

# OPEC

Organization of the Petroleum Exporting Countries

## Monthly Oil Market Report

***December 2012***

*Feature Article:*  
***Review of oil market in 2012, outlook for 2013***

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# OPEC Monthly Oil Market Report

## Publishing Schedule for 2013

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Wednesday,	16	January
Tuesday,	12	February
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Wednesday,	10	April
Friday,	10	May
Tuesday,	11	June
Wednesday,	10	July
Friday,	9	August
Tuesday,	10	September
Thursday,	10	October
Tuesday,	12	November
Tuesday,	10	December

# Oil Market Highlights

§ The **OPEC Reference Basket** slipped in November, despite the increase in global crude oil prices late in the month, dropping \$1.50 to stand at \$106.86/b. Year-to-date the Basket averaged \$109.70/b, a gain of \$2.32/b or 2.15% over last year. Economic worries continued to outweigh ongoing concerns about supply distributions. Some easing in revived geopolitical factors also helped to dampen concerns that had pushed prices higher in the middle of the month. In the crude futures markets, money managers reversed course in November and increased net long positions. This added speculative pressure and supported the rise in crude oil prices at the end of the month. On 10 December the Basket stood at \$105.01/b.

§ **Global economic growth** in 2013 remains at 3.2%, but has been revised down for 2012 to 3.0% from 3.1%. US economic growth has been robust and its forecast remains at 2.2% in 2012 and 2.0% in 2013. In Japan, a significant deceleration has led to a revision in growth to 1.6% from 2.2% in 2012 and to 0.6% from 1.1% in 2013. The contraction in the Euro-zone appears to have bottomed out in 3Q12 and the growth forecast has been revised to minus 0.4% from minus 0.5% for 2012, while next year's growth is forecast unchanged at 0.1% for 2013. China is still expected to grow at 8.0% in 2013 after estimated growth of 7.6% this year. While India's forecast for 2013 is unchanged at 6.6%, the sharper-than-expected deceleration in the 3Q12 has caused the growth estimate for 2012 to be revised down to 5.5% from 5.7% in the previous forecast.

§ **World oil demand** growth in 2012 is forecast at 0.8 mb/d, unchanged from the previous assessment, and the same growth is expected for next year at 0.8 mb/d. Oil demand growth in 4Q12 is estimated at 1.0 mb/d y-o-y. This is almost double the growth in 3Q12, as US oil demand moved from deep contraction to minor growth.

§ **Non-OPEC supply** growth is projected at 0.5 mb/d in 2012, steady since the last assessment, supported by strong anticipated growth from the US and Canada, despite disruptions in some countries. Non-OPEC supply growth in 2013 is forecast to stand at 0.9 mb/d, unchanged from the previous month. OPEC NGLs and nonconventional oils are expected to average 5.7 mb/d in 2012, a gain of 0.4 mb/d over the previous year, and 6.0 mb/d in 2013, an increase of 0.2 mb/d over the current year. In November, OPEC crude oil production averaged 30.78 mb/d, according to secondary sources, a decline of 0.21 mb/d from the previous month.

§ **Product markets** in November continued the decline seen in October. This was mainly due to further losses at the top and bottom of the barrel. Gasoline cracks continued to plummet worldwide following seasonal low demand amid increased supplies, as refineries returned from maintenance. An oversupply of fuel oil amid lower bunker demand intensified bearish sentiments at the bottom of the barrel. These factors have led to a fall in refinery margins across the board. So far, the winter season has not yet lent sufficient support to distillates to offset the market's generally bearish mood.

§ In the **tanker market**, freight rates for the dirty tanker market saw a general improvement in November compared to the previous month. On average, VLCC and Aframax freight rates increased by 22% and 5% respectively. Suezmax saw the only negative performance, declining by 3% from a month ago. The improvements seen in freight rates came as a result of higher market activities and an enhanced tonnage supply/demand balance. The clean tanker freight rates were mixed in November, with East of Suez freight rates up by 11%, while West of Suez freight rates lost 5% from a month earlier. OPEC spot fixtures gained 13.8% from the previous month to average 13.82 mb/d.

§ Preliminary data for October shows that **total OECD commercial oil stocks** fell by 12.3 mb but remained 38.0 mb above the last five year average, and 75.0 mb higher than a year ago at the same period. OECD commercial stocks stood at around 59.5 days at the end of October, 2.4 days higher than the last five year average. The latest information shows that US total commercial oil stocks fell by 6.4 mb in November, but they indicated a surplus of 35.1 mb with the five year average and 16.7 mb higher than a year ago. The fall in US total commercial oil stocks was attributed to both crude and products as they declined by 3.1 mb and 3.4 mb respectively.

§ **Demand for OPEC crude** for this year remained unchanged from the previous assessment to stand at 30.1 mb/d, showing a decline of 0.1 mb/d when compared to 2011. The required OPEC crude is forecast to average 29.7 mb/d, 0.4 mb/d lower than 2012 level and remained at the same level as estimated in the previous report.



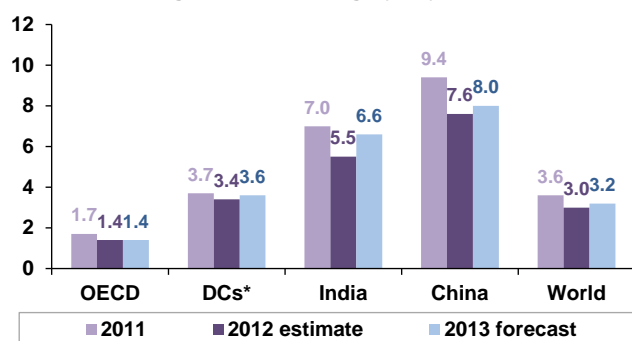
## Review of oil market in 2012, outlook for 2013

The first quarter of this year witnessed a significant increase in the value of the OPEC Reference Basket. The upward push was driven by a number of factors, including supply disruptions in the North Sea and some countries in West and East Africa, supply fears due to geopolitical tensions, and increasing speculative activities in the crude futures markets. By the end of the quarter, the Basket's value had reached over \$120/b. In the second quarter, prices fell below \$100/b, as ample supply and concerns about the gloomy economic outlook, particularly in the Euro-zone, outweighed any lingering supply fears, leading to a speculative sell off. However, in the third quarter, the Basket bounced back to around the \$110/b level, where it currently remains.

While the world economy experienced another year of deceleration in 2012, some indicators are pointing to a tentative recovery in the second half of the year and this momentum is likely to be carried over into 2013. The main support comes from the improving economy in the US, which has been lifted by some advances in the labour and the housing markets. Moreover, the contraction in the Euro-zone has been less-than-expected in the 3Q12. With the most recent initiatives helping to foster growth, the Euro-zone could potentially return to growth in the coming year, although this might prove challenging. However, Japan is the main economy in the OECD that is forecast to continue decelerating significantly in 2013, although the economy could also benefit from renewed momentum in its largest trading partners. Meanwhile, the major emerging economies appear to have engineered a soft landing in 2012 and growth levels should be mostly at higher levels in the coming year. China, and to some extent India, are particularly expected to benefit from improving world trade in 2013.

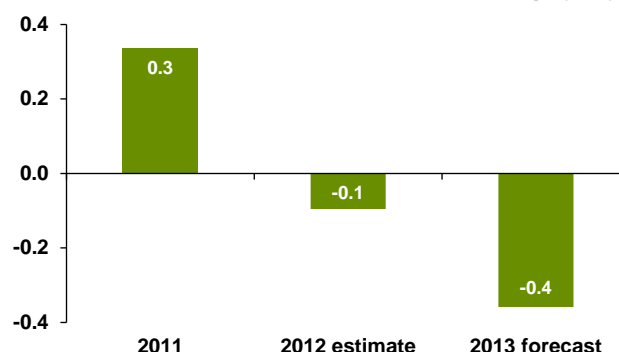
As a result, the coming year could see an end to the deceleration in the world economy, with growth of 3.2%, compared to growth of 3.0% in the current year (**Graph 1**). However, many uncertainties remain. The most important will be avoiding the fiscal cliff in the US, further decisions on austerity issues in the Euro-zone, and balancing the need to reduce the fiscal debt burden while stimulating growth in Japan. In the emerging economies, it remains to be seen how domestic demand will be improved, given the likely continuation of low growth in their main exporting markets in the developed world.

**Graph 1: GDP growth, % change y-o-y**



\*DCs are excluding China and India.

**Graph 2: Demand for OPEC crude, mb/d change y-o-y**



Turning to the oil market, the forecast for global oil demand in 2012 has seen ongoing downward revisions to currently stand at 0.8 mb/d. Unlike in the previous year, the downward revisions in oil demand growth were not confined to the OECD, but also came from China and India. In contrast, Japan's shut down of almost all its nuclear power plants led the country to rely more heavily on other types of energy. Japanese oil use in power plants increased from 7.5% of the total energy consumption in the previous year to 19.7%. Similarly, India's oil demand was boosted by the massive electricity shut-down and summertime flooding. World oil demand growth in 2013 is expected to remain at 0.8 mb/d. However, weakness in the global economy is causing a great deal of uncertainty for the forecast for world oil demand, which has a downward risk, especially in the first half of the year. A large amount of this risk can be attributed not only to the OECD but also to China and India.

The forecast for non-OPEC supply growth in 2012 also experienced downward revisions to stand at 0.5 mb/d. Since the start of the year, non-OPEC supply has suffered various setbacks due to technical, geological, weather and geopolitical factors. North America is leading the supply growth in 2012, while OECD Western Europe, Africa, and the Middle East are driving the decline. In 2013, non-OPEC production is expected to increase by 0.9 mb/d, supported by growth from North America, Africa, Eurasia, and Latin America, while OECD Western Europe is likely to see a continued decline. OPEC NGLs and non-conventional oils are expected to increase by 0.4 mb/d and 0.2 mb/d in 2012 and 2013.

Based on these projections, the growth in total non-OPEC supply including OPEC NGLs and non-conventional oils of around 1.1 mb/d is expected to outpace the increase in world oil demand growth in 2013. This would result in demand for OPEC crude averaging 29.7 mb/d in 2013, or around 0.4 mb/d less than the level estimated for the current year (**Graph 2**). Despite the considerable uncertainties affecting supply and demand in the market, and without underestimating the potential impact of non-fundamental factors, the improving economic outlook for the coming year should help support oil market stability.



# Crude Oil Price Movements

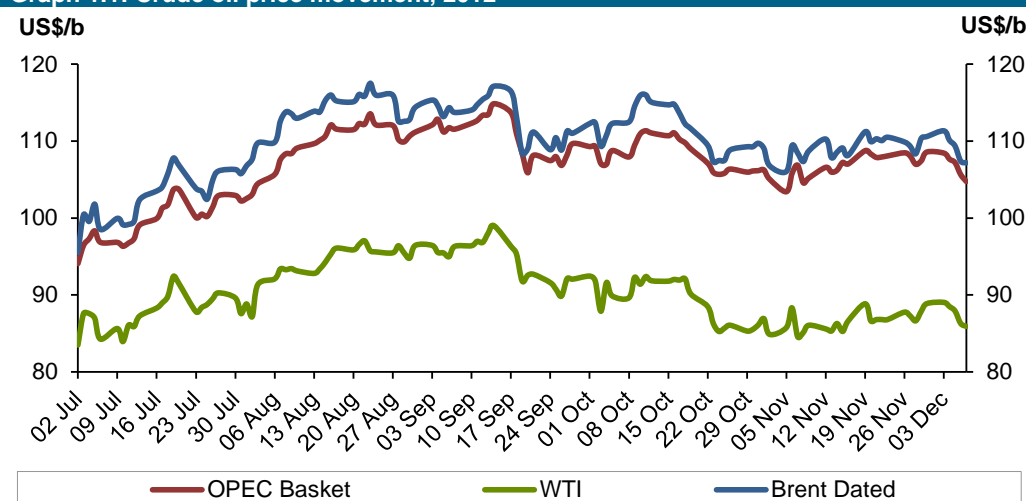
*For second month running, the Basket price slipped in November, although staying above \$105/b*

## OPEC Reference Basket

In line with global crude oil prices, the monthly average price of the OPEC Reference Basket slipped for a second month in a row in November, despite a late-month improvement in the global figure. Lingered concern about the struggling world economy and its impact on oil consumption weighed on prices earlier in the month. However, from mid-month on, the focus shifted back to concern about disruptions to Middle East supplies following a flare up of geopolitical tensions in the region. Furthermore, crude markets continued to balance up risks to demand from the United States' 'fiscal cliff' (\$600 billion in automatic budget reductions and expiring tax cuts at the end of 2012) against concern about disruptions to Middle East supplies.

The Basket fell by \$1.50 to settle at a monthly average of \$106.86/b in November, i.e. down 1.38%, but remained above the key \$105/b level. Year-to-date, the Basket averaged \$109.76/b, compared with last year's average of \$107.44/b for the same period, a y-o-y increase of \$2.32/b or 2.15%.

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



Among the Basket's components, Venezuela's Merey dropped by far the most, losing more than 4% of its value in a month. The ongoing weakness of West Texas Sour (WTS) affected the performance of Merey, since this is an integral part of the US Gulf Coast's pricing formula. The Midland Texas WTS discount to WTI Cushing has been widening throughout the year in line with higher production in Midland Texas and lower take-away capacity; this was confirmed by US Energy Information Administration (EIA) data for August which put total Texas crude oil production up over 500,000 b/d y-o-y, with the overall level exceeding 2 mb/d for the first time since 1988. The differential reached record levels, with WTS last assessed at minus \$22/b to WTI Cushing, implying an outright price of less than \$65/b. While a trend of gently widening differentials can be corrected for via the pricing formula monthly "k" adjustment factor – with the volatility exhibiting \$10+ price-swings – it cannot be accounted for when setting prices on a prospective basis.

Following the weakness in the benchmark, African crudes also dropped, despite continuing problems with light sweet crudes in the North Sea and West Africa. The Buzzard field had been in extended maintenance until late October, and after it had come back, it had to be shut down again temporarily, causing delays for many cargoes and tightening volumes available to the European market. At the same time, Nigerian crude production suffered from a combination of natural disasters, oil theft and sabotage to the oil infrastructure. Meanwhile, falling demand for gasoline and naphtha undermined buying interest for North African light sweet crudes. The Middle Eastern Basket-component crudes were supported by healthy Asian demand, particularly for distillate-rich grades. Their prices slipped the least over the month.

The Basket's Latin American components, Ecuador's Oriente and Venezuela's Merey, averaged below \$100 for the second month in a row. Merey plunged \$4.22 to \$93.28/b, while Oriente slipped \$1.59 to \$97.15/b. African grades Saharan Blend, Es Sieder, Bonny Light and Girassol or Brent-related crudes fell by \$2.24 to an average of \$109.55/b, i.e. down by 2% from last month. The multi-destination Basket components, namely Arab Light, Basrah Light, Kuwait Export and Iran Heavy, lost almost 1% in November to \$106.89, representing a drop of around \$1/b from the previous month. Meanwhile, the Middle Eastern crudes Murban and Qatar Marine also fell, by almost 1.5% or \$1.59 to an average of \$108.41/b.

On 10 December, the Basket price stood at \$105.01/b, \$1.85 below November's average.

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

	<u>Oct 12</u>	<u>Nov 12</u>	<u>Change</u> <u>Nov/Oct</u>	<u>Year-to-date</u>	
	<u>2011</u>	<u>2012</u>			
<b>OPEC Reference Basket</b>	<b>108.36</b>	<b>106.86</b>	<b>-1.50</b>	<b>107.47</b>	<b>109.70</b>
Arab Light	109.09	108.47	-0.62	107.81	110.38
Basrah Light	106.66	105.45	-1.21	106.18	108.20
Bonny Light	113.31	110.91	-2.40	114.46	113.87
Es Sider	111.41	109.01	-2.40	112.19	112.07
Girassol	111.00	108.91	-2.09	111.79	112.48
Iran Heavy	108.11	106.80	-1.31	106.05	109.27
Kuwait Export	107.56	106.82	-0.74	105.51	109.16
Marine	108.63	107.12	-1.51	106.46	109.52
Merey	97.50	93.28	-4.22	97.63	100.77
Murban	111.36	109.69	-1.67	109.79	112.00
Oriente	98.74	97.15	-1.59	101.04	103.10
Saharan Blend	111.41	109.36	-2.05	113.30	111.62
<b>Other Crudes</b>					
Brent	111.61	109.11	-2.50	111.67	111.81
Dubai	108.80	107.22	-1.58	106.19	109.30
Isthmus	104.39	99.37	-5.02	105.23	107.18
Mars	103.73	102.95	-0.78	107.79	107.03
Minas	111.47	108.26	-3.21	114.83	117.24
Urals	110.26	108.23	-2.03	109.36	110.68
WTI	89.47	86.59	-2.88	94.67	94.59
<b>Differentials</b>					
WTI/Brent	-22.14	-22.52	-0.38	-17.00	-17.22
Brent/Dubai	2.81	1.89	-0.92	5.48	2.52

*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 oil futures softened again on economic concern in November*

Crudes oil futures softened again in November, registering two consecutive months of losses on a monthly average basis. There was large day-to-day volatility in the upside and downside trading environment throughout the month. Economic concern continued to gain an upper hand, on worries about supply distribution due to the Middle Eastern geopolitical tensions. Some easing in geopolitical tensions helped cool the concern that had boosted prices in the middle of the month.

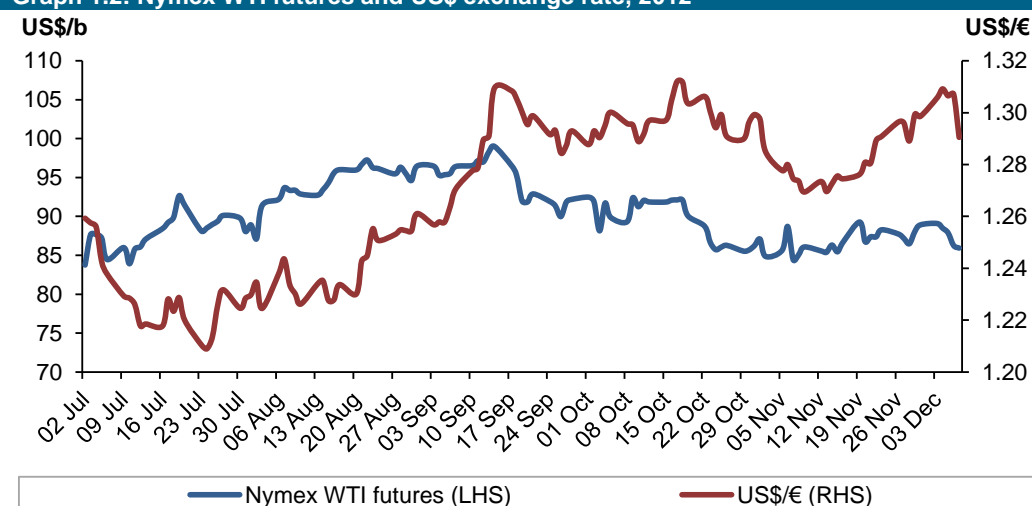
The Euro-zone economy experienced its worst quarter of negative growth since 2009. This, along with fears that the looming US fiscal cliff could plunge that country back into recession, limited the upside to oil market, despite the strong outlook for Chinese economic growth. Chinese economic data from official sources indicated that China would see a higher growth rate again in the fourth quarter. Crude imports were up considerably in October month-on-month (m-o-m), and industrial output, retail sales and fixed asset investments all climbed the previous month. However, earlier oil demand figures hinted that global economic worries were far from over, with prominent forecasting agencies all lowering their 2012 predictions. Also, US nationwide crude stocks climbed to their highest levels since July and last month saw another stockbuild in China after two consecutive months of implied stockdraws.



Month-on-month, the Intercontinental Exchange (ICE) Brent front-month price shed almost \$2/b or around 1.75% to settle at \$109.53/b, which was below the key \$110/b level. Meanwhile, the New York Mercantile Exchange's West Texas Intermediate (Nymex WTI) front-month price dropped by over 3%, amid bulging crude stocks — not least due to Hurricane Sandy making landfall, leaving behind a trail of devastation and shut-in refineries. Data from the North Dakota Industrial Commission showed that, in September, shale oil production from the state climbed to approximately 660,000 b/d, up by 4% m-o-m to yet another monthly record. Nymex WTI front-month dropped around \$2.83 to average \$86.73/b. The ICE Brent front-month year-to-date average was 0.7% higher at \$111.93/b, compared with last year's level of \$111.18/b. WTI's front-month year-to-date average price was almost unchanged from last year at \$94.75/b.

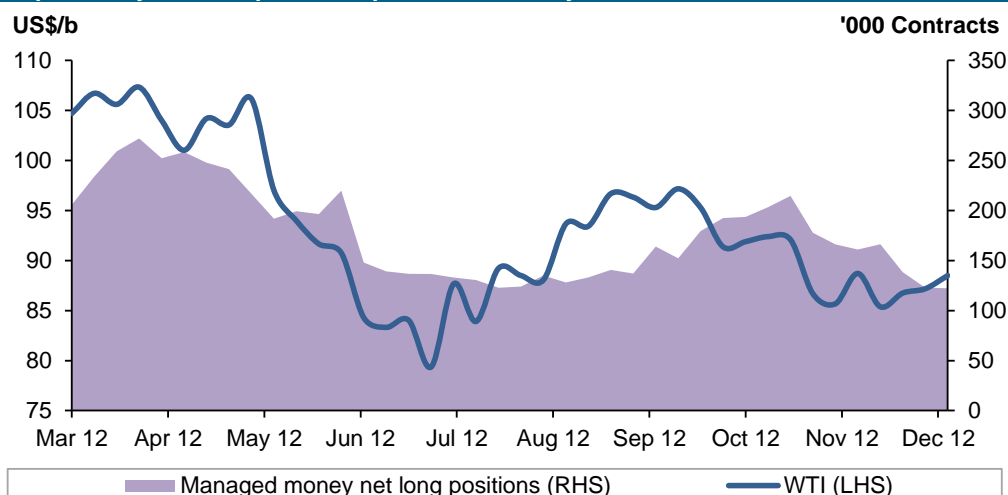
Crude oil futures prices continued to slide in the first week of December. On 10 December, Nymex WTI and ICE Brent stood at \$85.56/b and \$107.33/b, respectively.

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



After the previous month's steep fall, and consistent with the month-end improvement in crude oil prices, money managers increased their bullish bets for crude oil futures, adding more lots to their net length, according to the end-of-November Commitments of Trade data from Nymex and ICE. In the week to 27 November, speculators expanded their Nymex WTI and ICE Brent net long positions by 6,248 and 11,016 to 116,096 and 108,112 respectively.

Meanwhile, compared with the previous month, which had witnessed the biggest concentration of bearish positions in two years, money managers were generally bullish over the month, stirred by a temporary flare-up in geopolitical tensions, optimism about China's economic growth and a timely solution for the US 'fiscal cliff'. In total, speculators increased their combined net long positions in the two main crude oil futures markets, ICE and Nymex, by 9,883 to 224,208 contracts at the end of November from 214,325 lots at the end of October. Meanwhile, the combined open interest decreased by almost 400,000 contracts to 3.7 million. The Nymex WTI front-month futures contracts' traded volume during November decreased by 73,365 lots to 5.16 million contracts. The ICE Brent volume also slipped, by a large 284,760 contracts to 4.97 million contracts.

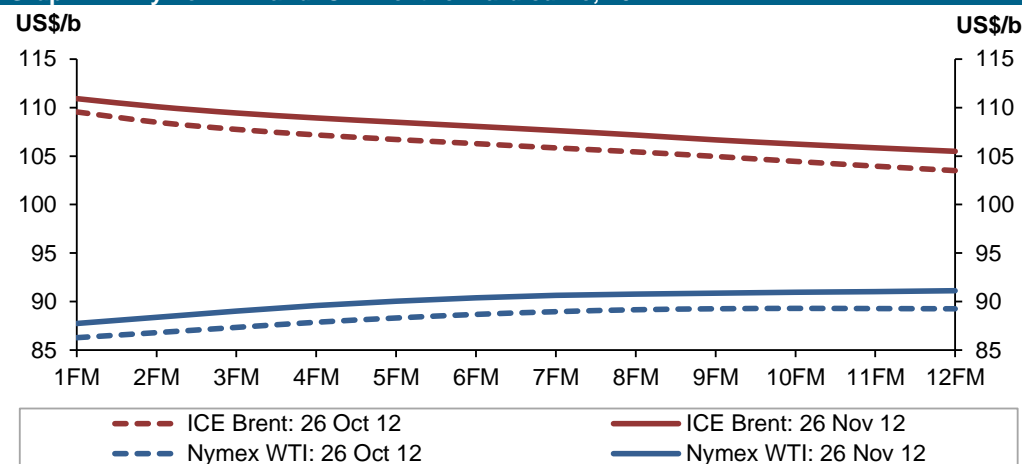
**Graph 1.3: Nymex WTI price vs. speculative activity, 2011-2012**

*Nymex WTI contango widened in November, while ICE Brent backwardation remained*

### The futures market structure

The Nymex WTI contango structure widened by another 10¢ in November, as high production in mid-continent, coupled with lower crude demand due to temporary refinery shutdowns associated with Hurricane Sandy, kept crude oil stocks at Cushing at high levels. As such, the WTI first-to-second-month differential widened from -45¢ in October to around -55¢ in November, on a monthly average basis. Hurricane Sandy forced shutdowns on the Atlantic coast, reducing East coast refinery runs to 760,000 b/d from more than 1 mb/d earlier. Meanwhile, increased domestic output, now at a 17-year peak, boosted stocks to their highest levels since June. The restart of the 220,000 b/d Buzzard field in the North Sea helped soften recent ICE Brent backwardation, where prompt prices were at a premium to forward supplies. But supply tightened again after the temporary shutdown of the Buzzard field and other production problems in the region, causing several cargos to be delayed. On top of these repeated outages, several arbitrage cargoes moved to South Korea, tightening the prompt volumes further. On average, the spread between the second and the first month of the ICE Brent contract remained unchanged at 95¢/b in November.

As North Sea crude oil production continued to experience a slow recovery from maintenance, in addition to the lingering effect of the geopolitical tensions on the Brent market, the transatlantic Brent-WTI spread widened further to record levels in November. The front-month ICE Brent/Nymex WTI spread widened to an average of nearly \$23/b, a sustained discount not seen since October 2011. Abundant supply of US mid-continent crude, at a time when refinery runs were cut due to prolonged maintenance and Hurricane Sandy, depressed WTI prices relative to Brent, making the spread wider.

**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**

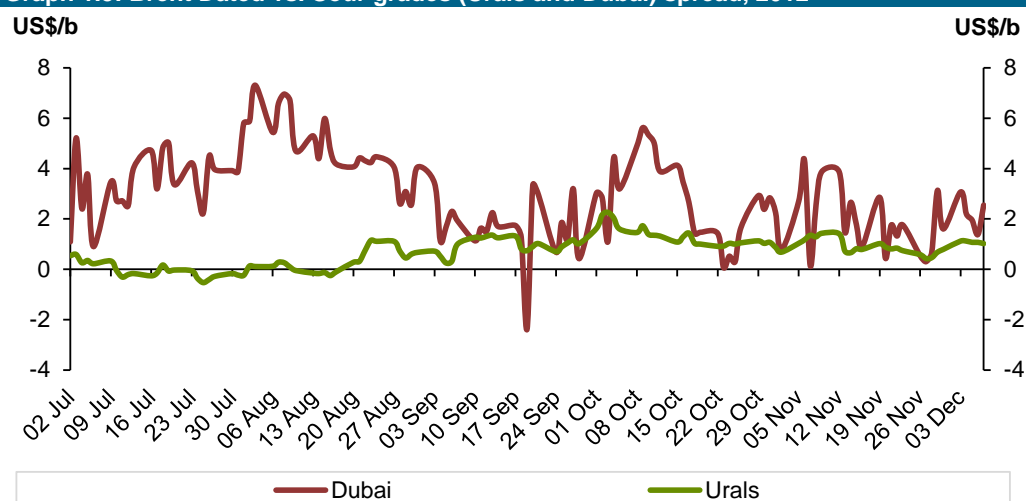
<b>Nymex WTI</b>						
	<u>1st FM</u>	<u>2nd FM</u>	<u>3rd FM</u>	<u>6th FM</u>	<u>12th FM</u>	
26 Oct 12	86.28	86.80	87.34	88.68	89.26	
26 Nov 12	87.74	88.37	89.02	90.38	91.12	
<b>ICE Brent</b>						
	<u>1st FM</u>	<u>2nd FM</u>	<u>3rd FM</u>	<u>6th FM</u>	<u>12th FM</u>	
26 Oct 12	109.55	108.49	107.75	106.28	103.50	
26 Nov 12	110.92	110.09	109.44	108.06	105.49	

FM= future month.

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

In Asia, the widened Tapis/Dubai spread witnessed earlier in November, amid increasing deterioration in fuel oil cracking margins, started to narrow late in the month. Renewed South Sudanese exports and slim Japanese utility demand depressed Asian sweet crudes. Sudan will export up to 60,000 b/d of medium-sweet Nile Blend crude from now on, up from 20,000 b/d earlier. The resumption of South Sudanese exports comes at a time of low demand from Japan's power-generation sector. Japanese utilities favour Nile Blend because it is low in sulphur and waxy, making it suitable for direct burning. On the other hand, strong refinery demand from Japan and South Korea lifted Middle East Gulf crude values, further narrowing the spread. Refiners are looking to meet late-winter requirements, as well as replenish crude stocks. Medium-sour crude premiums to official selling prices rose to a 14-month high.

*Narrower spread globally in November, despite fuel oil weakness*

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

In the US Gulf Coast (USGC), the Light Louisiana Sweet (LLS)-Mars spread narrowed, supported by complex refinery demand for medium-sour crudes. Demand for medium-sour and heavy crudes increased in the US Gulf Coast as plants returned from maintenance. Refinery throughputs rose, narrowing sour crude differentials to increasingly over-supplied light-sweet grades. The LLS-Mars spread narrowed from \$6.50 to \$5.55 in November. In contrast, in the mid-continent, US medium-sour WTS's discount to WTI fell sharply over the month as refinery maintenance, rising production and pipeline constraints to Cushing increased supply in West Texas, depressing prices. The differential widened to a record of more than minus \$20/b. The depressed WTS market weighed on imported Latin American crudes that used WTS in their official formula pricing. In the US West Coast (USWC), demand for medium-sour Alaskan North Slope (ANS) picked up ahead of the expected restart of Chevron's Richmond refinery, benefiting Ecuadorean sour grades.

Despite poor fuel oil margins in Europe, tighter supply caused the Urals differential to Dated Brent to narrow over the month. Urals supplies were getting tighter from pipeline maintenance and increasing demand from Russian refineries returning from maintenance. The increase in volumes that had been redirected to the Eastern Siberia

Pacific Ocean (ESPO) pool was also tightening the Urals availability in Europe. In the meantime, despite support from disrupted West African supplies and higher demand in the Mediterranean for light-sweet crudes, North Sea grades were coming under pressure from falling demand for gasoline and naphtha, as well as lower arbitrage volumes to South Korea. On a monthly average basis, the Dated Brent-Urals spread narrowed from \$1.35 in October to around 90¢ in November.

# Commodity Markets

Majority of commodity prices declined in November

## Trends in selected commodity markets

For November, commodity prices reported diverse trends. Energy and non-energy prices declined by 1.6% and 2.0% m-o-m respectively. Food prices dropped by 1.9% m-o-m, base metals fell by 3.3% and gold prices fell by 1.43%.

Commodity prices seem to have been relatively mute to some improvements in the macroeconomic data released in November, especially the renewed optimistic sentiment about Chinese and US GDP growth and the expectations of better performances in the fourth quarter of 2012 and in 2013. October macroeconomic data for China was slightly better than expected, with industrial production growth up to 9.6% year-on-year (y-o-y) versus 2% in September. Likewise, fixed asset investment growth continued to recover, picking up to 20.7% y-o-y. There was also 14.5% y-o-y growth in nominal retail sales, with robust consumer sentiment which may point to the stabilization of the Chinese economy.

Other encouraging factors were an improvement in manufacturing data out of China, Japan and even the Euro-zone, which pointed to a rebound in that global industry. Nevertheless, the base metal price recovery in the last weeks of November was related mainly to short-covering, and as fundamentals have shown little sign of strengthening, the rebound in this complex of prices was not expected to be sustained, since these markets were hampered by growing stocks in China.

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

Table 1.1. Commodity price data, 2012							
Commodity	Unit	Monthly averages			% Change		
		Sep 12	Oct 12	Nov 12	Sep/Aug	Oct/Sep	Nov/Oct
World Bank commodity price indices for low and middle income countries (2005 = 100)							
Energy		188.5	183.9	180.9	0.6	-2.5	-1.6
Coal, Australia	\$/mt	89.0	81.9	83.1	-2.2	-8.0	1.5
Crude oil, average	\$/bbl	106.3	103.4	101.2	1.0	-2.7	-2.2
Natural gas, US	\$/mmbtu	2.8	3.3	3.5	0.1	16.7	6.6
Non Energy		192.0	188.8	184.9	1.5	-1.7	-2.0
Agriculture		200.2	194.2	190.1	-0.2	-3.0	-2.1
Food		223.3	214.4	210.2	-1.4	-4.0	-1.9
Soybean meal	\$/mt	646.0	601.0	579.0	0.3	-7.0	-3.7
Soybean oil	\$/mt	1,283.0	1,175.0	1,133.0	2.5	-8.4	-3.6
Soybeans	\$/mt	670.0	617.0	589.0	-2.0	-7.9	-4.5
Grains		260.8	261.1	261.8	-1.8	0.1	0.3
Maize	\$/mt	320.8	321.2	321.6	-3.4	0.1	0.1
Wheat, US, HRW	\$/mt	353.4	358.2	360.8	1.2	1.4	0.7
Sugar World	¢/kg	44.1	44.8	42.6	-4.3	1.6	-4.8
Base Metal		171.0	168.8	163.2	9.1	-1.3	-3.3
Aluminum	\$/mt	2,064.1	1,974.3	1,948.8	11.9	-4.4	-1.3
Copper	\$/mt	8,087.7	8,062.0	7,711.2	7.6	-0.3	-4.4
Iron ore, cfr spot	¢/dmtu	99.5	114.0	120.4	-7.5	14.6	5.6
Lead	¢/kg	217.8	214.2	218.2	14.6	-1.6	1.9
Nickel	\$/mt	17,288.0	17,168.7	16,335.4	9.9	-0.7	-4.9
Tin	¢/kg	2,077.1	2,123.4	2,071.3	10.6	2.2	-2.5
Zinc	¢/kg	201.0	190.4	191.2	10.5	-5.3	0.4
Precious Metals							
Gold	\$/toz	1,744.8	1,746.6	1,721.6	7.0	0.1	-1.4
Silver	¢/toz	3,360.9	3,318.7	3,277.3	16.7	-1.3	-1.2

Source: World Bank, Commodity price data.

The **Henry Hub (HH) natural gas price** rose by 6.7% m-o-m in November, compared to 16% in the previous month. Bearish factors were warmer-than-normal weather and weak fundamentals on the supply side, as production remained at very high levels.

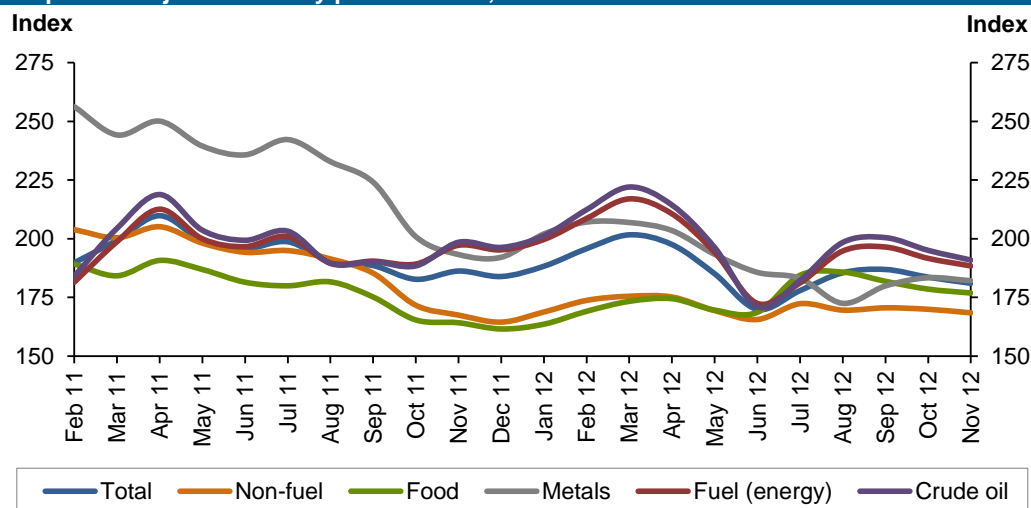
The **agricultural price index** decreased by 2.1% m-o-m in November compared to a fall of 2.96% a month earlier, with food prices reporting a 1.9% drop, less than the fall of 3.99% in the previous month. In the last week of November, agricultural markets, especially grain prices, benefited from a better macro data release, bullish results of the

US Department of Agriculture export sales data and weather concerns for some commodities. Grain prices remained almost flat in November. Corn prices recovered in the last week of November — supported by US corn export sales which were higher than expected for the week ending 15 November. It must be noted that, despite this, the lower trend in ethanol production continued, reporting a 7,000 b/d fall to 804,000 b/d in the last week of November from the previous week.

**US wheat prices** went up by 1.8% m-o-m in November. The gains were concentrated in the last week of November, supported by dry weather in the USA which had led to a historically low crop-rating.

