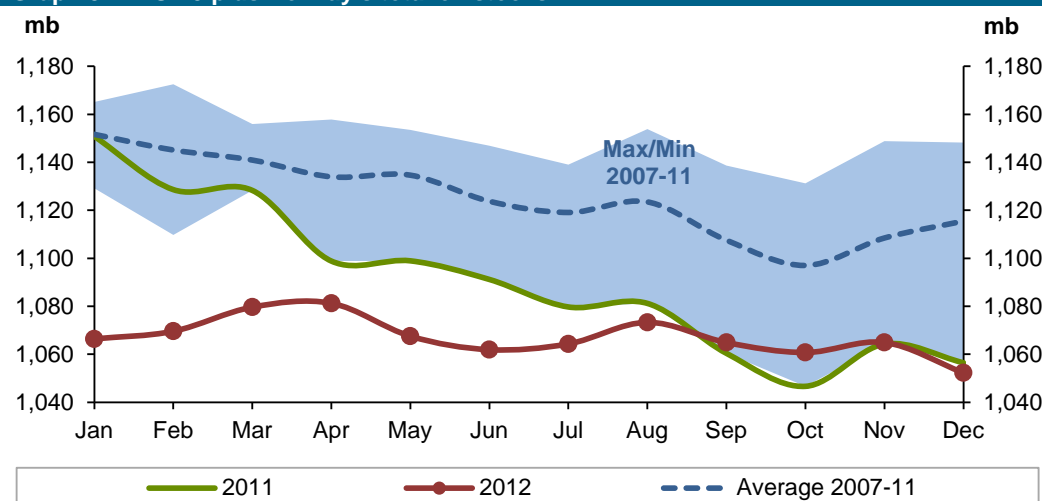
## Europe

*European stocks fell by 12.6 mb in December, according to the latest available data*

The latest available data for December shows that European stocks reversed the build of the previous month and fell by 12.6 mb to stand at 1,065.0 mb. At this level, they ended the month 4.2 mb, or 0.4%, below a year ago at the same time and were 63.2 mb, or 5.7%, below the five-year average. Most of the stock draw came from crude which declined by 11.1 mb, while products decreased only by 1.5 mb.

European crude inventories fell by 11.1 mb in December, reversing the build of 8.1 mb of the previous month, and finished at 451.7 mb, an eight-month low. At this level, they were 26.0 mb, or 5.4%, above a year earlier, although still 13.0 mb, or 2.9%, below the last five-year average. A higher increase in demand from refiners, averaging 10.5 mb/d, almost 90,000 b/d above the November level, was behind the draw in European crude stocks. Average refinery utilization edged above 82% of capacity but was well down on the summer peak of 87%.

**Graph 9.2: EU-15 plus Norway's total oil stocks**



Product stocks in Europe fell by 1.5 mb after the fourth consecutive month of a build and ended December at 600.6 mb, leaving them at 34.0 mb, or 5.4%, below the same period last year and showing a deficit of 50.7 mb, or 7.8%, with the five-year average. Within products, and with the exception of middle distillates which remained unchanged, all components experienced draws. Gasoline stocks saw a slight fall of 0.1 mb to end the month of December at 105.2 mb and were 4.9 mb, or 4.4%, less than a year ago and 15.6 mb, or 12.9%, below the seasonal average. The drop in gasoline stocks reflects mainly higher exports to the US to temporarily replace the output lost from US East Coast refineries as demand in Europe continued to remain weak. Fuel oil stocks were lower by 0.6 mb, ending the month of December at 91.7 mb, which was 4.1 mb below the same period last year and 16.3 mb lower than the five-year average. Higher exports to Singapore have led to the stock draw in residual fuels. Middle distillates remained unchanged in December to stand at 373.5 mb. At this level, they are 4.1 mb, or 4.3%, below a year ago and 16.2 mb, or 4.2%, below the seasonal average. Higher demand in the Mediterranean region was offset by higher distillate production.

**Table 9.2: EU-15 plus Norway's total oil stocks, mb**

|                       | <u>Oct 12</u>  | <u>Nov 12</u>  | <u>Dec 12</u>  | <u>Change</u><br><u>Dec 12/Nov 12</u> | <u>Dec 11</u>  |
|-----------------------|----------------|----------------|----------------|---------------------------------------|----------------|
| <b>Crude oil</b>      | <b>454.6</b>   | <b>462.8</b>   | <b>451.7</b>   | <b>-11.1</b>                          | <b>425.8</b>   |
| Gasoline              | 108.0          | 105.6          | 105.5          | -0.1                                  | 110.4          |
| Naphtha               | 28.2           | 30.8           | 29.9           | -0.9                                  | 33.5           |
| Middle distillates    | 376.9          | 373.5          | 373.5          | 0.0                                   | 391.0          |
| Fuel oils             | 93.0           | 92.3           | 91.7           | -0.6                                  | 95.9           |
| <b>Total products</b> | <b>606.1</b>   | <b>602.2</b>   | <b>600.6</b>   | <b>-1.5</b>                           | <b>630.7</b>   |
| <b>Total</b>          | <b>1,060.7</b> | <b>1,064.9</b> | <b>1,052.3</b> | <b>-12.6</b>                          | <b>1,056.5</b> |

Source: Argus and Euroilstock.

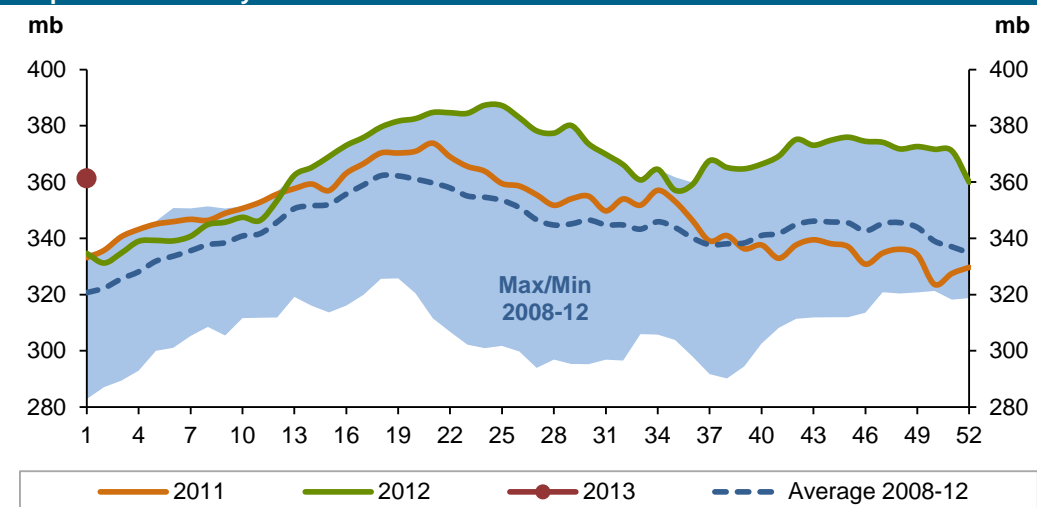
**US**

*US total commercial oil stocks fell by 3.0 mb in December following a strong drop of 22 mb in November*

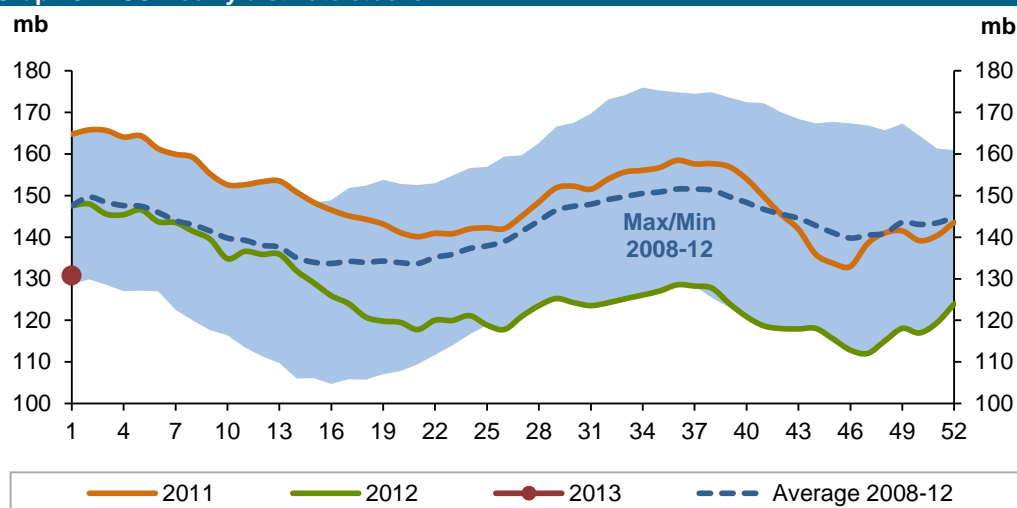
**US total commercial oil stocks** fell in December by 3.0 mb following a strong drop of 22 mb in November to stand at 1,089.5 mb. Despite this stock draw, they were 35.4 mb, or 3.4%, above the same period a year ago and 54.7 mb, or 5.3%, higher than the five-year average. The fall was attributed to crude, which declined by 11.8 mb, while products abated this stock draw, increasing by 8.8 mb.

In December, **US commercial crude stocks** declined by 11.8 mb for the second consecutive month to stand at 359.9 mb. Despite this draw, crude commercial oil stocks remained at comfortable levels, indicating a surplus of 29.3 mb, or 8.8%, with a year ago and 40 mb, or 12.5%, with the five-year average. It should be noted that the bulk of the stock-draw in crude occurred during the week ending 28 December when crude oil fell by 11.1 mb from the previous week, reflecting refiners optimizing tax liabilities on their inventory positions. On a monthly basis, the fall in US crude stocks came about from higher crude oil refinery inputs which rose by nearly 400,000 b/d to 15.4 mb/d, much higher than at the same time last year, indicating growth of 750,000 b/d. In December, US refineries operated at around 90.6%, which was 2.4 percentage points (pp) above November and 5.8 pp higher than the same month last year. In December US crude imports averaged nearly 8.0 mb/d, almost unchanged from a month earlier but lower than the level of December 2011, when imports reached 8.4 mb/d. In contrast, with the draw on total crude commercial stocks, inventories in Cushing showed a further increase of more than 4.0 mb, reaching a new record high of nearly 50.0 mb. However, stock levels in Cushing could drop in coming weeks following the new pipeline expansion due to the startup of the 400,000 b/d Seaway line.

