

Organization of the Petroleum Exporting Countries

Monthly Oil Market Report

May 2013

*Feature Article:
Assessment of the global economy*

<i>Oil market highlights</i>	<i>1</i>
<i>Feature article</i>	<i>3</i>
<i>Crude oil price movements</i>	<i>5</i>
<i>Commodity markets</i>	<i>11</i>
<i>World economy</i>	<i>15</i>
<i>World oil demand</i>	<i>26</i>
<i>World oil supply</i>	<i>34</i>
<i>Product markets and refinery operations</i>	<i>45</i>
<i>Tanker market</i>	<i>53</i>
<i>Oil trade</i>	<i>57</i>
<i>Stock movements</i>	<i>63</i>
<i>Balance of supply and demand</i>	<i>70</i>



Helferstorferstrasse 17, A-1010 Vienna, Austria

Tel +43 1 21112 Fax +43 1 2164320 E-mail: prid@opec.org Web site: www.opec.org

Oil Market Highlights

§ The **OPEC Reference Basket** dropped for the second-consecutive month in April, declining by \$5.39 or more than 5% to stand at \$101.05/b. Year-to-date, the Basket declined by \$10.22 or 8.7% from the same period last year. Crude oil futures took a substantial hit again in April, with Brent falling 5.6% to July 2012 levels with a monthly average of around \$103/b. Nymex WTI edged 1% lower to average \$92/b. A vulnerable global economy combined with the prospect of moderate demand growth, rising crude production, and high stocks sent prices tumbling. Crude oil also lost ground amid cross-commodity and equity market herd behaviour as momentum trading led to a sell-off that sent commodities, such as gold and silver, plunging by record levels. The latest CFTC and ICE commitment of traders' reports confirmed the bearish investor sentiment towards oil in April. However, the Basket has shown some improvement since the start of the month to stand at \$101.67/b on 9 May.

§ **World economic growth** is forecast at 3.2% in 2013, following growth of 3.0% in the previous year, unchanged from the last report. The US housing and labour markets continue to show a recovery, but given persistent fiscal uncertainties, the US growth forecast for 2013 remains unchanged at 1.8%. Japan's forecast has been revised to 1.1% from 0.8%, on support from recent monetary stimulus. The Euro-zone's forecast remains unchanged, with an expected contraction of 0.5%. Slowing exports have impacted China's economy and growth has been revised to 8.0% from 8.1%, while India's forecast is unchanged at 6.0%. A fragile recovery in the global economy has been visible since the beginning of the year, but momentum has started slowing again and growth risks are skewed to the downside.

§ **World oil demand** growth in 2013 remains unchanged from the previous report at 0.8 mb/d, broadly in line with the estimate for 2012. However, the performance of the first quarter of this year has been revised down based on actual data. A large portion of the growth is seen coming from China, with a 0.4 mb/d increase. The other non-OECD countries are expected to add some 0.8 mb/d, with the Middle East region accounting for around 0.3 mb/d, followed by Other Asia and Latin America with growth of about 0.2 mb/d each. In contrast, OECD demand is expected to see a contraction of around 0.4 mb/d, which is slightly less than in 2012.

§ **Non-OPEC supply** is forecast to grow by 1.0 mb/d in 2013, following an increase of 0.5 mb/d in 2012, broadly unchanged from the previous report. OECD Americas remain the driver of growth in 2013, while OECD Europe is seen experiencing the largest decline. OPEC NGLs and non-conventional oils are expected to increase by 0.2 mb/d in 2013. In April, total OPEC crude oil production, according to secondary sources, was estimated to average 30.46 mb/d, an increase of 0.28 mb/d over the previous month.

§ **Product markets** continued losing ground in April due to sharp declines in light and middle distillate cracks, which have been pressured by rising supplies along with weaker demand worldwide. In Asia, refinery margins fell mostly for the top of the barrel. US margins experienced a strong correction due to the recovery in WTI prices. In Europe, the drop in the Brent price allowed European margins to recover, despite weak market fundamentals due to lacklustre domestic demand.

§ In the **tanker market**, a general bearish sentiment could be seen in both dirty and clean markets in April, due to low tonnage demand. On average, dirty spot freight rates dropped by 4% from the previous month. The drop in freight rates was mainly driven by lower demand on refinery maintenance and the end of the winter season. OPEC and Middle East sailings declined from previous month, along with arrivals in all reported ports.

§ **OECD commercial oil stocks** fell marginally in March, remaining in line with the five-year average. Crude stood 19.0 mb over the seasonal average, while products indicated a deficit of about the same amount. In terms of forward cover, OECD stocks stood at 59.1 days, some 1.3 days above the five-year average. Preliminary data shows US commercial stocks rose by 20.0 mb in April. This indicates a surplus of 42.0 mb compared to the seasonal average, with the bulk coming from crude.

§ **Demand for OPEC crude** in 2012 is estimated at 30.2 mb/d, following an upward revision of 0.1 mb/d from the previous report and broadly unchanged compared to the previous year. In 2013, demand for OPEC crude is expected to average 29.8 mb/d, representing an upward revision of 0.1 mb/d from the previous report and a 0.4 mb/d decline from last year.

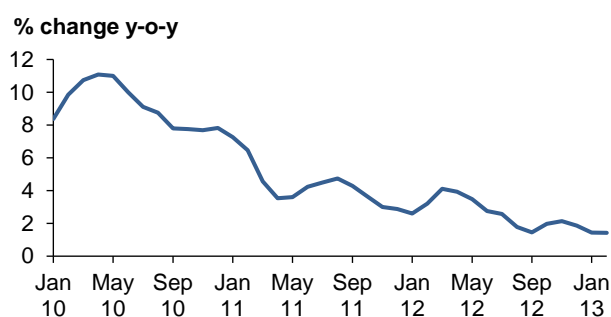
Assessment of the global economy

When the global growth forecast for 2013 was published in July last year at 3.2%, the estimate seemed rather conservative. However, almost a year later, the forecast remains unchanged, although with risks currently skewed to the downside. The on-going challenges to the global economy have also been highlighted in the IMF's most recent *World Economic Outlook*, which has reduced its forecast for 2013 to 3.3%, from a 4.1% forecast a year ago.

While at the beginning of the year it looked as if further momentum was building up, the continued decline in the Euro-zone, the significant deceleration in the first quarter in some of the Asian economies and the recently acknowledged slow-down in Russia all have the potential to again push growth down slightly further. This recent deceleration has also become obvious in the continued slowdown in global industrial output, which began in May 2010 and has been mainly due to lower growth in the industrialized economies (**Graph 1**).

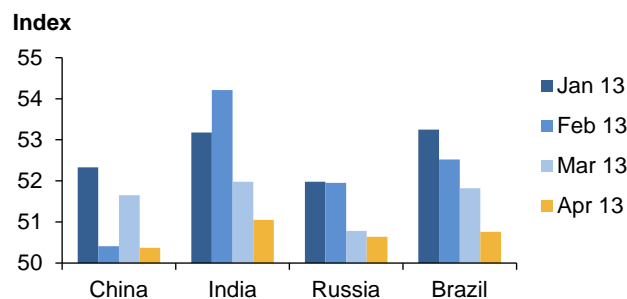
Some regions, however, could provide upside-potential. This would mainly come from the US, where the most recent progress in the labour market has provided some indications of economic improvement. At the same time, uncertainty prevails given the emerging impact of the sequester cuts and on-going budget negotiations. If challenges can be successfully overcome, then this could lift US growth beyond the current forecast of 1.8%. In the Euro-zone, a meeting of the European Council at the end of May is expected to discuss easing some austerity measures. This might reduce the 0.5% economic contraction expected for this year. In Japan, it is still too early to tell if the recently announced monetary stimulus will be accompanied by additional fiscal measures to further lift the current growth forecast of 1.1%.

Graph 1: Global industrial production



Source: Netherlands Bureau for Economic Policy Analysis and Haver Analytics.

Graph 2: Manufacturing PMI for Emerging Countries



Source: HSBC, Markit and Haver Analytics.

In the major emerging economies, some further stimulus measures might provide upside support. However, given rising inflation levels, central banks and policymakers alike will be careful in pursuing such a policy. China is likely to consider the 1Q13 growth level of 7.7% as reasonable, as it is higher than their official forecast for the year of 7.5%, although below the MOMR forecast of 8.0%. India has continued lowering its key policy rate in April in order to provide some momentum to its economy, which is forecast to grow at around 6.0%. However, elsewhere, the most recent data indicates a more severe slow-down in 1Q13 in many of the Asian economies and the latest PMIs for April point to a continued deceleration (**Graph 2**).

Given the unbalanced growth levels, various economic challenges, and the significant impact of the unprecedented increase in monetary supply, the global economy has become more complex in the recent years. Monetary policies in particular have had an effect on foreign exchange levels, foreign investments and rising asset markets, however, the full consequences are not yet clear.

Although world GDP growth has remained unchanged from the initial forecast, substantial revisions have been made to the economies of some regions since then. Consequently, regional oil demand growth projections have been revised, with upward revisions in Emerging and Developing Countries and sharp downward changes in the OECD economies, mostly in Europe and Asia Pacific. At the same time, total world oil demand growth in 2013 has remained broadly unchanged over the forecasting period at 0.8 mb/d. However, there are a number of downward risks to the forecast for the remainder of the year.

Given the prevailing economic situation and resulting downward risks to global oil demand growth, along with the potentially significant increase in non-OPEC supply, oil market developments warrant close monitoring over the coming months.

Crude Oil Price Movements

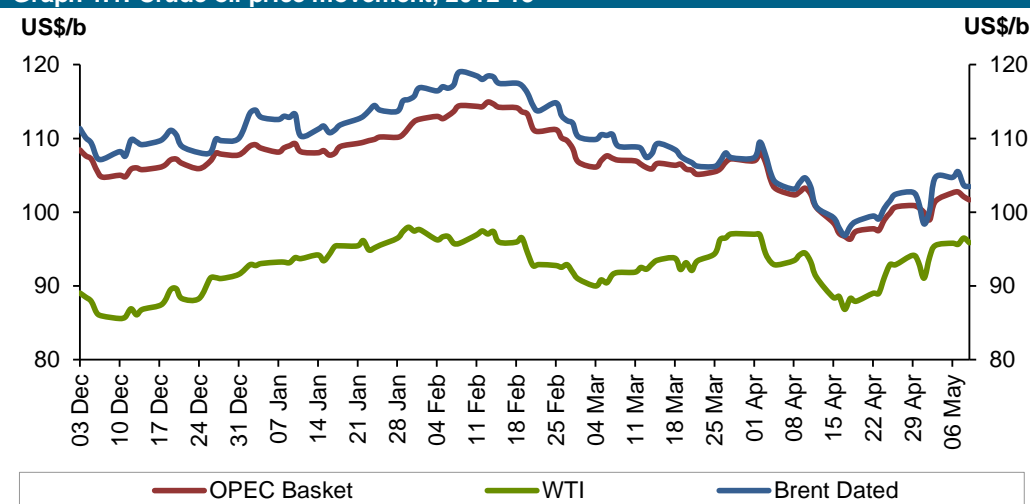
The OPEC Reference Basket fell for the second consecutive month, but remained above \$100/b

OPEC Reference Basket

The OPEC Reference Basket (ORB) dipped by more than 5% for the second month in a row in April. However, it continued to average above \$100/b, supported by the lesser decline in Oman/Dubai-related crudes. Cumulative losses in the value of the Basket in March and April amounted to more than \$11 or 11% from the highest price this year, which was around \$112/b in February. Similar to the previous month, the value of the Basket reflected the bearish sentiment in the international crude oil market, magnified by speculative activity, which continues to weaken outright prices by record levels. Several key factors continue to pressure crude oil prices, including weak economic data from the world's two largest oil consumers, the United States and China, which necessitated a cut in this year's oil demand forecasts by major energy agencies. Additionally, ongoing Euro-zone economic turmoil and record levels of US crude oil inventories have contributed greatly to the downturn in crude oil prices.