In October, Chinese imports of agricultural commodities reported a mixed performance. Soybean and soy oil decreased by 18.8% and 13% on a monthly basis, while sugar and wheat imports fell by 33% and 42% m-o-m, respectively. On the other hand, corn imports from China went up by 15.4% m-o-m.

**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 rebounded in November, but were still affected by high stocks in China*

The **World Bank's base metal price index** decreased by 3.3% m-o-m in November, despite the complex being supported by some positive macroeconomic news which boosted long-covering. Some of the positive macro developments in November were: the agreement by Euro-zone leaders to release the next tranche of aid to Greece and some positive comments about agreement on the US fiscal cliff; positive news about the Chinese economy, where the November manufacturing Purchasing Managers' Index (PMI) rose above 50, establishing a record for the last 13 months; and a recovery in the US housing sector for October, this being the highest recovery since 2008. Those facts alone should indicate a strong future demand for metals — but it seems that the metals market has also anticipated falling price factors, such as the building up of unreported stocks in China and the threat of a fiscal cliff in the USA. Nevertheless, ample inventories of several base metals in China make it very difficult to accurately forecast any demand improvement.

The situation in China regarding demand fundamentals should improve at a reasonable speed. This would enable a reduction of the significant excess of base metals built up during the year. Regarding this point, the latest signs suggest a relatively low demand performance — traders report that downstream consumers continue to buy on an "as-needed" basis. Furthermore, the trend for bonded copper warehouse inventories is

higher in a month-on-month comparison, reflecting the ongoing financing of imports and also some export flow tolls. Generally, despite the upside indication in China's PMI for November, this has certainly yet to materialise among demand-led tightening fundamentals in the domestic market.

Chinese trade data for base metals were mixed again for the complex, with refined copper imports falling due to unfavourable arbitrage and rising production, as well as some technical problems in materialising imports from Chile. On the other side, primary aluminium imports rose by 22.5% m-o-m to 49,000 tonnes in November, up 407% from last year due to open arbitrage and they were directed straight into bonded warehouses. This, combined with exports falling to 4,000 tonnes, led to net imports of 45,000 tonnes, which added to the surplus in the domestic market.

Furthermore, the open interest for all the base metals at the London Metal Exchange seems to be falling relatively sharply, which might be reflecting some risk-off activities and further reductions of investors' exposures.

Concerning aluminium, most traders continue to be explicitly bearish, regardless of the price rises in November due to the surplus in the market.

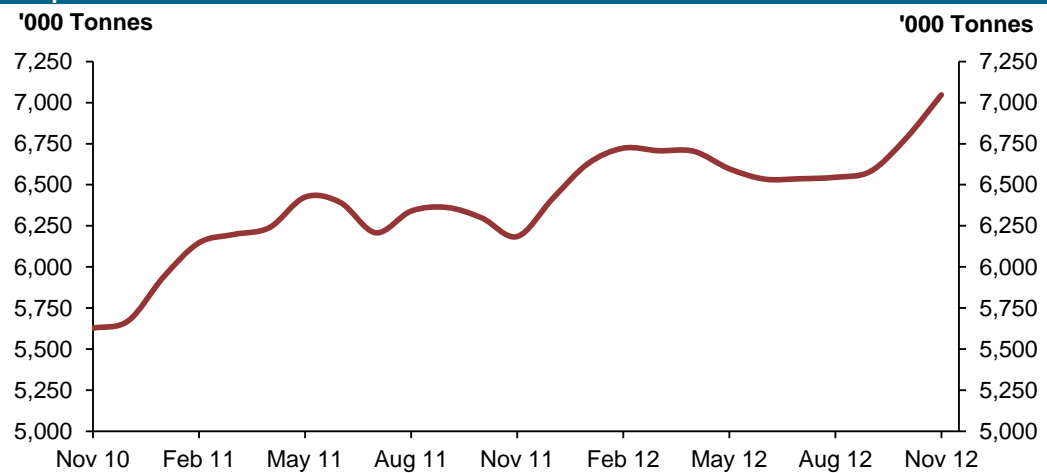
**Copper** prices declined further by 4.3% m-o-m in November from the previous month. The relatively poor performance of copper prices was related greatly to signals of weak domestic demand in China. The outcropping inventory in China was expected to be 675,000 tonnes of copper in Shanghai. Chinese copper imports fell by 21.7% m-o-m to 231,000 tonnes in October, the lowest level of the year so far, and 22% y-o-y. This fall was related to a 9% y-o-y increase in domestic copper production (according to National Bureau of Statistics data), unfavourable import arbitrage for most of September and a 31% y-o-y drop in imports from Chile to 79,000 tonnes due to a port strike in September.

Therefore, this is likely to cause a delay and reduce the demand recovery that could be expected from improved economic activity. This can be considered a risk to forecast prices for the first half of 2013.

On the supply side, according to Metal Bulletin, contract negotiations for copper are underway for annual treatment and refining charges, with BHP Billiton being reported to have started by offering a rollover of 2012's levels of \$60/t and 6¢/pound. It is expected that, while the mines continue to ramp up, mine supply will continue to improve and, as a consequence, there will be higher levels for 2013. Nevertheless, there are indications that the market is being speculative and therefore it remains uncertain whether \$70/t and 7¢/lb will be reached. This can be shown on Codelco's results for the last week of November. Its production fell by around 5% on a y-o-y comparison from January to September to reach 1.25 Mt (including Anglo Sur and El Abra mines' shares), mostly because of declining ore grades (including Chuquimata, which Codelco plans to turn into an underground operation). Despite this, the company has kept its output target for 2012 at 1.7 Mt, which would imply an impressive jump of about 30% for the third quarter of 2012, set against the average of the preceding three quarters.

According to the International Copper Study Group, the recovery in mine production continues: 6.4% y-o-y in August, compared with a 1.8% y-o-y decline in January. Despite this, refined production remains relatively weak. Output of refined products fell in August by 0.3% y-o-y, after a 0.5% y-o-y decline in July, and it is up by only 2% in the year-to-date. In August, usage was flat y-o-y, and this was geographically driven by European demand being down by 7%, although this was partly offset by an unexpected strong 5% y-o-y growth in the USA.



**Graph 2.2: Inventories at the LME**

Source: London Metal Exchange.

**Gold prices** also declined by 1.43% m-o-m in November. Gold prices have been moving up and down, due to geopolitical tensions and a growing appetite for risk with a recovering equity market performance and dollar strength. Nevertheless, a fragile physical market remains a bearish factor.

It is expected that a resolution to the US fiscal cliff, as well as the risk of reflation, will have a positive impact on the gold market. Since September 2011, gold has been trading within a constant range, leading to the question of whether the run of investors buying securities in anticipation of rising prices, which started in 2000, has finally come to an end. The flattish performance of gold prices can be explained partly by relative weaknesses in emerging market growth, equities and currencies against the US dollar. The emerging markets continue to represent almost 75% of the actual physical gold demand. The observed rally for gold that could be perceived in the last decade has overlapped with the rise of emerging market economies and the fast appreciation of their respective currencies against the US dollar. It can be observed that the currencies of the main emerging markets peaked shortly before gold during the summer and that afterwards they have been moving closely to each other. Some investors claim that emerging market growth has reached a low-point and that it will continue to move higher during 2013. Others expect a 5% foreign exchange appreciation in emerging market currencies versus the US dollar. This would break the emerging market currencies out of the ranges they have been trading since September 2011. These factors are expected to further continue supporting gold demand. In terms of price, moderate gains are expected — gold should reach \$1,800 per ounce by the third quarter of 2013.

#### Investment flows into commodities

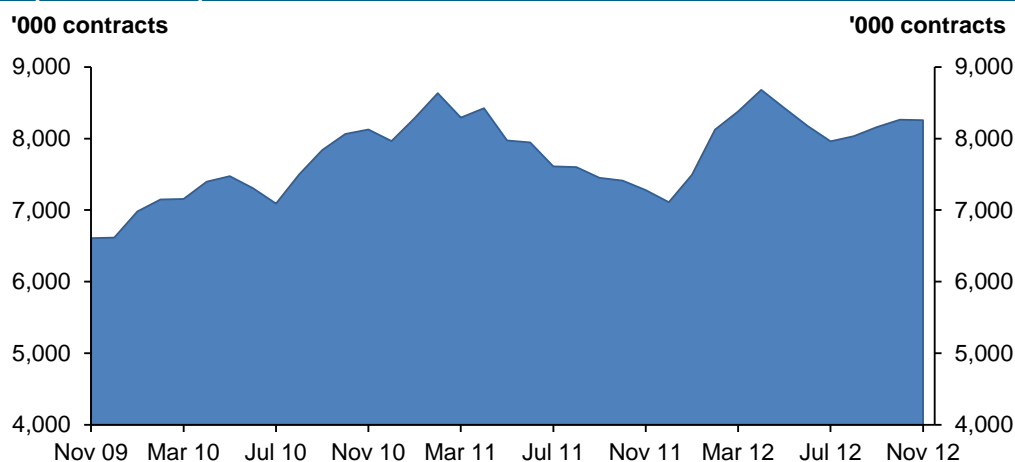
The **total open interest volume (OIV)** in major commodity markets in the USA declined slightly to 8,255,908 contracts in November from 8,262,448 contracts in the previous month. Except for livestock, all market groups posted declines.

As in previous months, a bearish investor mood continued in most commodity markets amid the uncertainties about the health of global economic growth.

Total net length speculative positions in commodities declined by 25.6% m-o-m to 781,477 contracts in November from 1,050,918 contracts in the previous month. Money managers' long positions posted a 7.5% m-o-m fall to 1,653,782 contracts, while short positions boomed by 18.5 % m-o-m to 872,305 contracts.

*Investors remain cautious, due to macroeconomic concern*

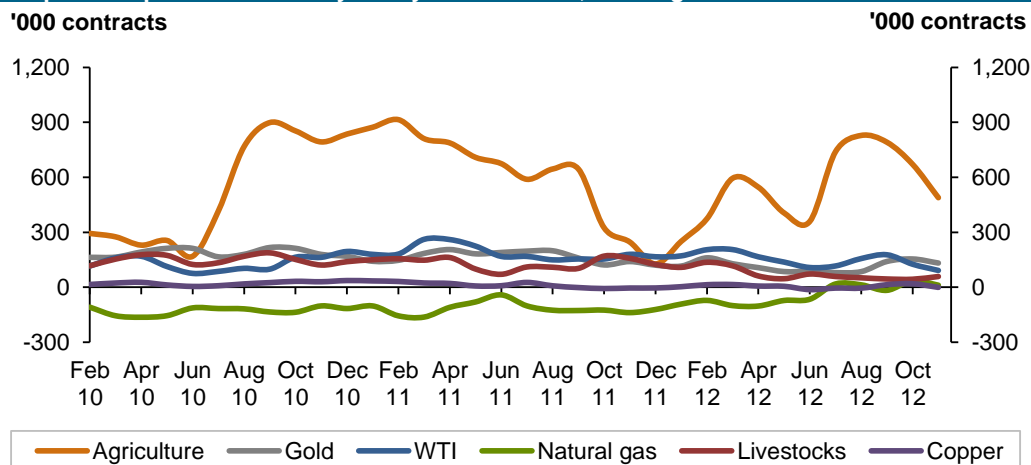


**Graph 2.3: Total open interest volume**

Source: US Commodity Futures Trading Commission.

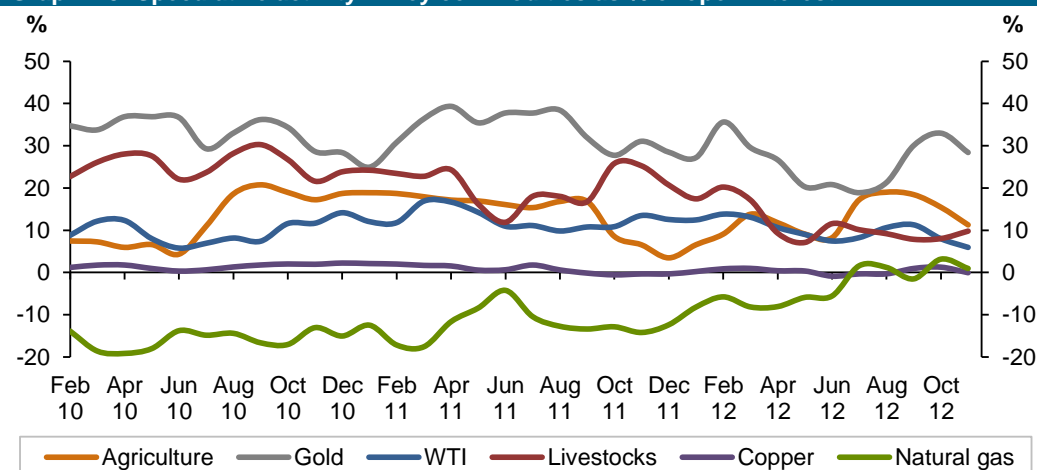
The **agricultural** OIV posted a mild 0.1% drop to 4,336,769 contracts in November. Money managers' net long positions in agricultural markets declined by a further 27.1% (versus 15.3% in October) to 488,767 contracts in November. Short positions rose by 33.2% to 443,586 contracts, while long positions dropped 7.1% to 932,353 contracts.

The **HH natural gas** OIV decreased by 1.7% to 1,161,994 contracts, compared with a 6.9% gain in the previous month. HH natural gas reported a 70.4% fall in money managers' net length to 11,064 contracts in November. This was the result of a 7.4% drop in long positions, combined with a 4% rise in shorts.

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

Source: US Commodity Futures Trading Commission.

The **copper OIV decreased by 1.9% to 150,085 contracts in November, compared with a 4.5% gain in the previous month.** Speculative investment in copper fell to minus 741 contracts from 19,314 contracts in October. Money managers' net long positions decreased by 27.5% to 30,634 contracts, while shorts jumped by 36.7% to 31,375 contracts.

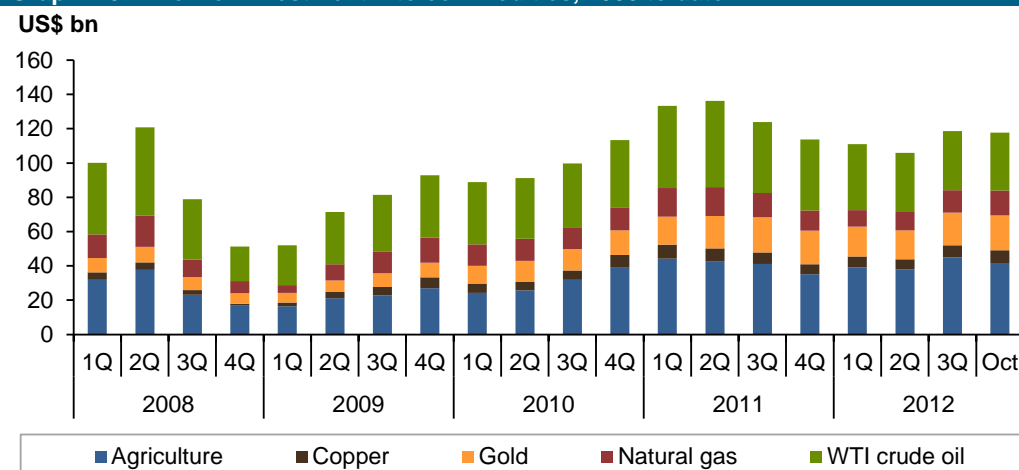
**Graph 2.5: Speculative activity in key commodities as % of open interest**

Source: US Commodity Futures Trading Commission.

The **gold** OIV dropped by a mild 0.6% to 465,104 contracts in November, compared with a 0.1% drop in October. Strategic investment in gold posted a 14.4% drop to 132,087 contracts, compared with a gain of 9.6% in the previous month. A 13.4% decline in long positions, with no change in shorts, took place.

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

	Open interest		Net length			
	Oct 12	Nov 12	Oct 12	% OIV	Nov 12	% OIV
Crude Oil	1,571	1,544	126	8	92	6
Natural Gas	1,182	1,162	37	3	11	1
Agriculture	4,342	4,337	671	15	489	11
Precious Metals	608	611	188	31	163	27
Copper	153	150	19	13	-1	0
Livestock	546	598	44	8	59	10
<b>Total</b>	<b>8,402</b>	<b>8,402</b>	<b>1,084</b>	<b>13</b>	<b>812</b>	<b>10</b>

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

Source: US Commodity Futures Trading Commission.

During the last few weeks, it seems that investors have shifted their attitude towards risk to a slightly more positive one. The US dollar is weaker, the Chicago Board Options Exchange Market Volatility Index (VIX or 'fear index') has fallen to the lowest levels of the year, and the S&P500 is up by around 5% since the low point in the middle of November. Nevertheless, since the US fiscal cliff issue has not been settled yet and since many problems in Europe remain unsolved (for instance, a possible request for financial aid from Spain), investors continue to be cautious about the macroeconomic environment. Negative macroeconomic headlines, even in markets with strong fundamentals, can have a negative impact on commodity price trends. Therefore, until the year-end, results are expected to fluctuate in choppy trading. During the next few weeks, prices might fall, while increases are expected for early 2013.

The evidence that China's economy has reached a bottom point is one of the factors positively affecting attitudes to risk — especially for base metals.

While copper prices have seen a 4% improvement from their low levels, the smaller and more volatile base metals, such as tin and nickel, have shown more impressive gains of about 8–9%. Conversely, most of the reported price gains have slight backing from individual market fundamentals and come mainly from short-covering and, to some extent, a more positive macro-environment.

Regarding commodity investment flows in recent months, gold seems to have become the main driver of commodity investments. Index investors have started to withdraw funds again.

# World Economy

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

	World	OECD	US	Japan	Euro-zone	China	India
2012	3.0	1.4	2.2	1.6	-0.4	7.6	5.5
2013	3.2	1.4	2.0	0.6	0.1	8.0	6.6

## Industrialised countries

### US

*US economy relatively resilient, with 3Q GDP at impressive 2.7%. Growth forecast unchanged at 2.2% for 2012 and 2.0% for 2013*

The US economy remains relatively resilient and the third-quarter GDP performance was at an impressive 2.7% growth rate, compared with a rather low level in the second quarter of 1.3%. While most indicators recently allowed the conclusion of a slight rebound of the economy, the latest slowing in some of the lead indicators highlights that the economy remains fragile. This could also reflect the uncertainty ahead about a solution to the 'fiscal cliff' issue, which is holding back investment, as can also be seen in the diverging trend of capital expenditure in the USA vis-à-vis the positive trends in the labour market.

The GDP figures for the third quarter of 2012 (3Q12) offer some surprises, which have been confirmed by the latest GDP-assessment. After more than two years of negative quarterly Government spending, this suddenly jumped by 3.5% in 3Q12. The majority of this increase came from the federal budget, which increased by 9.5% on a quarterly base, by pushing up defence spending by 12.9% quarter-on-quarter (q-o-q) and non-defence spending by 3.0%. This led to a contribution of Government spending of almost 0.7% percentage points (pp) to the 2.7% quarterly growth, with the majority coming from the defence side, which contributed 0.64 pp. Since the Government had held back on spending in recent years and suddenly — in the run-up to the recent elections — seemed to spend more on the easy-to-fund defence item, the coming GDP figures would again seem to require some room on the downside because 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. Adding to an expected slowdown in 4Q12 are the potentially negative effects of Hurricane Sandy, which hit the east coast at the end of October. The major uncertainty, however, remains with how the issue of the fiscal cliff — a mix of spending cuts and expiring tax cuts — will be addressed, as it seems that businesses remain reluctant to invest heavily in such an environment of political uncertainty. This current uncertainty, combined with the fiscal issues, may lead to muted growth next year, which is expected to be below this year's level. If, on the other hand, agreement on the fiscal cliff issues is found relatively soon and the newly elected administration is able to provide some confidence to business about its future handling of the economy, this could unleash some of the spending that is currently being held back.

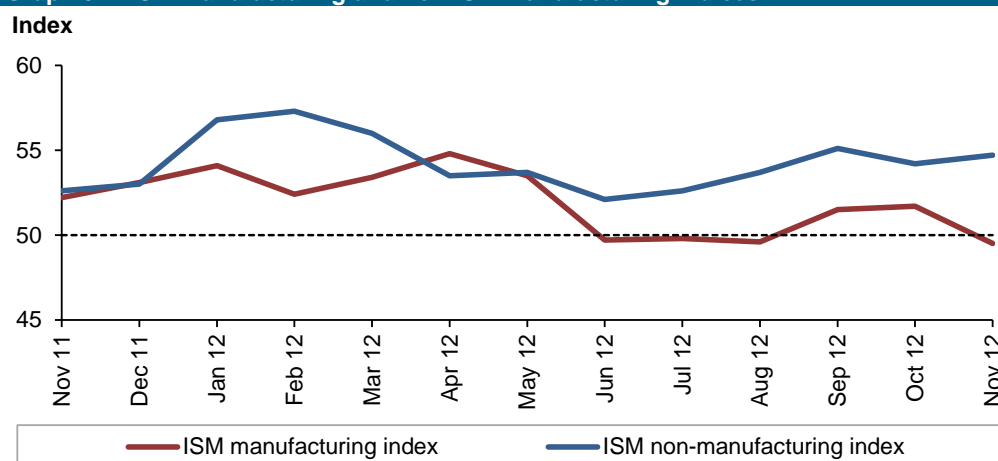
The relatively high level of sovereign debt will certainly remain a topic of discussion for some time to come, considering that the debt ratios are among the worst in the developed economies, with a US budget deficit for 2012 of 8% and a gross debt-to-GDP ratio of 107%, according to the forecast of the International Monetary Fund (IMF). It is clear that the US Administration will need to bring down the debt pile, which in any case will continue to have an impact on GDP growth levels in the coming years. If, therefore, considering a 30-year average growth rate of the US economy of around 2.5% and growth potential of up to 4% per annum, the current level of around 2.0% growth, as in 3Q12, seems to be a reasonable figure that — given the fiscal drag — will not have much upside currently, even when considering the improvements in the labour and housing markets, as the two major branches of private household spending accounting for around two-thirds of the economy.

In the meantime, the labour market — despite being a lagging indicator — has offered some bright spots. Unemployment fell to 7.7% in November, compared with last month's figure of 7.9%. This is the lowest figure since January 2009, shortly after Lehman went bankrupt. Job additions in the non-farm payroll area continued at 146,000. The private sector added 147,000 in November, slightly lower than the October level of 189,000. The share of long-term unemployed also fell, to reach 40.1% in November, after it had risen to 40.6% in October. On the more negative side, and potentially a reason why the improving

labour market seems to have had only a small impact on lifting GDP, is that the participation rate is still relatively low at 63.6%, less than the 63.8% of October. Furthermore, earnings increases have come down consecutively over the past 12 months. With slight improvements in the labour market, consumer confidence has held up well. The consumer confidence index of the Conference Board rose again in November to 73.7, after an already considerable rise in October to 73.1, from September's 68.4. This is not only the highest level so far this year, but also the highest since March 2008. However, some momentum is fading, as monthly retail sales figures fell by a small margin of 0.3% in October.

Industrial production continues to expand on a yearly base, but at a lower rate. It grew by 2.1% in October, after 3.4% in September. Manufacturing orders rose strongly again and pointed to higher production figures when they increased by 3.0% y-o-y in October, after a rise of 1.8% y-o-y in September. However, some slowing of the momentum has been noted in the latest figures from the Institute of Supply Management (ISM), which provides the main purchasing managers' index (PMI) for the US economy. The ISM figure for the manufacturing sector in November stood at 49.5, just below the growth-indicating level of 50 and significantly below the 51.7 of October. In contrast, the ISM for the services sector increased to 54.7 in November from 54.2 in October, pushing the composite index slightly higher in November to 54.1 from October's at 53.9.

**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 5.2% in October, after rising by a slight 0.3% in September, 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 has continued its rising trend with a monthly price increase of 4.4% in September, after 4.8% in August and 3.9% in July.

So, considering that the most recent improvements have been slight, mainly with fiscal and monetary support, and that many, primarily political, uncertainties that could have a significant impact prevail, the growth forecast remains unchanged at 2.2% for 2012 and at 2.0% for 2013. If, however, some more evidence becomes available of a positive solution to the fiscal issues, this could have some support and raise the growth forecast accordingly to a slightly higher level.

*Japanese economic growth rate for 2013 revised down to 0.6% from 1.1%, after significant decelerating trend in 2012*

## Japan

The Japanese economy continues to decelerate significantly from the impressive recovery-induced growth level of the first quarter of this year (1Q12) at 5.3% seasonally adjusted annualized growth. The latest revised figures suggest that that should be the highest quarterly growth rate for some time. This is after 2Q12 growth fell to 0.3% and 3Q12 dropped well below zero at -3.5%. These developments were triggered by further declining exports and soft domestic demand. Moreover, lead indicators like orders do not point to a recovery anytime soon. This makes it almost certain that the economy will grow at a much lower rate next year, after this year's disaster-driven recovery. The reasons for this continued softening of the economy have been manifold. Exports have been affected by political tensions with China, the Euro-zone's continued deceleration and the still relatively low demand from the USA, and these factors, together with slowing domestic demand — after consumer incentives ran out — have been pushing economic activity lower. Added to this, the high sovereign debt level of the economy and consequently the political standstill on the decision about a further stimulus package do not offer much room for an early strong recovery.

Elections have been set for 16 December and it now seems unlikely that the present Government will be supported by the electoral vote, with the country's Liberal Democratic Party (LDP) being ahead in the most recent polls. Along with this, the expectation had built up that there would be a further monetary stimulus, because the LDP supports this strategy. However, as the past has shown that the monetary route is not necessarily successful in terms of growth, it remains to be seen whether this has any significant impact. What it could do, however, and it is the aim of the LDP's leaders to pursue such a strategy, is to increase inflation, since the economy has been facing deflation for most of the past 17 years. The fight against deflation has been made into a core-topic by the LDP. It has called for unlimited monetary easing from the Bank of Japan to achieve an inflation target of 2%. Working together across all parties, however, would be necessary, because a victory for the LDP in the lower house elections would still leave Japan with the problem of a hung Parliament, since the currently leading Democratic Party of Japan is the largest party in the upper house. Overall, the elections in Japan, in combination with the newly installed leadership in China and the upcoming elections in South Korea, could have a profound impact on the near-term political landscape covering these three economies.

Exports continued to fall in October, dropping by 6.5% year-on-year (y-o-y), which was slightly better than the September figure of -10.3%, which in turn had been the steepest fall since April 2011; nevertheless, this constitutes the fifth consecutive month of decline in this very important area. While imports also fell, by 1.5%, the trade balance remained negative at 551 billion yen on a non-seasonally adjusted base. Export-dependent Japanese manufacturers have also struggled to contend with the effects of the yen's sharp rise in value. And so the most recent decline in the value of the yen, which again pushed it above the ¥80.0/\$ mark, could come as light relief. However, leading indicators are not too encouraging for the coming months.

On top of this, retail sales fell by 1.2% y-o-y in October, which was much worse than the September level of 0.4% and the largest decline for almost a year. This decline came after a strong August figure of 1.8% y-o-y, when there was still support from consumer incentives. Industrial production continued its slide, declining by 6.8% y-o-y in October, which was the same rate as in September, which in turn had followed a decline of 4.7% in August. The indications for future production also point to a continued deceleration, with machinery orders — as a lead indicator for industrial output in the coming months — declining by 7.6% y-o-y in September, after a drop of 5.6% in August. The Purchasing Managers' Index (PMI) for manufacturing fell again in November and remained below the growth-indicating level of 50 for the sixth consecutive month at 46.5, compared with 46.9 in October. However, the services sector PMI offered some brighter reading at 51.8 in November, the first time it had been above 50 since April and indeed the highest level it had been since then. This pushed up the composite PMI to almost the 50 mark, standing at 49.9 in November.



*Euro-zone decline less than expected in 3Q12. 2012 growth forecast up slightly to -0.4%; 2013 still at 0.1%*

Despite the current lacklustre momentum of the Japanese economy, there is the possibility that it could gain some momentum again in 2013, if the country's major trading partners continued to recover and if the disputes with China could be solved. Given the GDP-revisions of the first two quarters and the lower-than-expected growth in 3Q12, GDP growth expectations have been revised down from 2.2% to 1.6% for this year and from 1.1% to 0.6% in 2013.

### **Euro-zone**

Some improvements in the Euro-zone's economy led to a lower-than-expected decline in the third quarter. This momentum to the upside came from a relatively low level of economic activity, even though growth remains in negative territory at least for this year; but an improvement in global trade and a further rise domestic demand could provide the basis for at least slight growth in the coming year. In the meantime, more pessimistic views on next year's growth have been published. The latest forecast from the OECD Secretariat assumes next year's growth rate in the Euro-zone at only -0.1% and the European Central Bank's (ECB) most recent forecast presents a figure of -0.3%, while the Bundesbank has revised down its forecast for Germany to only 0.7% for this year and 0.4% for 2013.

One of the recent support factors has been the announcement of the ECB's Outright Monetary Transaction programme (OMT), which has been able to push down the sovereign debt rates of the ailing economies, including Spain and Italy, to lower and more reasonable levels. Moreover, emergency facilities for economies which deal with sovereign debt issues have been implemented, and these should provide some relief too. This, in combination with improving global trade, has provided some support factors to a gentle rebound from this year's trough levels. It is obvious that many challenges remain for 2013. However, the measures that have been undertaken to improve the economic situation should provide some support for growth in the coming year.

While Euro-zone leaders have agreed on a compact for growth in mid-year, the recent summit in October and the meeting of the Finance Ministers in November have not supported this strategy at large. The diverging views among members on how, in detail, to allow the European Commission to control mainly the fiscal side and the banking system seem to be too big at the moment. Without the implementation of the necessary harmonization of the fiscal side, it is not clear how the Euro-zone will be able to manage its crisis in the long term. The recently announced support by the European Central Bank will not be enough and, if the situation in the peripherals and particularly in Spain and Italy worsens again, a continuation of the recession seems possible next year and its consequent impact on the global economy might be felt again. Most importantly, the Euro-zone — as has been pointed out on several occasions recently, including by the International Monetary Fund (IMF) — needs to move back into solid growth territory in order to be able to pay back the debt it has accumulated. It should be able to do so, given its strong industrial base in the more advanced economies, as well as via transfers and support for building up a growth base in the peripherals, but political deadlock — at least currently — is not pushing the agenda forward.

Spain's ten-year Government bond yields have fallen from average peak levels of 6.8% in July to 5.6% in October. It is still not clear whether Spain will apply for the support of the emergency umbrella of the Euro-zone, because it currently seems that its intention is to sidestep a bailout. This could end up in an even worse situation as yields might rise quickly in a once 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. Therefore, if yields move back to more elevated levels, the result for the economy could mean a worsening of the present situation, and a request for the support package would be inevitable.

The ECB has again kept its key policy rate at 0.75% at its December meeting, but, with a continuation of the slowdown, it might reduce the rate further to 0.5% in the coming months. Such a rate-cut might be triggered also by the dire situation in the credit sphere. Lending by financial intermediaries to the private sector has been

negative since the beginning of the year and it reached the highest decline on record on a yearly basis in September at  $-1.1\%$ . This decline was even bigger than that of September 2009, when Lehman Brothers went bankrupt. The October figure is slightly better, but still deep on the negative side at  $-0.7\%$ . Mortgages generally have picked up and increased by  $1.2\%$  year-on-year (y-o-y), compared with  $0.2\%$  in September. Credit to non-financial corporations in the Euro-zone declined by a stunning  $2.5\%$ , a new record low this year. This is hardly supportive at a time when industrial production is decelerating and leading indicators — although improving slightly — point to a continued deceleration.

For the time being at least, the debt issues seem to be contained somehow and the real economy — while still in negative territory at large — seems to improve slightly. With better-than-expected third-quarter (3Q12) growth and a better purchasing managers' index (PMI), there is the possibility that 2013 will improve on this year. However, after reviewing the latest trend for industrial production, it becomes clear that the situation remains fragile.

Industrial production has declined for 11 consecutive months, reaching its largest figure in September at  $-2.9\%$  y-o-y, following  $-2.1\%$  in August. The main indicator of future developments with production — the PMI — points to some improvement in the near future, while still highlighting the negative trend, since the figure remains below the growth-indicating-level of 50. The latest PMI figures for manufacturing, published by Markit, stood at 46.2 in November, up from October's 45.5. The PMI for the services sector also improved, to stand at 46.7, from 46.0 in the previous month. This gentle positive trend has lifted the composite PMI to 46.5 from 45.7. 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 industrial activity has led to another record unemployment rate of  $11.7\%$  in October. As has frequently been the case in recent years, Spain again has the highest rate at  $26.2\%$ , with youth unemployment at an exceptional  $55.9\%$ . This compares with Germany's lowest recent rate of general unemployment of  $5.4\%$ , reflecting the differences in the strength of the economies within the Euro-zone. Youth unemployment for all this region stood at  $23.9\%$ , also a new record. Consequently, retail trade growth has been negative now for every consecutive month for more than a year, with the latest figure for October declining by  $2.8\%$  y-o-y, the largest fall since September 2009.

Considering the severe challenges that the Euro-zone economy is facing, the low level of decline raises hopes that the economy might move into positive territory in the coming year. However, this positive assessment will need to be reviewed in the first quarter, after the current quarterly performance is completed, allowing the leading indicators to offer a better perspective on the performance in 2013. In the meantime, the forecast for 2013 remains at  $0.1\%$  growth, while that for 2012 has been revised up by a slight  $0.1\%$ , from  $0.5\%$  to  $0.4\%$ .

## Emerging markets

China's economy is showing signs of reviving after a mid-year slump. Industrial production, retail sales and exports all accelerated in October, and the authorities took steps to boost liquidity in the economy. Recent data, however, offer some encouragement that the industrial production cycle may now be turning, at least in China, which should act as a bellwether for the rest of the region. After stabilising in September, industrial production, investment and retail sales picked up in October (EIU, December 2012). Growth in Latin America is forecast to slow to  $2.6\%$  in 2012, down from  $4.4\%$  in 2011. Activity in the region has been adversely affected by the debt crisis and recession in the Euro-zone, as well as slower growth in China and the sluggish performance of the US economy. A growth rate of  $1.5\%$  is forecast for Brazil, which is weighing on regional as well as EM growth this year. Adjustments have been made in the 2012 and 2013 growth forecasts for Eastern Europe following revisions to our Euro-zone growth forecasts. Economic growth in the Middle East and North Africa will be constrained in 2012 in anticipation of economic stagnation or even contractions in several economies of the region. However, high oil prices and somewhat higher output will sustain strong rates of growth in the oil producing countries.

*Despite modest improvements in economic performance in OECD and emerging markets, recovery remains weak*



**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	5.4	5.3	-52.1	-62.0	-2.5	-1.8	54.8	52.9
<b>China</b>	7.6	8.0	2.7	3.3	220.2	204.5	-2.3	-2.1	16.4	16.8
<b>India</b>	5.5	6.6	9.3	7.6	-66.1	-67.7	-6.0	-5.4	50.9	51.0
<b>Russia</b>	3.7	3.4	6.7	5.9	86.6	60.1	-0.3	-0.6	7.5	7.6

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

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

### Brazil

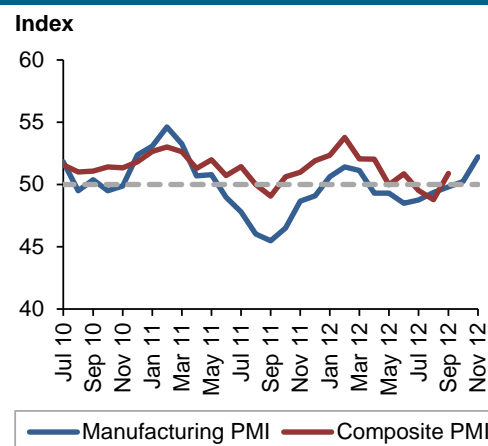
*Successive interest rate cuts have led to a sharp drop in banking profits, changing Brazil's banking environment*

The weak global environment continues to have a negative impact on emerging markets across the globe, including Latin America. Latin American growth will slow for a second successive year in 2012. However, it is widely accepted that the recent slowdown in Latin America is a cyclical rather than structural phenomenon as fundamentals in these economies remain strong. However, according to the 2013 "Doing Business" report released by the World Bank, Latin America continues to lag behind most of the world in the quality of its business environment. Amongst the 33 countries included, not one make the top 20 in the 2013 report. The best regional performer is Chile, which is ranked 37<sup>th</sup> out of 185, and only another handful of economies are in the top 50 (Puerto Rico, Peru, Colombia and Mexico are ranked 41<sup>st</sup>, 43<sup>rd</sup>, 45<sup>th</sup> and 48<sup>th</sup>, respectively). Brazil, the region's largest economy, also remains a difficult place to do business from a regulatory point of view, despite two decades of market reforms. The country ranks 130<sup>th</sup>, losing some ground from 2012 in the general rankings.

Third quarter results for the biggest banks illustrate a rapidly changing environment for banking, in the wake of the unprecedented policy easing cycle implemented by the central bank, which has cut the benchmark interest rate from 12.5% in August 2011 to 7.25% in October 2012. The latest results show a sharp drop in the return on equity of Brazil's two largest private banks. The government and the central bank have indicated their intention to maintain the Selic rate at 7.25% for a sufficiently prolonged period. It is claimed that two structural changes justify sustained low interest rates in the economy; a fall in Brazil's neutral interest rate — the rate consistent with a monetary policy stance that is neither expansionary nor contraction — and a decline in the non-accelerating inflation rate of unemployment (NAIRU). The impact of the changing environment is already evident in bank's profitability. This policy change, if sustained, could lead to increased lending in sectors where previously financial institutions were reluctant to operate. Housing and real estate are such sectors. Lower interest rates could sustain Brazil's housing boom which began in 2007.