**Graph 9.3: US weekly commercial crude oil stocks**



In contrast to the stock draw in crude, product inventories rose by 8.8 mb in December after four consecutive months of stock draws. At 729.6 mb, the deficit incurred last month switched to a surplus of 6.1 mb, or 0.8%, from a year ago and now stand higher by 14.7 mb or 2.1%, compared to the seasonal average.

**Graph 9.4: US weekly distillate stocks**

Within products, the picture was mixed. Distillates and gasoline saw builds, while residual fuel, jet fuel stocks and other unfinished products witnessed declines. Gasoline stocks continued their build of four consecutive months, increasing by 13.6 mb to end December at 225.7 mb, the highest level since March. With this build, they are now at 2.5 mb, or 1.1%, above a year ago and 14.7 mb, or 2.1%, higher than the seasonal average. The drop of about 100,000 b/d in demand to average 8.5 mb/d was behind the stock-draw in gasoline. Higher gasoline output, reaching almost 9.1 mb/d, also contributed to the build in gasoline stocks. Distillate stocks reversed the fall of the last two months and increased by 8.9 mb to end the month of December at 124.0 mb. Despite this build, distillates remained at 25.2 mb, or 16.9%, below the year-ago level and 28.0 mb, or 18.4%, lower than the seasonal norm. Lower demand in December was behind the drop in distillate stocks. Indeed, apparent demand for distillates fell by around 250,000 b/d from November and from the level of the same period last year. Higher output supported the build of distillate stocks. In December, distillate production averaged 4.9 mb/d, around 200,000 b/d more than a month earlier, but slightly below a year ago at the same time. The continued strength of distillate exports limited the further build in distillate stocks. Jet fuel stocks fell for the second consecutive month, by 1.0 mb. At 39.2 mb, they were 2.3 mb, or 5.5%, lower than a year ago, showing a deficit of 1.9 mb, or 4.7%, with the seasonal norm. Residual oil stocks also declined by 2.0 mb in December to finish the month at 36.4 mb. At this level, they were 2.2 mb, or 6.5%, higher than the same month a year ago, but they are still 1.2 mb, or 3.1%, below the latest five-year average.

**Table 9.3: US onland commercial petroleum stocks, mb**

|                   | <u>Oct 12</u> | <u>Nov 12</u> | <u>Dec 12</u> | <u>Change</u><br><u>Dec 12/Nov 12</u> | <u>Dec 11</u> |
|-------------------|---------------|---------------|---------------|---------------------------------------|---------------|
| Crude oil         | 375.4         | 371.8         | 359.9         | -11.8                                 | 330.7         |
| Gasoline          | 203.8         | 212.1         | 225.7         | 13.6                                  | 223.1         |
| Distillate fuel   | 119.2         | 115.1         | 124.0         | 8.9                                   | 149.2         |
| Residual fuel oil | 37.5          | 38.4          | 36.4          | -2.0                                  | 34.2          |
| Jet fuel          | 45.0          | 40.1          | 39.2          | -1.0                                  | 41.5          |
| <b>Total</b>      | <b>1114.8</b> | <b>1092.5</b> | <b>1089.5</b> | <b>-3.0</b>                           | <b>1054.1</b> |
| SPR               | 695.0         | 695.0         | 695.0         | 0.0                                   | 696.0         |

Source: US Department of Energy's Energy Information Administration.

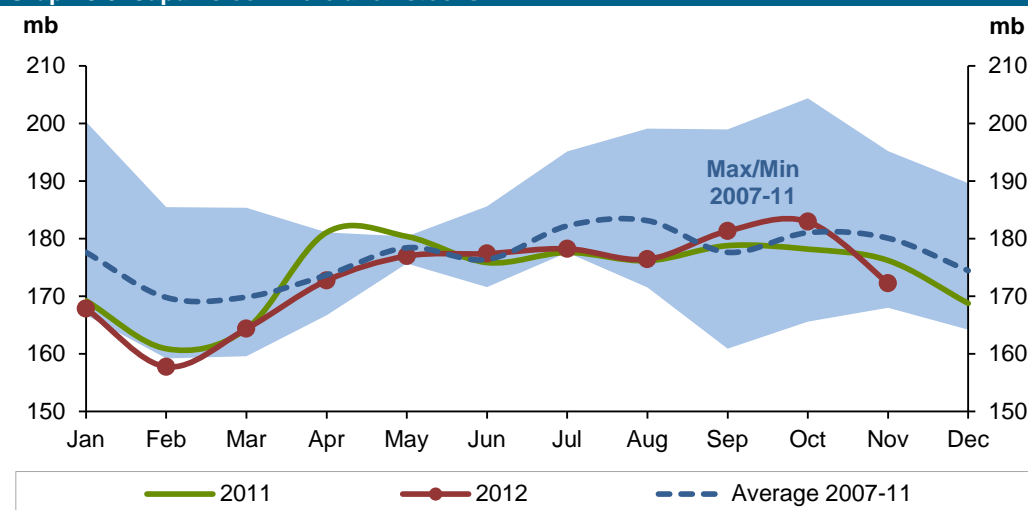
*Total commercial oil stocks in Japan declined by 10.7 mb in November, reversing the build of the last two months*

### Japan

In November, total **commercial oil stocks** in Japan reversed the build of the last two months and declined by 10.7 mb to stand at 172.3 mb, the lowest level since the end of March 2012. With this stock draw, they switched the surplus of the previous month to a deficit of 2.3% with a year ago, and they are 7.8 mb, or 4.4%, below the five-year average. Both crude and product stocks went down by 3.7 mb and 7.0 mb, respectively.

**Japanese commercial crude** oil stocks fell by 3.7 mb for the second consecutive month and ended November at 98.9 mb. At this level, they stood at 0.5 mb above a year ago at the same time, while they remained 0.5 mb below the seasonal average. The stock-draw in crude came as crude throughput rose by 106,000 b/d, or 3.4%, from a month earlier. However, at 3.2 mb/d Japanese crude oil runs were 5.0% less than a year ago at the same time. Japanese's refiners were running at 71.8%, 2.4 pp higher than in the previous month but 3.5 pp below the same period last year. Direct crude burning in power plants in November fell by 16.2% to end the month at around 203,000 b/d, and they indicated a decline of 16.3% compared to the same period last year. In November, Japanese crude oil imports stood at 3.3 mb, unchanged from the previous month, but were 7.6% less than a year ago at the same period.

**Graph 9.5: Japan's commercial oil stocks**



**Japan's total product inventories** reversed their upward trend of seven consecutive months and declined in November by 7.0 mb. At 733 mb, Japanese product stocks stood at 4.5 mb, or 5.8%, below a year ago at the same period and 7.3 mb, or 9.1%, less than the five-year average. The stock draw in total products came as total oil product sales in November rose by 8.5% from a month earlier to reach 3.5 mb/d. At this level, they are 2.0% higher than a year earlier. The increase in oil product sales was supported by firm fuel oil demand combined with higher kerosene consumption driven by colder-than-normal weather. All products experienced a stock draw with the bulk coming from distillate fuel. Indeed, distillate stocks fell by 3.1 mb to end the month of November at 34.4 mb and they are at 3.8 mb, or 9.9%, below a year ago and 4.1 mb, or 10.6%, less than the seasonal average. Within distillate components, kerosene and gasoil oil stocks went down by 14.6% and 0.5%, respectively, while jet oil fuel stocks rose by 1.2%. The strong fall in kerosene stocks is attributed to very high consumption with almost double from last month, due to colder weather. Gasoline stocks fell by 1.3 mb to end the month at 12.7 mb, representing a slight deficit of 0.1 mb, or 1.1%, and they are 0.5 mb, or 3.5%, less than the five-year average. The drop in gasoline stocks could be attributed mainly to the decline in imports and production as domestic sales saw an increase. Residual fuel oil stocks fell by 1.7 mb to stand at 15.5 mb leaving them at 0.7 mb, or 4.5%, below a year ago and 1.9 mb, or 11.2%, lower than the five-year average. Within the components of fuel oil, fuel oil A fell by 9.5%, while fuel oil B.C stocks fell less by 1.4%. Higher domestic sales by almost 24% were behind the decline in fuel oil A inventories. Naphtha inventories saw a stock draw of 1.0 mb, ending November at 10.7 mb. Despite this drop, they remained 0.2 mb, or 1.7%, higher than a year ago, but remained 0.8 mb, or 7.2%, lower than the five-year average. The fall in naphtha stocks came from lower imports which declined by 15.5%.

**Table 9.4: Japan's commercial oil stocks\*, mb**

|                       | <u>Sep 12</u> | <u>Oct 12</u> | <u>Nov 12</u> | <u>Change</u><br><u>Nov 12/Oct 12</u> | <u>Nov 11</u> |
|-----------------------|---------------|---------------|---------------|---------------------------------------|---------------|
| <b>Crude oil</b>      | <b>104.1</b>  | <b>102.6</b>  | <b>98.9</b>   | <b>-3.7</b>                           | <b>98.4</b>   |
| Gasoline              | 14.1          | 14.1          | 12.7          | -1.3                                  | 12.9          |
| Naphtha               | 10.0          | 11.6          | 10.7          | -1.0                                  | 10.5          |
| Middle distillates    | 35.9          | 37.5          | 34.4          | -3.1                                  | 38.2          |
| Residual fuel oil     | 17.3          | 17.1          | 15.5          | -1.7                                  | 16.2          |
| <b>Total products</b> | <b>77.2</b>   | <b>80.3</b>   | <b>73.3</b>   | <b>-7.0</b>                           | <b>77.8</b>   |
| <b>Total**</b>        | <b>181.3</b>  | <b>183.0</b>  | <b>172.3</b>  | <b>-10.7</b>                          | <b>176.2</b>  |

\* At end of month.

\*\* Includes crude oil and main products only.

Source: Ministry of Economy, Trade and Industry, Japan.

### Singapore and Amsterdam-Rotterdam-Antwerp (ARA)

*Product stocks in Singapore rose by 1.2 mb at the end of November for the third consecutive month*

At the end of November, **product stocks in Singapore** rose by 1.2 mb for the third consecutive month and ended the month at 42.7 mb, the highest level since August 2011. At this level, they were at 3.4 mb, or 8.6%, above a year ago at the same time.