On a monthly basis, the OPEC Reference Basket in April dropped to average \$101.05/b, slipping by \$5.39 or 5.06% over the previous month. Year-to-date, the Basket averaged \$107.28/b, a decline of \$10.22/b or 8.7% from the same period last year.

Graph 1.1: Crude oil price movement, 2012-13



In April, all Basket component values weakened between 3.6% and 5.7% compared to the previous month. Apart from Bonny Light, which was supported by higher Asian demand amid lower availability, Dated Brent-related crudes faced downward pressure from the ample supply of regional light sweet crudes and lower refinery consumption. Saharan Blend, Es Sider, Girassol and Bonny Light dropped by 5.3% to an average of \$103.55/b, down by \$5.77. These grades continue to be affected by the overall sharp deterioration in the North Sea Brent market relative to US WTI and Middle Eastern Oman/Dubai.

With the return of Asian refinery demand after a substantial maintenance period, the Oman/Dubai market performed a bit better than other crude oil markets. This was reflected in the value of the Basket components priced in this market, since their values declined the least, despite record downward adjustments for official crude oil pricing formulae to Asia for March and April loadings. Qatar Marine and Murban crudes decreased by 3.6% or \$3.90/b over the month of April to average \$103.01/b. Multi-destination grades which also lost ground, include Iran Heavy, Basrah Light, Kuwait Export and Arab Light, which, on average, weakened by \$5.61 or 5.3% to a penny short of \$100/b, reaching \$99.99/b for the first time in nine months. Reflecting the strong m-o-m drop due to formula differential adjustments for the US Gulf Coast (USGC) physical market, Latin American grades, including Ecuador's Oriente and Venezuela's Merey, decreased by \$5.01 or 5% to a monthly average of \$94.70/b, below \$100 for the second month in a row.

On 9 May, the OPEC Reference Basket stood at \$101.67/b.

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

			Change	Year-to-date	
	Mar 13	Apr 13	Apr/Mar	2012	2013
OPEC Reference Basket	106.44	101.05	-5.39	117.66	107.28
Arab Light	107.61	101.97	-5.64	118.35	108.43
Basrah Light	104.17	98.22	-5.95	116.23	104.99
Bonny Light	110.57	105.17	-5.40	121.51	112.36
Es Sider	108.37	102.22	-6.15	119.63	109.86
Girassol	109.48	103.84	-5.64	120.34	110.33
Iran Heavy	105.47	99.71	-5.76	117.19	106.37
Kuwait Export	105.17	100.07	-5.10	117.22	106.23
Marine	105.36	101.55	-3.81	117.02	106.35
Merey	98.55	93.84	-4.71	109.47	97.71
Murban	108.45	104.46	-3.99	119.66	109.21
Oriente	100.86	95.56	-5.30	112.22	100.22
Saharan Blend	108.87	102.97	-5.90	119.75	110.66
Other Crudes					
Brent	108.37	102.17	-6.20	118.86	109.85
Dubai	105.55	101.68	-3.87	116.51	106.52
Isthmus	109.86	105.48	-4.38	115.29	108.68
Mars	108.35	100.37	-7.98	115.59	106.76
Minas	109.47	101.25	-8.22	127.73	111.68
Urals	107.01	102.06	-4.95	117.18	108.71
WTI	92.87	91.97	-0.90	103.11	93.71
Differentials					
WTI/Brent	-15.50	-10.20	5.30	-15.75	-16.13
Brent/Dubai	2.82	0.49	-2.33	2.35	3.33

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 saw a substantial drop again in April, with Brent falling 5.6% to July 2012 levels with a monthly average of around \$103/b. Nymex WTI posted a much smaller loss of only 1% to average about \$92/b.

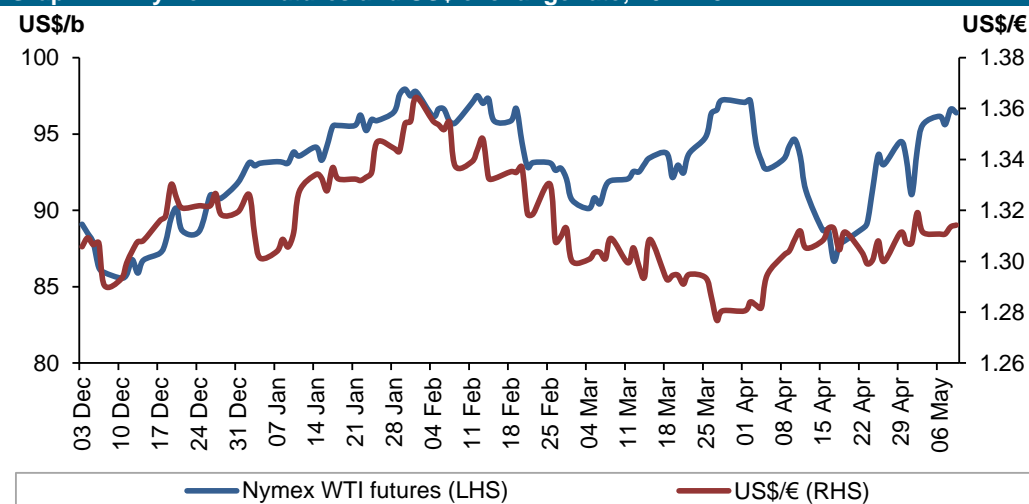
A fragile global economy — with the prospect of weakening demand growth, rising production and high commercial crude stocks — has sent crude prices tumbling. Crude oil also lost ground amid cross-commodity and equity markets' herd behaviour, as momentum trading led to a sell-off that sent commodity prices, such as those for gold and silver, plunging by record levels. The bearish market sentiment was due to less-than-encouraging macroeconomic data from across the globe, particularly from the world's two largest oil consumers. China's first-quarter GDP data was lower than expected, Europe's economic outlook is somewhat gloomy again, while in the US jobs and economic data were disappointing. This led to a downward revision of global oil demand for 2013 by the three main forecasting agencies and a cut by the IMF to its forecast for global GDP growth in 2013, sparking bearish sentiment among investors. The market perception of oversupply on the back of the US shale boom amid lacklustre light sweet crude demand on both sides of the Atlantic Basin and high stocks, along with a record high in US commercial crude inventories, also had a hand in pushing prices lower.

On the **Nymex**, the **WTI front-month** moderately dropped by around 90¢, or 1%, to average \$92.07/b in April. Compared to the same period in 2012, the WTI value is lower by \$9.24 or 9% at \$93.79/b. On the **ICE** exchange, the **Brent front-month** plunged by a hefty 5.6% or \$6.12 to reach an average of \$103.43/b. Year-to-date, ICE Brent also was lower by \$8.55, or 7.2%, at \$110.34/b from \$118.89/b at the same period last year.

On 9 April, ICE Brent stood at \$104.47/b and Nymex WTI at \$96.39/b.

Crude oil futures weakened further due to the fragile global economic recovery

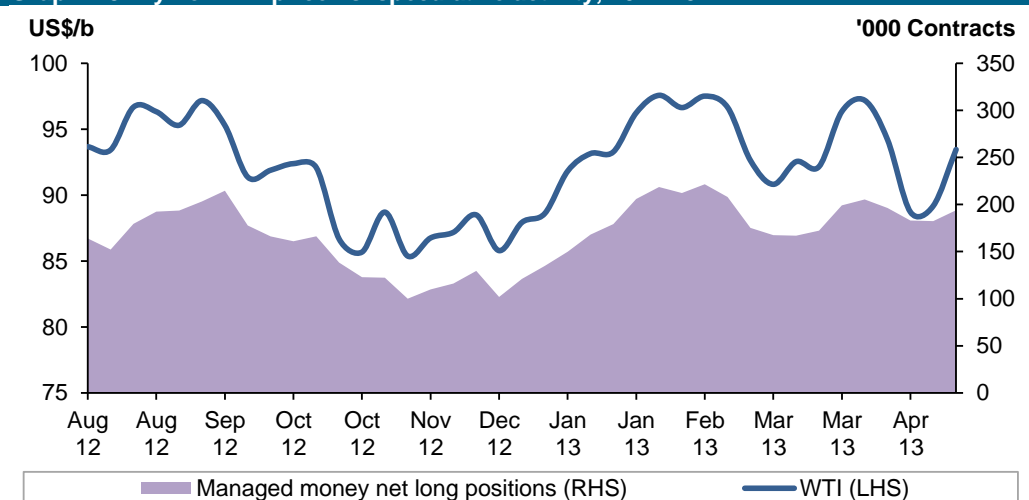
Graph 1.2: Nymex WTI futures and US\$ exchange rate, 2012-13



The latest CFTC and ICE commitments in trade reports for the week ending 23 April confirmed bearish investor sentiment for oil in April. Nymex WTI and ICE Brent **managed money net length positions** in futures and options posted a decline of 8.4% and 24%, respectively. Hedge funds and other financial players are continuing to exit long positions in oil futures as prices plunged during the past two months, with speculators cutting net length by some 132,000 lots or 132 mb in Nymex WTI and ICE Brent combined since prices hit a peak in mid-February 2013. The ICE Brent market is facing the bulk of the drop in net length, as it continues to slip at a much steeper rate than the Nymex WTI. Furthermore, **open interest volume** in ICE Brent dropped from its peak as prices fell, but recovered recently alongside a rise in overall traded volume to stand at 1.8 mn lots, 6,000 contracts lower than in mid-February. On the other hand, the Nymex WTI open interest volume increased over the period to 2.5 mn lots.

Total traded volume in both futures markets increased by almost 2.2 mn contracts each in April. However, the total traded volume in ICE Brent futures exceeded that of the Nymex WTI by more than 3.1 mn contracts to become the world’s most traded oil futures contract. The landlocked WTI contract has contributed to the attractiveness of Brent, which better reflects global fundamentals. The backwardated structure of Brent for more than two years has also played a role in attracting typically bullish investors, such as managed money groups, as it allows for additional profits during contract rollover. This is in contrast to WTI, where, with the exception of three weeks in October–November 2011, WTI 1st versus 2nd month has been in contango since 2008. WTI Nymex average daily volume during April reached 606,444 contracts (606 mb/d), up 80,744 lots, while the ICE Brent daily traded volume was at 756,658 contracts (756 mb/d) on average, 68,682 lots higher than the previous month.