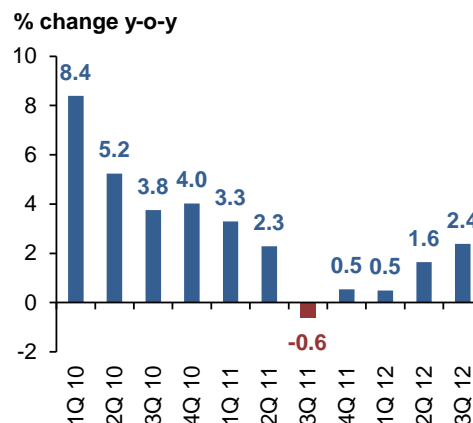
The government defeat over its proposed changes to the oil royalties bill in Congress has again exposed the limited influence of the administration of president Dilma Roussef in Congress. The controversy over oil royalties has intensified since large oil reserves were found off the Brazilian coast in recent years. Finding the best way to share the new potential wealth has led to a fierce battle in Congress between oil producing states and other states that do not produce oil but want greater resources.

Graph 3.2: Brazilian PMI



Source: HSBC, Markit and Haver analytics.

Graph 3.3: Brazilian GDP growth (SAAR = seasonally adjusted annual rate)



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

*Emphasis on economic reforms under new Chinese leadership, amid strong macroeconomic performance in November and rising industrial profits*

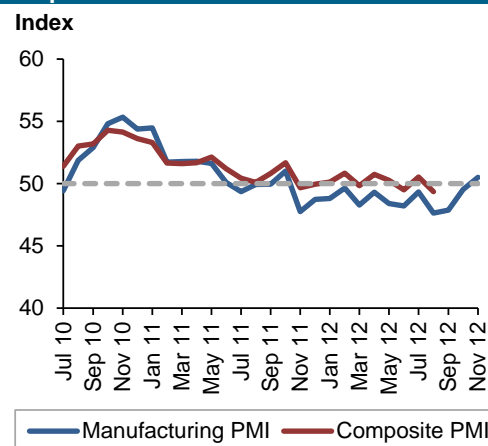
## China

The strong call for reform issued last week by premier-designate Li Keqiang, who acceded to number two in the Communist Party's new Politburo Standing Committee in mid-November, was the first clear affirmation that the administration of Xi Jinping, appointed as the Party's General Secretary, intended to push through significant changes over the next decade. Mr. Li is quoted as saying "reform is still the biggest bonus for China. We have benefited from reform in the past 30 years. We have to march on as there is no way back...we have to face challenges and break all the systematic obstacles that block scientific development." Such words are clearly a sign of new leadership and have a clear message to push for ground-breaking reform aimed at creating a mature, market-oriented economy (FT, China Confidential, 29 November 2012). Continuing in this reformist vein, Mr. Li has said recently that the Chinese economy would be further opened to foreign companies, thus bringing more opportunities for cooperation between China and other countries.

Aside from policy signals, the real economy appears to have performed strongly in November, with manufacturing activities rising significantly. Several other readings reinforced a sense of robust activity in real estate. Home transactions in 54 major cities reached 236 units in November, posting month-on-month growth of 30.6%. According to the China Index Academy, in the week to 18 November, 36 of 40 monitored cities saw home transactions go up y-o-y with the northeastern city of Harbin posting the biggest rise of 971.7%. Meanwhile, in spite of the obvious rebound in the economy in October and November and given the expectation that this robust phase will carry through to December and the start of 2013, inflationary pressures remain fairly subdued.

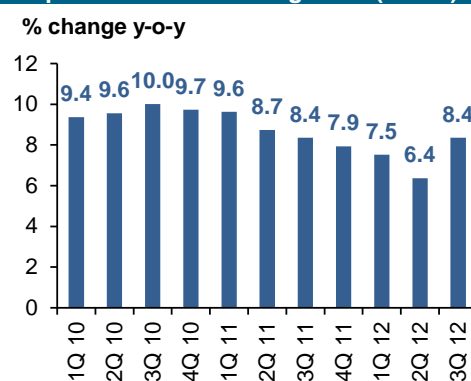
China's macroeconomic indicators have improved in recent months, helping industrial profit to turn around. Not only did total industrial sales revenue grow to 10.3% compared to one year ago but total industrial profits rose 0.5% over the first 10 months of the year (JP Morgan, November 2012). Among the major industrial enterprises, industrial profits in the state-owned sector fell 9.2% during January-October, while sales revenue rose 5.3% over a year ago. On the other hand, industrial profits at domestic private enterprise continued to outperform, up 17% over a year ago in October, with sales revenue rising 16.8% y-o-y. For much of this year, the weakening in corporate earnings has been as one of the significant constraints on corporate capex and overall fixed investment growth. In addition to improving signs from the bottom up, enterprise level sales and profits data, we have observed some early signals that the corporate sector's de-stocking process is likely near an end, as suggested by the stabilization in the manufacturing PMIs finished goods inventory component in recent months (JP Morgan, December 2012).

Graph 3.4: Chinese PMI



Source: HSBC, Markit and Haver analytics.

Graph 3.5: Chinese GDP growth (SAAR)



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

## India

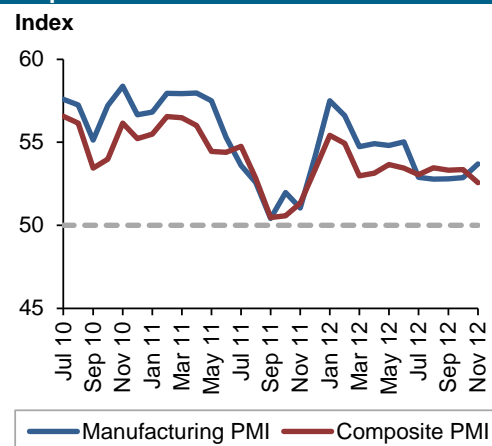
*India's fiscal reform improves economic growth prospects in medium-term but elevated inflation could prevent cuts in budget deficit in short-run*

India's economy decelerated for a fourth successive quarter in 3Q of 2012, signaling a downward move toward the long term trend of the country's economic growth. Agricultural production is likely to suffer further on account of the sub-par monsoon, while government spending will be restrained by a shortfall in revenue. On the other hand, infrastructure investment is likely to get a much needed boost as the government finalizes plans for the National Investment Board. Exports also are believed to increase in coming months on the back of slowly improving global economy. However, a main obstacle in the way of public investment expenditure to boost aggregate demand has been the huge budget deficit that amounts to 6% of GDP in 2012. The government has stepped up effort to rein in budget deficit but reducing the budget deficit in the short run could be hard to achieve. Although policymakers as well as lawmakers are increasingly concerned about a ballooning budget deficit and its adverse effects on economic growth, it is obvious that elevated inflation levels would make it very difficult to push for bold and far-reaching fiscal reform, including raising the subsidized fuel prices and privatization of government-owned companies in the short-term.

According to the EIU (December 2012) non-seasonally adjusted factory output contracted by 0.4% y-o-y in September. India's industrial production data are subject to revision and should therefore be read with some caution. Capital goods output declined by 12.2% y-o-y, marking a slight improvement over the average contraction of 13.2% in the earlier quarter. High nominal interest rates continue to deter capital investment and persistent inflation means that the central bank is unlikely to ease monetary policy. Although investor and business sentiments received a boost from a recent bout of economic reform, these measures are yet to be enacted in full.

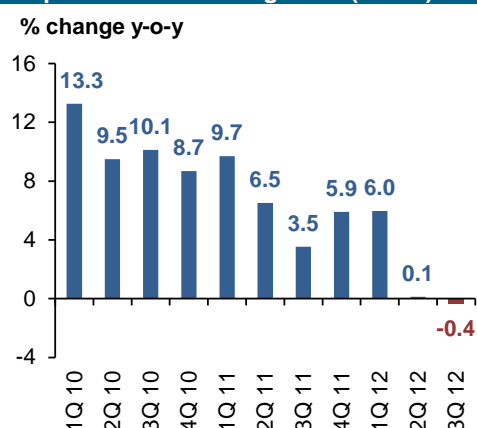
The government is aiming for a budget deficit of 5.3% for the current fiscal year and to reduce it to 3.0% by fiscal year 2016/17. Although the fiscal consolidating plan lacks details, analysts see the move as a step in the right direction. The central bank has called for credible deficit reduction before it will consider further interest rate cuts. However, the central bank did reduce bank's required ratios to make more liquidity available for investment and expansion of economic activities. With wholesale inflation accelerating to 7.8% y-o-y in September, reaching a 10-month high, there is limited scope for further monetary easing. Our estimate for Indian economic growth for this year is thus downgraded to 5.5% from the previous 5.7%; and considering the huge potential of the economy, we think it could rebound to higher rate of growth approaching to 6.6% next year.

Graph 3.6: Indian PMI



Source: HSBC, Markit and Haver analytics.

Graph 3.7: Indian GDP growth (SAAR)



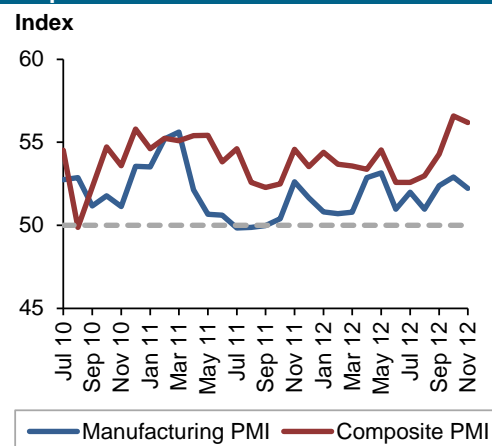
Source: Central statistical office of India and Haver analytics.

*Russia's economic growth falls to lowest rate since 2009 amid drop in investment and slowing domestic demand*

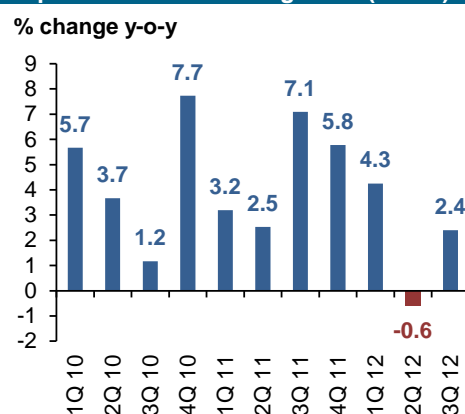
## Russia

The Federal Statistical Services has announced a 2.9% GDP growth in Q3 on a y-o-y basis. This is the slowest rate of growth since 2009. In September, agricultural output contracted 7.7% as severe drought left crops depleted. In addition, fixed capital investment dropped for the first time in 18 months, as a slowdown in China and recession in Europe persuaded many firms to scale back spending. Household purchasing power was hit by a pickup inflation throughout Q3, as reflected in a drop in retail sales growth. The October PMI survey for services also advanced to 57.3 from 54.5 in September despite a fall in export orders indicating that this sector might be regaining momentum as the economy enters Q4.

The Russian central bank has held the refinancing rate at 8.25%, following a 25 basis points rate increase in September. It seems that recent downbeat readings on the economy discouraged further monetary tightening. A slowdown in inflation to 6.5% in October also influenced its decision. However, the cost of food may rise on the back of a poor grain harvest, which could keep consumer price increase above 6.0% over the next six months. Meanwhile domestic demand continues to decelerate with real investment falling year on year. A range of data released in September confirms that domestic demand growth is decelerating as rising inflation erodes the purchasing power of consumers. As a result, real wages growth slowed to 6.6% y-o-y in September from 11% in the first half of the year. Retail sales volumes increased by 4.4% on annual basis. The economics ministry has blamed monetary tightening by the central bank for the slowdown in demand growth. A sharp reduction in loan growth and rise in the cost of borrowing have contributed to the decline in investment. However, the domestic demand trend has yet to have a significant impact on output. The latest trends in demand make it more likely that the central bank may keep interest rate on hold in the near future (EIU, December 2012).

**Graph 3.8: Russian PMI**

Source: HSBC, Markit and Haver analytics.

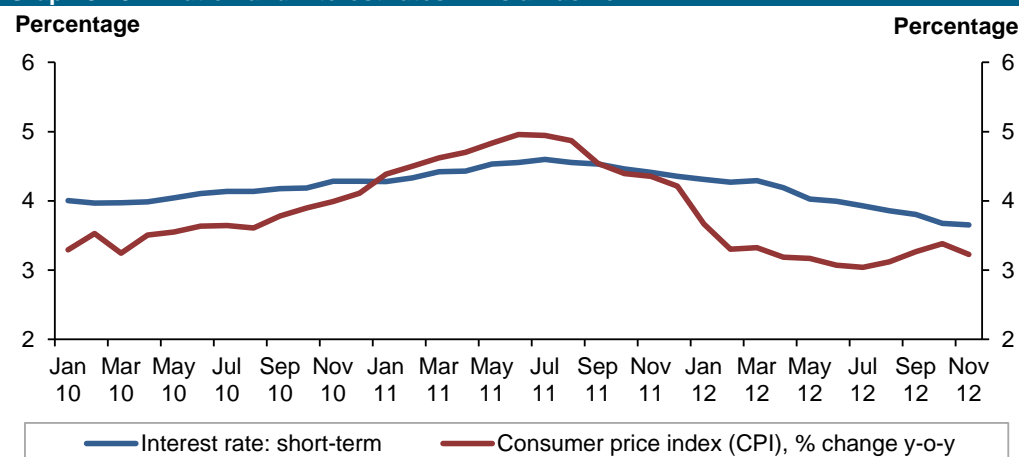
**Graph 3.9: Russian GDP growth (SAAR)**

Source: Federal State Statistics Service and Haver analytics.

*Emerging signs that industrial sector in Asia Pacific is improving*

### Asia Pacific

There are increasing signs that the Asia Pacific's manufacturing sector is slowly taking a turn for the better. In Indonesia, manufacturing activity continues to grow, but a bit more slowly, with the HSBC's PMI registering 51.5 last month, compared with 51.9 in October. In Vietnam, the sector started to expand in November, with the PMI picking up to 50.5 from 48.7 in October; this was its highest level since September. Thailand's industrial production surged by 36.4% year-on-year (y-o-y) in October; this impressive growth rate primarily reflected the base effects from last year's flooding. According to newly released official data, Vietnam recorded a modest US\$50 million trade deficit in November, but registered a trade surplus of just over \$1.0 billion during the first 11 months of 2012. In November alone, merchandise exports are estimated to have totalled \$10.20 bn, up 15.2% y-o-y against imports of \$10.25 bn (up 8.8% y-o-y). Inflation, on the other hand, seems to be getting under control after a period of tight monetary policy in the region. In Indonesia, the headline consumer price index (CPI) inflation rate retreated to 4.3% y-o-y in November from 4.6% the month before, signalling that inflationary pressures in the economy remain tame, despite robust growth (the economy grew by 6.3% y-o-y during the first three quarters). This opens an opportunity for monetary authorities to ease their policies, helping stimulate growth next year. As widely anticipated, the Monetary Policy Committee of the Bank of Thailand voted to leave the policy rate unchanged at 2.75% at its regularly scheduled meeting on 28 November. The decision was unanimous and followed a surprise rate cut at the October meeting, which has since been described repeatedly as a one-time "insurance" against external headwinds.

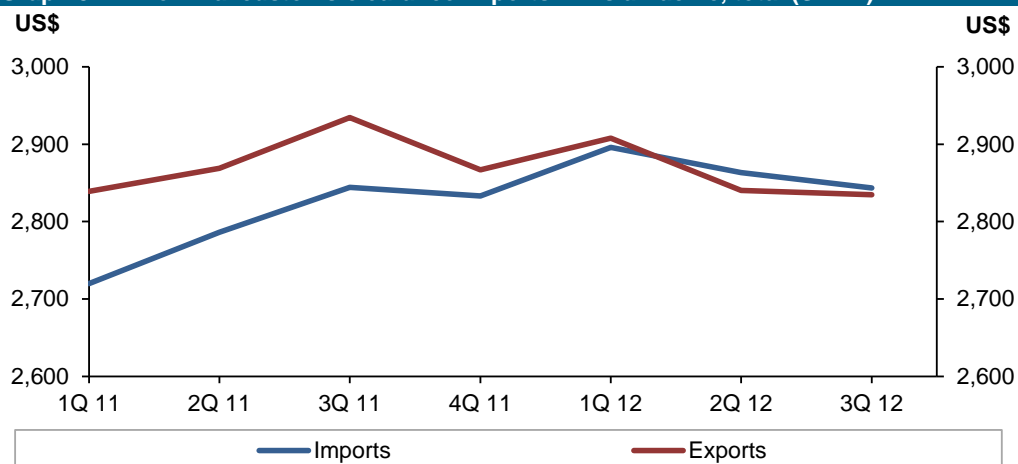
**Graph 3.10: Inflation and interest rates in Asia Pacific**

Source: IHS CERA.

*Inflation coming under control in region after tight monetary policy in 1st half of 2012*

Uncertainties about external demand still threaten recovery in the region. Trade deficits in many countries in 2012 are increasing, as a result of slowing exports to the troubled economies of the USA and Europe, together with a slower-paced China, while imports, albeit tending to go down, are still higher than exports due to robust domestic demand. Hong Kong's merchandise exports fell in October, following a strong rebound in September, as demand from Europe remained weak, while shipments to the USA contracted again.

**Graph 3.11: Nominal customs clearance imports in Asia Pacific, total (SAAR)**



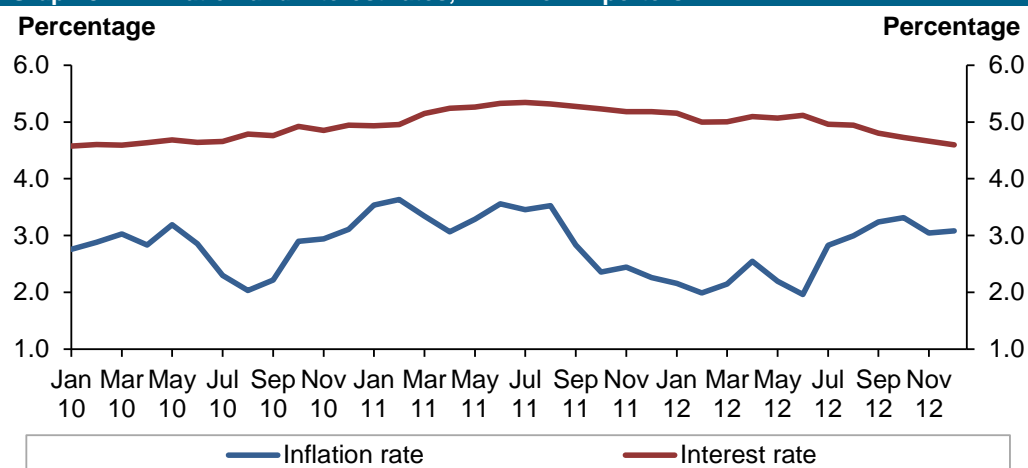
Source: IHS CERA.

*High public spending, with large deficits, expected by MENA importers in 2013*

### MENA

Faced with difficult external and internal environments, growth in the roughly defined MENA region's (Middle East/North Africa) oil-importers — Djibouti, Egypt, Jordan, Lebanon, Mauritania, Morocco, Sudan and Tunisia — will be just above two per cent in 2012. However, most of these countries will witness higher public spending next year to stimulate growth, but at the cost of rising deficits. Tunisia's 2013 draft budget sees Government expenditure rising to 26.6 bn dinars (US\$16.7 bn) in 2013, up from TND 25.4 bn in the supplementary 2012 budget. This represents an increase of 4.7% in state spending. According to the finance ministry, the budget plan is based on economic growth of 3.5% next year, with a projected budget deficit of 5.9% of GDP, down from a gap of 6.6% in the 2012 budget.

Despite the tight monetary policies in the region, inflation has been edging up recently. Morocco's CPI inflation rose 0.6 percentage points to an annual rate of 1.8% in October, led higher by a 2.8% month-on-month (m-o-m) increase in education prices, according to the High Planning Commission. Lebanon's consumer price inflation climbed to 11.2% y-o-y in October, up from 10.3% in September, according to data published in November by the Lebanese Central Administration of Statistics. CPI inflation in Oman, an oil-exporter, rose moderately in September to an annual rate of 2.7%, from 2.4% a month earlier, according to data from the Ministry of National Economy.

**Graph 3.12: Inflation and interest rates, MENA oil importers**

Source: IHS CERA.

*MENA oil importers phasing out energy subsidies to decrease deficits*

On the other hand, Governments in the region are attempting to implement different measures to reduce fiscal deficits, especially in the oil importing countries, such as by cutting energy subsidies, despite widespread public protests. Starting on 14 November, the Jordanian Government has decided to cut subsidies for various staple fuel products. The cost of cooking gas will rise from 6.5 Jordanian dinars (US\$ 9.2) to JOD 10.0 per canister, an increase of more than 50%. Gasoline (petrol) prices will rise from JOD 0.71 to JOD 0.80 per litre, and kerosene and diesel prices are also set to rise. In undertaking these actions, the kingdom is attempting to prevent the fiscal deficit from widening further.

### Subsaharan Africa

The Institute of International Finance says that Sub-Saharan African economies have enjoyed the second-fastest growth rate in the world for the past decade, and this trend looks set to continue. The region is in the midst of 'transformative growth'. It could move from accounting for only 4% of world GDP in 2010 to 7% by 2040 and 12% by 2050. Growth has been fuelled by commodities, but that is changing rapidly as wealth per capita increases and new industries develop. Downside risks are the fragile global recovery and the potential of a slowdown in China.

### Latin America without Brazil

Recent economic indicators from the region highlight the robust recovery of many Latin America countries and the decoupling from economic problems facing Brazil and Argentina. Peru and Chile posted growth of 6.5% and 5.7% respectively in the third quarter, compared with the year-earlier period. Colombia's economy grew by 4.9% during the second quarter, compared with the 2011 period. Mexico's economy grew by 4.2% during the year's first nine months versus the year-earlier period — this was nearly three times the rate of Brazil. However, Argentina grew by just 2.4% in the first half of the year, compared with a year earlier.



*Inflation slightly higher in some OPEC Member Countries recently*

## OPEC Member Countries

The Central Department of Statistics and Information reported that the Kingdom of Saudi Arabia's CPI with base year of 1999=100 witnessed a slightly higher annual inflation rate in October of 3.8%, compared with 3.6% in September. The National Bureau of Statistics has reported that CPI inflation in the United Arab Emirates (UAE) eased to a 0.5% annual rate in October, after holding above the 1% mark in the previous two months. Kuwait's CPI inflation dropped to 1.9% y-o-y in September from 2.8% in August, according to data published by the Central Statistical Office on November. Consumer prices actually grew by 0.2% m-o-m, following 0.1% growth in August, so the large drop was due to favourable base effects, as expected.

After accelerating slightly, in both monthly and annual terms, the rigour of Iraqi consumer price increases lost some steam in October. According to figures released by the Central Organisation for Statistics and Information Technology, CPI inflation increased to 4.8% y-o-y in October, the slowest observed rate since November 2011.

## Oil prices, US dollar and inflation

*US dollar increased against all major currencies in November. After accounting for inflation and currency fluctuations, Basket price fell by 0.3% or \$0.18/b to \$65.87/b from \$66.05/b*

The US dollar increased against all the major currencies in November — by 1.2% against the euro, 0.8% against the Swiss franc and 0.7% against the pound sterling. The performance vis-à-vis the yen was more significant. Here, it gained 2.3% and the yen is now trading again clearly above the critical level of ¥80/\$. It averaged ¥80.792/\$ in November and has moved higher again since the beginning of December, when it reached a level of up to ¥82.50/\$.

The euro-US dollar exchange rate averaged \$1.2820/€ in November. The handling of the fiscal cliff in the USA and the near-term future developments with the Euro-zone's sovereign debt situation will be the two major forces that will influence trading patterns over the coming weeks. Furthermore, while it seems that there is more room on the downside for the euro, the challenges facing the USA to continue expanding at only 2% annual growth amid the fiscal issues and the consequent drag on the currency should not be underestimated.

In nominal terms, the average price of the OPEC Reference Basket fell by \$1.50/b or 1.4% from \$108.36/b in October to \$106.86/b in November. In real terms, after accounting for inflation and currency fluctuations, the Basket price fell by 0.3% or \$0.18/b to \$65.87/b from \$66.05/b (base June 2001=100). Over the same period, the US dollar gained 0.9% against the import-weighted modified Geneva I + US dollar basket, while inflation declined by 0.2%, offsetting the relative effect in the change of the nominal to the real value.\*

\* 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 2012 estimated at 0.8 mb/d

## World oil demand in 2012

Rebuilding efforts in the aftermath of Hurricane Sandy in the USA have contributed to the country's oil demand growth in early December. Not only has US oil consumption grown, albeit slightly, but Indian oil demand has also risen drastically, pushing total world oil use to 90.3 mb/d in December. Cold winter weather would affect mainly middle distillate consumption. Normal year-end winter intensity remains at the level of natural gas use and slightly affecting heating oil demand. This is expected to go hand-in-hand with the world's winter oil demand seasonality. The challenge in OECD economies has had a negative effect on world oil demand. Furthermore, the future economic prospects in both OECD Europe and OECD Pacific remain uncertain. Although there is good news regarding industrial activity in Germany, other areas are producing negative economic signals. While China's economy has shown signs of stagnation in the past few months, the December data suggests a better performance. Furthermore, the transportation sector is expected to see an inching-up of fuel consumption during the holidays. World oil demand growth in 2012 is estimated at 0.8 mb/d, to average 88.8 mb/d. There are no major differences to the last Monthly Oil Market Report (MOMR).

Graph 4.1: Regional shares in diesel consumption 2012

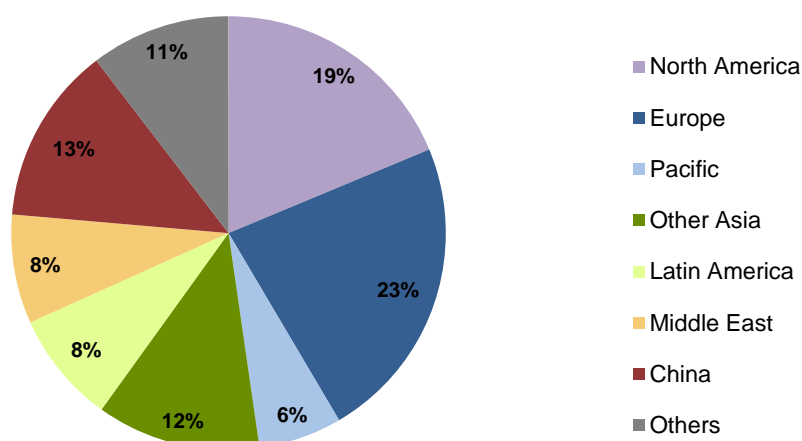


Table 4.1: World oil demand forecast for 2012, mb/d

	2011	1Q12	2Q12	3Q12	4Q12	2012	Change 2012/11	
							Growth	%
North America	23.73	23.21	23.47	23.53	23.72	23.48	-0.25	-1.04
Western Europe	14.28	13.69	13.73	13.90	13.84	13.79	-0.49	-3.45
OECD Pacific	7.87	8.83	7.78	7.94	8.39	8.23	0.36	4.63
<b>Total OECD</b>	<b>45.88</b>	<b>45.73</b>	<b>44.98</b>	<b>45.37</b>	<b>45.94</b>	<b>45.51</b>	<b>-0.37</b>	<b>-0.81</b>
Other Asia	10.46	10.51	10.79	10.94	10.83	10.77	0.30	2.91
Latin America	6.37	6.26	6.48	6.73	6.66	6.53	0.16	2.55
Middle East	7.57	7.73	7.69	8.11	7.73	7.82	0.25	3.29
Africa	3.36	3.37	3.39	3.28	3.43	3.37	0.01	0.25
<b>Total DCs</b>	<b>27.76</b>	<b>27.87</b>	<b>28.35</b>	<b>29.05</b>	<b>28.65</b>	<b>28.48</b>	<b>0.72</b>	<b>2.61</b>
FSU	4.29	4.24	4.09	4.51	4.72	4.39	0.10	2.39
Other Europe	0.70	0.69	0.65	0.69	0.77	0.70	0.01	0.73
China	9.41	9.45	9.88	9.54	9.97	9.71	0.30	3.20
<b>Total "Other regions"</b>	<b>14.40</b>	<b>14.38</b>	<b>14.62</b>	<b>14.74</b>	<b>15.47</b>	<b>14.81</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	87.86	87.86	89.44	90.01	88.80	0.76	0.86
Revision	0.00	0.12	0.09	-0.27	0.05	0.00	0.00	0.00

Totals may not add up due to independent rounding.

As a result of the summer power shutdown and seasonal agricultural activity, Indian diesel demand has soared since August; however, diesel usage has been slowing slightly in December. The use of crude and fuel oil by Japanese power plants is also slowing.

**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	%
North America	23.89	23.21	-0.69	-2.87	23.48	23.47	-0.01	-0.03
Western Europe	14.22	13.69	-0.52	-3.68	14.13	13.73	-0.40	-2.82
OECD Pacific	8.35	8.83	0.48	5.75	7.12	7.78	0.66	9.27
<b>Total OECD</b>	<b>46.45</b>	<b>45.73</b>	<b>-0.73</b>	<b>-1.57</b>	<b>44.73</b>	<b>44.98</b>	<b>0.25</b>	<b>0.57</b>
Other Asia	10.27	10.51	0.24	2.30	10.54	10.79	0.25	2.40
Latin America	6.11	6.26	0.15	2.53	6.34	6.48	0.14	2.27
Middle East	7.49	7.73	0.25	3.31	7.42	7.69	0.26	3.56
Africa	3.39	3.37	-0.03	-0.83	3.38	3.39	0.01	0.44
<b>Total DCs</b>	<b>27.26</b>	<b>27.87</b>	<b>0.61</b>	<b>2.24</b>	<b>27.67</b>	<b>28.35</b>	<b>0.68</b>	<b>2.44</b>
FSU	4.14	4.24	0.10	2.42	3.98	4.09	0.11	2.82
Other Europe	0.69	0.69	0.00	-0.19	0.65	0.65	0.01	1.08
China	9.13	9.45	0.32	3.53	9.54	9.88	0.35	3.62
<b>Total "Other regions"</b>	<b>13.96</b>	<b>14.38</b>	<b>0.42</b>	<b>3.02</b>	<b>14.16</b>	<b>14.62</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>1.39</b>	<b>1.61</b>

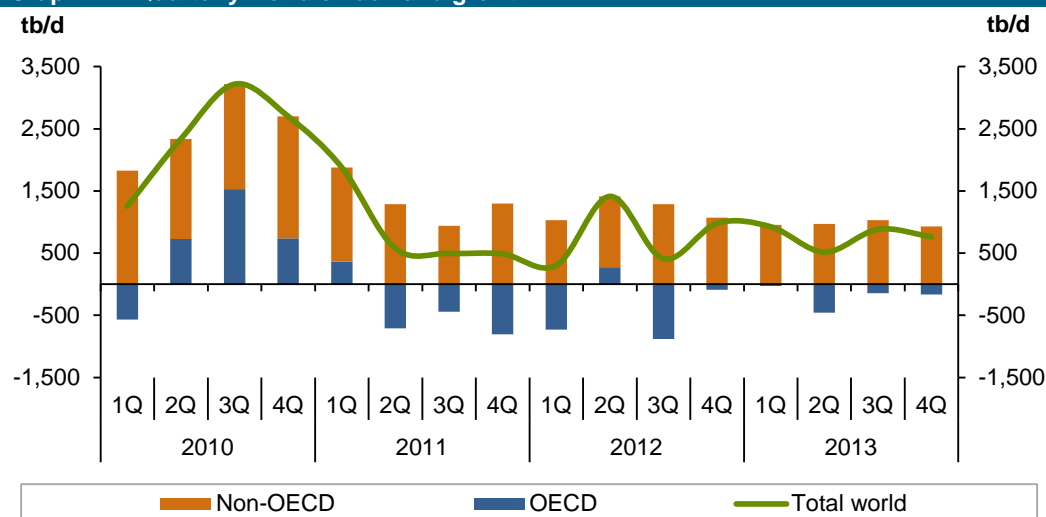
Totals may not add up due to independent rounding.

**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	%
North America	23.88	23.53	-0.35	-1.45	23.67	23.72	0.05	0.21
Western Europe	14.70	13.90	-0.80	-5.41	14.09	13.84	-0.25	-1.78
OECD Pacific	7.69	7.94	0.24	3.17	8.31	8.39	0.08	0.97
<b>Total OECD</b>	<b>46.27</b>	<b>45.37</b>	<b>-0.90</b>	<b>-1.94</b>	<b>46.07</b>	<b>45.94</b>	<b>-0.12</b>	<b>-0.26</b>
Other Asia	10.44	10.94	0.51	4.85	10.61	10.83	0.22	2.08
Latin America	6.54	6.73	0.19	2.89	6.50	6.66	0.16	2.50
Middle East	7.83	8.11	0.28	3.55	7.52	7.73	0.21	2.74
Africa	3.25	3.28	0.03	0.85	3.42	3.43	0.02	0.55
<b>Total DCs</b>	<b>28.05</b>	<b>29.05</b>	<b>1.00</b>	<b>3.57</b>	<b>28.04</b>	<b>28.65</b>	<b>0.61</b>	<b>2.17</b>
FSU	4.40	4.51	0.11	2.57	4.64	4.72	0.08	1.83
Other Europe	0.69	0.69	0.01	1.15	0.76	0.77	0.01	0.87
China	9.37	9.54	0.17	1.77	9.60	9.97	0.37	3.88
<b>Total "Other regions"</b>	<b>14.45</b>	<b>14.74</b>	<b>0.29</b>	<b>1.99</b>	<b>15.00</b>	<b>15.47</b>	<b>0.46</b>	<b>3.09</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**



## Year in Review 2012

The world financial crisis had a negative impact on the world economy, especially the OECD, since 2009. Nevertheless, the oil demand forecast for 2012 was not as ambiguous as the one for 2010, but a bit more complicated than that of 2011. Low growth in the US economy, along with a deceleration in other OECD economies, has pushed down world GDP growth to 3.0% for this year, versus 3.6% in 2011. Hence world oil demand has suffered the negative consequences of weakening economies to achieve growth of only 0.8 mb/d for 2012. Unlike last year, the downward revision to oil demand growth was not confined to mainly the OECD, but occurred in China as well. Japan shut down almost all its nuclear power plants, forcing the country to use other types of energy. Japanese oil use in power plants increased from 7.5% of total energy use to 19.7%. This denotes growth of 0.3 mb/d for the country in 2012 and made up 40% of annual world oil demand growth. Almost all the petroleum product demand growth in Japan was in the form of fuel and crude oil. Some upward revisions occurred in the non-OECD areas of strongest growth, namely India and the Middle East.

Indian oil demand was heavily affected by the massive electricity shutdown and the summertime agricultural season. The use of independent power-generators led to massive diesel usage country-wide. The fall in the grid left 600 million people without electricity. Excessive uploads to the electricity line crippled the total system a number of times, leading to the use of independent diesel-operated power-generation. As a result, diesel usage increased by a massive 0.2 mb/d in the third quarter. Industrial, including petrochemical, and transport fuels showed the largest increases during the year as a result of energy-intensive projects in the non-OECD region. The petrochemical industry, especially in Asia (China), featured substantial increases during the year.

World oil demand growth in 2012 is estimated at 0.8 mb/d, to average 88.8 mb/d.

Product-wise, transportation fuel consumption was the dominant feature, with consumption exceeding 50% of the total oil used. Diesel demand (transport and industrial) grew by 0.4 mb/d in 2012, to average 27 mb/d worldwide. This was greatly affected by the massive Indian consumption by independent electricity-generators. Gasoline demand, on the other hand, halted its decline and achieved growth of 0.4% during the year, averaging 22 mb/d. The main reason for gasoline's strong performance was the increase in US demand late in the year. Increased taxes on, and retail prices of, transportation fuel in some OECD countries and the removal of price subsidies in some non-OECD countries suppressed the use of such products. Japan's natural disaster last year hiked the country's fuel oil demand by 0.15 mb/d y-o-y; this came about as nuclear power plants were totally shut down.

China's oil demand grew as forecast in all quarters except the third, rising by 3.2% y-o-y to average 9.7 mb/d. Several factors interfered with China's demand, such as slower industrial manufacturing, lower exports, increased petroleum product prices and the Government's obstacles to new car registrations in major cities.

## OECD

Two factors played a major role in US oil demand in 2012, leading to a contraction of 0.25 mb/d in North America. Retail oil prices and the developments in the US economy were major variables in the region's demand during the year.

US demand has been the 'wild card' in global oil consumption over the past few years. Following rather devastating first and third quarters, US consumption settled down in the final quarter. Product-wise, consumption of distillates declined by almost 4% y-o-y, as a result of slowing industrial manufacturing. In addition, gasoline usage has been in a much better situation this year than last year. Last year's gasoline demand declined by 2.7%; however, demand this year is almost flat. Overall, US oil demand has declined by around 1.6% in 2012.

The 'Big Four' European countries (Germany, France, Italy and the United Kingdom) have continued their weak oil consumption patterns during the last eight years. This has caused OECD Europe's demand to lose 20% of its value since 1998. As seen last year, the Euro-zone debt problem has been battering the OECD Europe economy and forcing its total oil demand to lose half a million barrels in 2012. In all the OECD European countries, the sectors that were hit the most were transport and industry, resulting in lower consumption for distillates and gasoline. This move was seen in the past few years too. Despite

Germany's strong economy, this country's oil demand fell by 0.07 mb/d y-o-y. Germany is the largest oil-consuming country in Europe and its energy policies have a major effect on the region's oil demand. Its announcement of a total abandonment of nuclear usage will alter its future energy map after 2020.