Within products, fuel oil saw the bulk of the build increasing by 1.7 mb, followed by a 0.4 mb build in light distillate stocks, while middle distillates declined by 1.0 mb. Light distillate stocks rose to 9.6 mb at the end of November but remained 2.6 mb, or 21.3%, below the same period last year. Despite the slight build, light distillate stocks, which comprise mainly gasoline, remained low driven by the decline of imports in South Korea. Stocks may draw down further in the coming weeks on the back of refinery maintenance in Indonesia's largest plants. Residual fuel oil climbed to 22.7 mb, nearly an eight-month high, representing a surplus of 5.0 mb, or 28.5%, with the same period last year. This stock build is mainly due to weak Asian bunker limiting exports. At the same time, Asian fuel oil markets are currently in a steepening contango, which is encouraging stock building. Middle distillate stocks fell in November to stand at 10.4 mb but still represented a surplus of 1.0 mb, or 10.2%, with a year ago at the same period. Stocks of middle distillates are expected to fall further in December on ongoing refinery maintenance in Indonesia and expected reduction in imports from North Asia.

*Product stocks in ARA fell by 1.9 mb in November for the third consecutive month*

**Products stocks in Amsterdam-Rotterdam-Antwerp (ARA)** fell by 1.9 mb in November for the third consecutive month and ended the month at 27.3 mb. At this level, they stood at 3.5 mb, or 11.3%, below last year at the same time.

Within products, the picture was mixed, fuel oil, gasoil and gasoline saw a drop, while naphtha and jet fuel oil increased. Fuel oil stocks fell by 1.6 mb, reversing the build of last month, and ended the month of November at 5.0 mb. At this level, they are in line with last year at the same period. The fall in fuel oil stocks reflected lower arrivals to the ARA hub. Gasoil stocks also fell by 0.8 mb to stand at 13.7 mb, the lowest level since the end of November 2008, when demand was down sharply in the midst of the financial crisis. At this level, they represent a deficit of 2.2 mb, or 13.9%, below a year ago at the same period. Naphtha and jet fuel oil stocks rose both by 0.3 mb to stand at 1.3 mb and 2.3 mb, respectively. Naphtha stocks stood at 0.2 mb, or 20%, above last year at the same time, while jet fuel oil stocks indicated a deficit of 1.2 mb, or 33.6%, with a year ago at the same time. Meanwhile, gasoline stocks saw a minor decline and ended the month of November at 5.1 mb, almost the same level as November 2011. The stock draw was driven by higher exports outpacing the arrivals in ARA.

# Balance of Supply and Demand

Required OPEC crude for 2012 estimated at 30.1 mb/d, down 0.2 mb/d from 2011

## Forecast for 2012

Demand for OPEC crude for 2012 saw a slight downward revision from the previous report as demand and non-OPEC supply saw minor adjustments. Within the quarters, 1Q12 and 2Q12 remained unchanged, while 3Q12 and 4Q12 were both revised down by 0.1 mb/d. Demand for OPEC crude stood at 30.1 mb/d in 2012, representing a decrease of 0.2 mb/d from a year ago. 1Q12 is estimated to decline by 0.5 mb/d versus the same quarter last year; 2Q12 is estimated to increase by 0.4 mb/d, while 3Q12 and 4Q12 saw a decline of 0.3 mb/d and 0.2 mb/d, respectively.

**Table 10.1: Summarized supply/demand balance for 2012, mb/d**

|  | <u>2011</u>  | <u>1Q12</u>  | <u>2Q12</u>  | <u>3Q12</u>  | <u>4Q12</u>  | <u>2012</u>  |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>(a) World oil demand</b>                  | <b>88.04</b> | <b>87.98</b> | <b>87.95</b> | <b>89.16</b> | <b>90.06</b> | <b>88.80</b> |
| Non-OPEC supply                              | 52.45        | 53.22        | 52.65        | 52.47        | 53.59        | 52.98        |
| OPEC NGLs and non-conventionals              | 5.37         | 5.56         | 5.68         | 5.81         | 5.94         | 5.75         |
| <b>(b) Total supply excluding OPEC crude</b> | <b>57.81</b> | <b>58.78</b> | <b>58.33</b> | <b>58.28</b> | <b>59.53</b> | <b>58.73</b> |
| <b>Difference (a-b)</b>                      | <b>30.22</b> | <b>29.20</b> | <b>29.62</b> | <b>30.88</b> | <b>30.53</b> | <b>30.07</b> |
| OPEC crude oil production                    | 29.78        | 31.22        | 31.49        | 31.24        | 30.72        | 31.17        |
| Balance                                      | -0.44        | 2.03         | 1.86         | 0.36         | 0.18         | 1.10         |

Totals may not add up due to independent rounding.

## Forecast for 2013

Demand for OPEC crude for 2013 has been revised down by 0.1 mb/d from the previous report to stand at 29.7 mb/d. This represents a contraction of 0.4 mb/d compared to 2012. This downward revision came from the upward adjustment in non-OPEC supply, as world oil demand remained unchanged. Within the quarters, 1Q13 and 3Q13 were revised down by 0.2 mb/d, while the other quarters were adjusted lower by 0.1 mb/d. The first quarter is estimated to increase by 0.1 mb/d versus the same quarter last year, while 2Q13 and 3Q13 are expected to see negative growth of 0.8 mb/d. The fourth quarter is seen dropping by 0.2 mb/d.

**Table 10.2: Summarized supply/demand balance for 2013, mb/d**

|  | <u>2012</u>  | <u>1Q13</u>  | <u>2Q13</u>  | <u>3Q13</u>  | <u>4Q13</u>  | <u>2013</u>  |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>(a) World oil demand</b>                  | <b>88.80</b> | <b>88.86</b> | <b>88.46</b> | <b>90.04</b> | <b>90.84</b> | <b>89.55</b> |
| Non-OPEC supply                              | 52.98        | 53.64        | 53.61        | 53.91        | 54.49        | 53.92        |
| OPEC NGLs and non-conventionals              | 5.75         | 5.95         | 5.97         | 6.00         | 6.04         | 5.99         |
| <b>(b) Total supply excluding OPEC crude</b> | <b>58.73</b> | <b>59.59</b> | <b>59.58</b> | <b>59.91</b> | <b>60.53</b> | <b>59.90</b> |
| <b>Difference (a-b)</b>                      | <b>30.07</b> | <b>29.27</b> | <b>28.87</b> | <b>30.13</b> | <b>30.31</b> | <b>29.65</b> |

Totals may not add up due to independent rounding.