Graph 1.3: Nymex WTI price vs. speculative activity, 2012-13



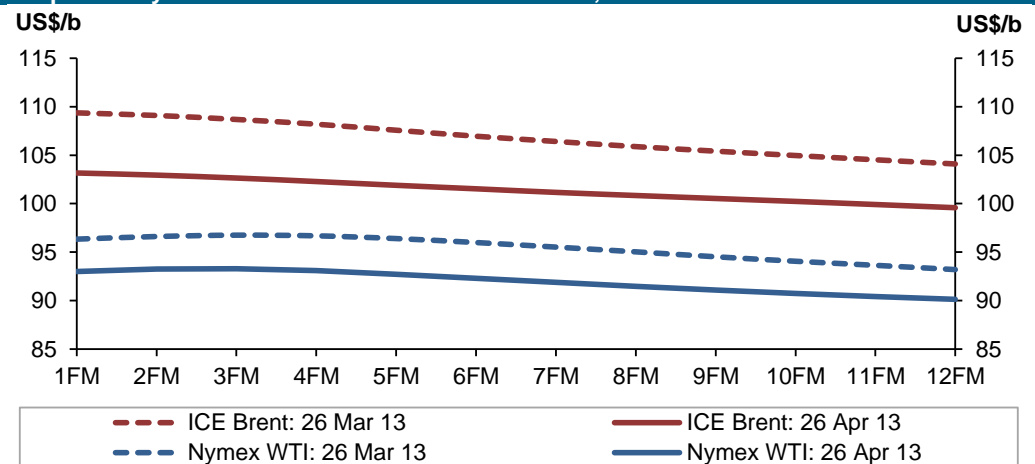
ICE Brent backwardation weakened to become nearly flat, while WTI market structure continued to improve

The futures market structure

The **ICE Brent inter-month spread** continued to weaken over April, flipping into contango for most of the month. Ample North Sea crude availability and high levels of regional maintenance have put the prompt Brent market under significant pressure in recent weeks. Volumes were partly lifted by prompt Forties availability on the back of strong production from the Buzzard field, which led to additional volumes being added to the April Forties loading schedule. In addition, the increased availability of Oseberg — up 29% m-o-m at 155,000 b/d — also helped offset a sharp drop of around 66,000 b/d in Ekofisk exports. The front-end contango in the ICE Brent curve was short lived, as the 1st and 2nd month spread returned to a very soft backwardation, aided by a flurry of arbitrage cargoes of North Sea crude to the USGC and South Korea. In April, the 1st and 2nd month ICE Brent contract spread averaged a multi-month low of around 9¢/b compared to 55¢/b the previous month.

On the other hand, the **Nymex WTI market structure** narrowed further over the month as incoming pipeline projects in the US as well as a massive increase in rail takeaway capacity further north alleviated supply pressure on the Cushing storage hub. The reversed Longhorn pipeline in West Texas seems to have helped in this regard, which is also evident from rising prices for West Texas Sour (WTS). The crude, produced in the Permian Basin, has seen its price climb from a differential of close to \$19/b below WTI to a recent record of a 15¢ premium, as the crude can now directly reach end consumers in the US Gulf. In April, the 1st month versus 2nd month time spread came down to average around 30¢/b, compared to about 40¢/b in the previous month.

Graph 1.4: Nymex WTI and ICE Brent forward curve, 2013



FM = future month.

The **Brent/WTI spread** temporarily narrowed to below \$10/b for the first time since January 2012, settling at \$8.90/b on the last trading day of the month. The spread averaged \$11.35/b in April, a hefty \$5.25 less than the previous month. In relative terms, WTI strengthened, while Brent weakened on the factors mentioned above. The narrowing spread is weighing on US refining margins in the midcontinent and could potentially inflict pain on coastal refineries that had banked on railroad inflows of distressed midcontinent crude. The appreciation of WTI, following the pipeline-related easing of the bottleneck around the Cushing storage hub, has also boosted outright prices for other grades in the region, such as Bakken, WTS and Western Canadian Select (WCS).

Refiners in the midcontinent appear to be seeking refuge from increasing prices by undertaking maintenance. As of the week to 19 April, run rates in PADD II slumped to 83.4%, the lowest level since April 2010, and a clear indication that current margins are becoming less profitable. In the past, heavy maintenance at PADD II tended to widen the Brent/WTI spread, as stocks around the Cushing area built up. The latest round of maintenance has also resulted in stock builds at the Cushing hub, but the link is no longer as direct due to increases in outbound pipeline capacity in the Midland and Cushing regions (Longhorn, Permian Express and Seaway pipelines), as well as a massive increase in rail takeaway capacity further north. The key question will be at

what point the narrower Brent/WTI spread closes off rail economics, thereby freezing outflows of Bakken crude and causing a renewed regional crude overflow.

Meanwhile, two other key factors supported US crudes, causing transatlantic arbitrage to temporarily open. Most importantly, Mexican and Venezuelan grades, which make up base load crude for a large portion of the USGC's refiners, were comparatively more expensive than competing US crudes. Counter to historical trends, Latin American term volumes have been more expensive than US crudes. The high prices result from the formulas utilised (which incorporate WTI and WTS) to price Latin American term volumes. Accordingly, this strength has rubbed off on the domestic crude complex.

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

Nymex WTI						
	<u>1st FM</u>	<u>2nd FM</u>	<u>3rd FM</u>	<u>6th FM</u>	<u>12th FM</u>	
26 Mar 13	96.34	96.61	96.75	95.99	93.20	
26 Apr 13	93.00	93.25	93.29	92.31	90.12	
ICE Brent						
	<u>1st FM</u>	<u>2nd FM</u>	<u>3rd FM</u>	<u>6th FM</u>	<u>12th FM</u>	
26 Mar 13	109.36	109.09	108.68	106.95	104.09	
26 Apr 13	103.16	102.94	102.64	101.53	99.58	

FM = future month.

The light-sweet/heavy-sour crude spread

The global light-sweet/heavy-sour spread narrowed significantly, except in the USGC. The spread followed developments in the refined product markets, where the healthy fuel oil market supported heavier crude grades, while poor light distillate cracks depressed light sweet crudes. Lower availability of sour crudes relative to the ample supply of lighter crudes also supported the narrowing trend.

In Europe, the **sour crude market** reflected bullish fundamentals, with Urals trading at 2013 highs both in the Mediterranean and in Northwestern Europe, as refining margins improved and the market saw limited supplies of alternative grades. Support came from strong fuel oil cracks, a tight May loading schedule, limited availability of alternative crudes, the continued unreliability of Kirkuk crude and the return of an estimated 1.4 mb/d of European refining capacity from maintenance in May, compared to April. Fuel oil is finding support in arbitrage to Asia, while the continuing loss of rival grades is keeping the sour crude market tight in the region.

On the other hand, **light sweet North Sea crude** came under pressure from poor refining margins and slim demand amid ample prompt cargoes and lower arbitrage trade to Korea. Weak naphtha refining margins also weighed on demand for sweet crudes. A steep drop in North Sea Dated has pushed Oseberg to a discount to US Light Louisiana Sweet (LLS), opening the arbitrage for North Sea grades to move to North America. Naphtha has come under pressure from weak demand in Europe for gasoline production and petrochemical feedstock. The Urals differentials moved from more than minus \$1.30/b to Dated Brent in March, to only minus 10¢ in April, on a month-to-month average basis, the lowest since January 2010.

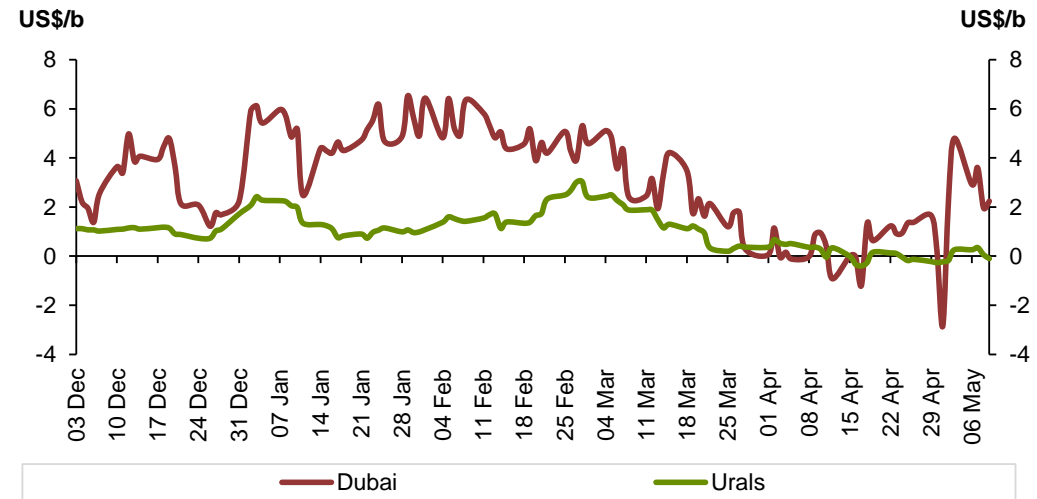
Similarly, in Asia, strong fuel oil cracks coupled with weak middle distillates contributed to a further sharp collapse in the Tapis/Dubai spread in April. Fuel oil refining margins are at their strongest since July last year, while inventories in Singapore recovered from a 32-week low. Fuel oil supplies are also tight, as Mideast Gulf refineries enter turnaround season. Meanwhile, both light and middle distillate cracks have trended downward, coming under pressure from lacklustre demand in the region as well as an upward movement in Chinese diesel exports. The depressed market for middle distillates is also reflected in falling spot differentials for diesel and kerosene-rich crudes such as Murban and ESPO. Besides maintenance, the Asian crude market — particularly light grades — is coming under pressure from higher inflows of West African, Caspian and other Brent-related grades following a narrow Brent/Dubai cash spread that averaged around 50¢/b in April. The influx in crude coupled with a still uncertain demand outlook and ailing refining margins has hit the Dubai market

Light-sweet/heavy-sour spread narrowed globally

structure hard, narrowing its backwardation. Tapis monthly average premium to Dubai in April weakened further to \$6.85/b, compared to a premium of about \$9.35/b in February, a decrease of \$2.50.

In the USGC, the sweet sour spread for LLS vs. Mars widened slightly by almost 60¢ to an average of \$5.05/b in April. On the other hand, in Midland Texas, light sour WTS crude is trading at parity to WTI, up from a differential of \$15/b just a few weeks ago, thus diminishing the attractiveness of South American crudes. Both Pemex and PDVSA use WTS in their pricing formula, therefore the closing spread between WTS and WTI indirectly affects their crudes. WTS has also tracked WTI's narrowing differential to Brent.

Graph 1.5: Brent Dated vs. Sour grades (Urals and Dubai) spread, 2012-13



Commodity Markets

Commodity prices fell in April, except for HH natural gas

Trends in selected commodity markets

The declining trend in commodities in April has continued, as was confirmed by the latest **World Bank** data. Prices fell across the board, with the exception of the Henry Hub gas prices. This continues the decoupling from the equity markets, which largely traded along the same lines with the commodity market in the past years. It remains to be seen if it will catch up again as expected, but for the time being the growth in equities — which reached new highs — is very different from the most recent developments in the commodities area.

Base and precious metals have seen the largest declines. Base metals have fallen by 4.9% m-o-m, with an above-average decline in copper, which is usually a good indicator for future economic activity. This decline in prices has also been triggered by slowing momentum in all the major emerging economies, particularly China, that have been the marginal buyers of these commodities for some years.

Another reason for the price decline might be the fact that **inflation** in the larger developed economies seems to be largely contained and investments in commodities as a hedge for inflation is currently not necessary.

Finally, the rise in the **US dollar** over the past months has added to the price decline, given the usual correlation of inverse US dollar price trends and commodity prices.