Japan's natural disaster last year affected all aspects of the country. Despite the decline in manufacturing activity, the extra use of crude and fuel oil by power plants rose by 0.3 mb/d. Furthermore, the rebuilding efforts contributed to the total increase in energy demand this year.

### **Auto industry**

After reaching a 30-year low in 2009, US vehicle sales have grown for the second year in a row in 2011. This sales growth was estimated at approximately 7%, as a result of easier credit, low interest rates and increased demand for cars and trucks. Auto sales continued to rise strongly during the first three quarters of 2012 at a rate of 13% and they are expected to become even stronger for the whole of the year. The main trends are very similar to those in Europe. Smaller and more fuel-efficient vehicles were on the rise as gasoline prices increased. In addition, sales of pickups and minivans rebounded as businesses replaced older vehicles. Also sales of mid-sized SUV vehicles increased by a strong 10%. It is projected that 2012 will see a big increase of around 13–14%, making this the strongest year since 2007. The Canadian auto market is estimated to have grown by 7% in 2012. The very close relationship between the Mexican automobile industry and the US auto market boosted auto production and exports during the first nine months of this year by 13% and 11%, compared with the same period of 2011. Domestic auto sales grew by 11% to 701,901 units, although they still remained below the level set in 2007, prior to the recession. The Mexican auto market is expected to continue growing at the same rate during the remainder of 2012.

The European market during the whole of 2012 was heavily influenced by the ongoing financial crisis in several countries, with substantial decreases across countries in new passenger car registrations. According to figures from the European Automobile Manufacturer's Association, European new passenger car registrations decreased by a strong 7% during January–October, with nearly all major markets recording negative figures. The UK was the only market to expand, by 5%, while Germany and France decreased by 2% and 13% respectively. Moreover, the southern European markets saw huge decreases: 12% in Spain, 21% in Italy and a remarkable 38% in Portugal and 40% in Greece. The general trends in the region continued to evolve during 2012, for smaller, more fuel-efficient cars with lower emissions, while most new cars had diesel engines. On average, Europeans change their car every eight years. During the remainder of 2012 and 2013, the European auto market will most certainly be dominated by economic concern and austerity measures further influencing current trends. Hence 2012 is projected to show a decrease of 8%. The Japanese auto market for 2012 is nevertheless projected to grow at around 30% y-o-y, as a result of the very strong sales in the first half of the year. The South Korean auto market is projected to shrink by 2% in 2012.

### **Non-OECD**

In the third quarter, China's oil demand experienced its second-weakest growth since the first quarter of 2009. Most of the easiness in the country's oil demand is a result of the slowing economy in the third quarter of this year. Furthermore, a cap that was introduced by the authorities on new car registrations in major cities played a significant role in the country's gasoline consumption this year. Other factors led to this weak performance, such as high retail prices and the Government's five-year energy-saving programme which was introduced during the year. As economic activity rebounded in the fourth quarter, China's oil usage inched up by 0.4 mb/d and is expected to end the year with 3.2% growth.

Indian diesel consumption boomed substantially in the third quarter as a result of the total electricity shutdown. Consequence, the use of independent electricity-generators led to a huge use of diesel in the summer. The transportation (increases in new car registrations) and industrial sectors displayed solid growth during the year, including the petrochemical and power plant industries. As a result of India's oil demand, Other Asia's oil demand grew by 0.3 mb/d for the year.

Energy-intensive projects in the Middle East, especially Saudi Arabia, raised the region's oil demand by 3.3% in 2012; this was 0.1 mb/d higher than growth in 2011. The region's oil demand has been growing at a steady rhythm in the past few years. The product consumed the most was diesel, which was used by both the transport and industrial sectors.

The OECD Pacific's and the non-OECD region's oil demand accounted for all the oil demand growth in 2012, totalling 1.4 mb/d y-o-y. Unlike last year, this year's strongest growth was seen in Other Asia, followed by China, the Middle East and Latin America.

### Auto industry

According to the statistics and analysis of the China Association of Automobile Manufacturers, Chinese automobile sales increased by almost 4% in 2012. Passenger car sales rose by 7% and commercial vehicle sales declined by 8% from 2011.

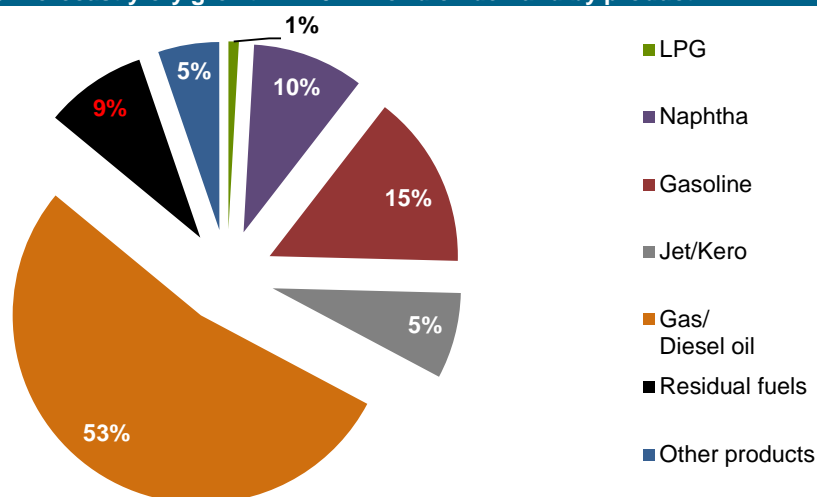
According to the data released by the Society of Indian Automobile Manufacturers, car sales in India are expected to have grown at an overall rate of 4% in 2012, as a result of the low level of sentiment towards the overall economic situation of the country, relatively high fuel prices and interest rates.

*North America's oil demand projected to decrease by 0.25 mb/d in 2012.*

### OECD — North America

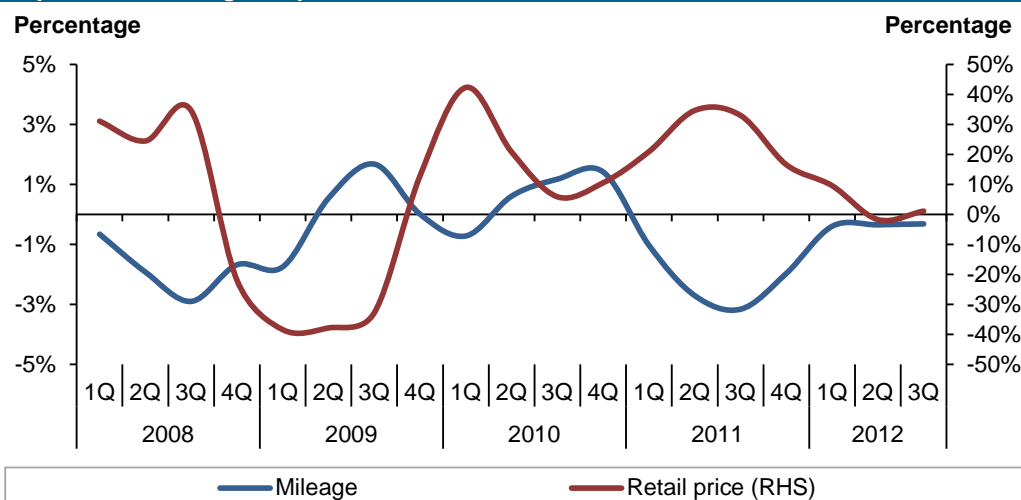
Increased manufacturing activity in the last two months of the year has not only stopped oil demand from decreasing in the USA, but has also seen a push towards growth in November. However, 2012 has looked generally quite disappointing for US consumption, with contractions in all product categories and the worst seen in distillates and residual fuel oil. The latest monthly US oil consumption data for September saw a continuation of the recent downward trend, showing decreases of 3.7% y-o-y. All main product categories experienced declines, including gasoline at 2%. The main factors influencing US consumption were weak industrial production, the struggling economy, high retail fuel prices, especially in the first half of the year, and fuel-switching, particularly towards natural gas. Preliminary weekly data shows an increase in US gasoline consumption in November — for the first time since August. The outlook for US oil consumption for 2013 remains rather pessimistic, especially when taking into consideration the development of the economy and fuel-switching.

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



The latest reported figures for Mexican oil consumption in October showed a sharp increase of around 15% over the same month last year. Improvements in industrial activity and the economy were the main factors behind this rise. Regarding Canadian oil demand, the latest available data for September shows oil demand decreasing once more by 1% y-o-y; oil usage in transportation and industrial products dominated this decrease. Despite this decrease, the country's annual oil demand is expected to be flat this year.

Overall, North America's oil demand is projected to decrease by 0.25 mb/d in 2012.

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

The latest information for November shows US auto sales up by 12% y-o-y, as a result of low interest rates, the replacement of aging vehicles and the fact that the general sentiment about the economy seems to be improving.

Automakers in Canada had their best October ever, pushing industry sales up nearly 8% from a year ago and putting sales on track for what could be a record year. Gasoline prices have been a key concern for cost-conscious buyers and that has helped push growth in the smaller, more fuel-efficient car category higher than in the truck segment.

The latest Mexican data from the Mexican Automobile Industry Association shows September production and domestic sales rising by 13% and 8%, while exports remained flat.

### OECD — Europe

European oil consumption contracted again in October, for the 14th month in a row. This reflected the region's tumbling economy. Consumption in Germany, France, Italy and the UK fell, however at a lower rate than in September. The bulk of the decreases was seen in transportation and some industrial fuels as a result of the weak regional economy. The European 'Big Four's' demand decreased by 0.10 mb/d in October y-o-y. 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 settled down.

For 2012, European oil consumption is expected to shrink by 0.5 mb/d, as a result of the severe economic turbulence in the continent.

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

	Oct 12	Oct 11	Change from Oct 11	Change from Oct 11 %
LPG	343	386	-43	-11.2
Gasoline	1,201	1,211	-10	-0.9
Jet/Kerosene	749	771	-22	-2.9
Gas/Diesel oil	3,446	3,388	58	1.7
Fuel oil	389	439	-50	-11.3
Other products	1,004	1,037	-33	-3.2
<b>Total</b>	<b>7,132</b>	<b>7,232</b>	<b>-100</b>	<b>-1.4</b>

\* Germany, France, Italy and the UK.

European new car registrations in October continued their downward trend, declining for the 13th consecutive month. Demand for new cars slid by 5% from October 2011. Looking at the major markets, the UK was the only one to expand (12%), while Germany remained stagnant and France (-8%), Italy (-12%) and Spain (-22%) all faced huge downturns.

For 2012,  
European oil  
consumption to  
shrink by 0.5 mb/d



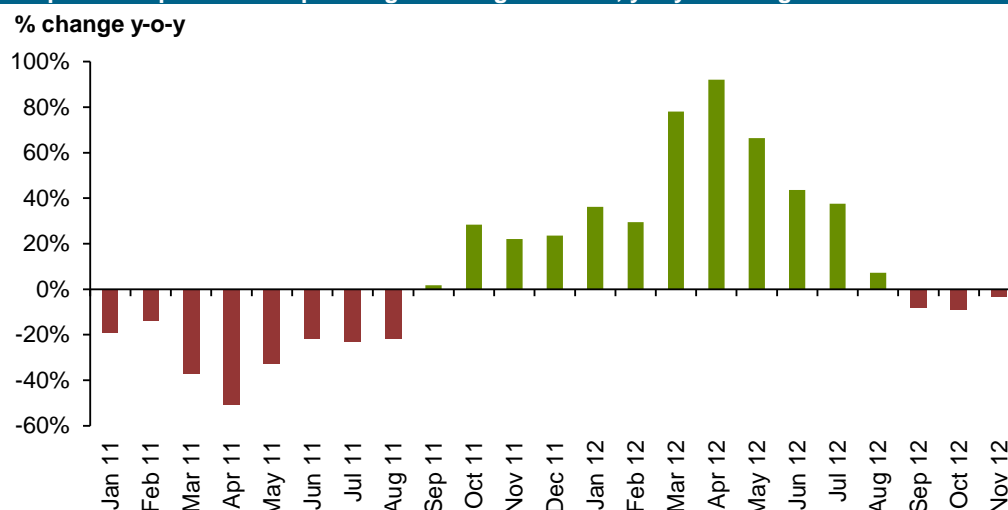
*OECD Pacific oil consumption to grow by 0.36 mb/d in 2012*

### OECD — Pacific

For Japan, the latest monthly data for October shows increasing consumption of crude and residual fuel oil direct use. However, these increases were considerably lower than in previous months. This was because of the high baseline and the end of the summer period. The consumption of other product categories differed: gasoline, jet fuel, liquefied petroleum gas (LPG) and distillates were on the rise, while naphtha and kerosene fell slightly and sharply respectively. Our earlier prognosis that the direct crude and residual fuel burning for electricity production would continue at least throughout 2012 seems to have been verified. For South Korea, September came up strongly, with increases of 2.1% y-o-y. Rises in industrial products, notably naphtha, more than offset declining consumption of other products.

OECD Pacific oil consumption is expected to grow by 0.37 mb/d in 2012, with the bulk of the increase resulting from direct crude/fuel oil burning for electricity-generation and substituting nuclear plants.

**Graph 4.5: Japanese new passenger car registrations, y-o-y % changes**



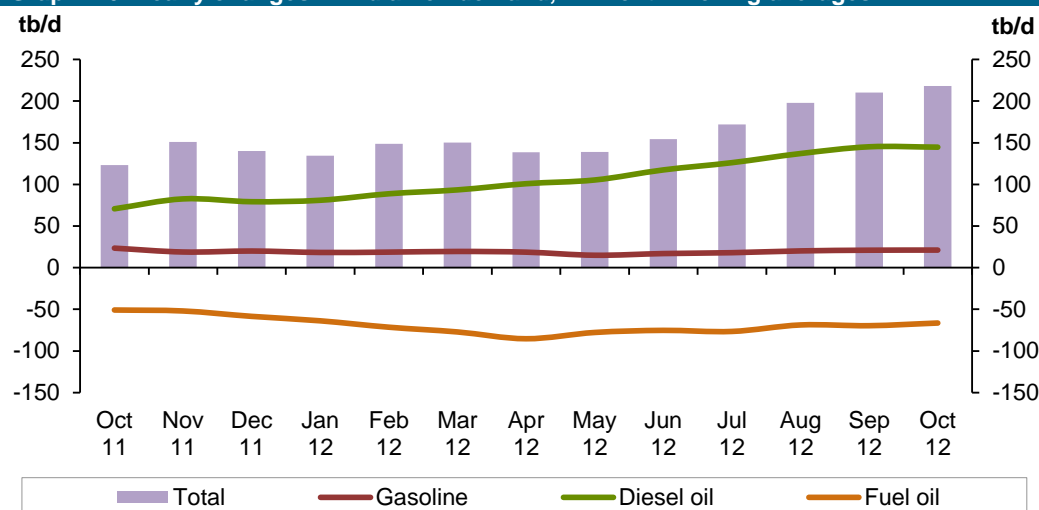
Japanese auto demand had two faces during the first ten months of 2012. Very strong growth of 55% was observed during January-to July. This was driven by strong tax incentives and subsidies, as well as a low baseline from the catastrophic earthquake and tsunami. Thereafter, as the low baseline effect and Government incentives disappeared, sales switched to the negative, showing the largest decline so far this year of 10% in October.

The latest October data shows South Korea's automobile sales increasing by a solid 9%, as production recovered from labour strikes in the country's top two automakers, Hyundai and Kia.

### Developing countries

The effect of India's total massive power shutdown was seen in the country's diesel demand for three months in the row. However, the end of the summer season, along with the stabilization of electricity supply, led to a slowdown in diesel demand. Hence October diesel demand growth has been estimated at 83 tb/d y-o-y, as opposed to the 200 tb/d level seen in the previous three months. The end of the summer season pushed down October oil demand growth for the entire country to 0.2 mb/d y-o-y. Furthermore, gasoline demand growth has been estimated at 5.6% for the same month. October oil demand is still on the high side, compared with the first half of the year. Indian oil demand growth is estimated at 0.2 mb/d for 2012. The early forecast was set at 3.4% demand growth for the year; however, the latest revision has put this at 4.4% for 2012.

*Developing countries' oil demand up 0.7 mb/d in 2012*

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

Indian oil demand growth at 0.2 mb/d for 2012

According to the data released by the Society of Indian Automobile Manufacturers, car sales in India registered a sharp increase of 23% in October y-o-y, as a result of greater demand during the traditional festival season and the launch of new models. This monthly growth was the highest since January 2011.

**Table 4.5: Taiwan oil demand, tb/d**

	Sep 12	Sep 11	Change	Change %
LPG	49	62	-13	-21.5
Gasoline	158	173	-15	-8.6
Jet/Kerosene	52	50	2	3.4
Gas/Diesel oil	89	94	-5	-5.6
Fuel oil	97	135	-38	-28.2
Other products	426	347	80	23.0
<b>Total</b>	<b>871</b>	<b>861</b>	<b>10</b>	<b>1.1</b>

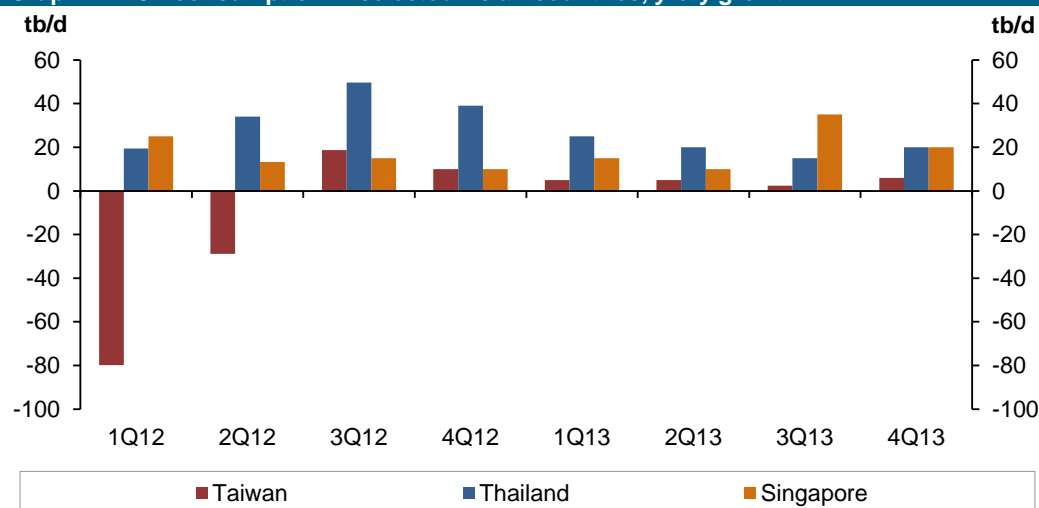
Given the strong oil demand by India, Other Asia's oil demand growth estimated at 0.3 mb/d in 2012.

Thailand's oil demand has performed well since February. Growth in energy use is attributed solely to economic activity related to the industrial sector. September and October oil demand each grew by an average of 5%. Most of the growth was attributed to the industrial and transport sectors.

Indonesian oil demand grew by 6% in September, pushing third-quarter growth to 0.1 mb/d y-o-y. The country's gasoline consumption was one of the highest in the region. This grew by 8.1% in September alone and this trend is expected to last until the year-end. The rise is attributed to a growing economy and minor subsidies for some oil product consumption. Indonesia will have consumed 1.4 mb/d by the end of 2012.

Given the strong oil demand by India, Other Asia's oil demand growth is estimated at 0.3 mb/d y-o-y in 2012.

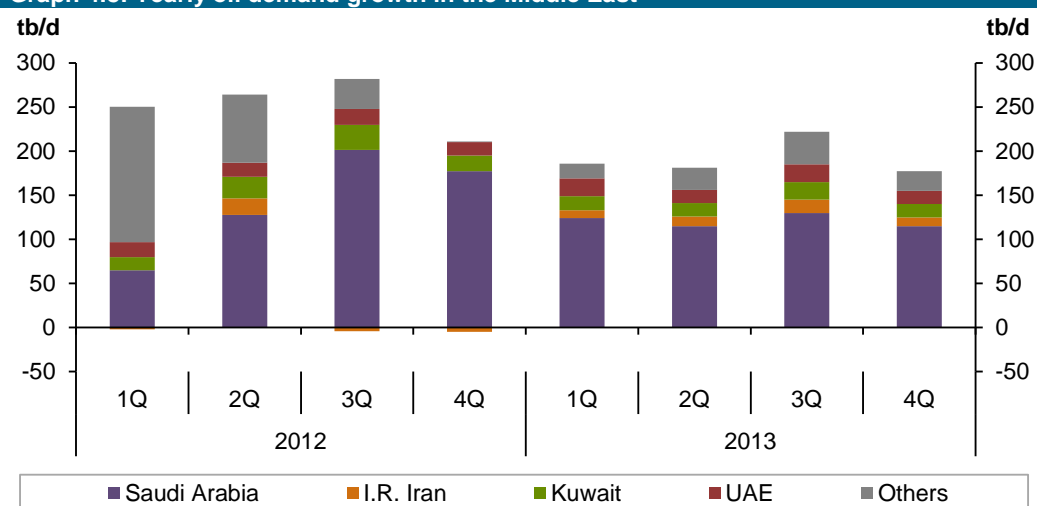


**Graph 4.7: Oil consumption in selected Asian countries, y-o-y growth**

*Middle East seen growing 0.25 mb/d in 2012*

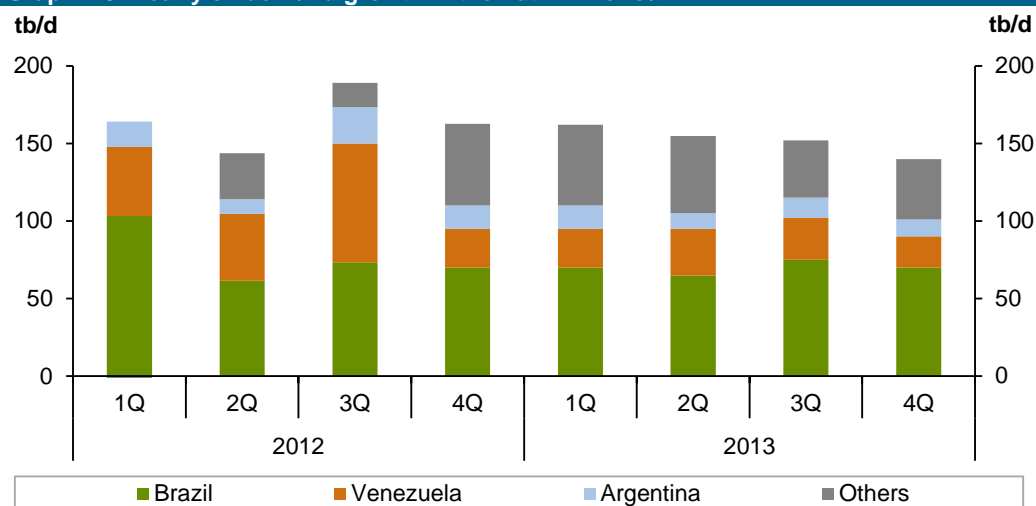
Saudi oil demand bounced back to its usual double-digit growth in October, at 13.7% y-o-y. The 'summer effect' is seen in the country's oil demand in October, when power-plants use up an abundant amount of fuel and crude oil. Direct crude use increased by 47% in October alone, averaging 0.6 mb/d. Nevertheless, this is expected to ease dramatically this month.

Oil consumption in the Middle East has been growing strongly, reaching around 2.9% annually. Most of this growth is attributed to the transport and industrial sectors. It is estimated that the Middle East will have consumed 7.8 mb/d at the end of 2012, denoting growth of 0.25 mb/d y-o-y.

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

Brazil's oil demand growth in September was almost flat, making it the lowest growth rate since September last year. However, this was affected by the energy seasonality in Brazil. The increase in gasoline consumption was offset by a decline in both diesel and LPG. Bad weather forced the Government in the middle of the year to reduce the alcohol/ethanol-based blending mandate from 25% to 19% and this caused the negative year-on-year demand.

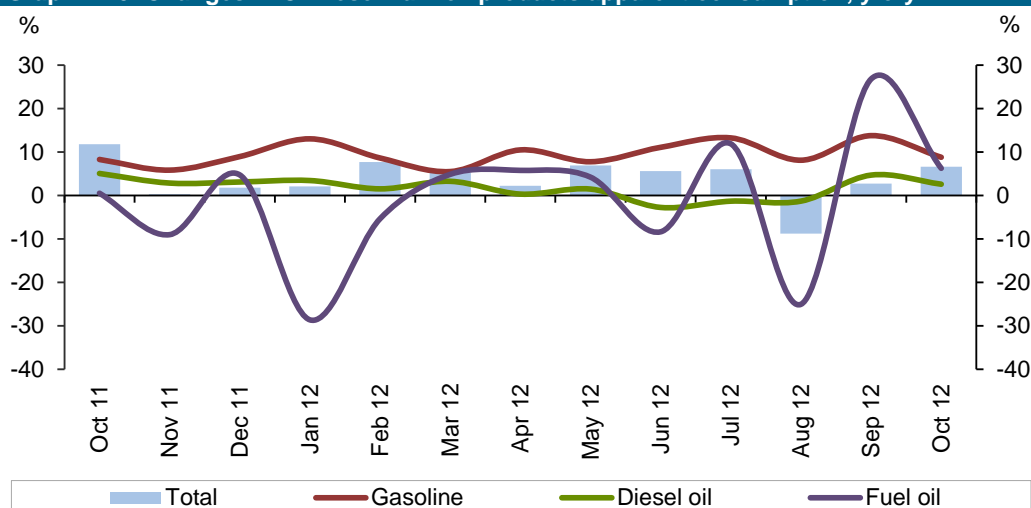
Venezuelan oil demand grew by 13.8% in September, in line with the August trend. This strong growth resulted from high demand for jet kerosene, which reached 28 tb/d. Jet kerosene is the second most-consumed petroleum product in Venezuela after gasoline. The country's oil demand rose sharply in the first three quarters of the year and is expected to end the year with growth of 0.05 mb/d y-o-y averaging 0.8 mb/d.

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

Developing countries' oil demand is forecast to have grown by 0.7 mb/d in 2012, to average 28.5 mb/d, denoting an upward revision of 0.06 mb/d from the last *MOMR*.

### Other regions

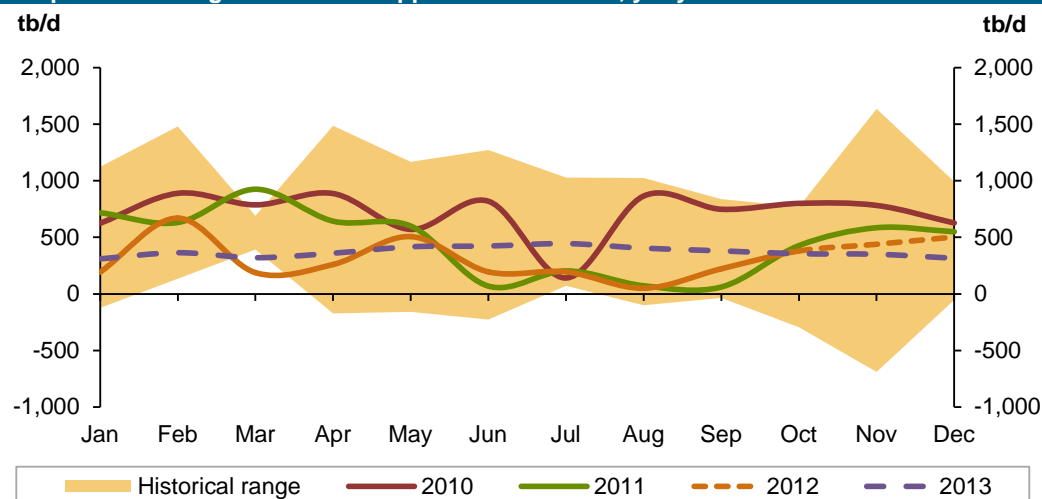
China's gasoline demand increased by a dramatic 8.8% in October y-o-y, adding another 162 tb/d to the total gasoline pool. Its gasoline demand has been on the growth path for many years, averaging 2.0 mb/d in October. This trend is expected to continue next year, pending no new Government policies directed towards transport fuel consumption. Kerosene and diesel use grew strongly in October, each by 0.1 mb/d. Diesel is the largest petroleum product consumed in China. China's Manufacturing PMI was estimated at 50.4 in November, the highest for more than 12 months. This indicated higher diesel demand during that month. Apart from November, diesel use was low for most of the year, as a result of slowing industrial activity. Another factor that affected diesel demand was the construction of infrastructure, where the use of machinery raised diesel demand. Winter intensity will play a major role in the use of transport fuel, as driving mileage tends to ease off when it is very cold.

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

China's oil demand growth is estimated at 3% or 0.3 mb/d in 2012.

According to the statistics and analysis of the China Association of Automobile Manufacturers, Chinese automobile sales increased by 5% in October, following a decrease of almost 2% in September y-o-y. Among the main automobile categories, passenger car sales rose by 6% and commercial vehicles by 1% y-o-y.

*China's oil demand growth is estimated at 3% or 0.3 mb/d in 2012.*

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

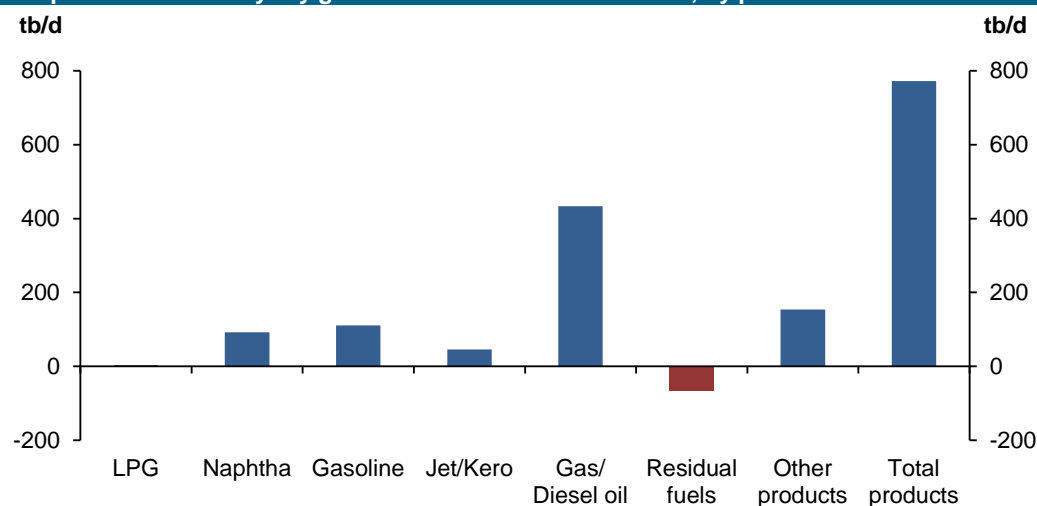
### World oil demand in 2013

*World oil demand to grow by 0.8 mb/d in 2013, to average 89.6 mb/d*

A high level of anticipated risk in the world economy next year is placing a large amount of uncertainty on the world oil demand assessment. This uncertainty is not confined to OECD economies, but is also expected in non-OECD countries, such as China and India. Hence, the forecast oil demand growth has a downside risk, especially in the first half of the year. Some factors that are affecting next year's oil demand forecast are the current vagueness in the world GDP assessment, retail petroleum prices and abnormal weather, and this could all lead to a revision of the world oil demand assessment later in the year.

The outlook for US oil consumption for 2013 remains somewhat pessimistic. This also applies to European oil consumption. Furthermore, China's oil demand, the second largest in the world, can alter the forecast for world oil use if a further decline in industrial activity occurred or any new policies were introduced by the government. World oil demand is forecast to continue its growth in 2013 to reach 0.8 mb/d, to average 89.6 mb/d.

Japan's oil demand forecast for 2013 indicates that the usage of fossil fuels for electricity-generation will continue to dominate, since there are no other options — apart from nuclear — for covering the country's large electricity requirements. During 2013, OECD Pacific oil consumption is projected to remain at the same level as in 2012.

**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**

	<b>2012</b>	<b>1Q13</b>	<b>2Q13</b>	<b>3Q13</b>	<b>4Q13</b>	<b>2013</b>	<b>Change 2013/12</b>	
							<b>Growth</b>	<b>%</b>
North America	23.48	23.35	23.38	23.63	23.75	23.53	0.04	0.19
Western Europe	13.79	13.50	13.46	13.64	13.61	13.55	-0.24	-1.72
OECD Pacific	8.23	8.85	7.69	7.96	8.41	8.22	-0.01	-0.07
<b>Total OECD</b>	<b>45.51</b>	<b>45.70</b>	<b>44.53</b>	<b>45.23</b>	<b>45.78</b>	<b>45.31</b>	<b>-0.20</b>	<b>-0.44</b>
Other Asia	10.77	10.69	10.96	11.15	11.00	10.95	0.18	1.71
Latin America	6.53	6.43	6.63	6.89	6.80	6.69	0.15	2.37
Middle East	7.82	7.92	7.87	8.32	7.91	8.00	0.19	2.40
Africa	3.37	3.37	3.40	3.28	3.43	3.37	0.00	0.06
<b>Total DCs</b>	<b>28.48</b>	<b>28.41</b>	<b>28.86</b>	<b>29.64</b>	<b>29.14</b>	<b>29.01</b>	<b>0.53</b>	<b>1.86</b>
FSU	4.39	4.33	4.17	4.58	4.82	4.48	0.09	1.96
Other Europe	0.70	0.70	0.66	0.70	0.78	0.71	0.00	0.68
China	9.71	9.77	10.25	9.91	10.31	10.06	0.35	3.59
<b>Total "Other regions"</b>	<b>14.81</b>	<b>14.80</b>	<b>15.07</b>	<b>15.19</b>	<b>15.91</b>	<b>15.25</b>	<b>0.44</b>	<b>2.97</b>
<b>Total world</b>	<b>88.80</b>	<b>88.90</b>	<b>88.45</b>	<b>90.05</b>	<b>90.83</b>	<b>89.57</b>	<b>0.77</b>	<b>0.87</b>
Previous estimate	88.80	88.79	88.37	90.32	90.77	89.57	0.77	0.87
Revision	0.00	0.12	0.08	-0.27	0.05	-0.01	0.00	0.00

*Totals may not add up due to independent rounding.*

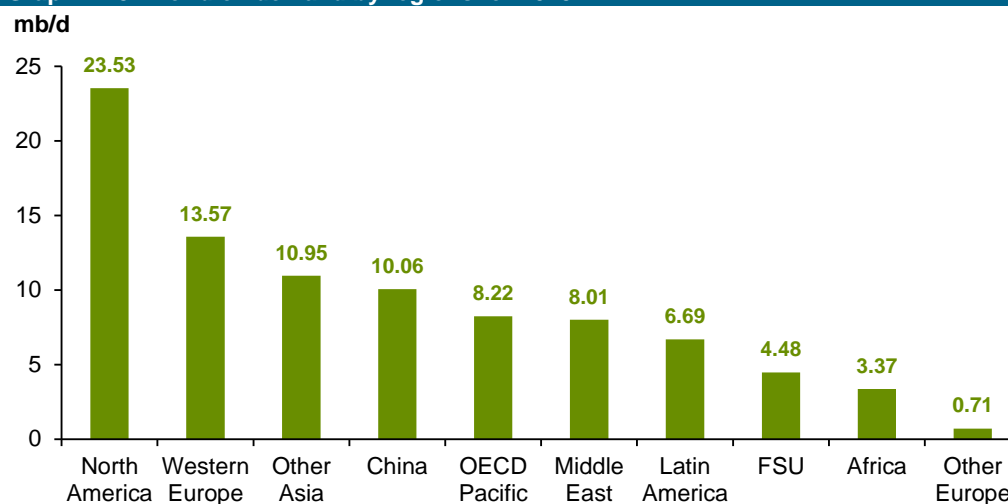
### Prospects in the auto industry in 2013

US auto sales in 2013 are forecast to grow more slowly at around 5%, a slightly improved forecast from early expectations. Only a sudden stimulus plan might alter this forecast for higher growth. Canadian auto sales in 2013 are projected to grow by 7%. The Mexican auto market is expected to grow at the same rate as in 2012.

The European auto market in 2013 is expected to continue this year's trend and show a further contraction, by as much as 6% y-o-y depending on the magnitude of the sovereign debt crisis in the region.

Japanese auto sales during 2013 are forecast to see minor growth of 1–3%, although the projections depend strongly on the evolution of the Japanese economy. South Korea's auto market is forecast to grow by only 1% in 2013, due to a slowdown in its economy, the existence of no plans for new car releases and the fading out of tax-reduction benefit. The South Korean Government cut special consumption taxes on vehicles temporarily last month in a bid to boost domestic demand, but this tax-cut plan is scheduled to finish at the end of the year.

China's auto sales in 2013 are expected to grow at 3%, depending on the Government's regulatory constraints against private car ownership. Meanwhile, India's auto sales are forecast to be at the lower rate of 1–3%; this lower rate, in comparison with previous years, is a result of a low level of sentiment towards the country's future economic situation.