**Graph 10.1: Balance of supply and demand**

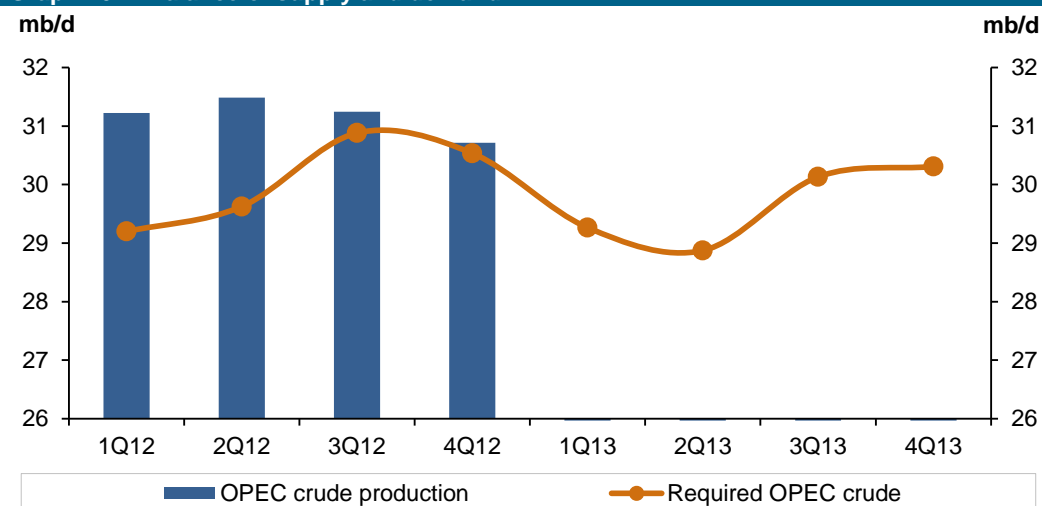




Table 10.3: World oil demand/supply balance, mb/d

|   | 2007  | 2008  | 2009  | 2010  | 2011  | 2012  | 2012  | 3012  | 4012 | 2012 | 1013 | 2013 | 3013 | 4013 | 2013 |
|---|-------|-------|-------|-------|-------|-------|-------|-------|------|------|------|------|------|------|------|
| <b>World demand</b>                           |       |       |       |       |       |       |       |       |      |      |      |      |      |      |      |
| OECD  | 50.1  | 48.4  | 46.3  | 46.9  | 46.5  | 46.3  | 45.6  | 46.0  | 46.6 | 46.1 | 46.3 | 45.1 | 45.8 | 46.4 | 45.9 |
| Americas                                      | 25.8  | 24.5  | 23.7  | 24.1  | 24.1  | 23.5  | 23.8  | 23.9  | 24.0 | 23.8 | 23.6 | 23.7 | 24.0 | 24.1 | 23.9 |
| Europe  | 15.6  | 15.5  | 14.7  | 14.7  | 14.3  | 13.7  | 13.8  | 13.8  | 13.9 | 13.8 | 13.6 | 13.5 | 13.6 | 13.6 | 13.6 |
| Asia Pacific                                  | 8.7   | 8.3   | 8.0   | 8.1   | 8.1   | 9.1   | 8.0   | 8.2   | 8.7  | 8.5  | 9.1  | 7.9  | 8.3  | 8.7  | 8.5  |
| DCs   | 24.2  | 25.0  | 25.6  | 26.5  | 27.2  | 27.3  | 27.8  | 28.5  | 28.1 | 27.9 | 27.9 | 28.3 | 29.1 | 28.6 | 28.5 |
| FSU   | 4.0   | 4.1   | 4.0   | 4.2   | 4.3   | 4.2   | 4.1   | 4.5   | 4.7  | 4.4  | 4.3  | 4.2  | 4.6  | 4.8  | 4.5  |
| Other Europe                                  | 0.7   | 0.7   | 0.7   | 0.6   | 0.6   | 0.6   | 0.6   | 0.6   | 0.7  | 0.6  | 0.6  | 0.6  | 0.6  | 0.7  | 0.7  |
| China   | 7.6   | 8.0   | 8.3   | 9.0   | 9.4   | 9.5   | 9.9   | 9.5   | 10.0 | 9.7  | 9.8  | 10.2 | 9.9  | 10.3 | 10.1 |
| (a) Total world demand                        | 86.6  | 86.1  | 84.8  | 87.1  | 88.0  | 88.0  | 88.0  | 89.2  | 90.1 | 88.8 | 88.9 | 88.5 | 90.0 | 90.8 | 89.6 |
| <b>Non-OPEC supply</b>                        |       |       |       |       |       |       |       |       |      |      |      |      |      |      |      |
| OECD  | 20.0  | 19.6  | 19.8  | 20.0  | 20.2  | 21.1  | 20.9  | 20.7  | 21.4 | 21.0 | 21.5 | 21.4 | 21.4 | 21.7 | 21.5 |
| Americas                                      | 14.3  | 14.0  | 14.4  | 15.0  | 15.5  | 16.5  | 16.4  | 16.5  | 17.1 | 16.6 | 17.1 | 17.2 | 17.2 | 17.4 | 17.2 |
| Europe  | 5.2   | 4.9   | 4.7   | 4.4   | 4.1   | 4.1   | 3.9   | 3.5   | 3.6  | 3.8  | 3.7  | 3.6  | 3.5  | 3.7  | 3.6  |
| Asia Pacific                                  | 0.6   | 0.6   | 0.6   | 0.7   | 0.6   | 0.5   | 0.5   | 0.7   | 0.7  | 0.6  | 0.7  | 0.7  | 0.7  | 0.7  | 0.7  |
| DCs   | 11.9  | 12.2  | 12.4  | 12.7  | 12.6  | 12.3  | 12.1  | 12.1  | 12.2 | 12.2 | 12.1 | 12.2 | 12.5 | 12.6 | 12.4 |
| FSU   | 12.5  | 12.6  | 13.0  | 13.2  | 13.2  | 13.4  | 13.2  | 13.2  | 13.4 | 13.3 | 13.4 | 13.3 | 13.4 | 13.5 | 13.4 |
| Other Europe                                  | 0.2   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1   | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  | 0.1  |
| China   | 3.8   | 3.8   | 3.8   | 4.1   | 4.1   | 4.2   | 4.2   | 4.2   | 4.3  | 4.2  | 4.3  | 4.2  | 4.2  | 4.3  | 4.3  |
| Processing gains                              | 2.0   | 2.0   | 2.0   | 2.1   | 2.1   | 2.2   | 2.2   | 2.2   | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  | 2.2  |
| Total non-OPEC supply                         | 50.4  | 50.4  | 51.1  | 52.3  | 52.4  | 53.2  | 52.7  | 52.5  | 53.6 | 53.0 | 53.6 | 53.6 | 53.9 | 54.5 | 53.9 |
| OPEC NGLs + non-conventional oils             | 3.9   | 4.1   | 4.3   | 5.0   | 5.4   | 5.6   | 5.7   | 5.8   | 5.9  | 5.7  | 5.9  | 6.0  | 6.0  | 6.0  | 6.0  |
| (b) Total non-OPEC supply and OPEC NGLs       | 54.4  | 54.5  | 55.5  | 57.3  | 57.8  | 58.8  | 58.3  | 58.3  | 59.5 | 58.7 | 59.6 | 59.6 | 59.9 | 60.5 | 59.9 |
| OPEC crude oil production (secondary sources) | 30.2  | 31.3  | 28.8  | 29.2  | 29.8  | 31.2  | 31.5  | 31.2  | 30.7 | 31.2 | 31.2 | 31.2 | 31.2 | 31.2 | 31.2 |
| Total supply                                  | 84.6  | 85.8  | 84.2  | 86.6  | 87.6  | 90.0  | 89.8  | 89.5  | 90.2 | 89.9 | 89.9 | 89.9 | 89.9 | 89.9 | 89.9 |
| Balance (stock change and miscellaneous)      | -2.0  | -0.3  | -0.5  | -0.6  | -0.4  | 2.0   | 1.9   | 0.4   | 0.2  | 1.1  |      |      |      |      |      |
| <b>OECD closing stock levels (mb)</b>         |       |       |       |       |       |       |       |       |      |      |      |      |      |      |      |
| Commercial                                    | 2,578 | 2,701 | 2,664 | 2,693 | 2,621 | 2,664 | 2,701 | 2,738 |      |      |      |      |      |      |      |
| SPR   | 1,528 | 1,530 | 1,568 | 1,565 | 1,536 | 1,536 | 1,539 | 1,542 |      |      |      |      |      |      |      |
| Total   | 4,106 | 4,231 | 4,232 | 4,257 | 4,158 | 4,200 | 4,240 | 4,280 |      |      |      |      |      |      |      |
| Oil-on-water                                  | 948   | 969   | 919   | 871   | 825   | 787   | 812   | 797   |      |      |      |      |      |      |      |
| <b>Days of forward consumption in OECD</b>    |       |       |       |       |       |       |       |       |      |      |      |      |      |      |      |
| Commercial onhand stocks                      | 53    | 58    | 57    | 58    | 57    | 58    | 59    | 59    |      |      |      |      |      |      |      |
| SPR   | 32    | 33    | 33    | 34    | 33    | 34    | 33    | 33    |      |      |      |      |      |      |      |
| Total   | 85    | 91    | 90    | 92    | 90    | 92    | 92    | 92    |      |      |      |      |      |      |      |
| <b>Memo items</b>                             |       |       |       |       |       |       |       |       |      |      |      |      |      |      |      |
| FSU net exports                               | 8.5   | 8.5   | 9.0   | 9.1   | 8.9   | 9.1   | 9.1   | 8.7   | 8.7  | 8.9  | 9.1  | 9.2  | 8.8  | 8.7  | 8.9  |
| (a) - (b)                                     | 32.2  | 31.6  | 29.3  | 29.8  | 30.2  | 29.2  | 29.6  | 30.9  | 30.5 | 30.1 | 29.3 | 28.9 | 30.1 | 30.3 | 29.6 |

Note: Totals may not add up due to independent rounding.

The new OECD classifications are now reflected in world oil demand/supply balance.

**Table 10.4: World oil demand/supply balance: changes from last month's table\*, mb/d**

|  | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2012 | 3Q12        | 4Q12        | 2012        | 1Q13        | 2Q13        | 3Q13 | 4Q13         | 2013 |
|--|------|------|------|------|------|------|------|-------------|-------------|-------------|-------------|-------------|------|--------------|------|
| <b>World demand</b>                                  |      |      |      |      |      |      |      |             |             |             |             |             |      |              |      |
| OECD   | 0.7  | 0.7  | 0.6  | 0.6  | 0.6  | 0.6  | 0.6  | 0.6         | 0.6         | 0.6         | 0.6         | 0.6         | 0.6  | 0.6          | 0.6  |
| Americas   | 0.4  | 0.4  | 0.4  | 0.3  | 0.3  | 0.3  | 0.3  | 0.4         | 0.3         | 0.3         | 0.3         | 0.3         | 0.4  | 0.3          | 0.3  |
| Europe   | 0.1  | 0.1  | -    | -    | -    | -    | -    | -0.1        | -           | -           | -           | -           | -0.1 | -            | -    |
| Asia Pacific   | 0.3  | 0.2  | 0.2  | 0.3  | 0.3  | 0.2  | 0.3  | 0.3         | 0.3         | 0.3         | 0.2         | 0.2         | 0.3  | 0.3          | 0.2  |
| DCs  | -0.6 | -0.6 | -0.6 | -0.6 | -0.6 | -0.5 | -0.5 | -0.6        | -0.6        | -0.5        | -0.5        | -0.5        | -0.6 | -0.6         | -0.5 |
| FSU  | -    | -    | -    | -    | -    | -    | -    | -           | -           | -           | -           | -           | -    | -            | -    |
| Other Europe   | -0.1 | -0.1 | -    | -    | -    | -0.1 | -0.1 | -0.1        | -           | -0.1        | -0.1        | -0.1        | -0.1 | -            | -0.1 |
| China  | -    | -    | -    | -    | -    | -    | -    | -           | -           | -           | -           | -           | -    | -            | -    |
| (a) Total world demand                               | -    | -    | -    | -    | -    | -    | -    | -           | -           | -           | -           | -           | -    | -            | -    |
| <b>World demand growth</b>                           | -    | -    | -    | -    | -    | -    | -    | -           | -           | -           | -           | -           | -    | -            | -    |
| <b>Non-OPEC supply</b>                               |      |      |      |      |      |      |      |             |             |             |             |             |      |              |      |
| OECD   | -    | -    | -    | -    | -    | -    | -    | -           | 0.3         | 0.1         | 0.3         | 0.2         | 0.2  | -            | 0.2  |
| Americas   | -    | -    | -    | -    | -    | -    | -    | -           | 0.3         | 0.1         | 0.3         | 0.2         | 0.2  | 0.1          | 0.2  |
| Europe   | -    | -    | -    | -    | -    | -    | -    | -           | -0.1        | -           | -           | -           | -    | -            | -    |
| Asia Pacific   | -    | -    | -    | -    | -    | -    | -    | -           | 0.1         | -           | -           | -           | -    | -            | -    |
| DCs  | -    | -    | -    | -    | -    | -    | -    | -           | -0.1        | -           | -0.1        | -0.1        | -0.1 | -0.1         | -0.1 |
| FSU  | -    | -    | -    | -    | -    | -    | -    | -           | -           | -           | -           | -           | -    | -            | -    |
| Other Europe   | -    | -    | -    | -    | -    | -    | -    | -           | -           | -           | -           | -           | -    | -            | -    |
| China  | -    | -    | -    | -    | -    | -    | -    | -           | -           | -           | -           | -           | -    | -            | -    |
| Processing gains                                     | -    | -    | -    | -    | -    | -    | -    | -           | -           | -           | -           | -           | -    | -            | -    |
| Total non-OPEC supply                                | -    | -    | -    | -    | -    | -    | -    | 0.1         | 0.1         | 0.1         | 0.2         | 0.1         | 0.1  | 0.1          | 0.1  |
| <b>Total non-OPEC supply growth</b>                  | -    | -    | -    | -    | -    | -    | -    | <b>0.07</b> | <b>0.15</b> | <b>0.06</b> | <b>0.17</b> | <b>0.14</b> | -    | <b>-0.20</b> | -    |
| <b>OPEC NGLs + non-conventionals</b>                 | -    | -    | -    | -    | -    | -    | -    | -           | -           | -           | -           | -           | -    | -            | -    |
| <b>(b) Total non-OPEC supply and OPEC NGLs</b>       | -    | -    | -    | -    | -    | -    | -    | 0.1         | 0.1         | 0.1         | 0.2         | 0.1         | 0.1  | 0.1          | 0.1  |
| <b>OPEC crude oil production (secondary sources)</b> | -    | -    | -    | -    | -    | -    | -    | -           | -           | -           | -           | -           | -    | -            | -    |
| <b>Total supply</b>                                  | -    | -    | -    | -    | -    | -    | -    | 0.1         | -           | -           | -           | -           | -    | -            | -    |
| <b>Balance (stock change and miscellaneous)</b>      | -    | -    | -    | -    | -    | -    | -    | 0.1         | -           | -           | -           | -           | -    | -            | -    |
| <b>OECD closing stock levels (mb)</b>                |      |      |      |      |      |      |      |             |             |             |             |             |      |              |      |
| Commercial   | 13   | 11   | 12   | 12   | 12   | 16   | 14   | 5           |             |             |             |             |      |              |      |
| SPR  | 4    | 4    | 4    | 4    | 4    | 4    | 4    | 7           |             |             |             |             |      |              |      |
| Total  | 17   | 15   | 16   | 17   | 16   | 20   | 18   | 11          |             |             |             |             |      |              |      |
| Oil-on-water   | -    | -    | -    | -    | -    | -    | -    | -           |             |             |             |             |      |              |      |
| <b>Days of forward consumption in OECD</b>           | -    | -    | -    | -    | -    | -    | -    | -           |             |             |             |             |      |              |      |
| Commercial onland stocks                             | -1   | -1   | -    | -1   | -    | -    | -    | -1          |             |             |             |             |      |              |      |
| SPR  | -    | -    | -    | -    | -    | -    | -    | -           |             |             |             |             |      |              |      |
| Total  | -1   | -1   | -1   | -1   | -1   | -1   | -1   | -1          |             |             |             |             |      |              |      |
| <b>Memo items</b>                                    |      |      |      |      |      |      |      |             |             |             |             |             |      |              |      |
| FSU net exports                                      | -    | -    | -    | -    | -    | -    | -    | -           | -           | -           | -           | -           | -    | -            | -    |
| (a) - (b)  | -    | -    | -    | -    | -    | -    | -    | -0.1        | -0.1        | -0.2        | -0.1        | -0.1        | -0.1 | 0.1          | -0.1 |