Table 2.1: Commodity price data, 2013

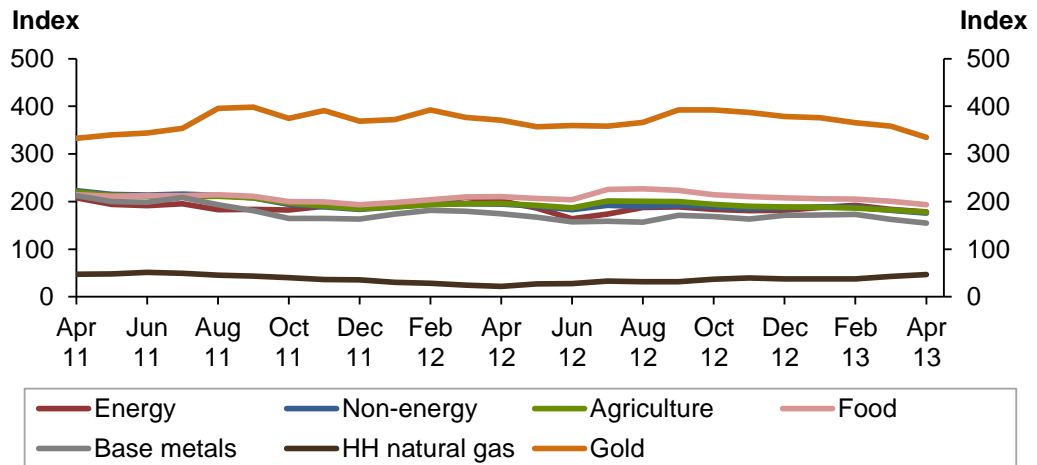
Commodity	Unit	Monthly averages			% Change		
		Feb 13	Mar 13	Apr 13	Feb/Jan	Mar/Feb	Apr/Mar
<i>World Bank commodity price indices for low and middle income countries (2005 = 100)</i>							
Energy		192.0	183.7	178.3	2.3	-4.3	-2.9
Coal, Australia	\$/mt	94.9	91.0	87.2	2.3	-4.2	-4.1
Crude oil, average	\$/bbl	107.6	102.5	98.9	2.4	-4.8	-3.6
Natural gas, US	\$/mmbtu	3.3	3.8	4.2	-0.5	15.0	9.1
Non Energy		187.9	181.4	175.7	-0.3	-3.5	-3.1
Agriculture		186.3	182.5	177.6	-0.9	-2.0	-2.7
Food		205.1	200.8	193.3	-0.2	-2.1	-3.7
Soybean meal	\$/mt	535.0	520.0	484.0	-0.6	-2.8	-6.9
Soybean oil	\$/mt	1,175.0	1,116.0	1,095.0	-1.3	-5.0	-1.9
Soybeans	\$/mt	596.0	511.0	495.0	0.7	-14.3	-3.1
Grains		246.8	247.5	234.8	-1.3	0.3	-5.1
Maize	\$/mt	302.7	309.0	279.9	-0.1	2.1	-9.4
Wheat, US, HRW	\$/mt	318.9	309.7	308.3	-4.9	-2.9	-0.5
Sugar World	¢/kg	40.3	40.8	39.3	-3.2	1.2	-3.7
Base Metal		172.9	162.9	154.9	0.5	-5.8	-4.9
Aluminum	\$/mt	2,053.6	1,909.6	1,861.7	0.8	-7.0	-2.5
Copper	\$/mt	8,060.9	7,645.6	7,234.3	0.2	-5.2	-5.4
Iron ore, cfr spot	¢/dmtu	154.7	139.9	137.4	2.6	-9.5	-1.8
Lead	¢/kg	236.6	216.9	202.7	1.4	-8.3	-6.5
Nickel	\$/mt	17,690.1	16,724.9	15,673.0	1.2	-5.5	-6.3
Tin	¢/kg	2,421.2	2,329.7	2,166.2	-1.4	-3.8	-7.0
Zinc	¢/kg	212.9	192.6	185.6	4.7	-9.5	-3.6
Precious Metals							
Gold	\$/toz	1,627.6	1,593.1	1,487.9	-2.6	-2.1	-6.6
Silver	¢/toz	3,032.9	2,879.1	2,535.5	-2.4	-5.1	-11.9

Source: World Bank, Commodity price data.

HH natural gas gained 9.1% in April

Contrary to large declines in most of the major commodities over the last two months, the **Henry Hub (HH) natural gas price index** again gained 9.1% in April, for the second straight month, but remained well below the 15% rise posted in March. During the latter part of the month, for the first time in nearly 10 weeks, the HH price index slid nearly 6% amid moderating weather forecasts, a build in inventories and tapering spring demand. It hit a 21-month high of \$4.429/mmbtu in the middle of the month as cold Midwest US weather forecasts and a slide in inventories to below-normal levels helped drive prices to recent record highs.

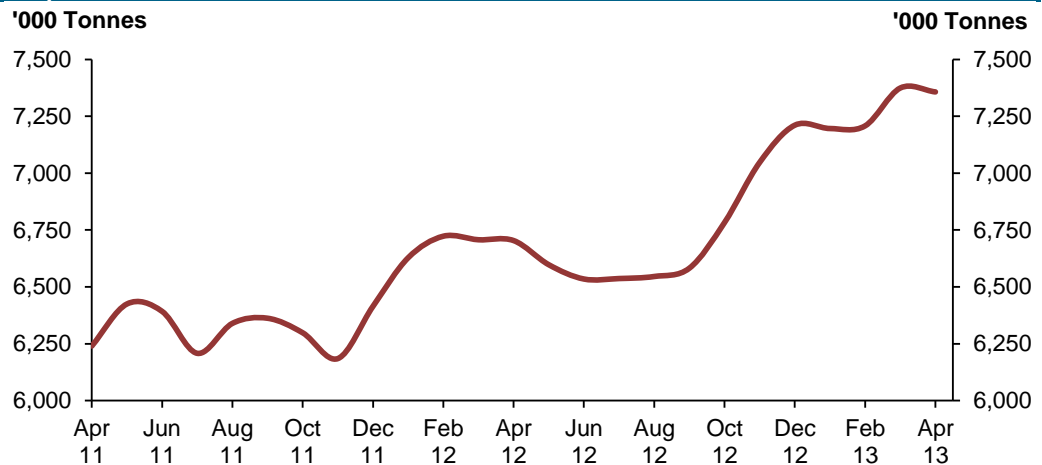
Graph 2.1: Major commodity price indexes, 2011-13



Source: World Bank, Commodity price data.

The **World Bank agricultural price index** fell by 2.7% from last month and minus 9.3% from a year ago. After having traded sideways in March, the grains declined in April by a significant level, 5.1%, pushing down the average price for this year. With all other issues considered secondary, the market remains focused on the upcoming US corn and soybean planting season, which will doubtless set the scene for this year’s grain market and probably also affect sentiment across the entire agricultural commodity sector. So far, wet weather in the US Midwest threatened to exacerbate already significant planting delays. The wheat price dropped by a further 0.5% in April, after falling 2.9% in March, partly due to an expected high production level.

Graph 2.2: Inventories at the LME



Source: London Metal Exchange and Haver Analytics.

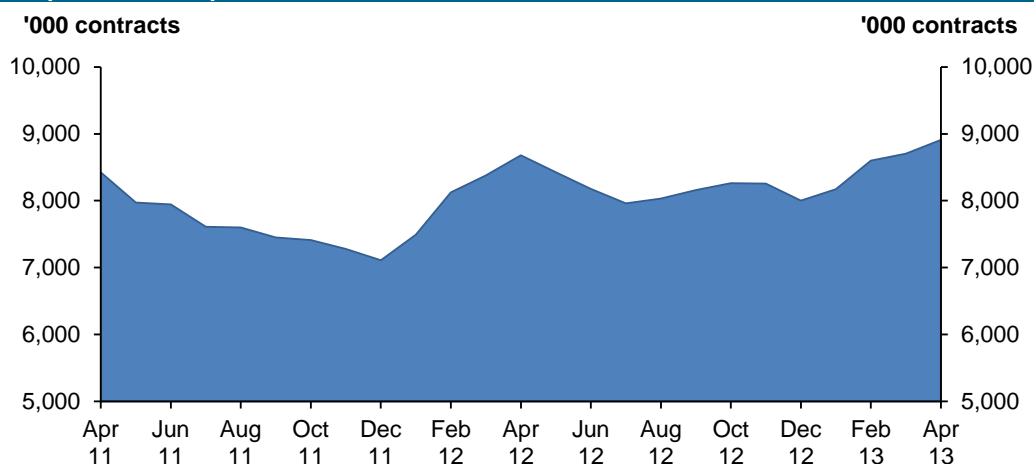
Total OIV up in US, led by natural gas, copper and crude oil

Investment flows into commodities

The **total open interest volume (OIV)** in major commodity markets in the US increased by over 2.4% m-o-m, for the fourth consecutive month, to 8.9 mn contracts in April, adding to the 1.2% rise in February. The growth was mainly attributed to higher OIV in natural gas, copper and crude oil, while the remaining commodities’ OIV thinned m-o-m.

Total net length speculative positions in commodities decreased further by 2.3% m-o-m to 455,156 contracts in April, on top of the 10.1% drop the previous month. The data reflected significant bearish sentiments in the agricultural and livestock commodities markets, while other markets were stable to very bullish, as in the case of natural gas.

Graph 2.3: Total open interest volume

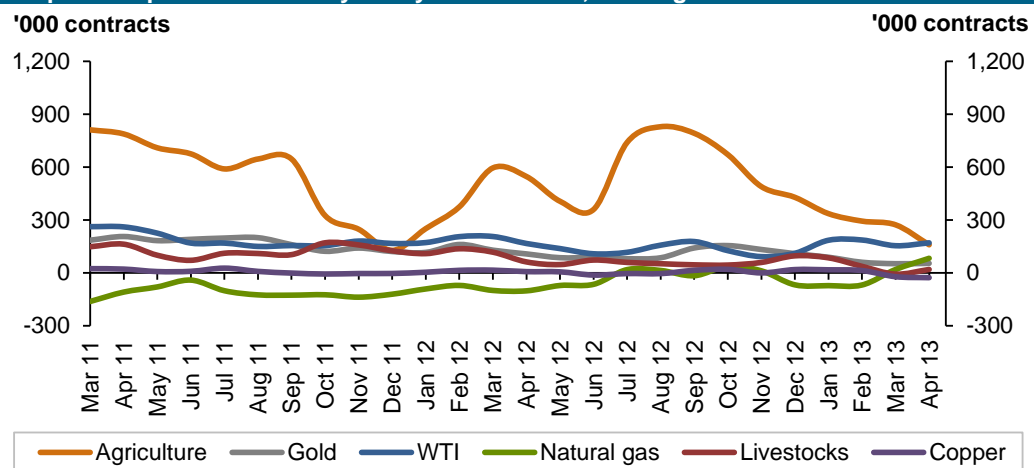


Source: US Commodity Futures Trading Commission.

Agricultural OIV fell again by 1.1% m-o-m to 4,426,284 contracts in April, the same as in March. Money managers' net long positions in agriculture dropped by a sharp 41.6%. Since August, agricultural net length dropped more than 80%. The net length reached 828,633 contracts in August, dropping to only 158,729 lots in April as prices continue to fall amid weak demand and improving global supply outlook.

Henry Hub natural gas OIV increased by a hefty 16.8% m-o-m to 1,535,113 contracts in April as bullish market sentiment continued. This is in addition to the 9.6% rise in March. For the eleventh week in a row, speculative net length positions increased three-fold to their highest on record at 82,125 contracts.