**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**

	Change 2013/12				Change 2013/12			
	<u>1Q12</u>	<u>1Q13</u>	<u>Volume</u>	<u>%</u>	<u>2Q12</u>	<u>2Q13</u>	<u>Volume</u>	<u>%</u>
North America	23.21	23.35	0.14	0.61	23.47	23.38	-0.10	-0.41
Western Europe	13.69	13.50	-0.19	-1.38	13.73	13.46	-0.27	-1.97
OECD Pacific	8.83	8.85	0.02	0.23	7.78	7.69	-0.09	-1.16
<b>Total OECD</b>	<b>45.73</b>	<b>45.70</b>	<b>-0.03</b>	<b>-0.06</b>	<b>44.98</b>	<b>44.53</b>	<b>-0.46</b>	<b>-1.01</b>
Other Asia	10.51	10.69	0.18	1.75	10.79	10.96	0.17	1.58
Latin America	6.26	6.43	0.16	2.59	6.48	6.63	0.15	2.39
Middle East	7.73	7.92	0.19	2.40	7.69	7.87	0.18	2.36
Africa	3.37	3.37	0.00	0.12	3.39	3.40	0.00	0.13
<b>Total DCs</b>	<b>27.87</b>	<b>28.41</b>	<b>0.54</b>	<b>1.92</b>	<b>28.35</b>	<b>28.86</b>	<b>0.51</b>	<b>1.80</b>
FSU	4.24	4.33	0.09	2.14	4.09	4.17	0.08	1.93
Other Europe	0.69	0.70	0.01	0.87	0.65	0.66	0.00	0.46
China	9.45	9.77	0.32	3.39	9.88	10.25	0.37	3.69
<b>Total "Other regions"</b>	<b>14.38</b>	<b>14.80</b>	<b>0.42</b>	<b>2.90</b>	<b>14.62</b>	<b>15.07</b>	<b>0.45</b>	<b>3.06</b>
<b>Total world</b>	<b>87.98</b>	<b>88.90</b>	<b>0.92</b>	<b>1.05</b>	<b>87.95</b>	<b>88.45</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**

	Change 2013/12				Change 2013/12			
	<u>3Q12</u>	<u>3Q13</u>	<u>Volume</u>	<u>%</u>	<u>4Q12</u>	<u>4Q13</u>	<u>Volume</u>	<u>%</u>
North America	23.53	23.63	0.09	0.40	23.72	23.75	0.04	0.16
Western Europe	13.90	13.64	-0.26	-1.86	13.84	13.61	-0.23	-1.66
OECD Pacific	7.94	7.96	0.02	0.25	8.39	8.41	0.03	0.31
<b>Total OECD</b>	<b>45.37</b>	<b>45.23</b>	<b>-0.15</b>	<b>-0.32</b>	<b>45.94</b>	<b>45.78</b>	<b>-0.17</b>	<b>-0.36</b>
Other Asia	10.94	11.15	0.21	1.93	10.83	11.00	0.17	1.60
Latin America	6.73	6.89	0.16	2.41	6.66	6.80	0.14	2.10
Middle East	8.11	8.32	0.21	2.55	7.73	7.91	0.18	2.29
Africa	3.28	3.28	0.00	0.13	3.43	3.43	0.00	-0.13
<b>Total DCs</b>	<b>29.05</b>	<b>29.64</b>	<b>0.58</b>	<b>2.01</b>	<b>28.65</b>	<b>29.14</b>	<b>0.49</b>	<b>1.69</b>
FSU	4.51	4.58	0.08	1.67	4.72	4.82	0.10	2.10
Other Europe	0.69	0.70	0.01	0.72	0.77	0.78	0.01	0.65
China	9.54	9.91	0.37	3.88	9.97	10.31	0.34	3.41
<b>Total "Other regions"</b>	<b>14.74</b>	<b>15.19</b>	<b>0.45</b>	<b>3.05</b>	<b>15.47</b>	<b>15.91</b>	<b>0.44</b>	<b>2.87</b>
<b>Total world</b>	<b>89.16</b>	<b>90.05</b>	<b>0.89</b>	<b>1.00</b>	<b>90.06</b>	<b>90.83</b>	<b>0.76</b>	<b>0.85</b>

Totals may not add up due to independent rounding.

# World Oil Supply

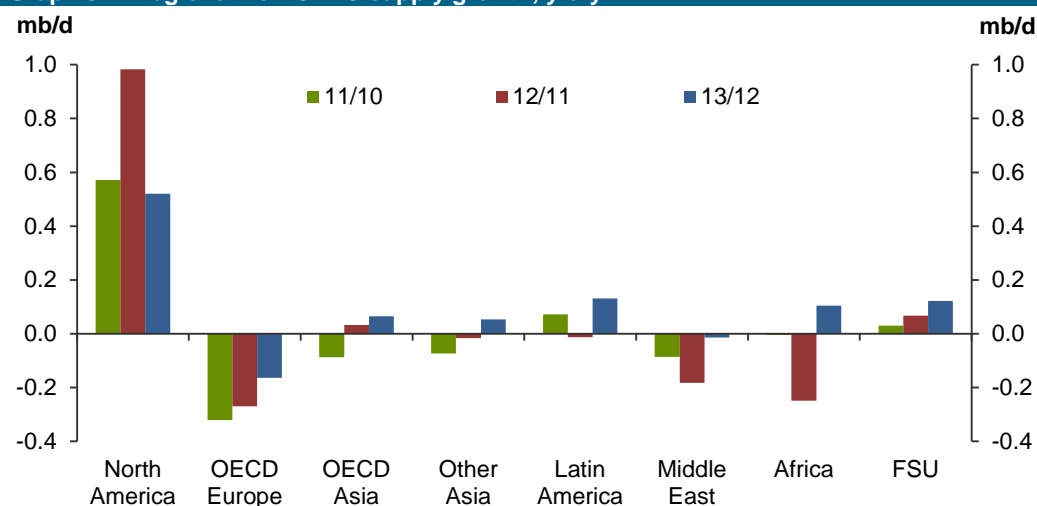
*Non-OPEC supply expected to increase by 0.48 mb/d in 2012 to average 52.93 mb/d*

## Non-OPEC Estimate for 2012

Non-OPEC production is expected to increase by 0.48 mb/d in 2012, to average 52.93 mb/d; this represents a minor downward revision of 10 tb/d from the previous Monthly Oil Market Report (MOMR). This revision came in the second half of the year, due to lower-than-expected output during the third quarter, although it was offset by an upward revision to the first-quarter supply estimate. In addition, a minor historical downward revision was made to the 2011 supply figure. The supply profiles of the USA, Mexico, Australia, Malaysia and Russia were revised up, while the production outlooks for Canada, Norway, the UK, India, Indonesia, Brazil, Oman, Syria, Yemen, South Sudan and Sudan, and Azerbaijan were revised down. However, the total downward adjustment more than offset the upward revisions. Updated actual and preliminary production data required the undertaken revisions to the 2012 supply forecast. Various unplanned outages, as well as political and weather-related factors, are among the main aspects behind the downward revision to the non-OPEC 2012 figure, while the continued strong growth from US shale production, as well as Russian oil supply, supported the upward revision.

North America remains the region with the highest expected supply growth in 2012, followed by China and the former Soviet Union (FSU), while OECD Western Europe, Africa and the Middle East remain the regions with the highest expected declines. The USA is expected to show the largest production increase among all the non-OPEC producers in 2012, followed by Canada, Russia and China. South Sudan and Sudan, Syria and the UK are likely to encounter the largest output drops among the non-OPEC countries.

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



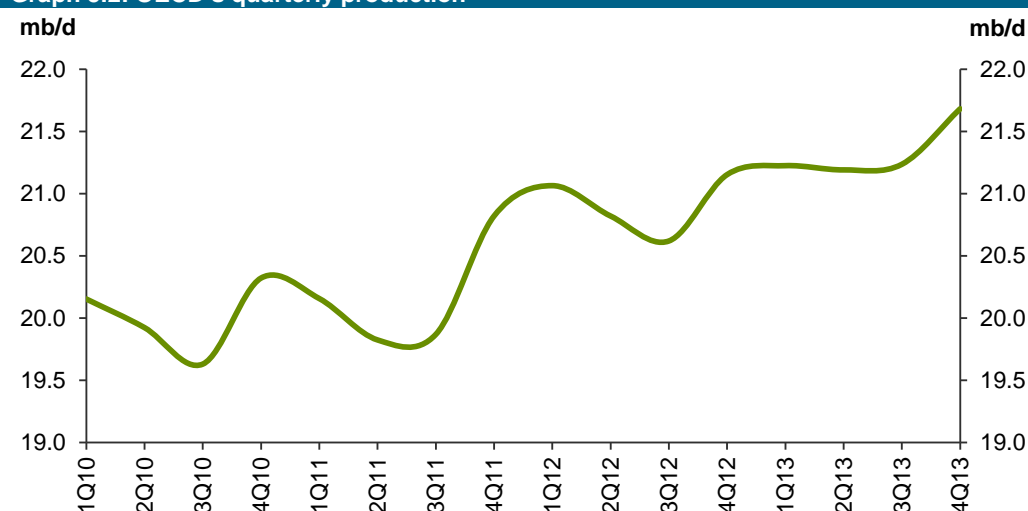
According to preliminary, actual and estimated data, total non-OPEC supply rose by 0.47 mb/d during the first three quarters of 2012, compared with the same period of 2011. The growth came in all the three quarters. The second quarter experienced the highest growth. On a quarterly basis, non-OPEC supply in 2012 is expected to average 53.23 mb/d, 52.65 mb/d, 52.40 mb/d and 53.44 mb/d respectively.

**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>	Change <u>12/11</u>
North America	15.53	16.48	16.38	16.45	16.75	16.51	0.98
Western Europe	4.07	4.07	3.91	3.49	3.73	3.80	-0.27
OECD Pacific	0.57	0.51	0.53	0.69	0.67	0.60	0.03
<b>Total OECD</b>	<b>20.17</b>	<b>21.06</b>	<b>20.82</b>	<b>20.62</b>	<b>21.15</b>	<b>20.91</b>	<b>0.75</b>
Other Asia	3.63	3.65	3.56	3.59	3.64	3.61	-0.02
Latin America	4.75	4.85	4.71	4.65	4.76	4.74	-0.01
Middle East	1.69	1.44	1.54	1.53	1.52	1.51	-0.18
Africa	2.59	2.40	2.30	2.31	2.36	2.34	-0.25
<b>Total DCs</b>	<b>12.66</b>	<b>12.34</b>	<b>12.11</b>	<b>12.08</b>	<b>12.29</b>	<b>12.20</b>	<b>-0.46</b>
FSU	13.24	13.36	13.25	13.19	13.43	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	4.27	4.20	0.08
<b>Total "Other regions"</b>	<b>17.49</b>	<b>17.66</b>	<b>17.55</b>	<b>17.54</b>	<b>17.84</b>	<b>17.65</b>	<b>0.15</b>
<b>Total Non-OPEC production</b>	<b>50.33</b>	<b>51.06</b>	<b>50.48</b>	<b>50.23</b>	<b>51.27</b>	<b>50.76</b>	<b>0.43</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>53.23</b>	<b>52.65</b>	<b>52.40</b>	<b>53.44</b>	<b>52.93</b>	<b>0.48</b>
Previous estimate	52.46	53.21	52.61	52.49	53.47	52.95	0.49
Revision	-0.01	0.02	0.04	-0.09	-0.02	-0.01	-0.01

**OECD**

Total OECD oil output is seen to increase by 0.75 mb/d in 2012, the highest increase since 1994, to average 20.91 mb/d, indicating an upward revision of 45 tb/d from the previous month. The expected strong growth in 2012 is significantly higher than the average of the last five years of 10 tb/d. North America's oil supply is driving the growth in the OECD, with a minor increase from OECD Pacific, while OECD Western Europe's supply is seen to decline. North America and the OECD Pacific were the drivers behind the upward revisions for this month, which were partly offset by a negative adjustment to OECD Western Europe. The overall supply profile of the OECD remains more or less unchanged, with strong supply growth projected from North America, a decline from OECD Western Europe and a minor increase from OECD Pacific. According to preliminary data, total OECD production stood at 21.01 mb/d during October, a rebound of 0.63 mb/d from September. On a quarterly basis, OECD supply in 2012 is estimated to average 21.06 mb/d, 20.82 mb/d, 20.62 mb/d and 21.15 mb/d, respectively.

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



### North America

North America's oil production is estimate to increase by 0.98 mb/d in 2012 to average 16.51 mb/d, the highest level of growth on record and the highest among all the non-OPEC regions, indicating an upward revision of 70 tb/d from the previous MOMR. The strong estimates for both the USA and Canada constituted the main factor behind the expected growth this. On a quarterly basis, North America's oil supply in 2012 is expected to average 16.48 mb/d, 16.38 mb/d, 16.45 mb/d and 16.75 mb/d respectively.

### US

US oil production is estimate to increase by 0.81 mb/d in 2012, the largest growth among all the non-OPEC countries and the largest in US history, to average 9.85 mb/d, constituting an upward revision of 0.10 mb/d from the previous month. This revision affected all quarters, with the highest in the second half of the year, as updated production data showed more strong growth than expected. The revision was supported by record-high production from North Dakota in September, on the back of a continued increase in the development of shale output. North Dakota's record-high level of 728 tb/d came about despite a decline in active rigs, although analysts maintain that more-efficient rigs were utilized. In addition, further rail capacity is becoming available for Bakken oil production to reach refiners, and this is seen to support the output. During the first nine months of 2012, North Dakota's supply averaged 632 tb/d, an increase of 244 tb/d over the same period a year earlier, while the Gulf of Mexico's and Alaska's supply declined by 95 tb/d and 38 tb/d respectively during the same period. A shift from gas to liquid drilling is seen to continue to support the growth in US supply. Moreover, increased production from shale activity in Texas, Oklahoma, Wyoming, Colorado and Utah further supported the upward revision, with horizontal drilling and hydraulic fracturing continuing to drive the growth.

Texas supply during the first nine months of 2012 saw growth of 0.50 mb/d from the same period a year earlier. This was driven mainly by shale activity from the Eagle Ford and Permian basins. In addition, US natural gas liquid (NGL) supply experienced strong growth, in support of the figures. This increased by 200 tb/d during the first nine months of the year, compared with the same period in 2011. The upward revision came despite the fire at a shut-down production platform in the Gulf of Mexico in mid-November. During the third quarter, US oil supply averaged 9.85 mb/d, a growth level of 0.94 mb/d from the same period a year earlier. Further revision to the US supply figure is possible in the coming months as more production data becomes available. On a quarterly basis, US supply in 2012 is seen to stand at 9.75 mb/d, 9.77 mb/d, 9.85 mb/d and 10.02 mb/d respectively.

### Canada and Mexico

Canada's oil output is expected to grow by 0.19 mb/d in 2012 to average 3.75 mb/d, constituting a downward revision of 40 t/d from the previous MOMR. This revision came about in the second half, due to updated production data for the third quarter. Reduced output from the Horizon project, on the back of maintenance, partly influenced the revision. Despite this revision, which was partly carried over to the fourth quarter, Canada's supply growth remained the second largest among all the non-OPEC countries. The country's output is expected to increase significantly in the fourth quarter, compared with the third, as eastern offshore fields White Rose and Terra Nova return from maintenance. In addition, the ramp-up of the Firebag field is seen to support the growth. Canada's supply growth in 2012 has been driven by oil sand output growth, as well as by crude from shale developments in Alberta, Saskatchewan and Manitoba. During the first three quarters, Canada's supply averaged 3.72 mb/d, an increase of 0.23 mb/d from the same period a year earlier. On a quarterly basis, its production in 2012 is estimated to stand at 3.81 mb/d, 3.68 mb/d, 3.68 mb/d and 3.83 mb/d respectively.

Mexico's oil supply is seen to average 2.92 mb/d in 2012, denoting a decline of 20 tb/d from 2011 and a minor upward revision of 5 tb/d from the previous MOMR. The minor upward revision came about as Mexico's output during the early parts of the fourth quarter was at a slightly higher level than expected. In October, Mexico's supply reached its lowest level in 2012 and averaged 2.88 mb/d, after remaining relatively steady at above 2.90 mb/d during the first nine months of the year. However, updated production data showed that output had returned to the normal level for 2012 in the

*North Dakota output reaches new record in September*

*Canada's supply estimate to increase by 0.19 mb/d in 2012*

*Mexico's October output is lowest so far in 2012*

early part of November. Accordingly, a minor upward revision was introduced to adjust for the updated production data. During the first three quarters, Mexico's supply averaged 2.92 mb/d, a decline of 20 tb/d from the same period of 2011. The national operator reported that, in 2013, Mexico's supply will experience some growth. The relatively stable level of production in 2012, compared with the previous year, could support the operator's prediction. Moreover, the operator will soon tender six blocks in the Chicontepec region under the performance contract system, which could support future supply. On a quarterly basis, Mexico's production in 2012 is seen to average 2.92 mb/d, 2.93 mb/d, 2.92 mb/d and 2.91 mb/d respectively.

### **Western Europe**

*OECD Western Europe's supply dropped 0.37 mb/d in third quarter*

Total OECD Western Europe oil supply is estimate to drop by 0.27 mb/d in 2012 to average 3.80 mb/d, the lowest level since 1983 and depicting a downward revision of 35 tb/d from the previous *MOMR*. This revision came from the third and fourth quarters. During the first three quarters, the region's supply dropped by 0.26 mb/d from the same period last year. The heaviest decline came in the third quarter, when supply fell by 0.37 mb/d. On a quarterly basis, OECD Western Europe's supply in 2012 is seen to stand at 4.07 mb/d, 3.91 mb/d, 3.499 mb/d and 3.73 mb/d respectively.

*Norway's oil production to drop 0.12 mb/d in 2012*

Norway's oil supply is projected to decline by 0.12 mb/d in 2012 and average 1.92 mb/d, a downward revision of 20 tb/d from the previous month. This revision happened in the third and fourth quarters to adjust for updated production data and encompass ongoing developments. Norwegian production increased in October from the previous month, supported by the return of Troll supply; yet output did not reach the August level. The short-of-expectations level in October prompted the Norwegian oil authority to warn that the output target for 2012 would not be met. Furthermore, technical issues and prolonged maintenance required the undertaken downward revision, such as the shutdown of Gjoa and the temporary halt of output from Troll C in November. In addition, the Valhall and Hod fields remained shutting during November for upgrade work, and this further supported the downward revision. The start-up of the Visund South field and the restart of the Ula field partly offset the downward revision. During the first three quarters, Norway's production declined by 0.10 mb/d from the same period a year earlier. On a quarterly basis, Norway's production in 2012 is expected to average 2.08 mb/d, 1.98 mb/d, 1.75 mb/d and 1.87 mb/d respectively.

*UK output in 2012 lowest since 1977 at 0.97 mb/d; Causeway output started up*

The UK's oil production is estimate to decline by 0.15 mb/d in 2012 to average 0.97 mb/d, the lowest level since 1977 and constituting a downward revision of 10 tb/d from the previous *MOMR*. This revision came in the fourth quarter, since production data for October was below expectations, despite increasing from the previous month, as production did not exceed August's level. Moreover, the technical difficulties with the restart of the Buzzard field, which had led to a halt in output for two days, supported the downward revision. The start-up of the Causeway project partly offset this revision. The operator of the Elgin-Franklin field, shut down in May due to a leak, maintained that output would restart by year-end. On a quarterly basis, UK supply in 2012 is expected to average 1.08 mb/d, 1.01 mb/d, 0.83 mb/d and 0.96 mb/d respectively.

### **Asia Pacific**

*Australia's output expected to increase by 30 tb/d in 2012*

Total OECD Asia Pacific oil output is expected to increase by 30 tb/d in 2012 to average 0.60 mb/d, denoting an upward revision of 15 tb/d from the previous month. On a quarterly basis, its supply in 2012 is seen to stand at 0.51 mb/d, 0.53 mb/d, 0.69 mb/d and 0.67 mb/d respectively.

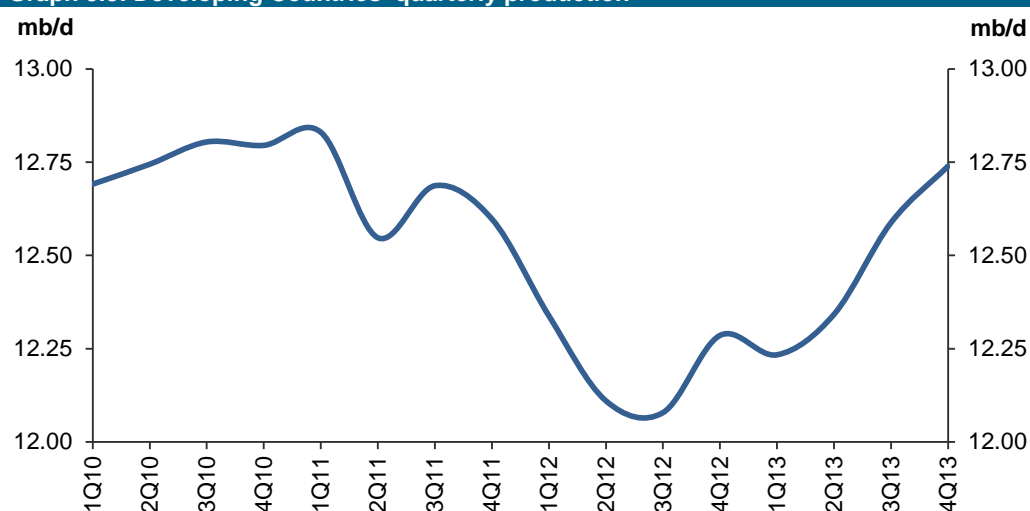
Australia's oil supply is expected to increase by 30 tb/d in 2012 to average 0.52 mb/d, constituting an upward revision of 15 tb/d from the previous *MOMR*. This minor revision was introduced to the second half of 2012 to adjust for updated production data in the third quarter, and this was partly carried over to the fourth. It came on the back of encouraging production data in the third quarter. The increased output from the Varnarvon basin and north-west shelf supported the revision. The development drilling at the Pyrenees project gave further support. During the first nine months, Australia's supply averaged 0.49 mb/d, an increase of 10 tb/d over the same period a year earlier. In the third quarter, output averaged 0.60 mb/d, a significant increase of 120 tb/d from the same period in 2011. On a quarterly basis, Australian supply in 2012 is seen to average 0.43 mb/d, 0.45 mb/d, 0.60 mb/d and 0.59 mb/d respectively.

*DC supply  
expected to  
average  
12.20 mb/d in  
2012, a decline of  
0.46 mb/d*

### Developing countries

Total developing country (DC) oil supply is estimated to decline by 0.46 mb/d in 2012, compared with the previous year, and to average 12.20 mb/d, the lowest level since 2007; this means a downward revision of 55 tb/d from the previous *MOMR*. This decline would be the highest on record. The revision came from Middle Eastern, African and Latin American supply, while projections for Other Asia production remained relatively steady. All the DC region's supply is expected to decline in 2012 from the previous year. Africa is currently expected to be the region with the second-highest supply decline, following OECD Western Europe. The DC forecast experienced various downward revisions, due mainly to delays, the weather and technical and political factors. DC production is expected to increase in the fourth quarter, supported by expected growth from Latin America, Other Asia and Africa. During the first three quarters of 2012, DC production averaged 12.18 mb/d, a decline of 0.51 mb/d from the same period a year earlier. During the third quarter, it averaged 12.08 mb/d, the lowest level since the fourth quarter of 2007 and depicting a decline of 0.61 mb/d from the same period of 2011. On a quarterly basis, DC supply in 2012 averaged 12.34 mb/d, 12.11 mb/d, 12.08 mb/d and 12.29 mb/d respectively.

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



*Malaysia's  
Gusumut-Kakap  
field started up*

Other Asia's oil supply is expected to average 3.61 mb/d in 2012, the lowest annual level since 1994 and depicting a decline of 20 tb/d from the previous year, albeit unchanged from the previous month. Among the region's countries, only Vietnam's, Thailand's and Malaysia's oil supply is expected to increase in 2012, while the rest of the countries are seen to decline. Despite this steady state, there have been a few downward and upward revisions that have offset each other. India's supply is expected to decrease by 10 tb/d in 2012 to average 0.88 mb/d, a downward revision of 5 tb/d from the previous *MOMR*. This revision came in the fourth quarter, due to updated production data for the early part of the quarter. During the first three quarters of this year, Other Asia's production dropped by 20 tb/d from the same period in 2011. On a quarterly basis, its supply in 2012 is expected to average 3.65 mb/d, 3.56 mb/d, 3.59 mb/d and 3.64 mb/d respectively.

Indonesia's oil supply is expected to decline by 60 tb/d in 2012 to average 0.96 mb/d, denoting a downward revision of 5 tb/d from the previous *MOMR*. This revision came on the back of updated production data that affected the early part of the fourth quarter. It happened despite the start-up of the South Mahakam gas project, which is seen as adding some liquid volume. In addition, the operator of the Cepu project indicated that production would reach a peak of 165 tb/d in the second half of 2014. The field's current output is estimated at 25 tb/d, and local opposition to the development's plan is seen to limit the field's growth. Malaysia's supply is estimate to average 0.65 mb/d in 2012, an increase of 10 tb/d from the previous year and an upward revision of 10 tb/d from the previous *MOMR*. This upward revision was supported by the start-up of the Gumusut-Kakap field, with an initial output of 25 tb/d and the expectation of a peak of 130 tb/d, as reported by the operator. In addition, the start-up of the Berantai gas project supported the upward revision, as a small quantity of liquid is expected to support the country's supply.

<i>Colombia's output increased in November</i>	<p>Latin America's oil supply is estimate to remain more or less steady in 2012, with a minor decline of 10 tb/d to average 4.74 mb/d, meaning a small downward revision of 10 tb/d from the previous <i>MOMR</i>. Argentina's production is expected to average 0.74 mb/d in 2012, flat from the previous year and steady from last month. This steady situation is supported by an output increase from the state-controlled operator and expected growth from the south Argentina province, which is expected to offset declines in mature producing areas. During the first three quarters, the country's supply remained steady with a minor increase of 10 tb/d from the same period of 2011. Colombia's production is estimate to increase by 30 tb/d in 2012 to average 0.95 mb/d, unchanged from the last <i>MOMR</i>. Production in October and November witnessed healthy increases from the previous month as output returned from the strike, pipeline outages and flooding that had affected the levels of previous months. During the first three quarters of 2012, Latin America's supply increased by 10 tb/d from the same period of 2011. On a quarterly basis, production this year averaged 4.85 mb/d, 4.71 mb/d, 4.65 mb/d and 4.76 mb/d respectively.</p>
<i>Brazil's main operator provided that Compos basin output reached peak</i>	<p>Brazil's oil production is projected to decrease by 20 tb/d in 2012 to average 2.62 mb/d, depicting a downward revision of 10 tb/d from the previous <i>MOMR</i>. This revision adjusted for updated production data in the third quarter, as well as early indications of October output. Brazil's supply in September reached its lowest level since July 2009. In October, available data suggested that the country's output increased from the previous month, yet remained within the third-quarter average. Maintenance at some platforms in the Compos basin, such as Roncador, affected output and supported the downward revision. Brazil's state-controlled operator reported plans to increase the efficiency of the Compos platforms as the basin's output reached its peak and the occurring decline is natural. It is estimated that the Compos basin produces 80% of the country's output. On the other hand, updated ethanol production data showed improved output in the early part of the fourth quarter, compared with the same period of 2011; that was the first time so far in 2012 where ethanol production had exceeded the previous year's level. The increase in ethanol production partly offset the downward revision. During the first three quarters of 2012, Brazil's supply remained steady, compared with the previous year, and averaged 2.61 mb/d. On a quarterly basis, supply in 2012 is expected to average 2.72 mb/d, 2.58 mb/d, 2.54 mb/d and 2.63 mb/d respectively.</p>
<i>Oman's production to increase by 30 tb/d in 2012 — the only increase in the Middle East</i>	<p>Middle East oil supply is estimated to average 1.51 mb/d in 2012, a decline of 0.18 mb/d from the previous year and indicating a downward revision of 20 tb/d compared to the previous <i>MOMR</i>. This revision came in the second half of the year to adjust for updated production data, as well as lower expectations for the fourth quarter. Oman's production is estimate to average 0.92 mb/d in 2012, denoting growth of 30 tb/d from the previous year and a downward revision of 5 tb/d from the last <i>MOMR</i>. This revision reflected an adjustment to updated actual production data in the third quarter and it was partly carried over to the fourth quarter. Oman's main operator reported a minor increase in crude oil output during the first 11 months of 2012, compared with the same period a year earlier. In addition, output from Offshore Block 8 increased to 20 tb/d, following the completion of new wells.</p>
<i>Syria's Government forces withdrew from Omar and AL-Ward fields in Der Ezzur</i>	<p>Syria's oil supply is expected to decline by 0.16 mb/d in 2012 to average 0.20 mb/d, constituting a downward revision of 10 tb/d from the previous month. This revision reflected updated estimates for the first three quarters, as well as changes in expectations for the fourth quarter, as reports suggested that Government forces withdrew from the Omar and Al-Ward fields in the Dier Ezzur area. The risks associated with Syria's supply forecast are very high due to the lack of production data and other supply-related information. The Government's budget pointed to a production level of 224 tb/d in 2013, but this remains under a great deal of uncertainty. Yemen's supply is estimated to average 0.18 mb/d in 2012, a decline of 40 tb/d from the previous year and a downward revision of 5 tb/d from the previous <i>MOMR</i>. This revision came on the back of the attack on the Marib pipeline in mid-November. During the first three quarters of 2012, the Middle East's oil output decreased by 0.24 mb/d from the same period of 2011. On a quarterly basis, its supply in 2012 is estimated to average 1.44 mb/d, 1.54 mb/d, 1.53 mb/d and 1.52 mb/d respectively.</p>



*Security arrangements delay restart of South Sudan's halted output*

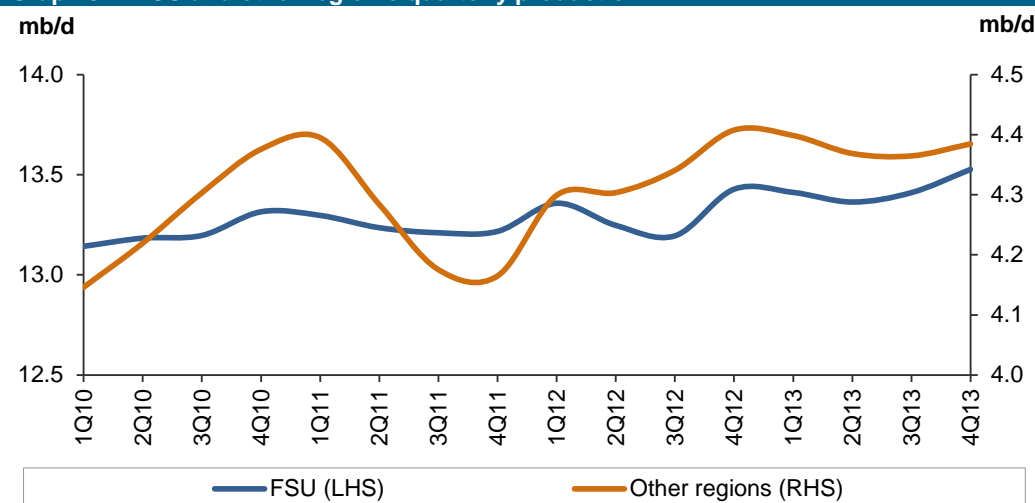
Africa's oil supply is predicted to average 2.34 mb/d in 2012, a decline of 0.25 mb/d from the previous year and a downward revision of 15 tb/d from the last *MOMR*. This revision concerned South Sudan and Sudan. South Sudan and Sudan's oil supply is expected to decrease by 0.30 mb/d in 2012 to average 0.13 mb/d, a downward revision of 15 tb/d from the previous month. It was introduced in the fourth quarter as South Sudan was expected to restart some of its halted production in mid-November. However, the output restart has been pushed back over security arrangements. After that, the two nations held talks and reports suggested a successful outcome to border security issues, and production might restart by year-end. Supply forecasts for the other countries in the region remained steady from the previous *MOMR*. During the first three quarters of this year, Africa's supply declined by 0.27 mb/d, compared with the same period of 2011. On a quarterly basis, supply in 2012 is seen to stand at 2.40 mb/d, 2.30 mb/d, 2.31 mb/d and 2.36 mb/d respectively.

### FSU, Other regions

*Total FSU supply to increase by 70 tb/d in 2012 and average 13.31 mb/d*

Total FSU oil supply is estimate to increase by 70 tb/d in 2012 to average 13.31 mb/d, unchanged from the previous month's assessment. Despite this steady situation, there were a few upward and downward revisions among the group's country supply profiles that offset each other. Russia and Other FSU remain as the drivers of growth in the FSU, while Azerbaijan's and Kazakhstan's supply is seen to decline in 2012. During the first three quarters of this year, FSU supply increased by 20 tb/d from the same period of 2011. On a quarterly basis, total FSU supply in 2012 is estimated to average 13.36 mb/d, 13.25 mb/d, 13.19 mb/d and 13.43 mb/d respectively. China's production is expected to increase by 80 tb/d in 2012 to average 4.20 mb/d. Other Europe's supply is estimated to remain flat from 2011 and average 0.14 mb/d in 2012.

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



*Russia's output reached new record in November, for fourth month running*

### Russia

Russia's oil supply is anticipated to increase by 0.10 mb/d in 2012 to average 10.37 mb/d, an upward revision of 15 tb/d from the previous *MOMR*. Production reached a fourth consecutive monthly record in November as per preliminary data, and this required the revision. The revision affected the fourth quarter, with current production data for October and November detecting higher-than-expected output. The healthy output levels in October and November came on the back of continued ramp-ups of the Vankor, Talakan and Verkhnechnoskoye developments, among others. During the first 11 months of 2012, Russia's supply has increased by 0.10 mb/d from the same period a year earlier. The healthy price level supported operators in maintaining and ramping up output in mature producing areas, in addition to the new volumes coming from green fields. On a quarterly basis, Russian supply in 2012 is expected to average 10.34 mb/d, 10.32 mb/d, 10.36 mb/d and 10.45 mb/d respectively. Its production averaged 10.49 mb/d in November, an increase of 40 tb/d from October, according to preliminary data.

*Kazakhstan's supply to average 1.58 mb/d in 2012, a decline of 20 tb/d*

### **Caspian**

Kazakhstan's oil output is expected to average 1.58 mb/d in 2012, a decline of 20 tb/d from the previous year and unchanged from the previous month. The minor decline comes on the back of limited new developments and the impact of maintenance and declines in mature producing areas. Output is expected to increase in the fourth quarter from the maintenance-curtailed production seen in the third quarter. During the first three quarters of 2012, Kazakhstan's supply decreased by 30 tb/d from the same period of 2011. On a quarterly basis, in 2012 it averages 1.62 mb/d, 1.57 mb/d, 1.52 mb/d and 1.62 mb/d respectively.

*Azeri output to decline by 30 tb/d in 2012*

Azerbaijan's oil supply is seen to decline by 30 tb/d in 2012 to average 0.92 mb/d, the lowest level since 2007 and denoting a downward revision of 15 tb/d from the previous month. This revision was due to updated production data in the third quarter that was carried over to the fourth quarter. Lower production from the Azeri-Chirag-Guneshli field affected the country's supply and is expected to curtail production further in the fourth quarter. Reports suggested that the slow pace of drilling had an impact on the field's output, which declined by an estimated 10%, compared with the previous year. During the first three quarters of 2012, Azerbaijan's supply decreased by 70 tb/d from the same period of 2011. On a quarterly basis, in 2012 it is estimated to average 0.96 mb/d, 0.92 mb/d, 0.88 mb/d and 0.93 mb/d respectively.

*China's Peng Lai field restarted*

### **China**

China's oil supply is projected to average 4.20 mb/d in 2012, an increase of 80 tb/d over the previous year and steady from the previous *MOMR*. This has happened despite the restart of the offshore Penglai field, which was shut in September 2011 on technical issues. Reports suggested that output reached 100 tb/d in November and peak production of 140 tb/d is expected by year-end. The start-up delay of the Beibu field from 2012 to 2013 offset the effect of the Penglai restart in our data. During the first three quarters of this year, China's supply increased by 30 tb/d from the same period of 2011. On a quarterly basis, this year it is estimated to stand at 4.16 mb/d, 4.16 mb/d, 4.20 mb/d and 4.27 mb/d respectively. In October, supply averaged 4.30 mb/d, a minor decrease of 20 tb/d from the previous month, according to preliminary data.

*Non-OPEC supply to grow by 0.90 mb/d in 2013 to average 53.83 mb/d*

### **Forecast for 2013**

Non-OPEC oil supply is forecast to grow by 0.90 mb/d in 2013 to average 53.83 mb/d, constituting a minor downward revision of 20 tb/d from the previous *MOMR*. There were various upward and downward revisions to the 2013 supply forecast, coming from changes to the 2012 supply forecast and historical revisions from 2011. Non-OPEC supply is expected to experience increases in all the quarters in 2013 on a y-o-y basis. On a regional basis, North America is expected to have the highest growth, followed by Latin America and the FSU, while Western Europe is seen to decline. Growth is expected to come mainly from the USA, Canada, South Sudan and Sudan, Brazil, Australia and Russia, while oil supply from Norway, Syria, Mexico and the UK is seen to decline. The risk and uncertainties associated with the supply forecast remain high on both sides, especially for the USA, Russia, Brazil, Syria, Yemen, South Sudan and Sudan, China and Mexico. On a quarterly basis, non-OPEC supply in 2013 is expected to average 53.48 mb/d, 53.48 mb/d, 53.81 mb/d and 54.54 mb/d respectively.