\* This compares Table 10.3 in this issue of the MOMR with Table 10.3 in the December 2012 issue.

This table shows only where changes have occurred.

**Differences from last month are affected by the new classification adopted by the OECD.**

Table 10.5: OECD oil stocks and oil on water at the end of period

|                                     | 2007         | 2008         | 2009         | 2010         | 2011         | 2008         | 3008         | 4008         | 1009         | 2009         | 3009         | 4009         | 1010         | 2010         | 3010         | 4010         | 1011         | 2011         | 3011         | 4011         | 1012         | 2012         | 3012         |
|-------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Closing stock levels, mb            |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| OECD onland commercial              | 2,578        | 2,701        | 2,664        | 2,693        | 2,621        | 2,608        | 2,665        | 2,701        | 2,753        | 2,766        | 2,785        | 2,664        | 2,699        | 2,779        | 2,769        | 2,693        | 2,654        | 2,697        | 2,683        | 2,621        | 2,664        | 2,701        | 2,738        |
| Americas                            | 1,209        | 1,278        | 1,284        | 1,329        | 1,308        | 1,219        | 1,257        | 1,278        | 1,329        | 1,364        | 1,369        | 1,284        | 1,312        | 1,367        | 1,396        | 1,329        | 1,298        | 1,338        | 1,341        | 1,308        | 1,334        | 1,361        | 1,378        |
| Europe                              | 962          | 1,016        | 997          | 972          | 922          | 980          | 977          | 1,016        | 1,016        | 1,001        | 997          | 997          | 1,000        | 1,007        | 971          | 972          | 975          | 953          | 930          | 922          | 951          | 927          | 933          |
| Asia Pacific                        | 407          | 407          | 383          | 391          | 391          | 409          | 431          | 407          | 408          | 401          | 419          | 383          | 387          | 405          | 402          | 391          | 382          | 406          | 413          | 391          | 378          | 413          | 427          |
| OECD SPR                            | 1,528        | 1,530        | 1,568        | 1,565        | 1,536        | 1,529        | 1,526        | 1,530        | 1,550        | 1,565        | 1,568        | 1,568        | 1,571        | 1,566        | 1,553        | 1,565        | 1,562        | 1,565        | 1,530        | 1,536        | 1,536        | 1,539        | 1,542        |
| Americas                            | 699          | 704          | 729          | 729          | 697          | 708          | 704          | 704          | 715          | 726          | 727          | 729          | 729          | 729          | 728          | 729          | 727          | 727          | 696          | 697          | 697          | 697          | 696          |
| Europe                              | 425          | 420          | 431          | 427          | 426          | 418          | 418          | 420          | 427          | 430          | 433          | 431          | 433          | 426          | 423          | 427          | 424          | 427          | 424          | 426          | 426          | 425          | 429          |
| Asia Pacific                        | 404          | 406          | 409          | 410          | 414          | 404          | 403          | 406          | 408          | 408          | 408          | 409          | 409          | 411          | 402          | 410          | 411          | 411          | 409          | 414          | 414          | 414          | 414          |
| <b>OECD total</b>                   | <b>4,106</b> | <b>4,231</b> | <b>4,232</b> | <b>4,257</b> | <b>4,158</b> | <b>4,137</b> | <b>4,190</b> | <b>4,231</b> | <b>4,303</b> | <b>4,331</b> | <b>4,353</b> | <b>4,232</b> | <b>4,270</b> | <b>4,345</b> | <b>4,322</b> | <b>4,257</b> | <b>4,216</b> | <b>4,262</b> | <b>4,213</b> | <b>4,158</b> | <b>4,200</b> | <b>4,240</b> | <b>4,280</b> |
| Oil-on-water                        | 948          | 969          | 919          | 871          | 825          | 925          | 885          | 969          | 899          | 904          | 869          | 919          | 919          | 897          | 926          | 871          | 891          | 853          | 835          | 825          | 787          | 812          | 797          |
| Days of forward consumption in OECD |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |              |
| OECD onland commercial              | 53           | 58           | 57           | 58           | 57           | 55           | 55           | 57           | 61           | 60           | 60           | 57           | 59           | 59           | 58           | 57           | 59           | 58           | 57           | 57           | 58           | 59           | 59           |
| Americas                            | 49           | 54           | 53           | 55           | 55           | 51           | 52           | 54           | 57           | 58           | 57           | 54           | 54           | 56           | 58           | 55           | 55           | 55           | 56           | 56           | 56           | 57           | 58           |
| Europe                              | 62           | 69           | 68           | 68           | 67           | 62           | 63           | 67           | 70           | 69           | 68           | 69           | 70           | 67           | 65           | 68           | 69           | 65           | 66           | 67           | 69           | 67           | 67           |
| Asia Pacific                        | 49           | 51           | 47           | 48           | 46           | 52           | 52           | 48           | 54           | 53           | 51           | 45           | 51           | 51           | 48           | 46           | 52           | 51           | 48           | 43           | 48           | 50           | 50           |
| OECD SPR                            | 32           | 33           | 33           | 34           | 33           | 32           | 32           | 32           | 34           | 34           | 34           | 34           | 34           | 33           | 33           | 33           | 34           | 33           | 33           | 33           | 33           | 34           | 33           |
| Americas                            | 28           | 30           | 30           | 30           | 29           | 30           | 29           | 30           | 31           | 31           | 30           | 31           | 30           | 30           | 30           | 30           | 31           | 30           | 29           | 30           | 29           | 29           | 29           |
| Europe                              | 27           | 29           | 29           | 30           | 31           | 27           | 27           | 28           | 30           | 29           | 30           | 30           | 30           | 28           | 28           | 30           | 30           | 29           | 30           | 31           | 31           | 31           | 31           |
| Asia Pacific                        | 49           | 51           | 51           | 50           | 49           | 52           | 49           | 48           | 54           | 54           | 49           | 48           | 54           | 52           | 48           | 48           | 56           | 52           | 48           | 46           | 52           | 50           | 49           |
| <b>OECD total</b>                   | <b>85</b>    | <b>91</b>    | <b>90</b>    | <b>92</b>    | <b>90</b>    | <b>87</b>    | <b>87</b>    | <b>89</b>    | <b>95</b>    | <b>95</b>    | <b>93</b>    | <b>91</b>    | <b>93</b>    | <b>92</b>    | <b>91</b>    | <b>90</b>    | <b>93</b>    | <b>91</b>    | <b>90</b>    | <b>90</b>    | <b>92</b>    | <b>92</b>    | <b>92</b>    |