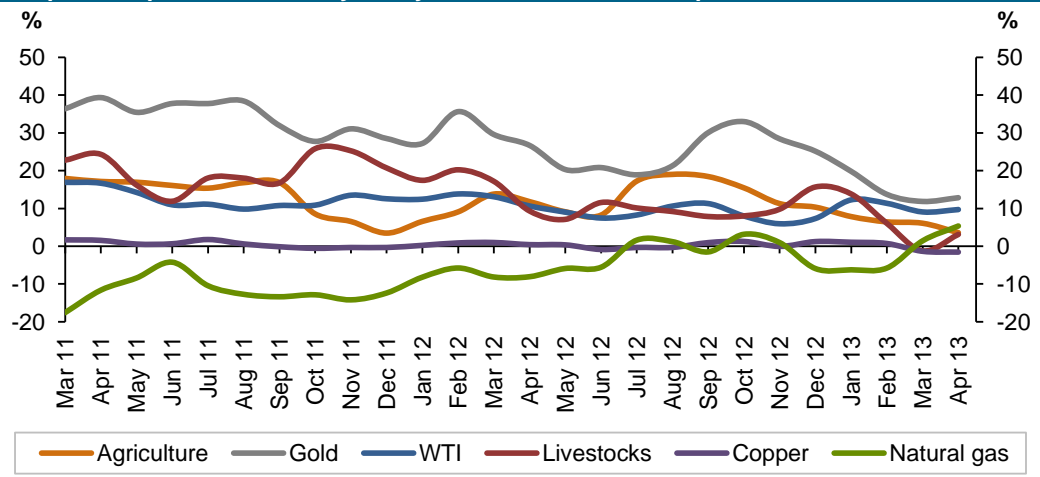
Graph 2.4: Speculative activity in key commodities, net length



Source: US Commodity Futures Trading Commission.

Copper's OIV increased 7.8% m-o-m to 177,693 contracts in April, reversing a March drop of 5.5%. However the group of investors increased their short positions, or bearish bets, by almost 11% to 26,025 contracts, in line with the fall of the price of copper futures by 5.4%.

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



Source: US Commodity Futures Trading Commission.

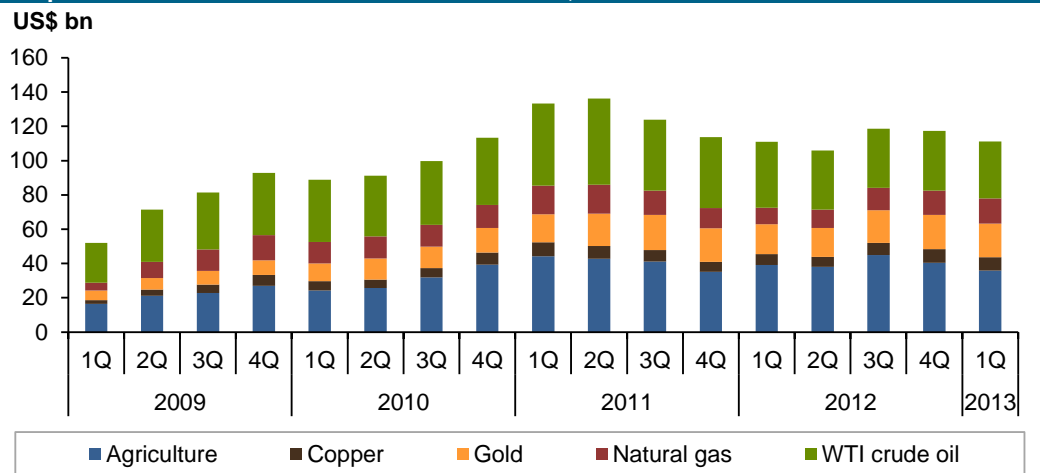
Gold OIV decreased in April

Gold's OIV decreased by 4.3% m-o-m to 416,587 contracts in April. Strategic investments in gold rose by 3.7% m-o-m to 53,371 contracts in April compared to a decrease of 13.6% in March. Bullish bets increased in gold futures and options as the price of the precious metal rallied 4.5% during the last week of the month. However, gold's net length remains near its weakest level since December 2008.

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

	Open interest		Net length			
	Mar 13	Apr 13	Mar 13	% OIV	Apr 13	% OIV
Crude oil	1,693	1,751	154	9	170	10
Natural gas	1,314	1,535	19	1	82	5
Agriculture	4,474	4,426	272	6	159	4
Precious metals	585	572	56	10	58	10
Copper	165	178	-22	-13	-28	-16
Livestock	622	602	-8	-1	19	3
Total	8,853	9,064	471	5	459	5

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



Source: US Commodity Futures Trading Commission.

World Economy

Table 3.1: Economic growth rates 2012-13, %

	World	OECD	US	Japan	Euro-zone	China	India
2012	3.0	1.3	2.2	2.0	-0.6	7.8	5.0
2013	3.2	1.2	1.8	1.1	-0.5	8.0	6.0

Industrialised countries

US

The underlying economy of the US continued recovering in 1Q13 from very low growth in 4Q12.

However, this year's fiscal drag is forecast to lead to muted growth in 2013, with GDP expected to expand by 1.8%.

The US economy is currently enjoying some positive momentum in its underlying economy. Wealth creation factors in the labour market, the housing sector and the equity market have turned out to be relatively supportive for the economy, and private household consumption is continuing to grow at solid rates, counterbalancing the negative effects of fiscal contraction. This positive development has so far been very well supported by the monetary policy of the Federal Reserve Board (Fed). The Fed has confirmed it will continue to be accommodating as long as necessary, while in general it must be accepted that there are certain risks to the Fed's policy, which currently seem worthwhile for the Fed to take. The drag to higher growth levels comes mainly from the fiscal consolidation that has been implemented this year and is estimated to have a negative impact of around 1.5 percentage points (pp).

Poor budget cuts under the sequester, combined with uncertainty about ongoing budget negotiations in Congress and discussion on the looming necessity to lift the debt ceiling after 18 May are the main aspects that seem to be holding back growth in the current year. It will be important to watch the development of fiscal retrenchment negotiations and indeed close monitoring will also be required to gain an idea of growth levels in the coming year.

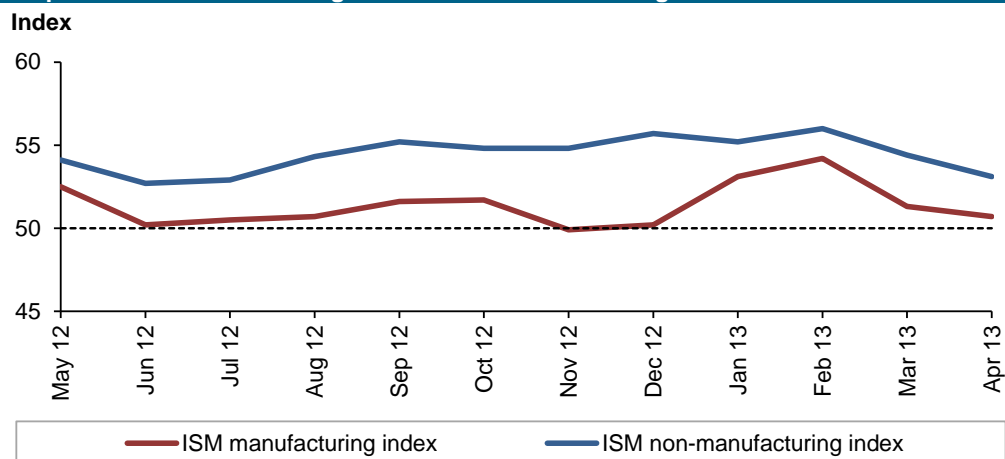
Given this situation, the most recently published first quarter GDP number of 2.5% annualised and seasonally adjusted quarterly growth is a solid growth level. It is considerably higher than the 0.4% seen in 4Q12 and almost matches the largely governmentally driven 3.1% in 3Q12, with the difference being that this time governmental spending declined by 4.1%, while in 3Q12 it rose by 3.9%. However, economic momentum in the current quarter is estimated to have slowed down and led to an estimated 2Q13 growth forecast of 1.5% to 2.0%. The first estimate will be published at the end of July. It will also be very interesting to learn about the major GDP revision by the Bureau of Economic Analysis (BEA), which will be published around the same time. These revisions will include newly added GDP items that are estimated by the BEA to lift GDP by around 3% and which could have some impact on GDP numbers going back to 1929.

The Fed has highlighted in recent months that the most important guideline in the current economic environment for its monetary policy decisions is development of the labour market. While so far improvements in the labour market have been slow, the latest April report provided some encouraging signals when compared to previous reports. Recovery will most probably remain choppy, but it has again underscored the relative robustness of the US economy. The unemployment rate declined to 7.5% and non-farm payrolls rose considerably by 165,000 in April, after a revised number of 138,000 in March. Moreover the share of long-term unemployment declined from 39.6% to 37.4%, the lowest level since November 2009. With improvements in the labour market, consumer confidence has also increased. The consumer confidence sentiment index of the Conference Board moved from 61.9 in March to 68.1 in April. This is historically still very low, but the trend in actual spending as part of the GDP stood at an encouraging 3.2% annualised and seasonally adjusted quarterly rate, the highest since the first quarter of 2011, so the improving trend in sentiment should be supportive for the near future.

This positive — though currently slightly decelerating — momentum is also confirmed by the Purchasing Managers' Index (PMI) for the manufacturing sector as provided by the Institute of Supply Management (ISM), which issued a decline from 51.3 in March to 50.7 in April. The PMI for the services sector — which constitutes more than two-thirds of the

economy — fell from the very high level of 54.4 in March to 53.1 in April.

Graph 3.1: ISM manufacturing and non-ISM manufacturing indices



Source: Institute for Supply Management.

The very important housing sector improved significantly over the past months and while last month's data has been mixed, the trend has again improved this month. After pending home sales unexpectedly fell by 1.0% m-o-m in February, they rose by 1.5% m-o-m in March, according to the National Association of Realtors. Pending home sales are considered to be a leading indicator of progress in real estate because they track contract signings. Positively, the yearly change of the federal housing finance agency (FHFA) house pricing index has continued its rising trend at a monthly price rise of 7.7% y-o-y in February, after 6.7% y-o-y in January, the largest increase since June 2006.

This year's fiscal drag is forecast to lead to muted growth in 2013. GDP is expected to expand by 1.8%, unchanged from the previous month's estimate. While the positive trend in the labour market and housing sector are encouraging, it remains to be seen if the momentum will continue.

Japan

Since the newly elected government has shown its willingness to push the economy out of its deflationary corner and lift growth levels beyond its current potential of around 1%, expectations for this year's economic performance are high. After years of almost no growth, Japan remains at absolute GDP levels around those of 2007. While there certainly is the possibility of a further boost to the currently low growth potential, it is not yet obvious whether the outcome will be as great as is hoped, and many counter-arguments remain.