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

	<b>2012</b>	<b>1Q13</b>	<b>2Q13</b>	<b>3Q13</b>	<b>4Q13</b>	<b>2013</b>	<b>Change 13/12</b>
North America	16.51	16.83	16.93	17.03	17.34	17.04	0.52
Western Europe	3.80	3.74	3.59	3.52	3.68	3.63	-0.16
OECD Pacific	0.60	0.65	0.67	0.68	0.66	0.67	0.06
<b>Total OECD</b>	<b>20.91</b>	<b>21.23</b>	<b>21.19</b>	<b>21.24</b>	<b>21.68</b>	<b>21.33</b>	<b>0.42</b>
Other Asia	3.61	3.63	3.66	3.67	3.69	3.66	0.05
Latin America	4.74	4.78	4.80	4.92	4.98	4.87	0.13
Middle East	1.51	1.47	1.46	1.50	1.55	1.49	-0.01
Africa	2.34	2.35	2.42	2.50	2.52	2.45	0.10
<b>Total DCs</b>	<b>12.20</b>	<b>12.23</b>	<b>12.34</b>	<b>12.59</b>	<b>12.74</b>	<b>12.48</b>	<b>0.27</b>
FSU	13.31	13.41	13.36	13.41	13.53	13.43	0.12
Other Europe	0.14	0.14	0.14	0.14	0.14	0.14	0.00
China	4.20	4.26	4.23	4.23	4.25	4.24	0.04
<b>Total "Other regions"</b>	<b>17.65</b>	<b>17.81</b>	<b>17.73</b>	<b>17.78</b>	<b>17.91</b>	<b>17.81</b>	<b>0.16</b>
<b>Total Non-OPEC production</b>	<b>50.76</b>	<b>51.27</b>	<b>51.27</b>	<b>51.60</b>	<b>52.33</b>	<b>51.62</b>	<b>0.86</b>
Processing gains	2.17	2.21	2.21	2.21	2.21	2.21	0.04
<b>Total Non-OPEC supply</b>	<b>52.93</b>	<b>53.48</b>	<b>53.48</b>	<b>53.81</b>	<b>54.54</b>	<b>53.83</b>	<b>0.90</b>
Previous estimate	52.95	53.48	53.49	53.83	54.58	53.85	0.90
Revision	-0.01	0.00	-0.02	-0.02	-0.03	-0.02	-0.01

### Revisions to the 2013 forecast

In addition to historical revisions, there were a few offsetting adjustments to the 2013 non-OPEC supply forecast. US oil supply growth in 2013 was revised up, as well as that of Mexico, Australia, Malaysia and Russia, while oil supply in 2013 from Canada, Norway, the UK, Oman, Yemen, Syria, South Sudan and Sudan, and Azerbaijan was revised down. US oil supply in 2013 is now expected to increase by 0.41 mb/d to average 10.26 mb/d.

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

OPEC natural gas liquids (NGLs) and non-conventional oils are expected to increase by 0.38 mb/d in 2012 to average 5.75 mb/d. In 2013, OPEC NGLs are forecast to grow by 0.24 mb/d over the current year to average 5.99 mb/d.

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

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

### OPEC crude oil production

Total OPEC crude oil production decreased by 0.21 mb/d in November compared to the previous month to average 30.78 mb/d, according to secondary sources. Crude oil output experienced decline from Nigeria, UAE, Saudi Arabia, and Angola in November compared to the previous month. OPEC crude production, not including Iraq, stood at 27.61 mb/d in November, a decrease of 0.22 mb/d from the previous month.

*OPEC crude oil  
production  
decreased  
0.21 mb/d in  
November*



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

	<b>2010</b>	<b>2011</b>	<b>1Q12</b>	<b>2Q12</b>	<b>3Q12</b>	<b>Sep 12</b>	<b>Oct 12</b>	<b>Nov 12</b>	<b>Nov/Oct</b>
Algeria	1,250	1,240	1,233	1,214	1,209	1,199	1,193	1,175	-17.5
Angola	1,786	1,667	1,763	1,738	1,709	1,668	1,736	1,713	-23.0
Ecuador	475	490	492	493	499	501	497	501	4.0
Iran, I.R.	3,706	3,628	3,391	3,086	2,734	2,673	2,678	2,683	5.0
Iraq	2,401	2,665	2,705	2,956	3,129	3,192	3,163	3,174	11.0
Kuwait	2,297	2,538	2,768	2,793	2,810	2,817	2,825	2,833	8.2
Libya	1,559	462	1,213	1,424	1,465	1,496	1,504	1,510	6.3
Nigeria	2,061	2,111	2,075	2,143	2,110	1,991	1,956	1,854	-101.7
Qatar	791	794	786	748	745	746	741	737	-4.2
Saudi Arabia	8,263	9,293	9,819	9,919	9,818	9,738	9,721	9,673	-47.5
UAE	2,304	2,517	2,598	2,607	2,653	2,652	2,646	2,592	-54.5
Venezuela	2,338	2,380	2,381	2,367	2,348	2,321	2,330	2,336	6.2
<b>Total OPEC</b>	<b>29,231</b>	<b>29,786</b>	<b>31,224</b>	<b>31,488</b>	<b>31,228</b>	<b>30,992</b>	<b>30,989</b>	<b>30,781</b>	<b>-207.7</b>
<b>OPEC excl. Iraq</b>	<b>26,831</b>	<b>27,120</b>	<b>28,519</b>	<b>28,532</b>	<b>28,099</b>	<b>27,801</b>	<b>27,826</b>	<b>27,607</b>	<b>-218.7</b>

*Totals may not add up due to independent rounding.*

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

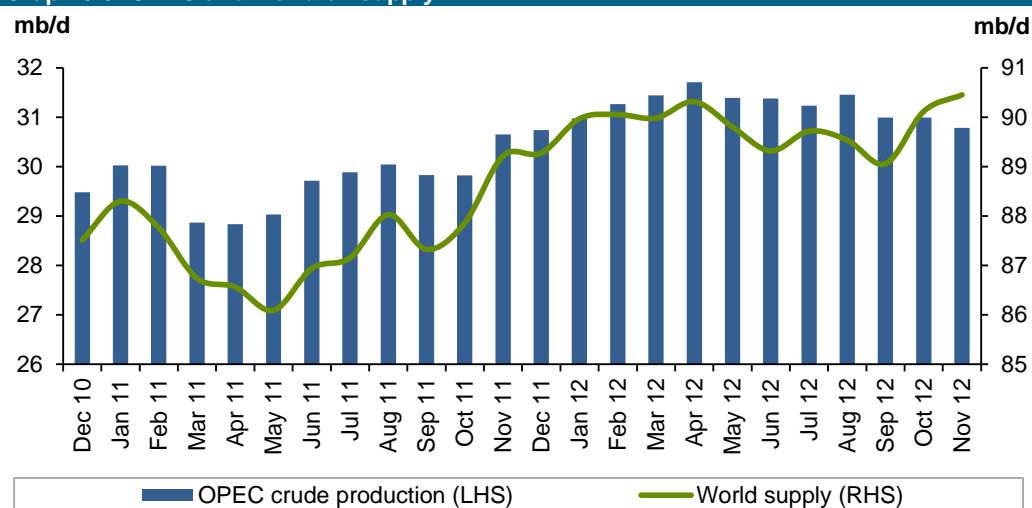
	<b>2010</b>	<b>2011</b>	<b>1Q12</b>	<b>2Q12</b>	<b>3Q12</b>	<b>Sep 12</b>	<b>Oct 12</b>	<b>Nov 12</b>	<b>Nov/Oct</b>
Algeria	1,184	1,173	1,215	1,213	1,201	1,195	1,207	..	..
Angola	1,691	1,618	1,734	1,716	1,677	1,714	1,674	1,640	-34.0
Ecuador	475	500	502	500	509	506	503	504	1.3
Iran, I.R.	3,544	3,576	3,742	3,758	3,746	3,739	3,721	3,708	-13.0
Iraq	2,358	2,653	2,628	2,936	3,150	3,235	3,035	3,190	155.0
Kuwait	2,312	2,660	2,995	2,990	2,957	2,900	2,930	2,970	40.0
Libya	1,487	462	1,296	1,503	1,504	1,537	1,562	1,544	-18.0
Nigeria	1,968	1,896	1,880	1,971	..	..	..	..	..
Qatar	733	734	745	737	726	735	725	730	5.0
Saudi Arabia	8,166	9,311	9,883	10,002	9,760	9,724	9,724	9,492	-231.6
UAE	2,324	2,565	2,602	2,615	2,727	2,691	2,647	2,674	26.6
Venezuela	2,779	2,795	2,792	2,818	2,820	2,800	2,779	2,807	28.6
<b>Total OPEC</b>	<b>29,020</b>	<b>29,942</b>	<b>32,015</b>	<b>32,758</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>
<b>OPEC excl. Iraq</b>	<b>26,662</b>	<b>27,290</b>	<b>29,387</b>	<b>29,823</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>	<b>..</b>

*Totals may not add up due to independent rounding.*

*.. Not available.*

## World Oil Supply

Preliminary data indicates that global oil supply increased 0.33 mb/d in November to average 90.45 mb/d. Non-OPEC supply experienced growth of 0.54 mb/d, while OPEC crude oil production decreased by 0.21 mb/d. The share of OPEC crude oil in global supply declined slightly to 34% in November from 34.3% in the previous month. The estimate is based on preliminary data for non-OPEC supply, estimates for OPEC NGL and OPEC crude oil production from secondary sources.

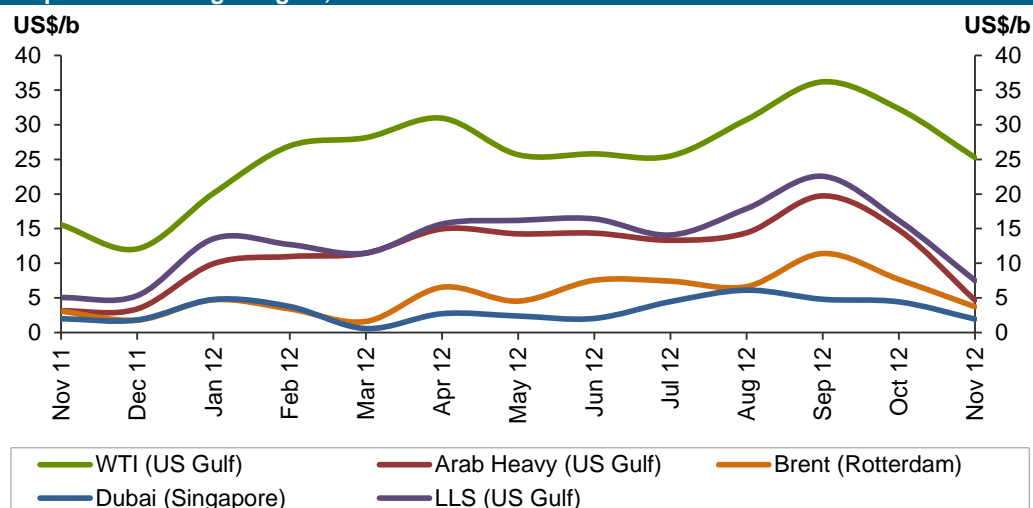
**Graph 5.5: OPEC and world oil supply**

# Product Markets and Refinery Operations

*Refinery margins fell worldwide in November, due to increasing supplies*

Product markets in November continued declining, due to further losses at the top and bottom of the barrel. Gasoline cracks continued to plummet worldwide, following seasonal low demand amid increasing supplies as refineries returned from maintenance. An over-supply of fuel oil at a time of lower bunker demand intensified bearish sentiment at the bottom of the barrel. These factors led to a fall in refinery margins across the board.

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



US Gulf Coast refining margins plummeted during November to the lowest level seen so far this year, due mainly to the sharp loss of more than \$12 in gasoline, which had been under pressure since the end of the driving season amid increasing supplies, allowing inventories to recover and reach the typical average level at the end of the month. Additional pressure came from the demand side being affected by the impact of Hurricane Sandy on the East Coast.

In contrast, the winter season has not yet lent sufficient support to distillates to offset the market's generally bearish mood.

The margins for West Texas Intermediate (WTI) fell, due to the plummeting gasoline crack, and lost almost \$7 to remain at around \$25/b. The margins for Light Louisiana Sweet and Arabian Heavy crudes on the US Gulf Coast suffered sharp drops of more than \$8, to stand at around \$8/b and \$5/b respectively in November, the lowest levels seen so far this year.

European gasoline cracks continued in free fall during November, due to improving supplies and weak demand, as bearish signals from the USA affected the European market.

**In addition, market sentiment turned bearish across the barrel, as the return of several refineries from maintenance eased the tight situation in the region while mild weather kept heating oil demand lacklustre.**

The refinery margin for Brent crude in North-West Europe showed a sharp loss of \$4 to average \$3.9/b, the lowest level seen in the last seven months.

Refinery margins in Asia lost the ground gained in recent months, because of a bearish performance at the bottom of the barrel, with the fuel oil crack continuing to lose ground due to the worldwide slump in bunker demand. In addition, the return of refineries from maintenance exerted pressure on the supply side.

With the exception of naphtha, losses were recorded across all parts of the barrel, as the market remained under pressure from rising supplies outweighing regional demand.

*Refinery runs on the rise in November after heavy maintenance*

These developments caused refinery margins in Singapore to show a sharp loss of more than \$2 to average \$2/b in November, the lowest level seen in five months.

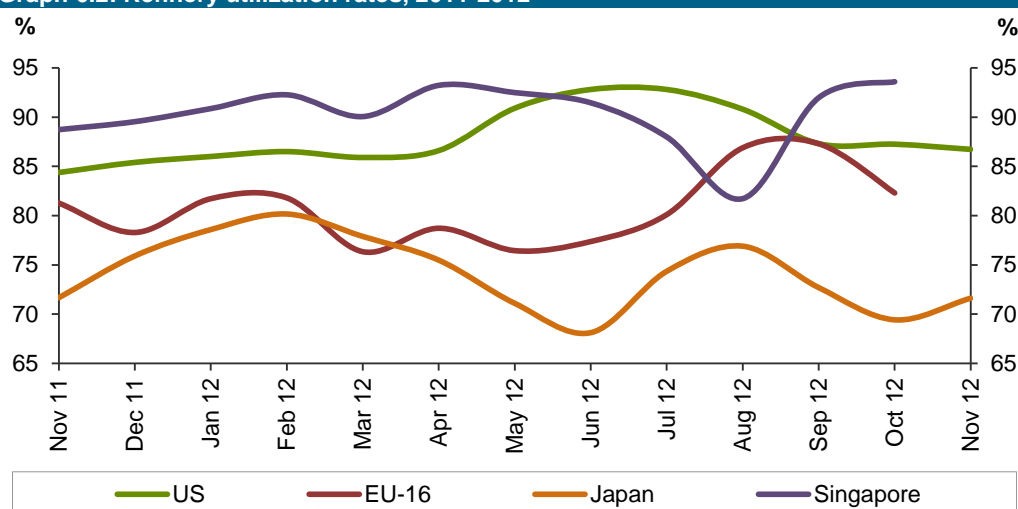
### Refinery operations

**US refinery utilization remained at the same level as in recent months as several refineries were affected when Hurricane Sandy struck the East Coast. However, during the last few weeks utilization rates have started moving up again. Furthermore, around the globe, several refineries are back from maintenance, thus increasing product supply.**

US refinery runs remained around 87% in November, and this was at the same level of the last two months. This was due in part to some maintenance, but mainly to the impact of Hurricane Sandy. However, during the past few weeks, several refineries, amounting to more than 500 tb/d of capacity, have been resuming operations in the aftermath of shutdowns caused by the hurricane.

This situation, along with high export levels, continued to keep product inventories below the five-year average, mainly middle distillates, while gasoline inventories showed a sharp recovery to reach the typical average level.

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



After the end of the driving season, gasoline demand dropped in the Atlantic Basin, causing margins to fall from the high level seen in previous months. Due to the heavy maintenance season in Europe, although the region's refineries continued with their throughputs on the rise, refinery utilization averaged more than 82% in October, which was lower than in the previous month when it hit the highest level seen so far this year of around 85%.

In Asia, activity in most of the refineries rose during October after a heavy maintenance season, and Singapore, China and India both increased their runs by 3% to reach an average of 93% each in October.

Japanese throughputs increased by 2% to average around 72% of capacity in November, after the restart of some refineries.

### US market

US gasoline demand stood at around 8.7 mb/d in November, increasing by 150 tb/d from the previous month and up by around 200 tb/d from the same month last year.

Despite the recent rise due to the Thanksgiving holiday, US gasoline demand continued to be seasonally low, being depressed further by the impact of Hurricane Sandy, while supply also tightened due to the disruptions caused by this disaster.

The waiver of the Jones Act, which has various prohibitions regarding the transportation

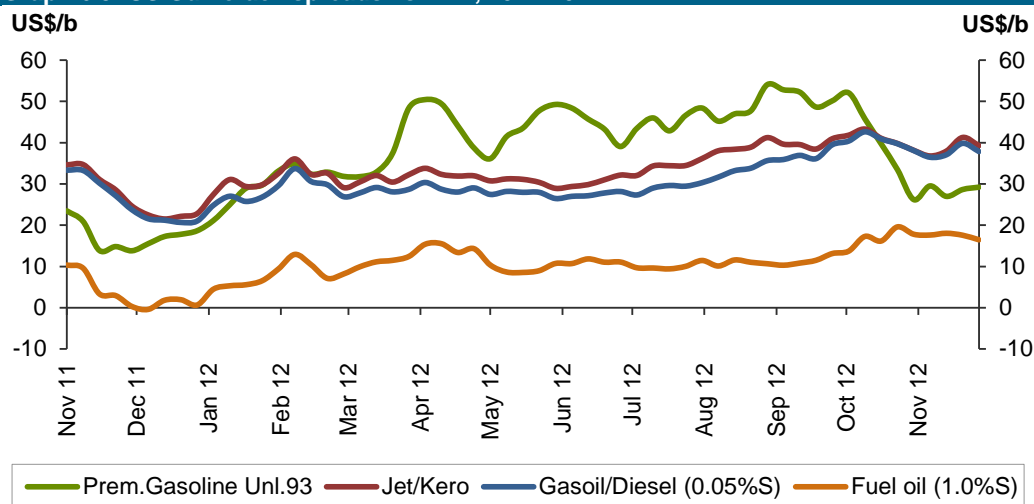
*US gasoline cracks continued falling in November*

from one US port to another by non-US-flagged ships, enabled shipments from refineries on the US Gulf Coast to the North-East to help counter the regional gasoline shortage. The waiver was in effect until 13 November and allowed some 1.75 million barrels of gasoline to be shipped to PADD1, according to the US Maritime Administration.

Demand for gasoline continues to increase from Latin America, mainly Brazil demanding growing quantities of refinery-based gasoline and will do so increasingly towards the end of the year due to higher seasonal requirements.

The gasoline crack averaged \$28/b in November, a sharp drop of around \$12 from the previous month's average.

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



**Middle distillate demand stood at around 4.0 mb/d in November, which was 370 tb/d above the previous month and around the same level as a year ago.**

Middle distillate cracks continued relatively healthy, although losing the ground gained in the previous month, due mostly to the market being sluggish across the country amid limited demand as the logistical difficulties on the Atlantic Coast hampered trading.

Distillates recorded lower outright prices and narrower cracks. Stocks fell to the lowest level in four years, with diesel supplies growing tighter in particular. Yet refiners were reluctant to increase runs in a pronounced manner, with demand remaining sluggish. PADD1 was the main recipient of the increased imports, since the availability of pipelines and trucks to move products from PADD3 to the East Coast were limited.

Latin American demand for diesel continued to be the main factor contributing to the market. Demand for diesel came mainly from Mexico, Chile, Ecuador, Panama and El Salvador, causing US distillate stocks to continue falling.

During the last few weeks, heating oil demand started to increase, with lower temperatures registered in some regions and total middle distillate demand reaching its highest level this year, at above 4 mb/d. Heating oil inventories were more than 30% below the five-year average. However, the Nymex heating oil futures contract moved into contango recently, giving an incentive to stockpile the product, after being in backwardation since the beginning of September. As a snowstorm hit the North-East, New York State lifted the requirement to burn heating oil with 15 parts per million of sulphur, easing pressure on a tight market with inventories below the five-year average. This requirement had been imposed only on 1 July and the waiver was to be in effect until 7 December.

The gasoil crack on the US Gulf Coast lost \$4 to stand at around \$37/b in November. At the bottom of the barrel, fuel oil cracks were slightly higher, thanks mainly to lower crude prices, while product fundamentals remained weak.

*Easing market in Europe affected product cracks*

In the last few weeks, fuel oil stocks increased to typical seasonal levels. Imports and production were markedly higher and, in addition, the devastating hurricane on the US East Coast resulted in lower demand from shippers in the region.

The fuel oil crack averaged \$17.5/b in November, a slight gain of 70¢ on the previous month and lower than the drop in the WTI price.

#### **European market**

**Product market sentiment turned bearish in Europe, as gasoline continued to be hit by lower demand in the Atlantic Basin, and the return of several refineries from maintenance eased the tight situation in the region, with mild weather keeping heating oil demand lacklustre.**

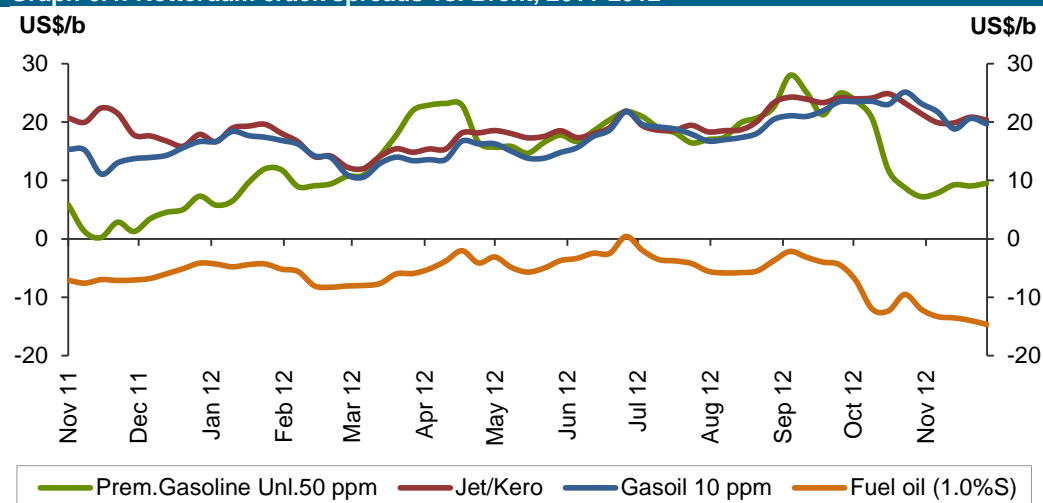
Gasoline cracks continued weakening substantially over the month, due to the European market remaining affected by lacklustre demand from the US East Coast following Hurricane Sandy. Thus fewer cargoes moved across the Atlantic, while demand from West Africa also continued to be subdued.

Stocks at the Amsterdam-Rotterdam-Antwerp (ARA) trading hub fell in October. However, in terms of forward cover, the market remained well supplied, with four days above the five-year average of 60 days.

The gasoline crack spread against Brent crude showed a sharp loss of \$6, to average around \$9/b in November.

The naphtha crack in Europe maintained the ground gained in recent months, as this product continued to out-perform light distillate gasoline. The main driver behind naphtha's improvement this month was rising propane prices, while demand from petrochemical firms in Asia-Pacific, especially Japan, helped boost the market.

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



The middle-of-the-barrel crack lost ground this month, as the return of some refineries from maintenance started to boost supplies and eased tightness in the region. The market was also under pressure from the expectation of increasing inflows from India and the US Gulf Coast, while news that Royal Dutch Shell would restart its Pernis refinery within the next weeks added to the bearish outlook too.

Furthermore, the lack of colder temperatures in Europe kept the important German heating market from restocking on a large scale.

Stock-builds during times of elevated maintenance levels hinted at a relatively weak demand situation in the region. Middle distillate forward demand cover at the end of October stood at 60.5 days, which was 3.5 days above the five-year average.

Lower demand from South America and the Red Sea exerted pressure on the market.

However, the market could limit the losses, because some support came from loading delays at ARA, Europe's largest shipping hub.

Looking ahead, the important German market is currently at lower-than-average levels, but its buying activity should improve when colder weather arrives in Europe.

The gasoil crack-spread against Brent crude at Rotterdam lost \$3 to average \$21/b in November.

At the bottom of the barrel, both fuel oil cracks continued losing ground over the month, although low-sulphur fuel oil (LSFO) once again performed worse than its high-sulphur equivalent. Both markets were still characterized by ample supply and weak demand, while supplies would improve further with the end of the refinery maintenance season.

In addition, Russian inflows boosted supplies to the region, while limited demand from the key Singapore market kept putting pressure on the market.

Looking ahead, the LSFO crack could remain under pressure with the likelihood of increasing supplies in the coming weeks, since Norway's Slagen refinery and various UK refineries were expected to finish turnaround by the end of November.

The North-West European fuel oil crack-spread against Brent exhibited a sharp loss of \$3.2 in November, to stand at -\$13.5/b.

#### **Asian market**

**The Asian market retreated under the pressure of increasing supplies, easing the tight situation seen in previous months, and the cracks weakened across the barrel — with the exception of naphtha, which remained healthy on the back of stronger petrochemical demand, despite increasing inflows into the region.**

At the top the barrel, gasoline witnessed a decline, with the market under pressure from ample supplies in the region and the expectations of higher gasoline exports from Taiwan. However, the downside was limited by strong regional demand, mainly from Indonesia – due to the heavy turnaround schedule – the Philippines and Malaysia as well as India, where gasoline consumption improved significantly to a four-month high. In South Korean, gasoline demand declined.

In addition, Singapore's onshore light distillate stocks posted a rise, although stocks remained below the five-year average.

These bearish factors caused gasoline to lose some ground, and the gasoline crack-spread against Dubai crude in Singapore showed a loss of \$2 to average \$9/b in November.

Supplies are expected to remain ample in the region, with increased volumes likely to be available from Taiwan's CPC refinery due to the new unit in operation, although this could be offset by an unplanned shutdown in a desulphurization unit at the Formosa Complex. On the other hand, demand could increase in Vietnam, following the cutback in domestic gasoline prices announced by the Ministry of Finance.

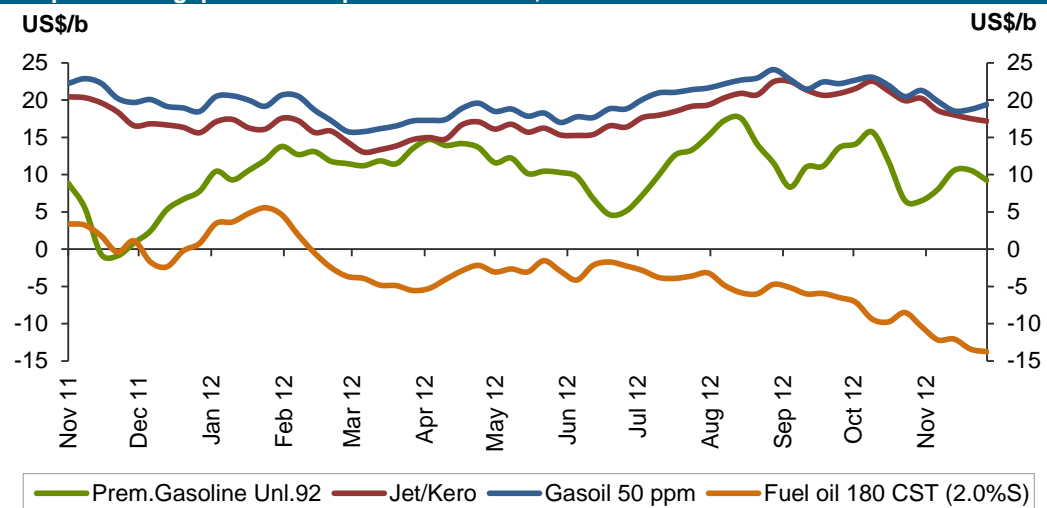
Naphtha kept the ground gained during the last months and continued to show a positive development, with sentiment remaining healthy in the region.

The naphtha crack remained largely steady, despite expectations of elevated Western arbitrage arrivals next month. Despite this, demand remained firm, particularly from Taiwan, with high petrochemical margins.

Looking forward, some support is likely to stem from Indonesia's import requirements during the maintenance of that country's refineries and from the firm demand from the petrochemical sector — although this could be offset by maintenance at the naphtha cracker of Japan's Kawasaki complex and the rising supplies from the Middle East, which will weigh on the market.

*Plentiful supplies caused product cracks to fall in Asian market*



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

Middle distillates continued to exhibit relatively healthy crack levels, although they lost part of their strength over the month, on the back of pressure from re-emerging higher supplies, with a lack of viable arbitrage outlets to Europe.

Cracks in the middle of the barrel lost ground, due mainly to rising supplies, in line with significantly lower refinery maintenance during the month. This was already reflected in an increase in Singapore's middle distillate stocks.

Gasoil demand limited losses and remained healthy in Sri Lanka, the Philippines and Vietnam. This was also due to higher exports from Asia-Pacific to Australia and South Africa.

The gasoil crack-spread in Singapore against Dubai averaged around \$19/b in November, a loss of \$2 from the previous month.

Looking forward, the market could receive support from a potential increase in diesel demand in China, given the gradually improving activity in the manufacturing sector, with the PMI Manufacturing Index rising for the second consecutive month.

At the bottom of the barrel, the fuel oil crack continued its downward trend for the fifth consecutive month. Despite some demand from Pakistan and South Korean utilities, supply-side factors continued to put pressure on fundamentals with arbitrage arrivals from the West into Asia at over five million tonnes, up by almost 600,000 tonnes m-o-m.

Chinese fuel oil imports have markedly contracted in recent months, and could wane over the coming period, as the recent decline in retail prices for motor fuels potentially has an impact on margins.

The fuel oil crack-spread in Singapore against Dubai dropped by almost \$4 to average -\$12.6/b in November.

Looking ahead, some support may stem from Japan in line with higher seasonal fuel oil requirements from utilities during the winter months; 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, %		
	Oct 12	Nov 12	Nov/Oct	Oct 12	Nov 12	Nov/Oct
<b>US</b>	14.81	14.84	0.03	87.25	86.73	-0.53
<b>France</b>	1.30	-	-	75.34	-	-
<b>Germany</b>	1.98	-	-	81.83	-	-
<b>Italy</b>	1.51	-	-	64.48	-	-
<b>UK</b>	1.27	-	-	71.98	-	-
<b>Euro-16</b>	10.50	-	-	82.30	-	-
<b>Japan</b>	3.11	3.21	0.10	69.43	71.62	2.19

Sources: OPEC statistics; Argus; Euroilstock Inventory Report; IEA; EIA/DoE; METI; PAJ.

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

		Sep 12	Oct 12	Nov 12	Change Nov/Oct
<b>US Gulf (Cargoes):</b>					
Naphtha		124.84	116.75	116.92	0.16
Premium gasoline	(unleaded 93)	145.35	129.93	115.02	-14.91
Regular gasoline	(unleaded 87)	129.17	119.72	108.59	-11.13
Jet/Kerosene		134.13	130.70	124.81	-5.89
Gasoil	(0.05% S)	131.66	130.22	123.91	-6.32
Fuel oil	(1.0% S)	108.75	103.41	101.06	-2.35
Fuel oil	(3.0% S)	100.97	96.18	92.96	-3.22
<b>Rotterdam (Barges FoB):</b>					
Naphtha		106.90	105.62	103.00	-2.62
Premium gasoline	(unleaded 10 ppm)	121.08	111.35	103.68	-7.67
Premium gasoline	(unleaded 95)	137.67	126.60	117.89	-8.72
Jet/Kerosene		136.77	135.41	129.34	-6.08
Gasoil/Diesel	(10 ppm)	134.72	135.41	129.48	-5.93
Fuel oil	(1.0% S)	109.44	101.15	95.37	-5.78
Fuel oil	(3.5% S)	102.07	96.86	92.46	-4.40
<b>Mediterranean</b>					
Naphtha		104.63	102.58	100.19	-2.38
Premium gasoline	(50 ppm)	139.12	128.34	119.82	-8.52
Jet/Kerosene		131.05	128.08	122.95	-5.14
Gasoil/Diesel	(50 ppm)	116.11	115.83	110.35	-5.48
Fuel oil	(1.0% S)	107.41	99.47	93.92	-5.55
Fuel oil	(3.5% S)	101.04	95.78	91.40	-4.38
<b>Singapore (Cargoes):</b>					
Naphtha		106.81	104.91	102.64	-2.27
Premium gasoline	(unleaded 95)	125.97	124.07	119.61	-4.45
Regular gasoline	(unleaded 92)	122.25	120.42	116.47	-3.95
Jet/Kerosene		132.57	130.17	125.21	-4.96
Gasoil/Diesel	(50 ppm)	133.44	130.92	126.57	-4.35
Fuel oil	(180 cst 2.0% S)	106.40	102.19	97.48	-4.70
Fuel oil	(380 cst 3.5% S)	104.70	99.89	94.59	-5.30

# Tanker Market

*Global spot fixtures increased in November by 10.1% to average 18.5 mb/d*

Global spot fixtures increased in November by 10.1% to average 18.5 mb/d. OPEC spot fixtures rose as well, by 7%, from the previous month to average 13.00 mb/d, up by 0.86 mb/d from the levels seen in October. The increase is attributed mainly to higher fixtures from the Middle East to the West, which rose by 1.2 mb/d to average 3.3 mb/d, while fixtures from outside the Middle East experienced a loss of 0.25 mb/d or 6.6% from the previous month. On an annual basis, OPEC spot fixtures in November were 11.1% higher than in the same month a year earlier. Sailings from OPEC increased in November by 0.59 mb/d or 2.5% to stand at 24.3 mb/d, a rise of 4.9% from last year. Middle East sailings stood at 17.9 mb/d, up by 0.62 mb/d from the previous month and 1.2% higher than the year before. Arrivals in almost all reported ports rose in November, with the exception of West Asia, which declined by 0.12 mb/d, reflecting a decrease of 2.6% from a month earlier and of 6% from last year. Arrivals in North America, Europe and the Far East all increased from a month earlier by 12.1%, 2.1% and 1.1% respectively, with annual rises of 11.4%, 2% and 5%.

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

	<u>Sep 12</u>	<u>Oct 12</u>	<u>Nov 12</u>	<u>Change Nov/Oct</u>
<b>Spot Chartering</b>				
All areas	16.32	16.80	18.50	1.70
OPEC	11.95	12.15	13.00	0.86
Middle East/East	5.56	6.20	6.12	-0.08
Middle East/West	2.65	2.15	3.33	1.18
Outside Middle East	3.74	3.81	3.56	-0.25
<b>Sailings</b>				
OPEC	23.85	23.68	24.27	0.59
Middle East	17.48	17.28	17.90	0.62
<b>Arrivals</b>				
North America	9.14	8.54	9.57	1.03
Europe	12.15	12.38	12.64	0.27
Far East	8.43	8.53	8.63	0.10
West Asia	4.50	4.56	4.44	-0.12

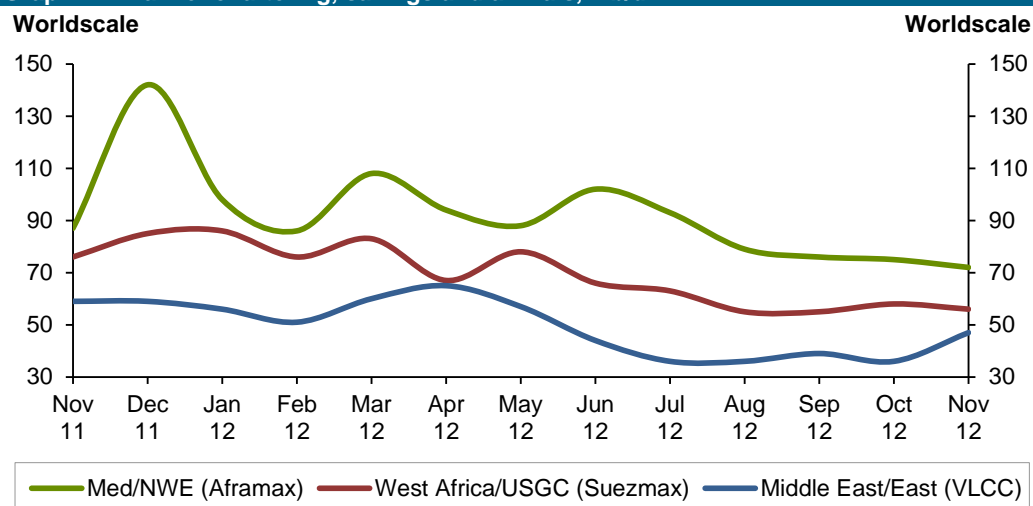
Source: "Oil Movements" and Lloyd's Marine Intelligence Unit.

Spot freight rates for the dirty tanker sector increased in November across a number of reported routes in general, with an exception being Suezmax. Average spot freight rates for VLCCs experienced the strongest gain, increasing by 21.8% from a month earlier to average 41 WS points, a level not seen for several months. This increase, which came mainly on the back of tightening tonnage supply and an improved Middle East market, did not last for long as the end of the month was quiet with activity lower.

Freight rates for Suezmax did not share the rising trend with VLCC, declining on all reported routes by 2.8% on average in November, while remaining stable on other key routes at best. Suezmax freight rates could not maintain the gains achieved at the end of October, as the market remained over-supplied, with limited tonnage requirements.

Aframax freight rates were mixed in November, while freight rates declined on some reported routes. The decline was counterbalanced by gains achieved on the Caribbean-to-US Coast. On average, Aframax freight rates rose by 5.3% in November. Bunker prices decreased in November, allowing owners to reduce operating costs and increasing margins. Taken as a whole, November was a promising month for tankers, as the market situation improved in several segments on the back of an enhanced supply and demand balance.