**Table 10.6: Non-OPEC supply and OPEC natural gas liquids, mb/d**

|                    | 2007  | 2008  | 2009  | 2010  | 2009  | 10/11 | 2011  | 30/11 | 40/11 | 2011  | 11/10 | Change | 10/12 | 2012  | 30/12 | 40/12 | 2012  | 40/12 | 2012  | 12/11 | Change | 10/13 | 2013  | 30/13 | 40/13 | 2013  | 13/12 | Change |
|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|--------|
| US                 | 7.47  | 7.57  | 8.17  | 8.64  | 0.47  | 8.77  | 8.92  | 8.91  | 9.53  | 9.04  | 0.39  | 9.04   | 9.76  | 9.80  | 9.88  | 10.34 | 9.95  | 10.34 | 9.80  | 9.95  | 0.91   | 10.35 | 10.42 | 10.45 | 10.53 | 10.44 | 0.49  |        |
| Canada             | 3.31  | 3.25  | 3.23  | 3.36  | 0.13  | 3.54  | 3.32  | 3.62  | 3.75  | 3.56  | 0.20  | 3.56   | 3.81  | 3.68  | 3.68  | 3.78  | 3.73  | 3.81  | 3.68  | 3.73  | 0.18   | 3.84  | 3.87  | 3.93  | 4.02  | 3.92  | 0.18  |        |
| Mexico             | 3.49  | 3.17  | 2.98  | 3.17  | -0.02 | 2.97  | 2.96  | 2.91  | 2.94  | 2.94  | -0.02 | 2.94   | 3.02  | 2.93  | 2.92  | 2.92  | 2.92  | 3.02  | 2.93  | 2.92  | -0.02  | 2.89  | 2.86  | 2.85  | 2.86  | 2.86  | -0.07 |        |
| OECD Americas*     | 14.28 | 14.01 | 14.39 | 14.97 | 0.58  | 15.29 | 15.21 | 15.46 | 16.22 | 15.55 | 0.58  | 15.55  | 16.51 | 16.42 | 16.49 | 17.06 | 16.62 | 16.51 | 16.42 | 16.49 | 1.07   | 17.10 | 17.17 | 17.24 | 17.40 | 17.23 | 0.61  |        |
| Norway             | 2.55  | 2.47  | 2.36  | 2.14  | -0.22 | 2.14  | 1.98  | 1.99  | 2.05  | 2.04  | -0.10 | 2.04   | 2.08  | 1.98  | 1.75  | 1.83  | 1.91  | 1.83  | 1.91  | 1.75  | -0.13  | 1.90  | 1.81  | 1.76  | 1.86  | 1.83  | -0.08 |        |
| UK                 | 1.69  | 1.57  | 1.48  | 1.37  | -0.12 | 1.27  | 1.16  | 0.94  | 1.11  | 1.12  | -0.24 | 0.94   | 1.08  | 1.01  | 0.83  | 0.92  | 0.96  | 0.83  | 0.92  | 0.83  | -0.16  | 0.94  | 0.88  | 0.87  | 0.93  | 0.91  | -0.05 |        |
| Denmark            | 0.31  | 0.28  | 0.26  | 0.25  | -0.01 | 0.23  | 0.25  | 0.23  | 0.21  | 0.23  | -0.02 | 0.23   | 0.22  | 0.22  | 0.21  | 0.19  | 0.21  | 0.22  | 0.22  | 0.21  | -0.02  | 0.19  | 0.18  | 0.17  | 0.18  | 0.18  | -0.02 |        |
| Other OECD Europe  | 0.62  | 0.62  | 0.63  | 0.64  | 0.01  | 0.67  | 0.66  | 0.70  | 0.68  | 0.68  | 0.04  | 0.68   | 0.69  | 0.70  | 0.70  | 0.70  | 0.70  | 0.69  | 0.69  | 0.70  | 0.02   | 0.69  | 0.69  | 0.70  | 0.69  | 0.70  | 0.00  |        |
| OECD Europe        | 5.17  | 4.94  | 4.74  | 4.39  | -0.35 | 4.32  | 4.05  | 3.86  | 4.05  | 4.07  | -0.32 | 4.07   | 3.91  | 3.91  | 3.49  | 3.63  | 3.77  | 3.57  | 3.57  | 3.57  | -0.29  | 3.73  | 3.57  | 3.50  | 3.66  | 3.62  | -0.16 |        |
| Australia          | 0.53  | 0.53  | 0.54  | 0.56  | 0.02  | 0.47  | 0.49  | 0.48  | 0.49  | 0.48  | -0.08 | 0.48   | 0.45  | 0.45  | 0.40  | 0.65  | 0.53  | 0.45  | 0.45  | 0.45  | 0.05   | 0.59  | 0.61  | 0.61  | 0.60  | 0.60  | 0.07  |        |
| Other Asia Pacific | 0.08  | 0.10  | 0.10  | 0.10  | 0.00  | 0.09  | 0.09  | 0.09  | 0.09  | 0.09  | -0.01 | 0.09   | 0.09  | 0.09  | 0.08  | 0.08  | 0.09  | 0.08  | 0.08  | 0.09  | 0.00   | 0.08  | 0.08  | 0.08  | 0.08  | 0.08  | 0.00  |        |
| OECD Asia Pacific  | 0.60  | 0.63  | 0.64  | 0.66  | 0.02  | 0.56  | 0.57  | 0.57  | 0.58  | 0.57  | -0.09 | 0.57   | 0.51  | 0.53  | 0.69  | 0.73  | 0.62  | 0.65  | 0.67  | 0.69  | 0.05   | 0.67  | 0.69  | 0.69  | 0.68  | 0.68  | 0.07  |        |
| Total OECD         | 20.05 | 19.58 | 19.76 | 20.02 | 0.26  | 20.17 | 19.84 | 19.89 | 20.85 | 20.19 | 0.17  | 20.19  | 21.09 | 20.86 | 20.66 | 21.42 | 21.01 | 20.86 | 21.42 | 21.09 | 0.82   | 21.49 | 21.43 | 21.44 | 21.73 | 21.53 | 0.52  |        |
| Brunei             | 0.19  | 0.17  | 0.16  | 0.17  | 0.00  | 0.17  | 0.16  | 0.17  | 0.17  | 0.17  | 0.00  | 0.17   | 0.16  | 0.14  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | -0.01  | 0.16  | 0.16  | 0.16  | 0.16  | 0.16  | 0.00  |        |
| India              | 0.80  | 0.80  | 0.78  | 0.86  | 0.08  | 0.90  | 0.89  | 0.88  | 0.87  | 0.88  | 0.03  | 0.88   | 0.87  | 0.87  | 0.88  | 0.87  | 0.87  | 0.87  | 0.87  | 0.88  | -0.01  | 0.88  | 0.89  | 0.89  | 0.88  | 0.89  | 0.01  |        |
| Indonesia          | 1.02  | 1.05  | 1.03  | 1.04  | 0.02  | 1.03  | 1.02  | 1.03  | 1.01  | 1.02  | -0.02 | 1.02   | 0.99  | 0.97  | 0.94  | 0.93  | 0.96  | 0.94  | 0.93  | 0.97  | -0.07  | 0.93  | 0.92  | 0.91  | 0.92  | 0.91  | -0.04 |        |
| Malaysia           | 0.76  | 0.76  | 0.73  | 0.70  | -0.03 | 0.68  | 0.59  | 0.63  | 0.65  | 0.64  | -0.06 | 0.64   | 0.68  | 0.63  | 0.64  | 0.64  | 0.65  | 0.64  | 0.64  | 0.63  | 0.01   | 0.65  | 0.67  | 0.70  | 0.73  | 0.69  | 0.04  |        |
| Thailand           | 0.33  | 0.36  | 0.37  | 0.34  | -0.02 | 0.34  | 0.34  | 0.33  | 0.33  | 0.33  | -0.01 | 0.33   | 0.35  | 0.35  | 0.36  | 0.35  | 0.35  | 0.35  | 0.35  | 0.35  | 0.02   | 0.34  | 0.34  | 0.34  | 0.34  | 0.34  | -0.01 |        |
| Vietnam            | 0.35  | 0.33  | 0.37  | 0.35  | -0.02 | 0.35  | 0.33  | 0.34  | 0.38  | 0.35  | 0.00  | 0.38   | 0.38  | 0.38  | 0.39  | 0.38  | 0.38  | 0.39  | 0.38  | 0.38  | 0.03   | 0.40  | 0.40  | 0.40  | 0.40  | 0.40  | 0.01  |        |
| Asia others        | 0.26  | 0.26  | 0.25  | 0.23  | -0.02 | 0.23  | 0.23  | 0.23  | 0.23  | 0.23  | 0.00  | 0.23   | 0.22  | 0.22  | 0.22  | 0.23  | 0.22  | 0.22  | 0.22  | 0.22  | -0.01  | 0.22  | 0.22  | 0.22  | 0.22  | 0.22  | 0.00  |        |