The core aim of the monetary strategy is to end deflation and to be able to consistently produce an inflation rate of around 2%. To achieve this, the Bank of Japan (BOJ) has diverted from its main monetary management mechanism — interest rate setting — to focus mainly on the quantity of the monetary base. With this strategy it intends to double the monetary base by 2014, moving it from a current ratio of around 30% to GDP to more than 50%. However, without a relative increase in wages an inflationary increase could backfire. Moreover, it should be highlighted that an economy like Switzerland's, with more than 80% of its monetary base to GDP and inflation has remained negative since October. This should provide some evidence that such a strategy — without additional measures — does not necessarily help. Furthermore, a ratio of around 30% of the monetary base to GDP is already quite high. It compares with less than 20% in the US; it seems monetary expansion in Japan has only met with limited effect. The weakening of the yen as part of this strategy has already been commented upon by other G20 economies as a dangerous intervention, and it is also negatively impacting fossil fuel import prices; higher imports became necessary after a move away from nuclear energy following the triple disaster of 2011. Finally, the sovereign debt level remains the highest of all developed economies, and while the central bank will be able to digest some of this debt pile, it

Business and consumer sentiment point to higher growth levels in 2Q13. Consequently, 2013 GDP growth has been revised from 0.8% to 1.1%

will require repayment and this could cause serious spending cuts for the government earlier rather than later, again hurting growth potential. These many unknowns will need to be carefully monitored in the near future.

Thus, Japan's economy is forecast to be mainly driven by large monetary stimulus, soon expected to be accompanied by further fiscal stimulus and structural improvements. Data for the first quarter provide some signals that government-led support is creating higher output, but much more momentum is needed to achieve current growth expectations. Leading indicators are fuelled by encouraging government prospects and point to rising output in the second quarter. It is too early to determine to what extent government efforts will materialise in additional economic growth.

After two negative quarters of export growth, 1Q13 growth was up by 1.2% y-o-y, a 6.0% quarterly rise; the decline of the yen versus the US dollar by almost 30% since November last year seems to have been an important support factor. Retail trade remained negative in March. After a fall of 2.2% m-o-m in February and a decline of 1.1% m-o-m in January, it was again lower by 0.3% m-o-m in March, leading to a yearly decline of 1.2% in 1Q13. Industrial production increased slowly each month, reaching 0.3%, 0.5% and 0.2% for the first three months of the year. Machinery orders remained negative at -8.4% y-o-y in February. However, business and consumer sentiment indices have a positive outlook for the remainder of the year. The purchase managers index (PMI) for manufacturing remained above the 50 line for the second time in April, reaching 50.4 in March and 51.1 in April. Consumer confidence climbed to 44.8 in March, its highest level since June 2007, based on numbers provided by the Cabinet Office.

Positive developments in exports and significant improvement in leading indicators have led to a revision of the 2013 growth forecast from 0.8% in the past month to 1.1%. However, it must be noted that many uncertainties prevail and future development needs to be carefully monitored.

Euro-zone

The Euro-zone's economic development has not improved much lately and it remains to be seen whether the economy will recover in the second half as currently estimated. Leading indicators point to a continued slowdown, industrial production is not improving, unemployment is at a record high and the transmission channel for the ECB's relatively accommodating monetary policy remains impaired. The economy has declined since 4Q11, though it is forecast to rebound by this year's third quarter, when it should produce positive growth on a quarterly basis. However, as the crisis has reached its core economies — Germany and France — it should not be ruled out that the economy's serious condition will continue for longer than currently expected. The labour market — with the exception of Germany, Austria and Luxembourg — indicates that the economy is dealing with grave issues that will need a lot more time to heal.

This distressed situation of the labour market in particular, in combination with the fading impact of monetary stimulus, which suffered a low response rate from the real economy, has led to the conclusion that austerity has not and will not necessarily lead to a turnaround in the short term. As the International Monetary Fund (IMF) pointed out on some occasions, and reflected in April G20 discussions, it may be important for economies which can afford it not to cut governmental spending further to the point at which future growth is significantly impaired. With some shift in the strategy of the austerity policy, which has been mainly driven by Germany, it is possible that the economy may find its way back sooner rather than later to careful growth. It is too early to say if such a shift will be supported and if so, then most likely after the German elections in September. Austerity — along with other measures — has certainly led to the regaining of investor confidence and more reasonable sovereign debt risk premiums. However, at debt ratios that are much lower now than the average of advanced economies in the Euro-zone and particularly in certain economies, it seems there is some room for maneuvering. The IMF estimates that austerity measures will lead to a budget deficit in the Euro-zone of 2.9%, compared to 4.7% in advanced economies and the 2013 US deficit of 6.6%. In this regard, it should

Taking the current declining momentum into consideration, the Euro-zone's growth forecast for 2013 remains unchanged, showing a contraction of 0.5%

be highlighted that in 2012 Germany and France already experienced higher growth rates in public spending than in private spending. In Germany, government consumption expanded by 1.4% in 2012, while private consumption grew by 0.6%. In France, the rates stood at 1.4% compared to -0.1%, respectively. The latest comments by the President of the European Commission that austerity measures have reached their limit were echoed by the French Finance Minister, who also advocated more fiscal flexibility. The newly installed government in Italy also highlighted the need to reform the tightness of the austerity policy in the Euro-zone. The German Finance Minister has already accommodated these arguments, recently stating that more flexibility — particularly in the cases of France and Spain — could be envisaged, and that the matter will be taken into consideration in upcoming European Council meetings of European Union Leaders and Finance Ministers at the end of May.

Industrial production in the Euro-zone has declined since November 2011, reaching its biggest drop in November of last year at -3.8%. In February, the decline stood at 2.7%, the highest in the past three months. The labour market continues to be in a very challenging stage and private household consumption is experiencing a decline. The unemployment rate moved up to 12.1% in March, the highest on record, while youth unemployment stood at 24.0%. Among the larger economies, Spain again recorded the highest unemployment rate at 26.7% for general unemployment and 55.9% for youth unemployment, both unsustainable in the long-term. Consequently retail trade remained negative for the 23rd consecutive month at -2.2% y-o-y in March, the largest decline in 1Q13. Leading indicators do not offer a lot of hope for an improvement in the situation any time soon. The main indicator for future production developments — the Purchasing Managers' Index (PMI), published by Markit — highlights problems in the economy, which remained clearly below the growth indicator level of 50 at 46.9 in April, almost the same level as in March.

Taking the current declining momentum into consideration, the Euro-zone's growth forecast remains unchanged at -0.5% for 2013 with no current indication for improved annual performance. This, however, takes into consideration some recovery in the second half. It remains to be seen to which extent the economy will manage to rebound, but it will certainly require the larger economies of Germany and France to improve first, with the others following.

Emerging markets

After a slowdown in 2012, emerging and developing economies are poised for stronger growth in the current year. Weakness in the advanced economies, and slower growth in China has been curbing exports in recent months, but as the US and Chinese economies are expected to improve and Europe to stabilise, demand for emerging market exports should start to rise again. China should record substantially better growth of 8.0% this year. This number is fractionally down from the last forecast of 8.1%, reflecting the recent tone of policymakers as well as some softness in the latest data.

Eastern Europe's transition economies continue to be challenged by close links with the troubled Euro-zone and the lingering effects of the 2008 credit bubble burst. This month, slight downward revisions were made to the 2013 GDP forecasts for Eastern Europe, in keeping with weaker prospects in the Euro-zone, a key trading partner and source of investment and financing. Russia's growth assumption, in particular, has been revised from 3.4% to 2.9%.

Growth in Latin America weakened last year, also triggered by the Euro-zone recession and the slowdown in China. However, it seems that the Latin American slowdown is cyclical rather than structural. We expect growth to pick up to 3.4% this year for the region, supported mainly by Brazil's recovery from a very low growth rate of 0.9% in 2012 to 3.0% for this year.

Economic growth in the Middle East and North Africa will weaken slightly to 3.1% in 2013, in part because the impact of a host of earlier fiscal stimulus measures will ease and Libya's growth pattern — which saw a significantly large recovery in the last year

— is distorting the pattern. This headline figure also masks a considerable divergence between positive prospects for oil-producing countries and mostly negative prospects for non-oil producing economies.

The first BRICS summit held in South Africa highlighted the growing importance of this informal group comprising Brazil, Russia, India, China and South Africa. It was the first time the summit was held on African soil (and the group's fifth in total), taking place in Durban on 26-27 March, thereby also signaling the growing importance of the African continent.

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
Brazil	0.9	3.0	5.4	6.3	-54.2	-71.6	-2.4	-2.7	60.5	60.8
Russia	3.4	2.9	5.1	6.3	81.3	41.3	-0.1	-0.5	7.7	8.0
India	5.0	6.0	9.3	9.4	-94.6	-91.9	-5.0	-4.3	49.3	48.7
China	7.8	8.0	2.6	4.3	222.6	181.8	-1.6	-2.0	15.8	16.2

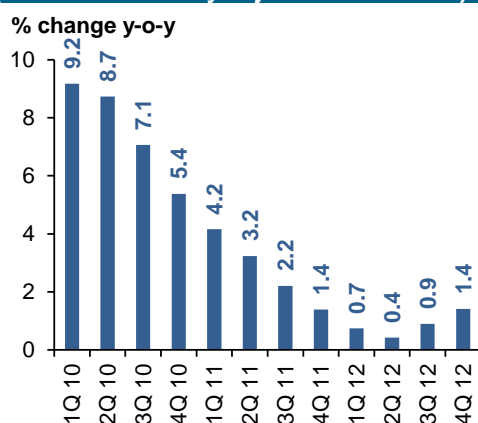
Source: OPEC Secretariat, Economic Intelligence Unit and Financial Times.
Figures for India are from the fiscal year 2012-2013 and 2013-2014.

Brazil

Brazilian manufacturing production expanded in March by 1.0% y-o-y after falling in February by 0.8% y-o-y, reflecting higher volumes of incoming new work from both domestic and international clients in the past months, though most recently new orders have eased again and input costs rose at their fastest rate in 22 months. Moreover, changes in Brazil's macroeconomic framework, together with heightened policy activism and creeping interventionism and protectionism, are currently undermining confidence.

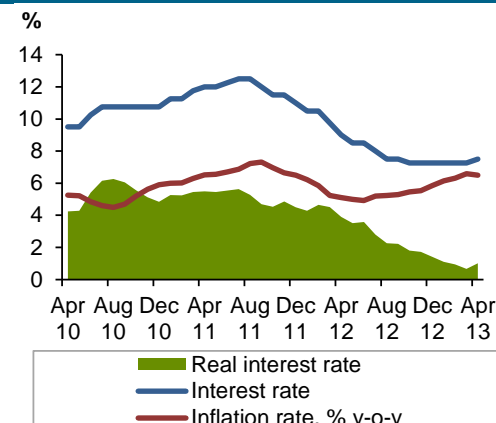
Tax breaks will hamper the achievement of the primary surplus target, which is currently around 3.1% of the GDP in the medium term, as the government forgoes revenue in exchange for a reduction in overall production costs. The conduct of monetary policy suggests that the Banco Central do Brasil (BCB, the Central Bank) is willing to accommodate inflation in the upper target of the 4.5-6.5 range. Despite the volatility in monthly activity indicators at the beginning of this year, an improvement in sequential growth in 1Q13, with better performance by the manufacturing industry (from the supply perspective) and in terms of investment is expected (from the demand side).

Graph 3.2: Brazilian GDP growth (SAAR = seasonally adjusted annual rate)



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

Graph 3.3: Brazilian interest rates and inflation rate



Source: Banco Central do Brasil and Haver Analytics.

In Brazil, inflation has continued to trend upward despite sluggish economic activity. March's figure of 6.6% y-o-y breached the 6.5% ceiling of the central bank's ($\pm 2.0\%$ around the central target of 4.5%) target range.