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



*Average freight rates for dirty tanker segment increased across a number of routes with the exception of Suezmax*

November witnessed a considerable uptick in **VLCC** market activity and freight rates. This increase, which was registered on all reported routes, was caused mainly by an enhanced supply-demand formula, as the tonnage list thinned amid higher seasonal demand and an influx of activity resulting from winter season requirements, in addition to increased interest from Asian buyers. Although the available tonnage was sufficient to absorb the increase in demand, spot freight rates benefited from the increase in activity to see a general rise in rates on different routes. For the VLCC sector, rates for tankers operating the Middle East-to-East route saw the largest increase among all the reported routes. They increased by 11 WS points or 30.6% in November from the previous month to stand at 47 points, while rates for tankers trading on the Middle East-to-West routes saw a lower increase of 5 WS points or 20% from a month earlier to average 30 WS points. The West Africa-to-West route registered the smallest increase among the reported VLCC freight rates, rising by 15% to average 46 WS points. In an annual comparison, all freight rates on reported routes from the Middle East to the East, the Middle East to the West and West Africa to the East showed a drop on the levels seen last year by 20%, 27% and 21% respectively. The stronger market encouraged ship-owners to demand higher rates and strengthen their positions against charterers who had expedited December's fixtures, taking into account the prevailing market situation, since fewer ships were available. Following the completion of December's first-decade requirements, market activity slowed down, especially with holidays in the USA and Asia. Moreover, VLCC-owners eased their stand as more competitive quotes were received for second-decade loadings.

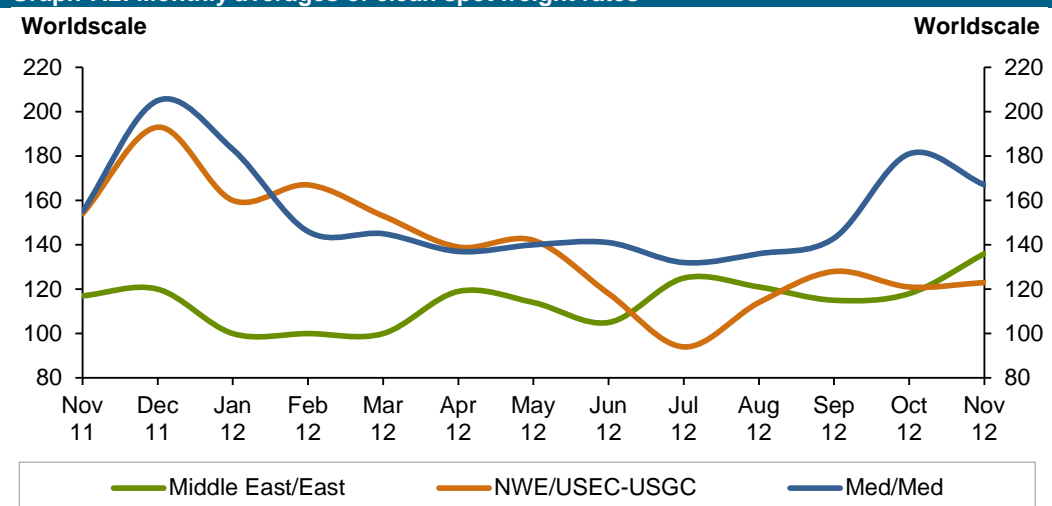
The uptick in VLCC spot freight rates did not spill over to the **Suezmax** class, unlike the owners had hoped. Among all the tankers in the dirty segment, Suezmax saw the only negative performance in November. The Suezmax market did not pick up at any stage of the month, as activity kept declining or remained stable at best. The abundant vessel availability prevented rates from registering any increase, as charterers kept receiving large numbers of offers at any given time during the month, even for prompt requirements. As a result, spot freight rates for Suezmax trading from West Africa to the US Gulf coast declined by 3.4% from the previous month to average 56 WS points; this was because the marginal gain that had been reported on this route the previous month did not last long, since rates went under pressure again due to the decreasing activity in that area. Additionally, spot freight rates for vessels operating from North-West Europe to the USA declined by 2% from a month earlier to average 50 WS point in November. Annually, the average spot freight rates on both reported routes saw greater declines of 26% and 31% respectively. November was uneventful for the Suezmax class, despite some delays caused by weather disruptions in the Mediterranean and delays in the Turkish Straits.

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

<b>Crude</b>	<b>Size 1,000 DWT</b>	<b>Sep 12</b>	<b>Oct 12</b>	<b>Nov 12</b>	<b>Change Nov/Oct</b>
Middle East/East	230-280	39	36	47	11
Middle East/West	270-285	28	25	30	5
West Africa/East	260	40	40	46	6
West Africa/US Gulf Coast	130-135	55	58	56	-2
NW Europe/USEC-USGC	130-135	52	51	50	-1
Indonesia/US West Coast	80-85	101	96	92	-4
Caribbean/US East Coast	80-85	89	94	118	24
Mediterranean/Mediterranean	80-85	77	77	78	1
Mediterranean/North-West Europe	80-85	76	75	72	-3

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

In the **Aframax** sector, spot freight rates were mixed, increasing on some routes and falling on others. Rates for Aframax tankers trading on the Indonesia-to-East and Mediterranean-to-North-West Europe routes declined in November by 4% each to average 92 WS points and 72 WS points respectively. The continued tonnage build-up in those areas, combined with severe competition between tanker-owners, kept dragging down the rates. Therefore, no improvement in the rates was detected, despite the congestion in the Turkish Straits, which caused a delay of 3–4 days, and the bad weather seen in Western Europe. Rates for the Mediterranean-to-Mediterranean route increased by a slight 1 WS point as a result of a small rise in the region's activity. On the other hand, Aframax rates on the Caribbean-to-USA route saw a notable increase in November, rising on average by 25.5% from the previous month to stand at 118 WS points. The gain in rates in the Caribbean was supported by the tight tonnage position and the disturbances caused by Hurricane Sandy. Yet, by the end of the month, rates started to decline as the situation cleared in the Caribbean and more vessels were available at that point. Annually, Aframax spot freight rates on this route gained by 9% from a year ago, while freight rates on all other routes declined.

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

*Clean tanker average spot freight rates were almost unchanged in November despite high activity witnessed at the end of the month*

Clean tanker average spot freight rates were almost stable in November, compared with a month earlier. In a monthly comparison, clean East of Suez rates gained 10.6% in November to average 146 WS points, while West of Suez rates declined by 5% to 156 WS points. Rates for tankers operating on the Middle East-to-East route increased by 15.3% and rates for the Singapore-to-East route rose by 6.9%, while rates for the North-West Europe to the USA increased by 1.7% in November from the previous month. Nevertheless, a negative performance was registered for spot freight rates on the Mediterranean-to-Mediterranean and Mediterranean-to-North-West Europe routes, declining by 7.7% and 6.3% respectively. Generally, the clean tanker market was quiet and lacked activity in November. The only exception came after Hurricane Sandy, as the disruption after the disaster created uncertainty about the market situation, and this led

eventually to a medium-sized increase in freight rates. Apart from this, the clean tanker market was fairly steady in November, but the end of November witnessed an increase in activities and an influx of cargoes which led to a firmer market for both long-range and medium-range tankers. As a result, the freight rates registered some gains as the position list balanced.

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

<b>Products</b>	<b>Size 1,000 DWT</b>	<b>Sep 12</b>	<b>Oct 12</b>	<b>Nov 12</b>	<b>Change Nov/Oct</b>
Middle East/East	30-35	115	118	136	18
Singapore/East	30-35	124	145	155	10
NW Europe/USEC-USGC	33-37	128	121	123	2
Mediterranean/Mediterranean	30-35	143	181	167	-14
Mediterranean/North-West Europe	30-35	148	189	177	-12

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

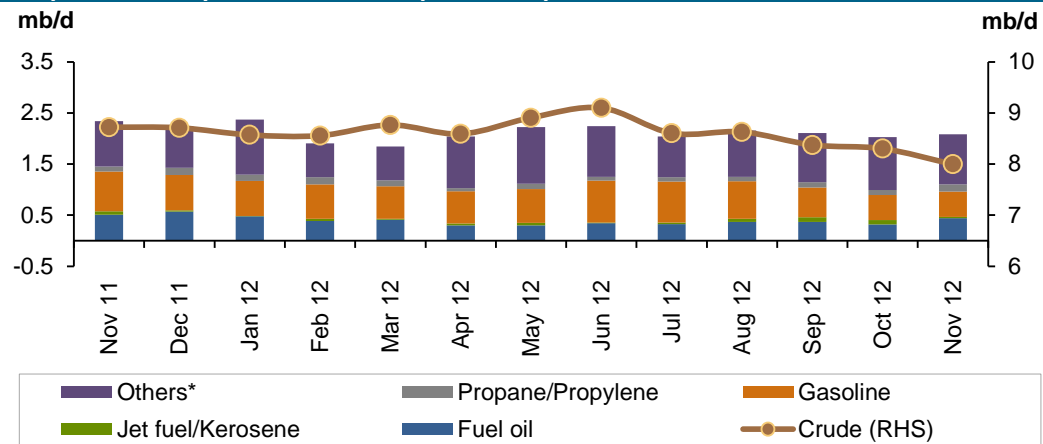
# Oil Trade

*US crude oil imports dropped for third month running in November to the lowest level since January 2000*

## USA

Preliminary data shows that US crude oil imports dropped for the third consecutive month in November, by around 300 tb/d or 3.7% from the previous month to average 8 mb/d. On an annual basis, this reflects a loss of 726 tb/d or 8% from a year earlier. US crude imports in November were found to be the lowest since January 2000.

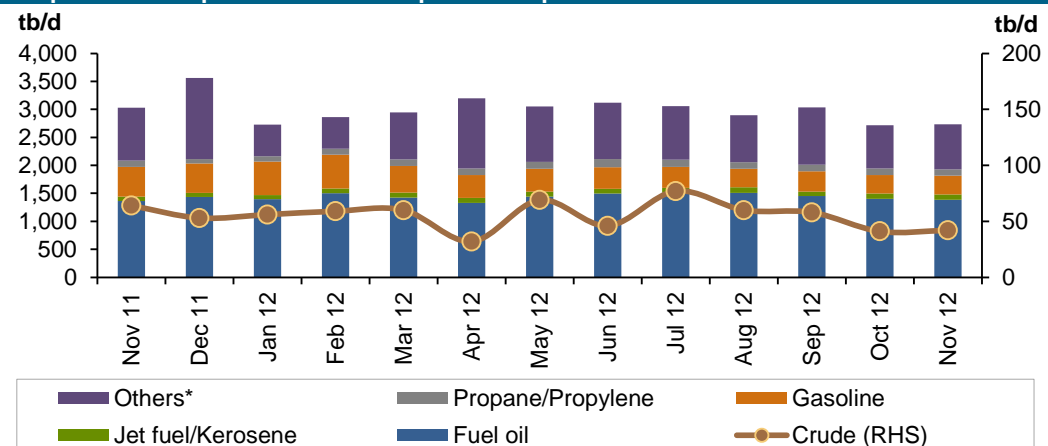
**Graph 8.1: US imports of crude and petroleum products**



\*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.

US product imports saw no major change from the previous month to average 2.08 mb/d, down by just 2.8% m-o-m, while, on a y-o-y basis, they dropped by 409 tb/d or 18.8%. In a year-to-date comparison, crude and product imports declined by 4.2% and 17% respectively. In contrast, US product exports in November registered a minor gain from a month earlier of 14 tb/d or 0.5% to average 2.8 mb/d — this figure reflects an annual gain of 319 tb/d or 10%. Consequently, total US net imports declined in November to an average of 7.3 mb/d, that is, a loss of 3.5% from the previous month and 10% from a year earlier.

**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.

The last monthly release for September shows that US crude imports fell to their lowest level since February 2011. This drop was equal to 3% on a monthly basis and 6% y-o-y, and was due to higher domestic production. The top suppliers to the USA maintained the same order as seen the previous month. Canada remained the premier crude supplier, accounting for a stable share of 27% of total imports. Saudi Arabia, the second-largest supplier to the USA, maintained its position and share from August,



accounting for 15% of total crude imports. Mexico stayed number three supplier, with 12% of imports. In an annual comparison, all three suppliers saw declines in their exported volumes to the USA, of 1%, 11% and 5% respectively.

Crude imports from OPEC Member Countries were almost stable in September from the previous month, accounting for 48% of total US crude imports. US product imports from Member Countries dropped by 13% from the previous month to register a share of 9.5% of total US product imports. As for the product supplier share, Canada, Russia and the United Kingdom maintained their positions as first, second and third suppliers to the USA. Canada's share of product imports decreased by 8% from August to average 522 tb/d or 25%. The UK's share fell by 40% to 109 tb/d. On the other hand, Russia's product exports to the USA increased by 80% to average 497 tb/d.

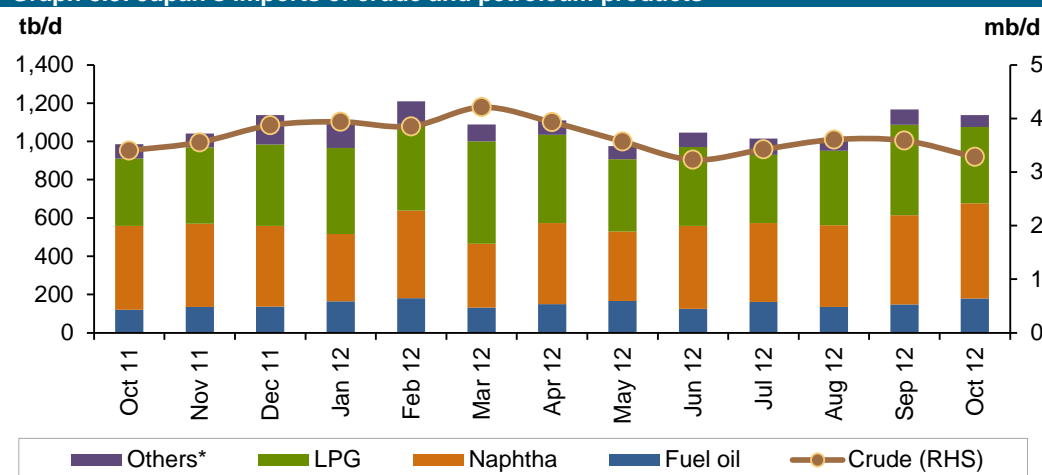
**Table 8.1: US crude and product net imports, tb/d**

	<u>Sep 12</u>	<u>Oct 12</u>	<u>Nov 12</u>	<u>Change Nov/Oct</u>
Crude oil	8,317	8,262	7,956	-306
Total products	-935	-733	-691	42
<b>Total crude and products</b>	<b>7,736</b>	<b>7,529</b>	<b>7,264</b>	<b>-264</b>

### Japan

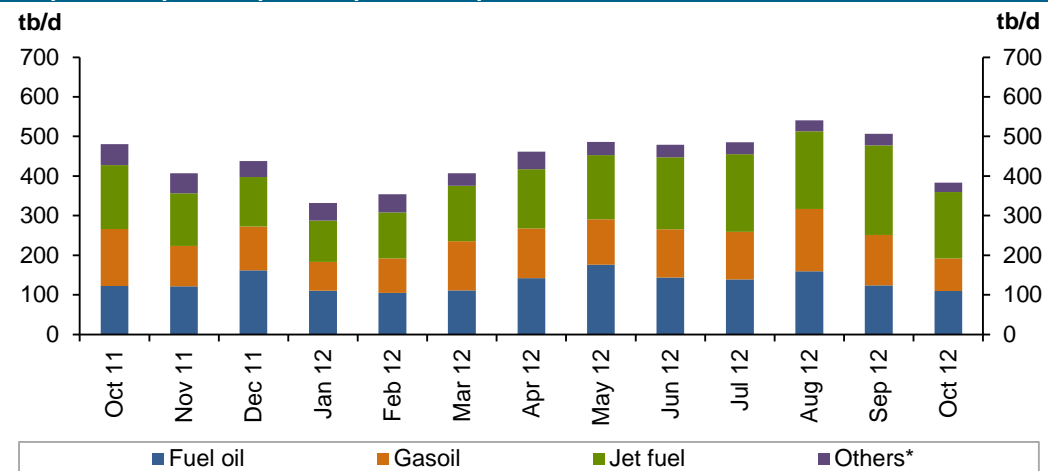
Japan's crude oil imports declined in October by 306 tb/d or 8.5% to average 3.3 mb/d. This was the lowest level since June. In a y-o-y comparison, they decreased in October by 3.6%. Concerning the suppliers' share, Saudi Arabia, as in the previous month, was top with a share of 31.6% of total crude exports to Japan. The UAE was second with a 22% share. But both Saudi Arabia and the UAE saw declines in their exported crude volumes to Japan from the previous month of 8% and 15% respectively. Qatar was third in October with a share of 9%, and this reflected a decline of 38% in its monthly imports to Japan.

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



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

*Japan's crude oil imports declined by 8.5% in October to average 3.3 mb/d*

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

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

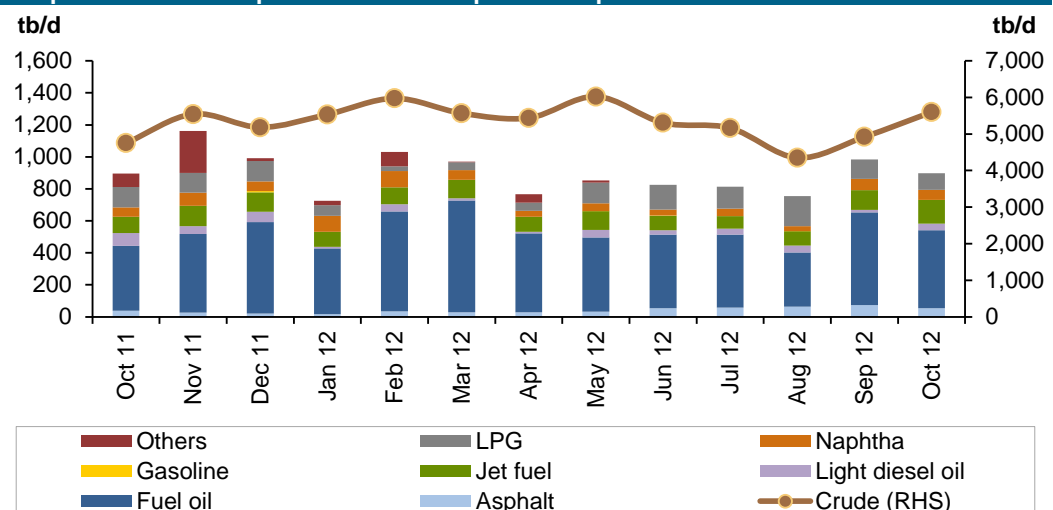
As for products, Japan's product imports increased by 44 tb/d in October to average 738 tb/d, showing a gain of 6.4% m-o-m and 16.7% y-o-y. This meant that they were at their highest level since February. The increase came on the back of a rise in imported volumes of naphtha and fuel oil, which were up by 7% and 21% from the month before. On the product export side, Japan's exports fell by 25% or 124tb/d in October to average 376tb/d, the lowest level since February. Annually, this meant a similar loss of 22%. As a result, Japan's net imports declined in October by 138 tb/d to average 3.6 mb/d, constituting a monthly drop of 4% and yet an annual gain of 2.5%.

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

	Aug 12	Sep 12	Oct 12	Change Oct/Sep
Crude oil	3,605	3,586	3,280	-306
Total products	92	194	362	168
<b>Total crude and products</b>	<b>3,697</b>	<b>3,780</b>	<b>3,643</b>	<b>-138</b>

### China

China's crude oil imports rose in October by 677 tb/d or 14% from the previous month to average 5.6 mb/d. That was the highest level since China's crude imports soared in May. The increase came as the country's crude refining stayed at its highest level in October. In an annual comparison, crude imports rose by 849 tb/d or 18% from levels seen last year.

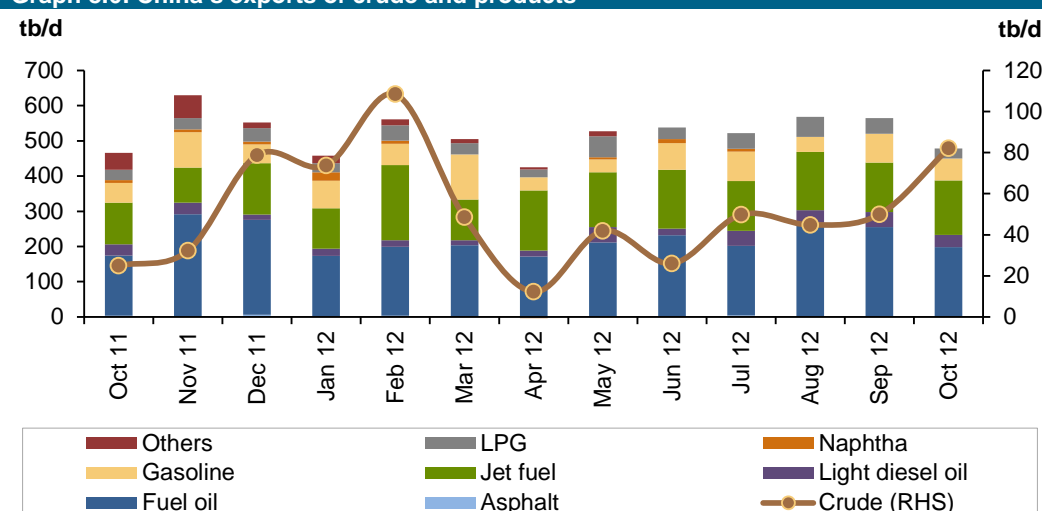
**Graph 8.5: China's imports of crude and petroleum products**

China's crude oil imports rose by 14% in October to average 5.6 mb/d

As for China's product imports, these saw a decrease of 83 tb/d or 9.5% from the previous month to average 786 tb/d. This was the result of a general decrease in all product imports, with the exception of jet fuel and diesel, while LPG monthly imports reached the lowest levels for six months. In terms of supplier share, Saudi Arabia, Angola and Oman maintained their positions in October as top crude suppliers to China. However, while Saudi Arabia and Oman increased their exports to China by 10% and 37% respectively, Angola saw a decline of 18%.

China's crude exports increased by 32 tb/d or 64% to average 82 tb/d in October to reach their highest level since February. On the other hand, the country's product exports declined by 74 tb/d or 14% to average 449 tb/d. As a result, China's net oil imports rose on a monthly and annual basis by 12% and 13% respectively to reach 5.8 mb/d, the highest level since May.

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



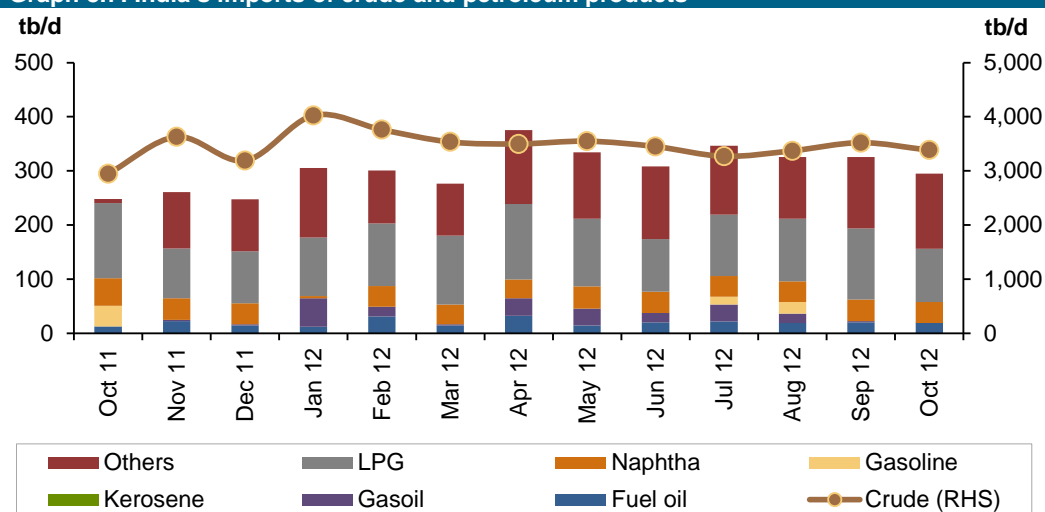
**Table 8.3: China's crude and product net imports, tb/d**

	<u>Aug 12</u>	<u>Sep 12</u>	<u>Oct 12</u>	<u>Change</u> <u>Oct/Sep</u>
Crude oil	4,306	4,872	5,517	645
Total products	32	346	337	-9
<b>Total crude and products</b>	<b>4,338</b>	<b>5,218</b>	<b>5,854</b>	<b>636</b>

## India

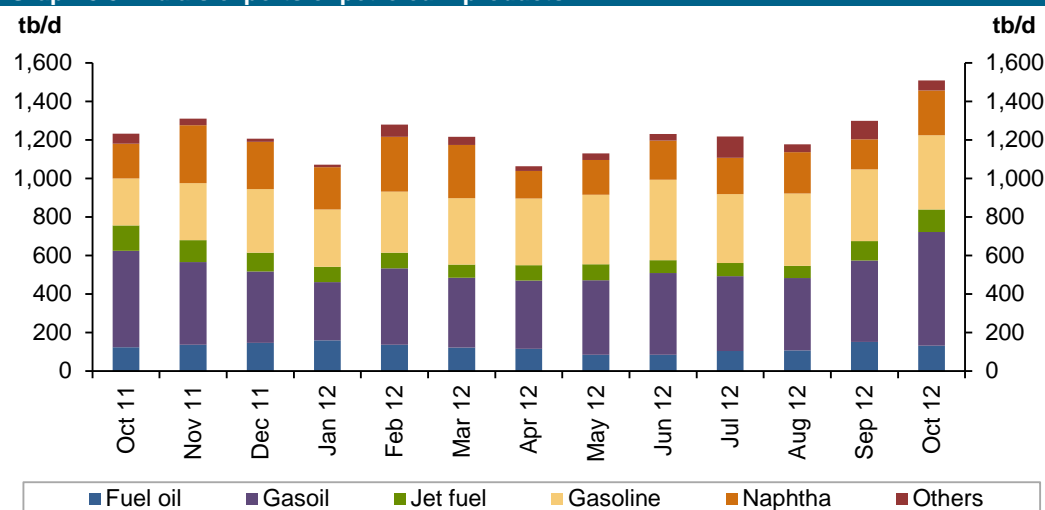
In October, India's crude imports averaged 3.38 mb/d, that is 137 tb/d or 3.9% lower than in the previous month, when they had risen to a multi-month high. Yet the monthly figures showed a gain of 14% over the same month a year earlier. Product imports saw a similar pattern, decreasing on a m-o-m basis by 9.5%, while y-o-y they increased by 47 tb/d or 18.8% to stand at 295 tb/d. The fall in monthly product imports was mainly due to a general decline in all product imports in October, with the greatest fall registered by LPG imports, declining by 33 tb/d or 25%.

*India's crude imports averaged 3.38 mb/d in October, 3.9% down on previous month*

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

India's product exports increased by 209 tb/d or 16.1% in October to average 1.5 mb/d. This increase to a record-high level was due to a recent expansion in refining capacity. It came on the back of higher exported volumes of diesel, naphtha, petrol and jet fuel, which saw increases of 40%, 49%, 3% and 17% respectively; fuel oil exports were the only exception, dropping by 13% from a month earlier. Consequently, India's net imports declined by 377 tb/d to average 2.17 mb/d, which was 15% lower than the level seen in September, yet 10.7% higher than a year earlier.

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**Graph 8.8: India's exports of petroleum products****Table 8.4: India's crude and product net imports, tb/d**

	Aug 12	Sep 12	Oct 12	Change Oct/Sep
Crude oil	3,372	3,521	3,384	-137
Total products	-837	-974	-1,213	-240
<b>Total crude and products</b>	<b>2,534</b>	<b>2,547</b>	<b>2,170</b>	<b>-377</b>

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

*FSU crude oil exports declined by 1.18% in October to average 6.4 mb/d*

## FSU

Total crude oil exports from the former Soviet Union (FSU) declined by 77 tb/d or 1.18% in October to average 6.4 mb/d. Crude exports through Russian pipelines fell by 68 tb/d or 1.6% to average 4.3 mb/d. Shipments from the Druzhba pipeline dropped by 7 tb/d or 0.7% to average 1.0 mb/d. Black Sea exports saw an increase of 34 tb/d or 4.2% to average 847 tb/d, while exports from the Baltics declined by 65 tb/d or 3.4% to average 1.8 mb/d in October. Loadings of the CPC blend dropped 124 tb/d or 18% from a month earlier to average 564 tb/d.

Total FSU product exports declined by 448 tb/d or 14.9% from the previous month to average 2.6 mb/d. This drop was driven mainly by a fall in exported volumes of gasoline, gasoil, fuel oil and VGO, while exports of naphtha and jet fuel increased.

**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>Sep 12</u>	<u>Oct 12*</u>
<b>Crude</b>							
<b>Russian pipeline</b>							
Black Sea	994	935	876	900	932	813	847
Baltic	1,564	1,461	1,444	1,725	1,611	1,912	1,847
Druzhba	1,126	1,170	1,243	1,109	1,006	1,008	1,001
Kozmino	309	306	307	317	315	322	312
<b>Total</b>	<b>4,005</b>	<b>4,178</b>	<b>4,161</b>	<b>4,356</b>	<b>4,174</b>	<b>4,357</b>	<b>4,289</b>
<b>Other routes</b>							
Russian rail	330	173	176	137	87	79	218
Russian-Far East	276	279	269	265	249	266	231
Kazakh rail	123	157	167	128	78	69	178
Vadandey	152	82	46	41	57	106	103
Kaliningrad	24	23	24	18	22	20	15
CPC	743	679	622	685	654	688	564
BTC	775	695	727	681	638	614	574
Kenkiyak-Alashankou	204	222	207	186	213	237	257
Caspian	239	170	169	168	198	131	170
<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>6,498</b>	<b>6,421</b>
<b>Products</b>							
Gasoline	141	149	155	113	113	158	110
Naphtha	253	243	277	295	307	323	329
Jet	18	10	3	5	12	8	23
Gasoil	809	716	848	744	734	753	663
Fuel oil	1,129	1,201	1,260	1,277	1,415	1,462	1,167
VGO	228	198	180	264	281	299	262
<b>Total</b>	<b>2,578</b>	<b>2,518</b>	<b>2,723</b>	<b>2,697</b>	<b>2,863</b>	<b>3,002</b>	<b>2,554</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>9,500</b>	<b>8,975</b>

\* Preliminary

Totals may not add due to independent rounding.

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

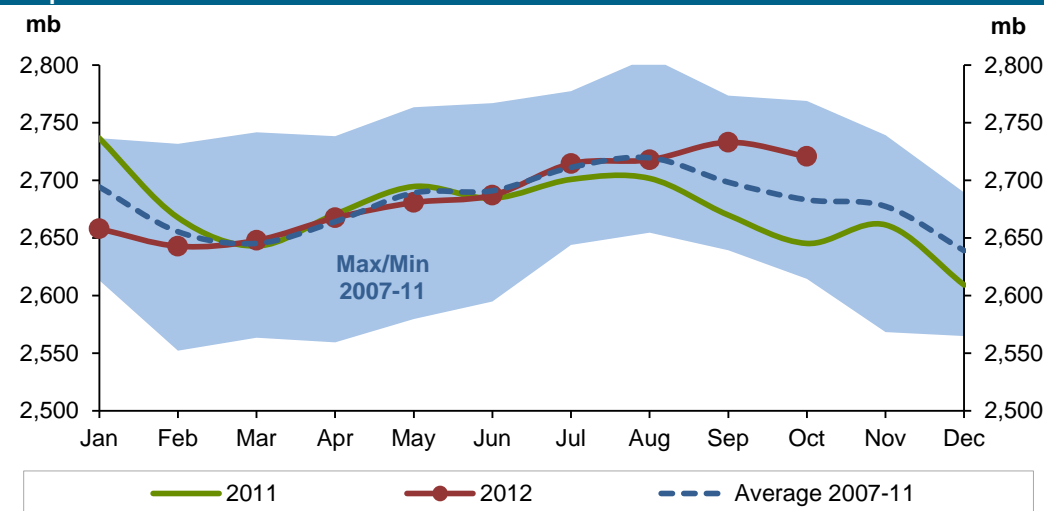
# Stock Movements

*Total OECD commercial oil stocks fell by 12.3 mb in October, after rising by more than 15 mb in September*

## OECD

Preliminary data for October shows that total OECD commercial oil stocks fell by 12.3 mb to stand at 2,721 mb, after rising by more than 15 mb in September. The total stock-draw came from products, which declined by 17.2 mb, while crude rose by 4.9 mb. Despite the fall in total stocks, inventories stood at a comfortable level, with a surplus of 75.0 mb over a year ago and a gain of 38.0 mb compared to the five-year average. Nonetheless, within the components, tightness remained in products, which were 2.8 mb below last year's level in the same period and 17.7 mb lower than the five-year average. Meanwhile, crude stocks showed a surplus of 78.3 mb with last year and of 55.3 mb with the seasonal norm.

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



On a regional basis, North America's stocks declined by 24.4 mb, with crude rising by 4.9 mb, while products abated this build, falling by 30.3 mb. The build in US commercial crude stocks reflected higher growth in light, tight oil supply in the USA, as well as higher imports from Canada. At 686 mb, North America's commercial crude oil stocks stood at comfortable levels, denoting a surplus with the five-year average of 55.2 mb, as well as being 78.3 mb more than a year ago. However, product stocks remained 30.0 mb below both the historical average and a year ago. Middle distillates in that region accounted for the bulk of the deficit, since higher exports were keeping stocks at lower levels.

OECD Europe's inventories saw a build of 10.5 mb, driven mainly by an increase of 10.0 mb in products, as crude rose by only 0.5 mb. With this total build, the region's commercial stocks raised the y-o-y surplus to 35.3 mb in October from 14.3 mb a month earlier, while remaining 4.0 mb below the last five-year average. Both crude and products showed gains over a year ago at 15.2 mb and 20.0 mb respectively, while, when compared with the last five-year average, they saw an opposite picture, with crude stocks 12.7 mb below the seasonal norm and product stocks 8.7 mb above the seasonal average.

OECD Pacific's commercial stocks rose in October for the second consecutive month, by 1.6 mb, driven by an increase of 3.2 mb in products as crude abated this build and declined by 1.5 mb. The region's commercial stocks stood at 15.9 mb above the last five-year average and were 26.3 mb higher than the same time a year ago. Within the components, commercial crude stood 12.8 mb above the historical average and 19.6 mb higher than the same period a year ago. Product stocks in the OECD Pacific at the end of October showed surpluses of 3.2 mb with the five-year average and 6.7 mb with a year earlier.



In terms of days of forward cover, OECD commercial stocks in October stood at 59.5 days, displaying gains of 2.4 days, compared with the last five-year average, and of 1.7 days, compared with the same period in the previous year. This comfortable level of days of forward cover for the OECD is not expected to fall, since demand in OECD countries is projected to decline further in the coming year during a continued good performance for non-OPEC supply. Indeed, OECD demand for next year is expected to fall by 200,000 b/d vis-à-vis this year, while that of non-OPEC is forecast to increase by around 0.9 mb/d.

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

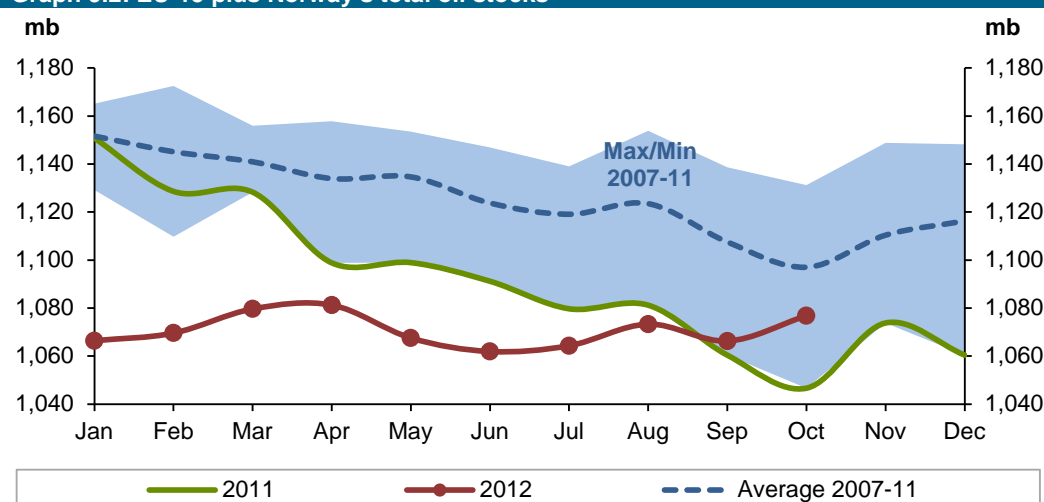
	<u>Aug 12</u>	<u>Sep 12</u>	<u>Oct 12</u>	<u>Change</u> <u>Oct 12/Sep 12</u>	<u>Oct 11</u>
Crude oil	1,290	1,309	1,314	4.9	1,235
Products	1,427	1,424	1,407	-17.2	1,410
<b>Total</b>	<b>2,718</b>	<b>2,733</b>	<b>2,721</b>	<b>-12.3</b>	<b>2,645</b>
<b>Days of forward cover</b>	<b>59.8</b>	<b>59.4</b>	<b>59.5</b>	<b>0.1</b>	<b>57.8</b>

## Europe

The latest available data for October shows that European stocks reversed the draw of the last month and experienced a strong contra-seasonal build of 10.5 mb to stand at 1,076.8 mb. At this level, they ended the month 30.2 mb or 2.9% higher than a year ago, but they were still 20 mb or 1.8% below the five-year average. The bulk of the build in total inventories came from products, which increased by 9.9 mb, while crude stocks rose by only 0.6 mb.