| Other Asia         | 3.70  | 3.73  | 3.69  | 3.70  | 0.01  | 3.70  | 3.56  | 3.62  | 3.64  | 3.63  | -0.07 | 3.63   | 3.65  | 3.56  | 3.59  | 3.57  | 3.59  | 3.59  | 3.57  | 3.59  | -0.04  | 3.59  | 3.61  | 3.62  | 3.64  | 3.62  | 0.02  |        |
| Argentina          | 0.77  | 0.78  | 0.76  | 0.75  | -0.01 | 0.76  | 0.68  | 0.74  | 0.75  | 0.73  | -0.02 | 0.74   | 0.72  | 0.71  | 0.72  | 0.70  | 0.72  | 0.71  | 0.72  | 0.71  | -0.02  | 0.71  | 0.70  | 0.70  | 0.70  | 0.70  | -0.01 |        |
| Brazil             | 2.22  | 2.38  | 2.51  | 2.66  | 0.16  | 2.61  | 2.62  | 2.61  | 2.70  | 2.64  | -0.03 | 2.72   | 2.58  | 2.54  | 2.62  | 2.61  | 2.61  | 2.62  | 2.61  | 2.62  | -0.02  | 2.65  | 2.66  | 2.76  | 2.80  | 2.72  | 0.10  |        |
| Colombia           | 0.54  | 0.60  | 0.68  | 0.80  | 0.11  | 0.88  | 0.94  | 0.94  | 0.96  | 0.93  | 0.13  | 0.95   | 0.95  | 0.96  | 0.95  | 0.99  | 0.96  | 0.95  | 0.99  | 0.96  | 0.03   | 0.99  | 1.01  | 1.02  | 1.03  | 1.01  | 0.05  |        |
| Trinidad & Tobago  | 0.16  | 0.16  | 0.15  | 0.15  | -0.01 | 0.14  | 0.14  | 0.13  | 0.13  | 0.13  | -0.01 | 0.13   | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | 0.12  | -0.02  | 0.11  | 0.10  | 0.10  | 0.10  | 0.10  | -0.01 |        |
| L. America others  | 0.27  | 0.28  | 0.30  | 0.31  | 0.01  | 0.30  | 0.30  | 0.30  | 0.30  | 0.30  | -0.01 | 0.30   | 0.30  | 0.30  | 0.31  | 0.32  | 0.31  | 0.30  | 0.31  | 0.30  | 0.01   | 0.30  | 0.31  | 0.32  | 0.31  | 0.30  | 0.00  |        |
| Latin America      | 3.96  | 4.20  | 4.39  | 4.66  | 0.27  | 4.70  | 4.68  | 4.72  | 4.84  | 4.73  | 0.07  | 4.81   | 4.67  | 4.67  | 4.64  | 4.75  | 4.72  | 4.72  | 4.64  | 4.75  | -0.02  | 4.76  | 4.78  | 4.89  | 4.95  | 4.84  | 0.13  |        |
| Bahrain            | 0.21  | 0.21  | 0.21  | 0.20  | 0.00  | 0.21  | 0.21  | 0.21  | 0.22  | 0.21  | 0.01  | 0.21   | 0.20  | 0.21  | 0.21  | 0.20  | 0.20  | 0.20  | 0.21  | 0.20  | -0.01  | 0.21  | 0.21  | 0.22  | 0.22  | 0.21  | 0.01  |        |
| Oman               | 0.71  | 0.76  | 0.81  | 0.86  | 0.05  | 0.89  | 0.87  | 0.89  | 0.89  | 0.89  | 0.02  | 0.89   | 0.89  | 0.92  | 0.93  | 0.94  | 0.92  | 0.93  | 0.94  | 0.92  | 0.03   | 0.94  | 0.94  | 0.95  | 0.95  | 0.94  | 0.03  |        |
| Syria              | 0.42  | 0.41  | 0.41  | 0.42  | 0.01  | 0.42  | 0.42  | 0.42  | 0.42  | 0.42  | 0.00  | 0.42   | 0.42  | 0.42  | 0.42  | 0.42  | 0.42  | 0.42  | 0.42  | 0.42  | -0.06  | 0.42  | 0.42  | 0.42  | 0.42  | 0.42  | -0.07 |        |
| Yemen              | 0.33  | 0.30  | 0.30  | 0.29  | -0.01 | 0.29  | 0.19  | 0.24  | 0.18  | 0.23  | -0.06 | 0.14   | 0.18  | 0.18  | 0.21  | 0.21  | 0.18  | 0.21  | 0.18  | 0.21  | -0.04  | 0.20  | 0.19  | 0.20  | 0.21  | 0.20  | 0.02  |        |
| Middle East        | 1.66  | 1.68  | 1.73  | 1.78  | 0.05  | 1.81  | 1.69  | 1.72  | 1.55  | 1.69  | -0.09 | 1.44   | 1.54  | 1.53  | 1.53  | 1.53  | 1.51  | 1.51  | 1.53  | 1.51  | -0.18  | 1.47  | 1.46  | 1.50  | 1.55  | 1.50  | -0.02 |        |
| Chad               | 0.15  | 0.15  | 0.14  | 0.15  | 0.01  | 0.14  | 0.14  | 0.14  | 0.14  | 0.14  | 0.00  | 0.14   | 0.14  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | 0.13  | -0.01  | 0.12  | 0.12  | 0.13  | 0.13  | 0.13  | -0.01 |        |
| Congo              | 0.24  | 0.26  | 0.27  | 0.30  | 0.02  | 0.29  | 0.29  | 0.30  | 0.30  | 0.30  | 0.00  | 0.30   | 0.30  | 0.30  | 0.30  | 0.30  | 0.30  | 0.30  | 0.30  | 0.30  | 0.00   | 0.30  | 0.29  | 0.30  | 0.30  | 0.30  | 0.00  |        |
| Egypt              | 0.66  | 0.69  | 0.69  | 0.71  | 0.01  | 0.70  | 0.70  | 0.71  | 0.70  | 0.70  | -0.01 | 0.71   | 0.71  | 0.71  | 0.71  | 0.71  | 0.71  | 0.71  | 0.71  | 0.71  | 0.01   | 0.70  | 0.69  | 0.69  | 0.68  | 0.69  | -0.02 |        |
| Equatorial Guinea  | 0.37  | 0.38  | 0.36  | 0.32  | -0.03 | 0.31  | 0.30  | 0.29  | 0.30  | 0.30  | -0.02 | 0.30   | 0.32  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.31  | 0.01   | 0.31  | 0.31  | 0.30  | 0.30  | 0.31  | -0.01 |        |
| Gabon              | 0.25  | 0.24  | 0.24  | 0.25  | 0.01  | 0.26  | 0.24  | 0.25  | 0.25  | 0.25  | 0.00  | 0.25   | 0.26  | 0.26  | 0.26  | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | 0.00   | 0.25  | 0.25  | 0.25  | 0.25  | 0.25  | -0.01 |        |
| South Africa       | 0.18  | 0.18  | 0.17  | 0.18  | 0.01  | 0.18  | 0.18  | 0.18  | 0.19  | 0.18  | 0.00  | 0.19   | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.19  | 0.01   | 0.19  | 0.19  | 0.18  | 0.19  | 0.19  | -0.01 |        |
| Sudan              | 0.48  | 0.46  | 0.48  | 0.46  | -0.01 | 0.45  | 0.45  | 0.43  | 0.38  | 0.43  | -0.03 | 0.43   | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | -0.01  | 0.44  | 0.44  | 0.44  | 0.44  | 0.44  | 0.02  |        |
| Africa other       | 0.28  | 0.27  | 0.25  | 0.23  | -0.02 | 0.27  | 0.27  | 0.27  | 0.27  | 0.27  | 0.06  | 0.27   | 0.27  | 0.27  | 0.27  | 0.27  | 0.27  | 0.27  | 0.27  | 0.27  | 0.01   | 0.27  | 0.27  | 0.27  | 0.27  | 0.27  | 0.02  |        |
| Africa             | 2.60  | 2.62  | 2.60  | 2.60  | 0.00  | 2.61  | 2.60  | 2.61  | 2.55  | 2.59  | -0.01 | 2.40   | 2.30  | 2.31  | 2.31  | 2.31  | 2.33  | 2.30  | 2.31  | 2.33  | -0.26  | 2.32  | 2.40  | 2.47  | 2.49  | 2.42  | 0.09  |        |
| Total DCS          | 11.93 | 12.22 | 12.42 | 12.74 | 0.32  | 12.81 | 12.53 | 12.67 | 12.58 | 12.65 | -0.10 | 12.30  | 12.08 | 12.07 | 12.07 | 12.16 | 12.15 | 12.15 |       |       |        |       |       |       |       |       |       |        |