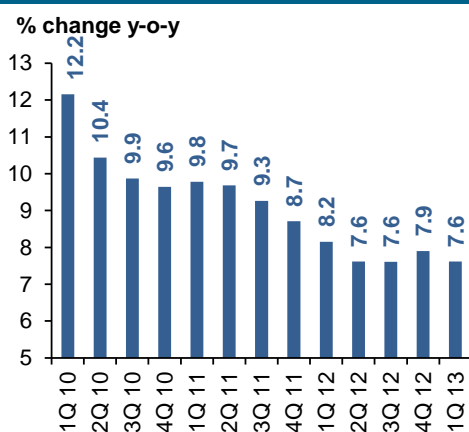
With mixed signals, but slightly improving indications of late, Brazil is forecast to expand by 3.0% this year, 0.2 percentage points lower than the forecast of the previous month. The still high inflation combined with somewhat slowing commodity prices and elevated capacity utilisation point to some downside risk, so the situation will be carefully monitored in the coming weeks.

China

The People's Bank of China (PBC, the central bank) is gradually shifting away from its accommodative policy stance as inflationary concerns re-emerge. In February, the PBC auctioned its first forward bond-repurchase agreements since June 2012. It remains to be seen how the PBC will manage its monetary policy in the short term, but in the medium term, authorities are committed to a policy of moving away from artificially suppressing interest rates — two rate cuts in mid-2012 were accompanied by measures that relaxed restrictions on banks' ability to set rates freely. The PBC will push for interest rate liberalisation in 2013 as part of a broader effort to move the economy away from investment-led growth, with the result that rates will drift higher. Low or negative returns on deposits have until now allowed cheap loans to be channeled to corporate investors.

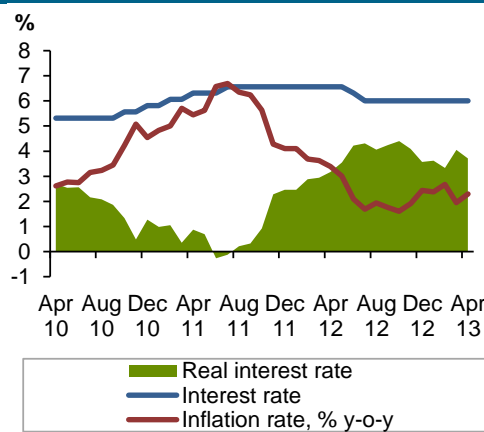
Real GDP growth slowed to 7.8% in 2012. Weak demand for Chinese exports and decelerating growth in property investment held back economic expansion, but strong growth in income continued to support private consumption. Looser monetary policy and investment in government-backed infrastructure projects drove acceleration in real GDP growth in the fourth quarter of 2012. With first quarter GDP expansion at only 7.7%, the momentum has slowed in 2013. Moreover, some momentum might also dissipate in the second half of 2013, as rising inflation could prompt a tightening of monetary policy. While it was hoped that upbeat fourth quarter performance signaled the start of a recovery, optimism about the Chinese economy has been tempered somewhat by recent disappointing data. Retail sales, along with industrial production, slowed. After inflation rose in February up to 3.2%, it moved down to 2.1% in March, reflecting a deceleration in economic growth and moderation of global commodity prices. Food and transport costs in China are susceptible to volatility in global oil prices.

Graph 3.4: Chinese GDP growth (SAAR)



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

Graph 3.5: Chinese interest rates and inflation rate



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

Some of the softening in 1Q13 has been accommodated by a 0.1 percentage growth revision. The 2013 GDP growth forecast now stands at 8.0%, compared to last month's growth forecast of 8.1%.

India

After several false starts, the government undertook a series of reforms beginning in September 2012 to tackle the burgeoning fiscal deficit and create new jobs. In late February, the government presented its last major budget of the current parliamentary term, for the fiscal year 2013/14 (April–March). The administration is attempting to balance its development priorities against the need for fiscal consolidation, and has set itself the ambitious target of cutting the budget deficit to the equivalent of 4.8% of the GDP in the coming year. It is likely to miss the target, which seems to be based on optimistic projections of revenue growth.

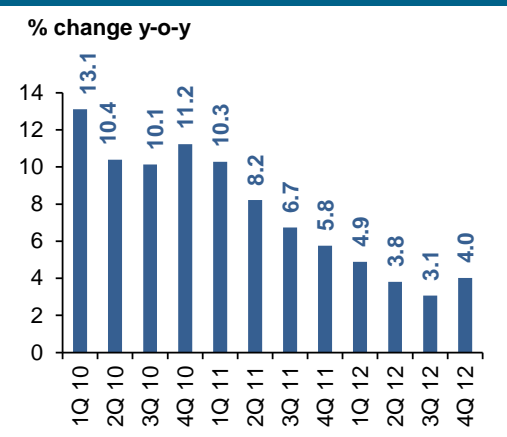
The government's budgetary strategy has been repeatedly challenged by a series of unfavourable developments since 2008, from the global financial crisis to a domestic economic slowdown, with the problem being exacerbated by Congress's fiscal profligacy. As a result, the federal government deficit widened from the equivalent of 2.5% of the GDP in 2007/08 to 5.7% in 2011/12.

The pace of economic expansion slowed sharply in 2012/13, owing to a host of domestic factors, including weaker business and consumer sentiment, a poor monsoon season and tight credit conditions. Growth in private consumption (which accounts for more than one-half of the nominal GDP) is estimated to have slowed to 4.1% in 2012/13, its slowest pace of expansion since 2004/05. Government consumption also decelerated to 4.1%, as the administration sought to narrow the fiscal deficit. The high cost of financing appears to have held back investment growth, which is estimated to have decelerated for the second consecutive year, to 2.5%.

On a factor–cost basis, agricultural output growth slumped to an estimated 1.8% in 2012/13 owing to the poor monsoon season. Expansion in industrial output decelerated for the second consecutive year, to an estimated 3.1% from an average of 8.2% a year between 2002/03 and 2011/12. Output in the services sector, which accounts for nearly 60% of the GDP, grew by 6.6%, marking a slowdown from an average annual growth of 9.3% in the previous decade. As a result, headline GDP growth on a factor–cost basis is estimated to have slowed to a ten-year low of 5% in 2012/13.

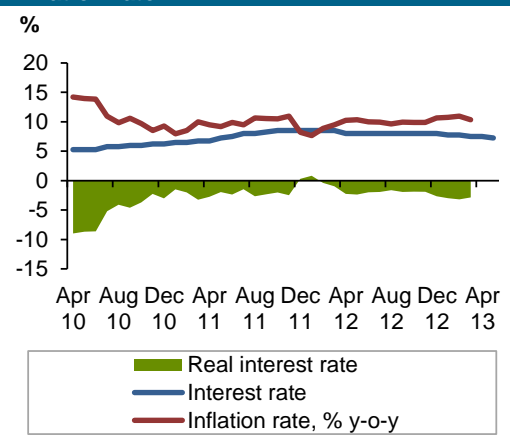
Since September 2012, the government has taken a series of steps to boost the economy. These include moves to lower the public subsidy bill, open up more sectors to foreign investment and fast-track approvals for infrastructure projects. It is expected these measures, combined with a loosening of monetary policy, will enable real GDP growth to rebound to around 6.0% in 2013/14.

Graph 3.6: Indian GDP growth (SAAR)



Source: Central statistical office of India and Haver Analytics.

Graph 3.7: Indian interest rates and inflation rate



Source: Reserve Bank of India and Haver Analytics.

Inflation remains a problem, also limiting the central bank's ability to further stimulate the economy via monetary expansion. This was highlighted when it recently reduced its key policy rate by a further 25 basis points to 6.25%. Inflation in March increased again to 10.4%, slightly lower than the 10.9% in February, but it remains very high. Moreover, the government is attempting to implement its fuel subsidy bill by raising administered fuel prices, forcing bulk users of diesel (such as railway and industry) to pay market prices for fuel and allowing oil marketing companies to raise petrol prices. Food prices, which account for a large proportion of the consumer price index, have risen sharply by 13.0% in the first quarter.

Based on the HSBC Emerging Market report, Indian manufacturing output increased modestly in March, as persistent power shortages hampered production. This has been a significant issue over the past year. The latest industrial production number for February was only 0.5% higher than in the previous year, and the Markit Purchasing Manager's Index (PMI) confirms a decelerating trend in the manufacturing sector. The manufacturing PMI for April stood at 51.1, the lowest number since November 2011. Unfortunately the very important services sector also seemed to experience a PMI deceleration to 50.7, the lowest level since October 2011.

The growth forecast for this year remains at 6.0%, but future developments need close attention. Currently, it seems there is a downside skew to risk in India, though it is still estimated to expand at a higher level than over the past year, when GDP grew by only 5.0%. The 2013 forecast will be reviewed in the coming month.

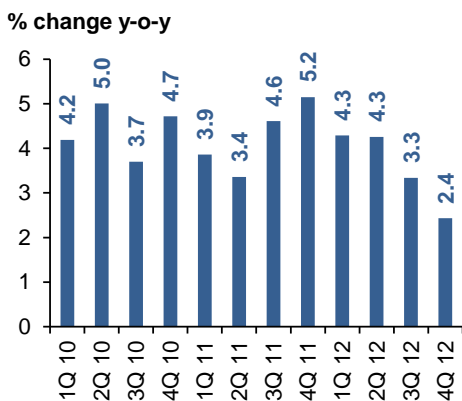
Russia

The 2012 federal budget recorded a small deficit of Rb37bn (US\$1.2bn), equal to 0.1% of the GDP. Excluding oil and gas revenue, the deficit expanded to 10.6% of the GDP, up from 9.5% of the GDP in 2011. Although the budget remained in surplus until November 2012, the traditional December surge in spending brought it back into deficit.

The Russian Central Bank (RCB) has held the refinancing rate at 8.25% for several consecutive months. It had raised its main rates in September 2012, when inflation breached the 6% upper limit of the central bank's target range after a poor harvest pushed up prices. Growth prospects, however, will remain significantly dependent on international commodity prices.

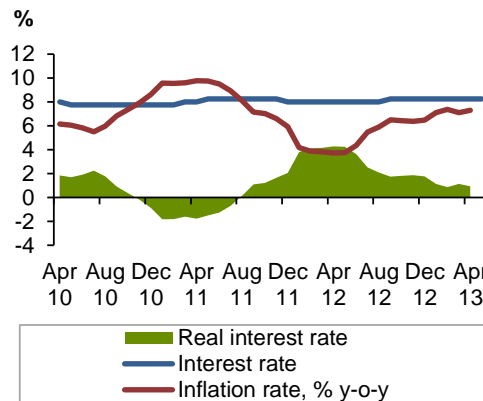
The slowdown in activity that set in during the second half of 2012 has continued. Industrial production declined in January and was up by only 0.1% in February, while in March it rose again to an encouraging 2.6%. According to estimates by the Ministry of Economic Development, the economy expanded by only 0.1% in February, a significant slowdown from the 1.6% y-o-y growth recorded in January.

Graph 3.8: Russian GDP growth (SAAR)



Source: Federal State Statistics Service and Haver Analytics.

Graph 3.9: Russian interest rates and inflation rate



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

Domestic demand growth slowed significantly at the start of 2013, but year-on-year growth in retail sales volume improved again in March to 4.4% from February's 3.0%. Inflation has recently accelerated and is eroding household purchasing power. The slowdown in retail sales growth is also due to a deterioration of consumer sentiment and a deceleration of credit expansion.