*European stocks reversed last month's draw in October, with strong contra-seasonal build of 10.5 mb*

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



European crude inventories rose by 0.6 mb in October, reversing the drop of the previous month, and finished at 458.2 mb. At this level, they were 26.3 mb or 6.1% above the year before, although they were still 5.6 mb or 1.2% below the last five-year average. The build was attributed to the large drop in refinery runs. Indeed, autumn refinery maintenance cut European throughputs by almost 600,000 b/d in October to 10.5 mb/d, after three months of crude runs of above 11.0 mb/d. This corresponded to a utilization rate of 82.5%, down from 86.5% in the third quarter. However, reduced supply of Russian Urals from the Baltic, as well as the delay at the UK's Buzzard field, limited a further build in crude oil stocks.

Product stocks in Europe posted a significant build of nearly 10 mb to end October at 618.7 mb, the highest level since April. At this level, they were 3.9 mb or 0.6% above the same period last year, which was the first surplus since July 2010 when product stocks were above the year-ago level. However, when compared with the five-year average, European stocks remained 15 mb or 2.3% lower. Within products, all the components experienced builds, with the bulk coming from middle distillates which increased by 6.0 mb. At 382.5 mb, distillate stocks stood 8.5 mb or 2.3% above a year ago and 2.0 mb or 0.5% above the seasonal average. Continued weak demand in

European counties, combined with higher diesel imports from the USA, was behind this build. However, a drop in refinery output limited a further build in distillate stocks. Gasoline stocks rose by 1.4 mb to finish October at 108.3 mb, showing a surplus of 1.6 mb or 1.5% with a year ago, while they were 6.0 mb or 5.5 mb below the five-year average. Weakening gasoline fundamentals, following reduced demand in the region, as well as lower transatlantic exports, were behind the build in gasoline inventories. Fuel oil stocks rose for the third consecutive month, by 2.2 mb, to end October at 94.5 mb, which were 4.7 mb below the same period last year and 13.0 mb lower than the five-year average. This stockbuild was driven mainly by weaker bunker demand.

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

	<u>Aug 12</u>	<u>Sep 12</u>	<u>Oct 12</u>	<u>Change</u> <u>Oct 12/Sep 12</u>	<u>Oct 11</u>
<b>Crude oil</b>	<b>461.9</b>	<b>457.6</b>	<b>458.2</b>	<b>0.6</b>	<b>431.9</b>
Gasoline	105.2	106.9	108.3	1.4	106.7
Naphtha	33.0	33.0	33.4	0.4	34.9
Middle distillates	381.8	376.5	382.5	6.0	374.0
Fuel oils	91.4	92.3	94.5	2.2	99.1
<b>Total products</b>	<b>611.4</b>	<b>608.7</b>	<b>618.7</b>	<b>9.9</b>	<b>614.8</b>
<b>Total</b>	<b>1,073.3</b>	<b>1,066.3</b>	<b>1,076.8</b>	<b>10.5</b>	<b>1,046.6</b>

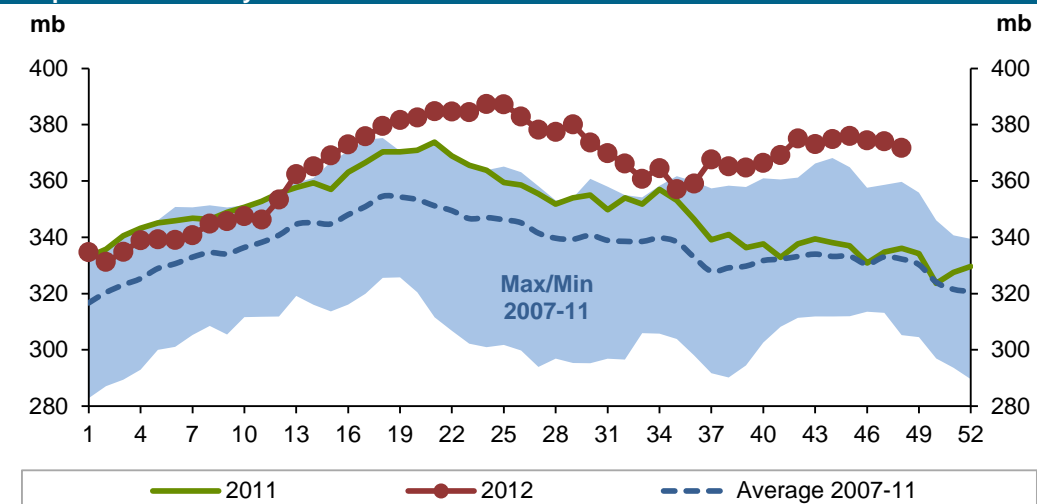
Source: Argus and Euroilstock.

## USA

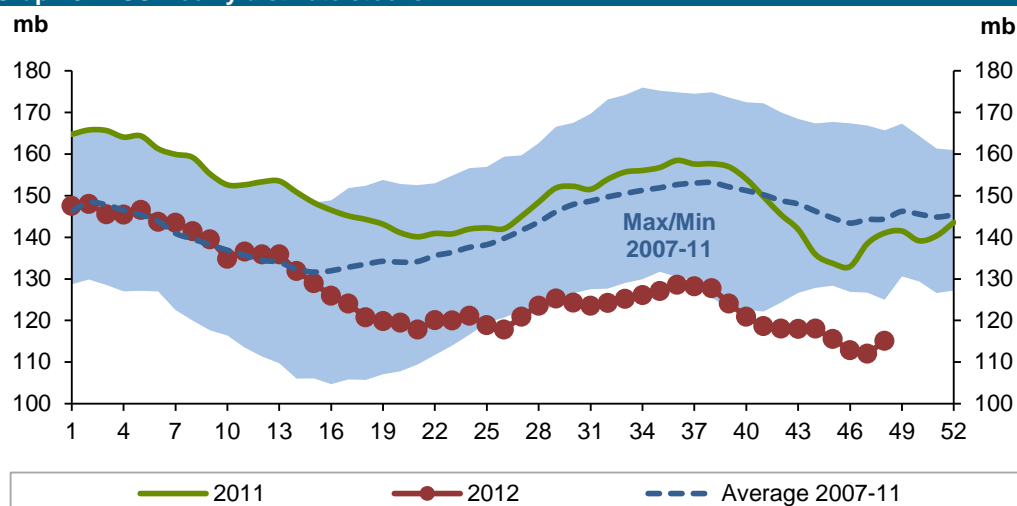
*Total US commercial oil stocks fell in November for second consecutive month, by 6.4 mb*

**US total commercial oil stocks** fell in November for the second consecutive month, by 6.4 mb, to stand at 1,092.5 mb/d. Despite this stock-draw, they were 16.7 mb or 1.6% above the same period a year ago and 35.1 mb or 3.3% higher than the five-year average. The fall was attributed to both crude and products, which declined by 3.1 mb and 3.4 mb respectively.

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



In November, **US commercial crude stocks** reversed the build of the past two months and fell by 3.1 mb to stand at 371.8 mb. Despite this draw, they showed a surplus with a year ago of 34.1 mb or 10.1% and they were 42.5 mb or 12.6% above the five-year average. It should be noted that the bulk of the stock-draw in crude occurred during the week ending 30 November, when crude oil fell by 2.4 mb from the previous week, reflecting higher crude runs. On a monthly basis, the fall in US crude stocks came about from lower imports, which declined by 280,000 b/d to average 7.9 mb/d and were almost 800,000 b/d lower than in the same period last year. The increase of 240,000 b/d in crude oil refinery inputs in November from the previous month also contributed to the drop in crude stocks. At 15.2 mb/d, US crude runs were also higher than during the same period a year ago, by more than 200,000 b/d. In November, US refineries operated at around 87%, which was 1.3 percentage points (pp) above the same month last year. In contrast with the draw on total crude commercial stocks, inventories in Cushing showed an increase of about 2.7 mb to stand at 45.6 mb, well above the same period last year.

**Graph 9.4: US weekly distillate stocks**

**Product inventories** fell by 3.4 mb in November, following the substantial draw in the previous month. At 720.8 mb, they were 17.4 mb or 2.4% below last year's level and 7.4 mb or 1.0% lower than the five-year average. Within products, the picture was mixed. Distillates, jet fuel and other unfinished products saw declines, while gasoline and residual fuel oil experienced builds. Gasoline stocks continued their build of three consecutive months, increasing by 9.7 mb to end November at 212.1 mb, the highest level since March. Despite this build, they were still 8.9 mb or 4.0% below those of a year ago, although they were in line with the seasonal average. The week ending 30 November saw a strong build of about 8.0 mb from the previous week, driven by a 468,000 increase in crude runs and a rise of 112,000 b/d in imports. The drop in demand to 8.4 mb/d also contributed to the stock-draw in gasoline, but, on a monthly basis, demand was around the level of last month and a year ago, averaging 8.6 mb/d.

Distillate stocks fell for the second consecutive month, by 3.0 mb, ending November at 115.1 mb. With this draw, distillates are now 28.9 mb or 20.1%, below the year-ago level and 34.5 mb or 23.1% lower than the seasonal norm. Higher demand in November was behind the drop in distillate stocks. Indeed, apparent demand for distillates rose by 280,000 b/d and they were almost at the same level as in the same period last year. The continued strength of distillate exports also supported the draw on distillates. However, higher production, reaching 4.7 mb/d, limited the drop in distillate stocks. Jet fuel stocks fell for the second consecutive month, by 3.3 mb. At 40.1 mb, they were 1.9 mb or 4.5% lower than a year ago, showing a deficit of 1.2 mb or 2.8% with the seasonal norm. Residual oil stocks rose by 0.8 mb in November to finish the month at 38.4 mb. At this level, they were 0.9 mb or 2.2% lower than the same month a year ago and 0.3 mb or 0.7% below the latest five-year average.

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

	<u>Sep 12</u>	<u>Oct 12</u>	<u>Nov 12</u>	<u>Change</u> <u>Nov 12/Oct 12</u>	<u>Nov 11</u>
<b>Crude oil</b>	369.0	374.8	371.8	-3.1	336.9
Gasoline	200.8	202.4	212.1	9.7	219.7
Distillate fuel	127.4	118.1	115.1	-3.0	143.9
Residual fuel oil	35.5	37.7	38.4	0.8	39.3
Jet fuel	43.9	43.4	40.1	-3.3	41.9
<b>Total</b>	<b>1123.4</b>	<b>1099.0</b>	<b>1092.5</b>	<b>-6.4</b>	<b>1074.2</b>
SPR	695.0	695.0	695.0	0.0	696.0

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

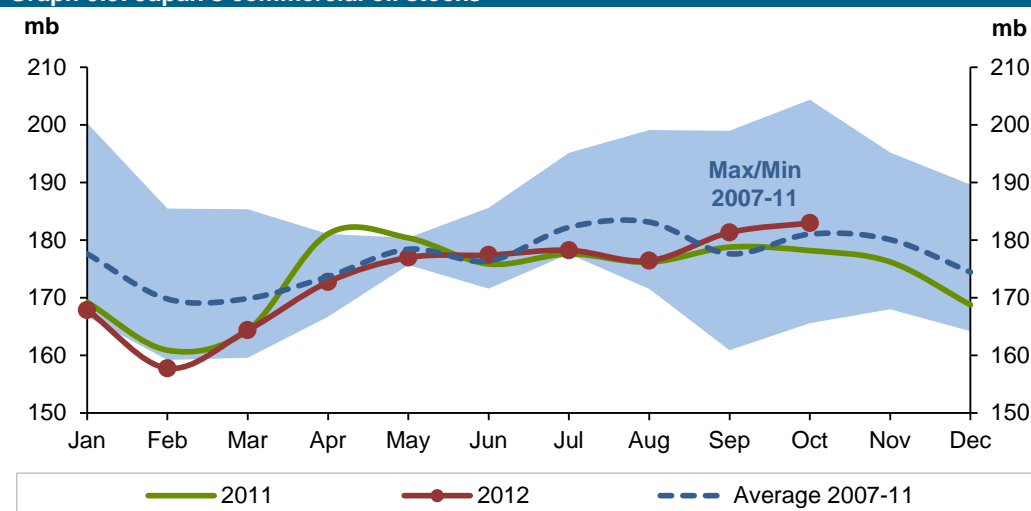
*In October, total commercial oil stocks in Japan increased for second month running, by 1.6 mb*

## Japan

In October, total **commercial oil stocks** in Japan increased for the second consecutive month, by 1.6 mb, to stand at 183.0 mb, the highest level since the end of December 2008. With this build, inventories widened the surplus with last year to 2.7% from 1.4% a month earlier, while remained around 1.9 mb or 1.1% above the five-year average. The total stock-build came solely from products, which increased by 3.1 mb, while crude declined by 1.5 mb.

**Japanese commercial crude** oil stocks declined by 1.5 mb, reversing the build of last month, and ended October at 102.6 mb. At this level, they were 1.6 mb above the same time a year ago and 3.6 mb above the seasonal average. The stock-draw came as crude imports decreased by more than 300,000 b/d or 8.5% from a month earlier. At 3.3 mb/d, Japanese crude imports were also 3.6% lower than a year ago at the same time. Lower crude throughputs limited a further draw in October. Indeed, crude throughputs fell by around 150,000 b/d or 4.5% to stand at 3.1 mb/d, and were 1.1% below the same period a year ago. Japanese refineries were running at 69.4%, which was 3.3 pp lower than in the previous month and 0.1 pp below the same period last year. Direct crude burning in power plants fell by 2.8% to end October at around 241,750 b/d, but they still showed an increase of 9.7% when compared with the same period last year.

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



**Japan's total product inventories** continued their upward trend, rising for the seventh consecutive month, by 3.1 mb, to end October at 80.3 mb, the highest level since December 2008. With this build, they switched the deficit of 2.2% of last month to a surplus of 4.0%. However, the deficit with the seasonal average remained at 2.0%. The build in total products came as total oil product sales in October fell for the first time in 11 months, as warmer temperatures curbed the demand for heating fuel. Within products, the bulk of the build came from distillates and naphtha, as other products remained almost unchanged. Distillate stocks continued their upward trend, increasing by 1.6 mb to end October at 37.5 mb, the highest level since November 2011. Despite this build, they still showed a deficit of 1.0 mb or 1.4%, compared with the five-year average, but they were 0.4 mb or 1.0% higher than the same period a year ago. Within the distillate components, all products saw a build. Kerosene stocks rose by 5.1%, reflecting lower domestic sales due to the unusually hot weather in October. Jet fuel inventories also rose by 2.2%, driven by a fall of 5.0% in domestic consumption, combined with a 23.4% decline in exports. Gasoil stocks increased by 4.5%, supported by a huge decline in exports and higher output.

Naphtha inventories saw an increase of 1.7 mb, ending October at 11.6 mb. At this level, they were 0.3 mb or 2.5% higher than a year ago, but still 0.9 mb or 7.3% lower than the five-year average. The build in naphtha stocks came from higher production, as this increased by 5.9%. Residual fuel oil stocks fell slightly, ending October at 17.1 mb and showing a surplus of 1.0 mb or 6% with a year ago; but they were 0.5 mb or 2.8% below the five-year average. Within the components of fuel oil, fuel oil A fell by

1.7%, while fuel oil B.C stocks remained almost unchanged. Lower production, combined with higher domestic sales, was behind the decline in fuel oil A inventories. Gasoline stocks remained unchanged from the previous month and ended October at 14.1 mb. At this level, they were 1.5 mb or 11.9% higher than a year ago, representing a surplus of 1.1 mb or 8.7% with the seasonal average.

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

	<u>Aug 12</u>	<u>Sep 12</u>	<u>Oct 12</u>	<u>Change</u> <u>Oct 12/Sep 12</u>	<u>Oct 11</u>
<b>Crude oil</b>	<b>101.4</b>	<b>104.1</b>	<b>102.6</b>	<b>-1.5</b>	<b>101.0</b>
Gasoline	13.9	14.1	14.1	0.0	12.6
Naphtha	9.4	10.0	11.6	1.7	11.4
Middle distillates	34.5	35.9	37.5	1.6	37.1
Residual fuel oil	17.2	17.3	17.1	-0.1	16.2
<b>Total products</b>	<b>75.1</b>	<b>77.2</b>	<b>80.3</b>	<b>3.1</b>	<b>77.2</b>
<b>Total**</b>	<b>176.4</b>	<b>181.3</b>	<b>183.0</b>	<b>1.6</b>	<b>178.2</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)

At the end of October, **product stocks in Singapore** rose for the second consecutive month, by 1.5 mb, and ended the month at 39.0 mb, the highest level since June. Despite this build, they were still 1.3 mb or 3.1% below the same time a year ago.

Within products, middle distillate and fuel oil stocks saw builds, while light distillate experienced a draw. Light distillate stocks dropped by 1.0 mb to 9.2 mb, constituting a deficit of 2.0 mb or 17% with the same period last year. This stock-draw was mainly due to limited output, as most refineries were in a period of regular maintenance. This happened despite lower demand in the region. Middle distillate stocks rose by a slight 0.2 mb, reversing the draw of last month, and they ended October at 9.4 mb. This was 1.4 mb or 12.6% below the same time last year. On a weekly basis, middle distillate stocks reached more than 11.0 mb during the week ending 25 October, before falling to 9.4 mb by the end of the month, the lowest level for four weeks. This fall came from higher diesel demand from South Africa and Malaysia. Fuel oil stocks surged for the second consecutive month, increasing by 2.3 mb and ending October at 20.5 mb. With this build, they switched the deficit with a year ago to a surplus of 2.1 mb or 11.4%. Stocks were expected to remain higher in November, as the Western arbitrage volume was expected to remain higher during the month.

**Products stocks in ARA** fell slightly by 0.2 mb in October flowing 2.6 mb decrease a month earlier, ending the month at 29.2 mb. At this level, they were 0.2 mb or 0.7% below the same time last year.

Within products, with the exception of fuel oil, all other products witnessed a draw, with the bulk of this coming from gasoil. Indeed, gasoil stocks fell by 1.0 mb to finish October at 15.0 mb, the lowest level for a year. Despite this drop, they were 0.7 mb or 5.2% higher than the same period a year ago. On a weekly basis, the week ending 31 October saw a build of nearly 1.0 mb over the previous week, boosted by higher inflows from the USA, France and the UK. Jet fuel inventories fell for the second consecutive month, by 0.4 mb, to stand at 2.6 mb, and this meant a decline of 1.9 mb or nearly 42.0% from the same period last year. Naphtha also saw a decline, of 0.3 mb, to stand at 0.6 mb, and was at almost at the same level as a year ago. This draw came on the back of higher demand from the petrochemical industry, which offset imports from Russia. Gasoline stocks fell by 0.4 mb in October to stand at 5.1 mb, unchanged from the same period a year ago. This decline occurred as higher exports outpaced arrivals to the ARA region. Fuel oil stocks were the only product showing a build, of 1.9 mb, and they ended October at 5.9 mb, the highest level since August 2011. At this level, they were 0.9 mb or 17.3% above the same period a year ago. This build was driven by higher arrivals to the region.

*At end of October, product stocks in Singapore rose for second consecutive month, by 1.5 mb*

*Product stocks in ARA fell slightly by 0.2 mb in October flowing 2.6 mb decrease last month*

# Balance of Supply and Demand

*Required OPEC crude for 2012 estimated at 30.1 mb/d, a decline of 0.1 mb/d*

## Forecast for 2012

Demand for OPEC crude for 2012 remains unchanged from the previous report, as demand and non-OPEC supply have seen only minor adjustments. Within the quarters, the first, second and fourth quarters experienced upward revisions of 0.1 mb/d each, while the third was revised down by 0.1 mb/d from the previous assessment. Demand for OPEC crude stood at 30.1 mb/d in 2012, representing a decrease of 0.1 mb/d from a year earlier. The first quarter is expected to decline by 0.5 mb/d versus a year ago, the second to increase by 0.4 mb/d and the third to decline by 0.2 mb/d, while the estimate for the fourth quarter remains broadly unchanged.

**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	53.23	52.65	52.40	53.44	52.93
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>57.82</b>	<b>58.79</b>	<b>58.33</b>	<b>58.21</b>	<b>59.38</b>	<b>58.68</b>
<b>Difference (a-b)</b>	<b>30.22</b>	<b>29.19</b>	<b>29.62</b>	<b>30.95</b>	<b>30.68</b>	<b>30.12</b>
OPEC crude oil production	29.79	31.22	31.49	31.23		
Balance	-0.43	2.04	1.87	0.28		

*Totals may not add up due to independent rounding.*

## Forecast for 2013

Demand for OPEC crude for 2013 remains unchanged from the previous report to stand at 29.7 mb/d. This represents negative growth of 0.4 mb/d, compared with 2012. Within the quarters, the first, second, and fourth saw upward adjustments of 0.1 mb/d each, while the third saw a downward revision of 0.2 mb/d from the previous assessment. The first quarter is estimated to increase by 0.3 mb/d versus the same quarter last year, while all other quarters are expected to see negative growth, with the bulk of the decrease coming from third, which is seen falling by 0.7 mb/d. The second and fourth quarters are forecast to drop by 0.6 mb/d and 0.5 mb/d respectively.

**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>88.90</b>	<b>88.45</b>	<b>90.05</b>	<b>90.83</b>	<b>89.57</b>
Non-OPEC supply	52.93	53.48	53.48	53.81	54.54	53.83
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>58.68</b>	<b>59.43</b>	<b>59.44</b>	<b>59.81</b>	<b>60.58</b>	<b>59.82</b>
<b>Difference (a-b)</b>	<b>30.12</b>	<b>29.48</b>	<b>29.01</b>	<b>30.24</b>	<b>30.24</b>	<b>29.75</b>

*Totals may not add up due to independent rounding.*

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

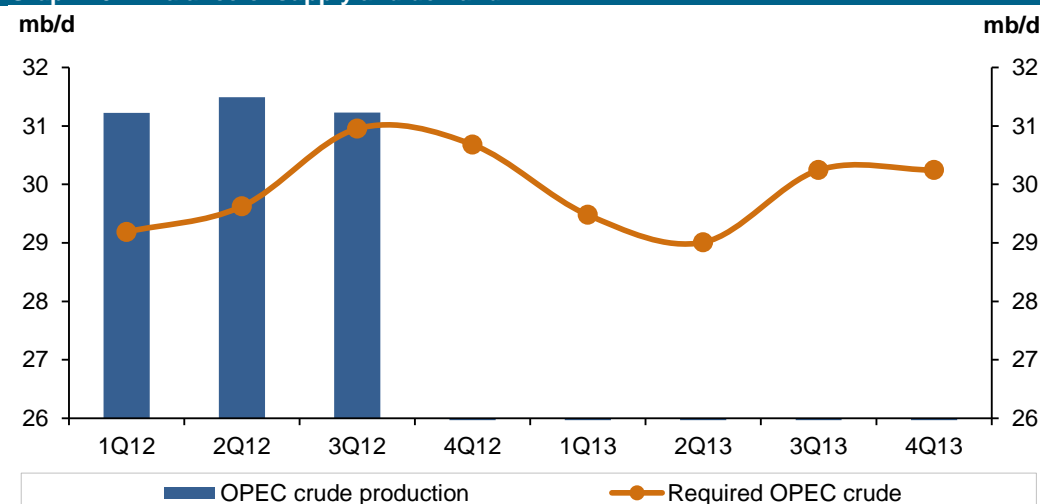




Table 10.3: World oil demand/supply balance, mb/d

	2007	2008	2009	2010	2011	1Q12	2Q12	3Q12	4Q12	2012	1Q13	2Q13	3Q13	4Q13	2013
<b>World demand</b>															
OECD	49.4	47.6	45.7	46.3	45.9	45.7	45.0	45.4	45.9	45.5	45.7	44.5	45.2	45.8	45.3
North America	25.5	24.2	23.3	23.8	23.7	23.2	23.5	23.5	23.7	23.5	23.3	23.4	23.6	23.8	23.5
Western Europe	15.5	15.4	14.7	14.6	14.3	13.7	13.7	13.9	13.8	13.8	13.5	13.5	13.6	13.6	13.6
Pacific	8.4	8.1	7.7	7.8	7.9	8.8	7.8	7.9	8.4	8.2	8.8	7.7	8.0	8.4	8.2
DCs	24.8	25.6	26.1	27.1	27.8	27.9	28.3	29.1	28.7	28.5	28.4	28.9	29.6	29.1	29.0
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	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.8	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	87.2	88.0	88.0	88.0	89.2	90.1	88.8	88.9	88.5	90.1	90.8	89.6
<b>Non-OPEC supply</b>															
OECD	20.0	19.6	19.8	20.0	20.2	21.1	20.8	20.6	21.2	20.9	21.2	21.2	21.2	21.7	21.3
North America	14.3	14.0	14.4	15.0	15.5	16.5	16.4	16.4	16.8	16.5	16.8	16.9	17.0	17.3	17.0
Western Europe	5.2	4.9	4.7	4.4	4.1	4.1	3.9	3.5	3.7	3.8	3.7	3.6	3.5	3.7	3.6
Pacific	0.6	0.6	0.6	0.7	0.6	0.5	0.5	0.7	0.7	0.6	0.6	0.7	0.7	0.7	0.7
DCs	11.9	12.2	12.4	12.8	12.7	12.3	12.1	12.1	12.3	12.2	12.2	12.3	12.6	12.7	12.5
FSU	12.5	12.6	13.0	13.2	13.2	13.4	13.2	13.2	13.4	13.3	13.4	13.4	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	4.2	4.2
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	52.4	52.5	53.2	52.7	52.4	53.4	52.9	53.5	53.5	53.8	54.5	53.8
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	58.2	59.4	58.7	59.4	59.4	59.8	60.6	59.8
OPEC crude oil production (secondary sources)	30.2	31.3	29.8	29.2	29.8	31.2	31.5	31.2	31.2	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	89.4	89.4	89.4	89.4	89.4	89.4	89.4	89.4
Balance (stock change and miscellaneous)	-2.0	-0.3	-0.6	-0.6	-0.4	2.0	1.9	0.2							
<b>OECD closing stock levels (mb)</b>															
Commercial	2,565	2,690	2,651	2,680	2,609	2,648	2,687	2,733							
SPR	1,524	1,527	1,564	1,561	1,532	1,532	1,535	1,536							
Total	4,089	4,216	4,216	4,241	4,141	4,180	4,222	4,269							
Oil-on-water	948	969	919	871	825	787	812	797							
<b>Days of forward consumption in OECD</b>															
Commercial onland stocks	54	59	57	58	57	59	59	59							
SPR	32	33	34	34	34	34	34	33							
Total	86	92	91	92	91	93	93	93							
<b>Memo items</b>															
FSU net exports	8.5	8.5	9.0	9.0	8.9	9.1	9.2	8.7	8.7	8.9	9.1	9.2	8.8	8.7	9.0
(a) - (b)	32.2	31.6	29.3	29.9	30.2	29.2	29.6	31.0	30.7	30.1	29.5	29.0	30.2	30.2	29.7

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



**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	-	-	-	-	-	0.1	0.1	-0.3	-	-	0.1	0.1	-0.3	-	-
North America	-	-	-	-	-	0.1	-	-0.1	-	-	0.1	-	-0.1	-	-
Western Europe	-	-	-	-	-	-	-	-0.2	-	-0.1	-	-	-0.2	-	-0.1
Pacific	-	-	-	-	-	-	0.1	-	-	-	-	0.1	-	-	-
DCs	-	-	-	-	-	-	-	0.1	-	-	-	-	0.1	-	-
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(a) Total world demand	-	-	-	-	-	0.1	0.1	-0.3	-	-	0.1	0.1	-0.3	-	-
<b>World demand growth</b>	-	-	-	-	-	0.12	0.09	-0.27	0.06	-	-	-	-	-	-
<b>Non-OPEC supply</b>															
OECD	-	-	-	-	-	-	-	-	0.1	-	0.1	0.1	0.1	0.1	0.1
North America	-	-	-	-	-	-	-	-	0.2	0.1	0.2	0.1	0.1	0.1	0.1
Western Europe	-	-	-	-	-	-	-	-	-0.1	-	-0.1	-0.1	-0.1	-	-0.1
Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-	-	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	-	-	-	-	-	-	-	-0.1	-	-	-	-	-	-	-
<b>Total non-OPEC supply growth</b>	-	-	-	-	-	-	-	-0.09	-	-	-	-0.06	0.07	-	-
<b>OPEC NGLs + non-conventionals</b>															
(b) Total non-OPEC supply and OPEC NGLs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>OPEC crude oil production (secondary sources)</b>															
Total supply	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Balance (stock change and miscellaneous)	-	-	-	-	-	-0.1	-0.1	0.1	-	-	-	-	-	-	-
<b>OECD closing stock levels (mb)</b>															
Commercial	-	-	-	-	-	1	-3	29	-	-	-	-	-	-	-
SPR	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Total	-	-	-	-	-	1	-3	30	-	-	-	-	-	-	-
Oil-on-water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Days of forward consumption in OECD</b>															
Commercial onland stocks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPR	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-
<b>Memo items</b>															
FSU net exports	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(a) - (b)	-	-	-	-	-	0.1	0.1	-0.2	0.1	-	0.1	0.1	-0.2	0.1	-

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

This table shows only where changes have occurred.

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
<b>Closing stock levels, mb</b>																							
OECD onland commercial	2,565	2,690	2,651	2,680	2,609	2,595	2,652	2,690	2,742	2,755	2,774	2,651	2,686	2,767	2,757	2,680	2,643	2,685	2,670	2,609	2,648	2,687	2,733
North America	1,198	1,269	1,273	1,318	1,299	1,209	1,246	1,269	1,320	1,355	1,360	1,273	1,301	1,357	1,386	1,318	1,288	1,328	1,329	1,299	1,320	1,349	1,358
Western Europe	960	1,014	995	971	921	977	975	1,014	1,014	999	994	995	998	1,005	969	971	973	951	928	921	949	925	942
OECD Pacific	407	407	383	392	390	409	431	407	408	401	419	383	387	405	402	392	382	406	413	390	378	413	433
OECD SPR	1,524	1,527	1,564	1,561	1,532	1,526	1,522	1,527	1,547	1,561	1,564	1,564	1,567	1,562	1,549	1,561	1,558	1,561	1,526	1,532	1,532	1,535	1,536
North America	699	704	729	729	697	708	704	704	715	726	727	729	729	729	728	729	727	727	696	697	697	697	696
Western Europe	421	416	426	423	422	414	414	416	424	427	429	426	429	422	419	423	420	423	420	422	421	424	426
OECD Pacific	404	406	409	410	414	404	403	406	408	408	408	409	409	411	402	410	411	411	409	414	414	413	413
<b>OECD total</b>	<b>4,089</b>	<b>4,216</b>	<b>4,216</b>	<b>4,241</b>	<b>4,141</b>	<b>4,121</b>	<b>4,174</b>	<b>4,216</b>	<b>4,289</b>	<b>4,316</b>	<b>4,338</b>	<b>4,216</b>	<b>4,252</b>	<b>4,329</b>	<b>4,307</b>	<b>4,241</b>	<b>4,201</b>	<b>4,245</b>	<b>4,196</b>	<b>4,141</b>	<b>4,180</b>	<b>4,222</b>	<b>4,269</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
<b>Days of forward consumption in OECD</b>																							
OECD onland commercial	54	59	57	58	57	56	56	58	61	61	60	58	59	59	59	58	59	58	58	57	59	59	59
North America	50	54	53	56	55	51	52	54	58	58	58	54	55	56	58	55	55	56	56	56	56	57	57
Western Europe	62	69	68	68	67	63	63	67	70	68	68	69	70	67	65	68	69	65	66	67	69	67	68
OECD Pacific	50	53	49	50	47	54	54	50	55	55	52	46	53	53	50	47	54	53	50	44	49	52	52
OECD SPR	32	33	34	34	34	33	32	33	35	35	34	34	34	33	33	34	35	34	33	34	34	34	33
North America	29	30	31	31	30	30	29	30	31	31	31	31	31	30	30	30	31	30	29	30	30	30	29
Western Europe	27	28	29	30	31	27	27	28	29	29	30	30	30	28	28	30	30	29	30	31	31	31	31
OECD Pacific	50	53	52	52	50	53	51	50	56	56	51	49	55	54	50	49	58	53	49	47	53	52	49
<b>OECD total</b>	<b>86</b>	<b>92</b>	<b>91</b>	<b>92</b>	<b>91</b>	<b>88</b>	<b>88</b>	<b>90</b>	<b>96</b>	<b>96</b>	<b>94</b>	<b>91</b>	<b>94</b>	<b>93</b>	<b>92</b>	<b>91</b>	<b>94</b>	<b>92</b>	<b>91</b>	<b>93</b>	<b>93</b>	<b>93</b>	<b>93</b>

December 2012

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

Table 10.7: World Rig Count

	2009	3Q09	4Q09	2009	09/08	Change					Change					Change					Change		
	2009	3Q09	4Q09	2009	09/08	1Q10	2Q10	3Q10	4Q10	2010	10/09	1Q11	2Q11	3Q11	4Q11	2011	11/10	1Q12	2Q12	3Q12	Oct	Nov	Nov/Oct
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	1,835	1,808	-27
Canada	91	177	277	218	-161	470	166	364	389	347	129	587	188	443	474	423	76	599	172	326	365	384	19
Mexico	128	135	123	128	26	118	106	84	80	97	-31	83	87	103	104	94	-3	98	110	108	106	105	-1
North America	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	2,306	2,297	-9
Norway	18	18	20	20	0	21	18	13	20	18	-2	21	17	16	16	17	-1	17	18	14	16	20	4
UK	19	16	15	18	-4	15	20	21	21	19	1	18	17	15	15	16	-3	14	19	18	22	19	-3
Western Europe	82	76	85	83	-15	87	96	92	100	94	11	118	112	123	119	118	24	112	117	117	124	127	3
OECD Pacific	25	26	23	25	-11	22	18	23	22	21	-4	17	17	17	18	17	-4	19	25	25	22	28	6
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	2,452	0
Other Asia	212	213	233	217	1	235	249	253	255	248	31	257	234	232	233	239	-9	231	216	205	220	218	-2
Latin America	147	149	169	157	-34	183	203	220	213	205	48	191	192	196	201	195	-10	191	190	172	170	157	-13
Middle East	151	139	147	150	-18	152	150	163	159	156	6	101	107	102	107	104	-52	116	112	110	99	111	12
Africa	11	9	12	10	-2	20	19	19	18	19	9	1	2	0	5	2	-17	3	3	9	11	12	1
Total DCs	520	510	561	534	-52	589	621	655	645	628	93	549	535	530	546	540	-88	542	522	496	500	498	-2
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	2,952	2,950	-2
Algeria	30	27	27	27	1	23	28	24	24	25	-2	29	33	30	33	31	6	31	31	44	39	37	-2
Angola	3	3	4	4	-1	10	8	9	9	9	5	11	11	11	8	10	1	10	12	7	8	7	-1
Ecuador	10	10	10	10	0	11	11	11	11	11	1	11	11	11	15	12	1	17	17	22	23	25	2
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	67	71	4
Kuwait**	11	14	13	13	0	19	18	21	23	20	8	56	56	57	60	57	37	56	56	58	58	59	1
Libya**	13	14	15	14	-1	17	17	14	15	16	1	10	3	8	9	8	-8	12	11	11	12	14	2
Nigeria	6	6	7	6	-1	11	13	18	17	15	8	35	35	36	36	36	21	37	35	37	34	32	-2
Qatar	9	9	9	9	-2	8	8	9	9	9	0	10	8	7	7	8	-1	8	7	8	6	8	2
Saudi Arabia	67	67	66	68	-9	68	67	67	65	67	-1	98	98	98	105	100	33	106	114	111	119	117	-2
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	113	111	-2
OPEC rig count	314	302	305	311	-24	334	335	344	355	342	31	493	490	495	498	494	152	515	534	546	559	561	2
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	3,511	0
of which:																							
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	2,712	2,694	-18
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	740	754	14
Others	35	34	37	35	3	43	40	42	46	43	8	48	49	47	52	49	6	54	46	51	61	65	4

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

na: Not available.

Source: Baker Hughes Incorporated &amp; Secretariat's estimates.

\* Excludes China and FSU.

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

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## OPEC Basket average price

US\$ per barrel

↓	down \$1.50 in November	November 2012	106.86
		October 2012	108.36
		Year-to-date	109.70

## November OPEC crude production

in million barrels per day, according to secondary sources

↓	down 0.21 in November	November 2012	30.78
		October 2012	30.99

## World economy

Global growth expectations for 2013 are unchanged at 3.2%, while 2012 has been revised to 3.0%. Japan's forecast has been lowered to 1.6% in 2012 and 0.6% in 2013, while the US remains unchanged at 2.2% and 2.0%, respectively. The Euro-zone now shows a contraction of minus 0.4% for 2012 and remains at 0.1% growth in 2013. China remains at 7.6% in 2012 and at 8.0% in 2013, while India has been lowered to 5.5% in 2012 and remains at 6.6% in 2013.

## Supply and demand

in million barrels per day

2012		12/11	2013		13/12
World demand	88.8	0.8	World demand	89.6	0.8
Non-OPEC supply	52.9	0.5	Non-OPEC supply	53.8	0.9
OPEC NGLs	5.7	0.4	OPEC NGLs	6.0	0.2
Difference	30.1	-0.1	Difference	29.7	-0.4

Totals may not add due to independent rounding.

## Stocks

Preliminary data for October shows that total OECD commercial oil stocks fell by 12.3 mb, but remained 38.0 mb above the last five-year average. OECD commercial stocks stood at around 59.5 days at the end of October, 2.4 days higher than the last five-year average. The latest information shows that US total commercial stocks fell by 6.4 mb in November, but indicated a surplus of 35.1 mb with the five-year average. The fall in US total commercial oil stocks was attributed to both crude and products, which declined by 3.1 mb and 3.4 mb, respectively.