Table 10.7: World Rig Count

|                      | Change |       |       |       |        |       |       |       |       |       |       |       | Change<br>Dec/Nov |       |       |       |      |       |       |       |       |       |     |
|----------------------|--------|-------|-------|-------|--------|-------|-------|-------|-------|-------|-------|-------|-------------------|-------|-------|-------|------|-------|-------|-------|-------|-------|-----|
|                      | 2009   | 3009  | 4Q09  | 2009  | 09/08  | 1Q10  | 2Q10  | 3Q10  | 4Q10  | 2010  | 10/09 | 1Q11  |                   | 2Q11  | 3Q11  | 4Q11  | 2011 | 11/10 | 1Q12  | 2Q12  | 3Q12  | Nov   | Dec |
| US                   | 936    | 956   | 1,108 | 1,081 | -796   | 1,345 | 1,508 | 1,622 | 1,687 | 1,541 | 459   | 1,717 | 1,829             | 1,945 | 2,031 | 1,881 | 340  | 1,990 | 1,971 | 1,906 | 1,808 | 1,784 | -24 |
| Canada               | 91     | 177   | 277   | 218   | -161   | 470   | 166   | 364   | 389   | 347   | 129   | 587   | 188               | 443   | 474   | 423   | 76   | 599   | 172   | 326   | 384   | 353   | -31 |
| Mexico               | 128    | 135   | 123   | 128   | 26     | 118   | 106   | 84    | 80    | 97    | -31   | 83    | 87                | 103   | 104   | 94    | -3   | 98    | 110   | 108   | 105   | 114   | 9   |
| Americas             | 1,154  | 1,267 | 1,508 | 1,428 | -931   | 1,933 | 1,780 | 2,070 | 2,156 | 1,985 | 557   | 2,386 | 2,104             | 2,492 | 2,609 | 2,398 | 413  | 2,688 | 2,253 | 2,340 | 2,297 | 2,251 | -46 |
| Norway               | 18     | 18    | 20    | 20    | 0      | 21    | 18    | 13    | 20    | 18    | -2    | 21    | 17                | 16    | 16    | 17    | -1   | 17    | 18    | 14    | 20    | 25    | 5   |
| UK                   | 19     | 16    | 15    | 18    | -4     | 15    | 20    | 21    | 21    | 19    | 1     | 18    | 17                | 15    | 15    | 16    | -3   | 14    | 19    | 18    | 19    | 21    | 2   |
| Europe               | 82     | 76    | 85    | 83    | -15    | 87    | 96    | 92    | 100   | 94    | 11    | 118   | 112               | 123   | 119   | 118   | 24   | 112   | 117   | 117   | 127   | 136   | 9   |
| Asia Pacific         | 25     | 26    | 23    | 25    | -11    | 22    | 18    | 23    | 22    | 21    | -4    | 17    | 17                | 17    | 18    | 17    | -4   | 19    | 25    | 25    | 28    | 31    | 3   |
| Total OECD           | 1,299  | 1,368 | 1,616 | 1,557 | -978   | 2,042 | 1,893 | 2,185 | 2,278 | 2,100 | 543   | 2,521 | 2,232             | 2,632 | 2,745 | 2,532 | 433  | 2,819 | 2,395 | 2,483 | 2,452 | 2,418 | -34 |
| Other Asia           | 212    | 213   | 233   | 217   | 1      | 235   | 249   | 253   | 255   | 248   | 31    | 257   | 234               | 232   | 233   | 239   | -9   | 231   | 216   | 205   | 218   | 207   | -11 |
| Latin America        | 147    | 149   | 169   | 157   | -34    | 183   | 203   | 220   | 213   | 205   | 48    | 191   | 192               | 196   | 201   | 195   | -10  | 191   | 190   | 172   | 157   | 168   | 11  |
| Middle East          | 151    | 139   | 147   | 150   | -18    | 152   | 150   | 163   | 159   | 156   | 6     | 101   | 107               | 102   | 107   | 104   | -52  | 116   | 112   | 110   | 111   | 89    | -22 |
| Africa               | 11     | 9     | 12    | 10    | -2     | 20    | 19    | 19    | 18    | 19    | 9     | 1     | 2                 | 0     | 5     | 2     | -17  | 3     | 3     | 9     | 12    | 10    | -2  |
| Total DCS            | 520    | 510   | 561   | 534   | -52    | 589   | 621   | 655   | 645   | 628   | 93    | 549   | 535               | 530   | 546   | 540   | -88  | 542   | 522   | 496   | 498   | 474   | -24 |
| Non-OPEC rig count   | 1,819  | 1,878 | 2,177 | 2,091 | -1,030 | 2,632 | 2,514 | 2,840 | 2,924 | 2,727 | 636   | 3,070 | 2,768             | 3,161 | 3,291 | 3,072 | 345  | 3,361 | 2,916 | 2,979 | 2,950 | 2,892 | -58 |
| Algeria              | 30     | 27    | 27    | 27    | 1      | 23    | 28    | 24    | 24    | 25    | -2    | 29    | 33                | 30    | 33    | 31    | 6    | 31    | 31    | 44    | 37    | 38    | 1   |
| Angola               | 3      | 3     | 4     | 4     | -1     | 10    | 8     | 9     | 9     | 9     | 5     | 11    | 11                | 11    | 8     | 10    | 1    | 10    | 12    | 7     | 7     | 7     | 0   |
| Ecuador              | 10     | 10    | 10    | 10    | 0      | 11    | 11    | 11    | 11    | 11    | 1     | 11    | 11                | 11    | 15    | 12    | 1    | 17    | 17    | 22    | 25    | 26    | 1   |
| Iran**               | 52     | 52    | 52    | 52    | 2      | 52    | 52    | 52    | 52    | 52    | 0     | 54    | 54                | 54    | 54    | 54    | 2    | 54    | 54    | 36    | 54    | 54    | 0   |
| Iraq**               | 36     | 36    | 36    | 36    | 7      | 36    | 36    | 36    | 36    | 36    | 0     | 36    | 36                | 36    | 36    | 36    | 0    | 36    | 50    | 76    | 71    | 69    | -2  |
| Kuwait**             | 11     | 14    | 13    | 13    | 0      | 19    | 18    | 21    | 23    | 20    | 8     | 56    | 56                | 57    | 60    | 57    | 37   | 56    | 56    | 58    | 59    | 57    | -2  |
| Libya**              | 13     | 14    | 15    | 14    | -1     | 17    | 17    | 14    | 15    | 16    | 1     | 10    | 3                 | 8     | 9     | 8     | -8   | 12    | 11    | 11    | 14    | 15    | 1   |
| Nigeria              | 6      | 6     | 7     | 6     | -1     | 11    | 13    | 18    | 17    | 15    | 8     | 35    | 35                | 36    | 36    | 36    | 21   | 37    | 35    | 37    | 32    | 32    | 0   |
| Qatar                | 9      | 9     | 9     | 9     | -2     | 8     | 8     | 9     | 9     | 9     | 0     | 10    | 8                 | 7     | 7     | 8     | -1   | 8     | 7     | 8     | 8     | 8     | 0   |
| Saudi Arabia         | 67     | 67    | 66    | 68    | -9     | 68    | 67    | 67    | 65    | 67    | -1    | 98    | 98                | 98    | 105   | 100   | 33   | 106   | 114   | 111   | 117   | 109   | -8  |
| UAE                  | 12     | 13    | 12    | 12    | 0      | 13    | 13    | 13    | 13    | 13    | 1     | 17    | 21                | 24    | 22    | 21    | 8    | 22    | 24    | 23    | 26    | 26    | 0   |
| Venezuela            | 64     | 54    | 54    | 60    | -20    | 66    | 64    | 70    | 80    | 70    | 10    | 125   | 125               | 125   | 113   | 122   | 52   | 126   | 122   | 112   | 111   | 106   | -5  |
| OPEC rig count       | 314    | 302   | 305   | 311   | -24    | 334   | 335   | 344   | 355   | 342   | 31    | 493   | 490               | 495   | 498   | 494   | 152  | 515   | 534   | 546   | 561   | 547   | -14 |
| Worldwide rig count* | 2,133  | 2,180 | 2,483 | 2,402 | -1,054 | 2,965 | 2,849 | 3,184 | 3,278 | 3,069 | 667   | 3,563 | 3,258             | 3,656 | 3,789 | 3,566 | 497  | 3,876 | 3,451 | 3,524 | 3,511 | 3,439 | -72 |
| of which:            |        |       |       |       |        |       |       |       |       |       |       |       |                   |       |       |       |      |       |       |       |       |       | 0   |
| Oil                  | 1,069  | 1,182 | 1,356 | 1,222 | -210   | 1,590 | 1,534 | 1,783 | 1,896 | 1,701 | 479   | 2,197 | 2,023             | 2,354 | 2,453 | 2,257 | 556  | 2,709 | 2,528 | 2,677 | 2,694 | 2,641 | -53 |
| Gas                  | 993    | 965   | 1,092 | 1,125 | -825   | 1,333 | 1,276 | 1,356 | 1,337 | 1,325 | 200   | 1,319 | 1,187             | 1,257 | 1,286 | 1,262 | -63  | 1,116 | 879   | 799   | 754   | 753   | -1  |
| Others               | 35     | 34    | 37    | 35    | 3      | 43    | 40    | 42    | 46    | 43    | 8     | 48    | 49                | 47    | 52    | 49    | 6    | 54    | 46    | 51    | 65    | 50    | -15 |

Note: Totals may not add up due to independent rounding.

na: Not available.

Source: Baker Hughes Incorporated & Secretariat's estimates.

\* Excludes China and FSU.

\*\* Estimated figure when Baker Hughes Incorporated did not reported the data.

## Contributors to the *OPEC Monthly Oil Market Report*

### Editor-in-Chief

Hasan M. Qabazard, Director, Research Division  
email: [hqabazard@opec.org](mailto:hqabazard@opec.org)

### Editor

Hojatollah Ghanimi Fard, Head, Petroleum Studies Department  
email: [h.ghanimifard@opec.org](mailto:h.ghanimifard@opec.org)

### Analysts

|   |   |
|---|---|
| Crude Oil Price Movements               | Eissa Alzerma<br>email: <a href="mailto:éalzerma@opec.org">éalzerma@opec.org</a>  |
| Commodity Markets                       | Odalis López-Gonzalez<br>email: <a href="mailto:olopez@opec.org">olopez@opec.org</a>  |
| World Economy                           | Mehdi Asali<br>email: <a href="mailto:masali@opec.org">masali@opec.org</a><br>Joerg Spitzzy<br>email: <a href="mailto:jspitzzy@opec.org">jspitzzy@opec.org</a>  |
| World Oil Demand                        | Esam Al-Khalifa<br>email: <a href="mailto:ekhalifa@opec.org">ekhalifa@opec.org</a>  |
| World Oil Supply                        | Haidar Khadadeh<br>email: <a href="mailto:hkhadadeh@opec.org">hkhadadeh@opec.org</a>  |
| Product Markets and Refinery Operations | Elio Rodriguez<br>email: <a href="mailto:erodriguez@opec.org">erodriguez@opec.org</a>   |
| Tanker Market <i>and</i> Oil Trade      | Anisah Almadhayyan<br>email: <a href="mailto:aalmadhayyan@opec.org">aalmadhayyan@opec.org</a>   |
| Stock Movements                         | Aziz Yahyai<br>email: <a href="mailto:ayahyai@opec.org">ayahyai@opec.org</a>  |
| Technical and editorial team            | Aziz Yahyai<br>email: <a href="mailto:ayahyai@opec.org">ayahyai@opec.org</a><br>Douglas Linton<br>email: <a href="mailto:dlinton@opec.org">dlinton@opec.org</a> |

### Data services

Nabeel F. Al Mojil, Officer-in-Charge, Data Services Department ([nabeel.mojil@opec.org](mailto:nabeel.mojil@opec.org)),  
Ramadan Janan ([rjanan@opec.org](mailto:rjanan@opec.org))  
Pantelis Christodoulides (World Oil Demand, Stock Movements),  
Hannes Windholz (Oil Trade, Product & Refinery), Mouhamad Moudassir (Tanker Market),  
Klaus Stoeger (World Oil Supply), Harvir Kalirai (Economics), Mohammad Sattar (Crude Oil Prices)

### Editing, production, design and circulation

Keith Aylward-Marchant, Alvino-Mario Fantini, Viveca Hameder, Hataichanok Leimlehner,  
Evelyn Oduro-Kwateng, Andrea Birnbach

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## OPEC Basket average price

US\$ per barrel



down \$0.31 in December

|                      |               |
|----------------------|---------------|
| <b>December 2012</b> | <b>106.55</b> |
| November 2012        | 106.86        |
| 2012                 | 109.45        |

## December OPEC crude production

in million barrels per day, according to secondary sources



down 0.46 in December

|                      |              |
|----------------------|--------------|
| <b>December 2012</b> | <b>30.37</b> |
| November 2012        | 30.83        |

## World economy

Global growth expectations are unchanged at 3.0% for 2012 and 3.2% for 2013. Japan's forecast has been raised to 2.0% in 2012 and 0.7% in 2013, while the US forecast has been increased to 2.3% for 2012 and remains at 2.0% for 2013. The Euro-zone is forecast to grow at 0.1% in 2013 after an estimated contraction of 0.4% in 2012. China's growth expectations remain at 7.6% for 2012 and 8.0% for 2013, while India has been revised down to 6.4% for 2013 after 5.5% growth last year.

## Supply and demand

in million barrels per day

| <b>2012</b>       |             |             | <b>2013</b>       |             |             |
|-------------------|-------------|-------------|-------------------|-------------|-------------|
|                   |             | 12/11       |                   |             | 13/12       |
| World demand      | 88.8        | 0.8         | World demand      | 89.6        | 0.8         |
| Non-OPEC supply   | 53.0        | 0.5         | Non-OPEC supply   | 53.9        | 0.9         |
| OPEC NGLs         | 5.7         | 0.4         | OPEC NGLs         | 6.0         | 0.2         |
| <b>Difference</b> | <b>30.1</b> | <b>-0.2</b> | <b>Difference</b> | <b>29.6</b> | <b>-0.4</b> |

Totals may not add due to independent rounding.

## Stocks

Preliminary data shows OECD commercial oil stocks experienced a seasonal decline of 15.3 mb in November. Despite the fall in total stocks, inventories showed a surplus of 16.0 mb compared to the five-year average. In days of forward cover, OECD commercial stocks stood at nearly 58 days in November, a gain of almost two days over the five year average. US total commercial oil stocks fell in December by 3.0 mb, but still indicated a surplus of 35 mb over the five year average.