Year-on-year consumer price inflation dropped to 7.11% in March 2013 from 7.38% in February, the first decline in inflation since June 2012. The rise in food prices fell to 8.3% from 8.7% in February, while non-food inflation reached 5.2% (from 5.3% in February) and services inflation lessened to 7.9% (from 8.2% in February). A good 2013 harvest will reinforce the expected downward trajectory for inflation in 2013.

While the first two months of the year produced signals that point to lower growth this year, March output has been encouraging. However, the impact of the first two months and somewhat lower global commodity prices — which provide a significant source of income for the economy — have led to a downward revision of Russia's GDP forecast from 3.4% to 2.9%. Moreover, fixed investment fell after a strong year in 2012 and wage growth slowed to its weakest pace for two years in the first quarter, prompting private household consumption to ease slightly. At the same time it should be highlighted that the Russian government's GDP forecast has also been revised — to an even larger extent — from 3.6% to 2.4%.

Asia Pacific

The growth pattern in Asia Pacific is mixed, with some economies experiencing a clear deceleration in 1Q13, such as Taiwan, while others softened only slightly, like Indonesia, and some expanded, for example South Korea. In general, the economic outlook is positive for this year, with the somewhat better momentum expected in 2H13 for the global economy.

The Philippines maintained its upbeat stride after last year's strong growth of 6.2%. A recent decision by Fitch Ratings to upgrade the country's credit rating to investment status has further boosted sentiment towards the Philippines. However, industrial production in February sharply declined by 1.4% y-o-y, compared to 5.7% y-o-y growth in January. This indicates that the Philippines may also face an overall deceleration in 1Q13.

The GDP in South Korea grew by 0.9% y-o-y, mainly driven by exports and gross capital formation, while industrial production declined in the first three months of the year. The won's recent increase, combined with the somewhat softer tone in the region and among trading partners in the developed economies, as well as the improved position of Japan due to its lower currency levels, has led to uncertainty about whether progress will continue in the next quarter.

Transition Region

Persistent economic weakness in the Euro-zone has kept the growth forecast for Central and Eastern Europe under downward pressure. Most countries in the region are struggling to avoid a prolonged period of stagnation. In addition, Croatia and Slovenia are set to remain in a recession in 2013, due to a lack of domestic demand. In particular, further sharp declines in gross fixed investment are likely in Slovenia. Turkey represents one of the few bright spots in the region and will see an improvement in the pace of its growth in 2013 of 3.5%, after a growth rate of 2.2% in 2012. March PMI data showed an ongoing downturn in the Polish manufacturing sector, which decreased from 48.0 in March to 46.9 in April and will continue to contract.

Although 2013 is set to be another difficult period for the transition region, conditions are expected to improve as the year progresses, given the assumption that the situation in the Euro-zone will improve in the second half, and that the currency bloc will return to growth by then. An easing of conditions in Euro-zone funding markets, also highlighted at the most recent ECB meeting in May, should loosen constraints on bank financing to Eastern and Central Europe as well.

Africa

The African economy is continuing to expand quickly. In North Africa, the economy in Tunisia is expected to register a growth of 2.8% this year, compared with 2.5% in 2012, related mainly to a rebound in tourism. In Egypt, which is still being held back by political uncertainty, economic growth is expected to reach 2.0% in 2013, compared with 1.9% last year.

Sub-Saharan Africa is achieving higher growth levels currently, fuelled by increasing commodity exports. It will see growth pick up slightly to 4.7% in 2013, after reaching 4.0% in 2012. Several of the oil exporting countries in the region (including Angola, Cameroon, Chad, Equatorial Guinea and Ghana) will benefit from rising hydrocarbon output. New mining production in several countries will also be a positive factor for manufacturing. After lower production levels in March, which were also held back by China's Lunar New Year holidays, the expansion should recover. The resurgence in Africa's fortunes, and the uptick in its vital oil, gas and mining sectors has been linked to factors such as the rapid growth of China and other Asian economies.

The first BRICS summit in Africa

The first BRICS summit in Africa in Durban on 27 March reached decisions on three main issues:

1. Establishment of a BRICS bank facilitating trade between the BRICS economies and also at an international level should take place. According to the above-mentioned proposal, a total contribution of US\$50bn is required, with a \$10 bn share coming from each member.
2. Appropriate extra funds for infrastructure investment should be found, hence focusing in particular on raising member funds.
3. Long-term investment is needed, as well as help boosting it.

The summit also approved the creation of a BRICS business council, which will meet twice a year in order to promote business ties.

Latin America without Brazil

Latin America is forecast to grow at higher rates in 2013, supported by an expected recovery in Brazil's growth and better performance by Argentina, the area's two largest economies. While Mexico is forecast to slow down from last year's growth of 3.9% to this year's level of 3.3%, it will still expand significantly. The whole region is forecast to expand by 3.4%, compared to 2.6% last year.

OPEC Member Countries

At first glance, last year was one of robust growth for OPEC Member Countries. Growth averaged about 5.3% in 2012 and is expected to continue at a somewhat slower pace in 2013 at around 4.2%. However, total growth last year was distorted by an exceptionally strong recovery in Libya, which experienced an 80% y-o-y GDP expansion. This is forecast to slow down to 15% this year. If figures for Libya are removed, OPEC would post an increase in GDP of 3.8% this year, almost in line with the previous year's healthy growth of 3.9%.

Saudi Arabia's economy will see a drop in growth from 6.8% in 2012 to 5.2% in 2013 due to a decline in gross fixed capital formation, a trend that started in the fourth quarter of 2012. The UAE economy will also see a slightly lower growth rate of 3.2% this year compared with 4.0% in 2012. Kuwait is forecast to see a drop in growth from 5.2% in 2012 to 4.7% this year, and Qatar's expansion will decrease from 6.2% in 2012 to 5.2% in 2013. Iraq will continue to expand at 8.3% this year, almost the same level as last year's growth of 8.5%.

In April, the US dollar declined slightly against all major currencies, with the exception of the yen.

Oil prices, US dollar and inflation

The US dollar in April declined slightly against all major currencies, with the exception of the yen. It fell by 0.5% versus the euro, 1.1% compared to the Swiss franc, 1.5% against the pound sterling and gained 3.5% on the Japanese yen. The impressive development of the US dollar versus the yen continued, and the monthly average rate in March stood at ¥97.710/\$, continuing on to reach a level of almost ¥100.0/\$ by the beginning of May.

The latest decision of the ECB to lower interest rates has supported the euro. Furthermore, discussion of possible further key policy rate cuts in the near term by the ECB President and the possibility of negative deposit rates combined with the potential to loosen tight austerity measures by policymakers in the Euro-zone have also supported the euro's value. While the euro was trading again above the \$1.30/€ mark, averaging \$1.3025/€ in April, it continued rising at the beginning of May after the ECB's decision to lower its key policy rate. An increase of the monetary stimulus in the Euro-zone in the coming month, combined with the decision to lessen austerity and promote growth via fiscal measures should further support the euro. Despite the recent slight weakening of the US dollar in trade weighted baskets, it is forecast to remain strong, at least in the short term. However, developments will depend upon decisions regarding austerity measures and monetary policy in the Euro-zone and near-term decisions on US fiscal issues in Congress.

In real terms, after accounting for inflation and currency fluctuations, the Basket price fell by 4.8% or \$3.18/b to \$63.21/b in April from \$66.39/b in March.

In nominal terms, the price of the OPEC Reference Basket fell by \$5.39/b or 5.1% from \$106.44/b in March to \$101.05/b in April. In real terms, after accounting for inflation and currency fluctuations, the Basket price fell by 4.8% or \$3.18/b to \$63.21/b from \$66.39/b (base June 2001=100). Over the same period, the US dollar fell by 0.1% against the import-weighted modified Geneva I + US dollar basket while inflation fell by 0.4%.*

* 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 performs below expectations in 1Q13

World oil demand expected to increase by 0.8 mb/d in 2013

World oil demand

The latest estimates based on preliminary data for the **first quarter of 2013** indicate that the increase in world oil demand was lower than projected in last month's MOMR. As a result, world oil demand growth has seen a downward revision of around 80,000 b/d from last month's report. However, the picture differs within the regions: OECD and China have been revised down by 90,000 b/d and 20,000 b/d respectively, while other non-OECD countries have been revised up by 30,000 b/d.

This has led to total **growth** of 0.9 mb/d in 1Q13 for global oil demand, a much higher increase than 0.4 mb/d during the same period a year earlier. Growth in the second quarter is projected to be lower at 0.6 mb/d as a result of last year's high baseline – resulting mainly from direct crude and residual fuel burning for electricity generation in Japan. Growth in 3Q13 and 4Q13 is projected to be 0.9 mb/d and 0.8 mb/d, respectively.

Looking at **absolute volumes**, total demand is expected to average 89.0 mb/d in the first quarter, before declining to 88.6 mb/d in the second. The latter half of the year will see much higher oil use, reaching 90.1 mb/d and 90.9 mb/d in the third and fourth quarters, respectively. For the whole year, world oil demand growth is expected to increase by 0.8 mb/d to average 89.7 mb/d, unchanged from the previous assessment.

Table 4.1: World oil demand in 2012, mb/d

	2011	1Q12	2Q12	3Q12	4Q12	2012	Change 2012/11	
							Growth	%
Americas	24.03	23.48	23.78	23.89	23.87	23.76	-0.27	-1.13
Europe	14.32	13.74	13.82	13.89	13.75	13.80	-0.52	-3.65
Asia Pacific	8.15	9.08	7.97	8.24	8.70	8.50	0.35	4.32
Total OECD	46.50	46.30	45.56	46.02	46.33	46.05	-0.44	-0.95
Other Asia	10.49	10.59	10.81	10.89	10.90	10.80	0.31	2.94
Latin America	6.06	5.97	6.22	6.47	6.38	6.26	0.20	3.24
Middle East	7.34	7.48	7.48	7.87	7.49	7.58	0.24	3.33
Africa	3.36	3.37	3.39	3.31	3.46	3.38	0.02	0.67
Total DCs	27.25	27.41	27.89	28.54	28.22	28.02	0.77	2.83
FSU	4.29	4.26	4.12	4.52	4.75	4.41	0.12	2.85
Other Europe	0.64	0.63	0.59	0.63	0.72	0.64	0.00	-0.01
China	9.41	9.46	9.88	9.54	10.08	9.74	0.33	3.50
Total "Other regions"	14.34	14.35	14.59	14.69	15.55	14.80	0.45	3.15
Total world	88.09	88.06	88.05	89.25	90.10	88.87	0.78	0.89
Previous estimate	88.09	88.06	88.04	89.24	90.11	88.87	0.77	0.88
Revision	-0.01	0.01	0.00	0.01	-0.01	0.00	0.01	0.01

Totals may not add up due to independent rounding.

However, risks to the current forecast are skewed to the downside, not only in the OECD but also in the non-OECD, especially China. Indeed, risks to the OECD forecast remain firmly on the downside driven by ongoing downward revisions in the economic outlook for the Euro-zone area. At the same time, weaker-than-expected economic growth in China in the first quarter and the potential difficulty in achieving 8% growth this year may dent oil demand consumption.

For the **OECD**, the downward revision incurred in the first quarter was attributed to Europe and Japan, while the US saw an upward revision from the previous assessment.

Recent statistical data for the US suggests positive growth during the first three months of this year for the first time since 1Q11. For the whole year, **OECD Americas** oil demand growth is expected to be flat, following a decline of nearly 0.3 mb/d in 2012.

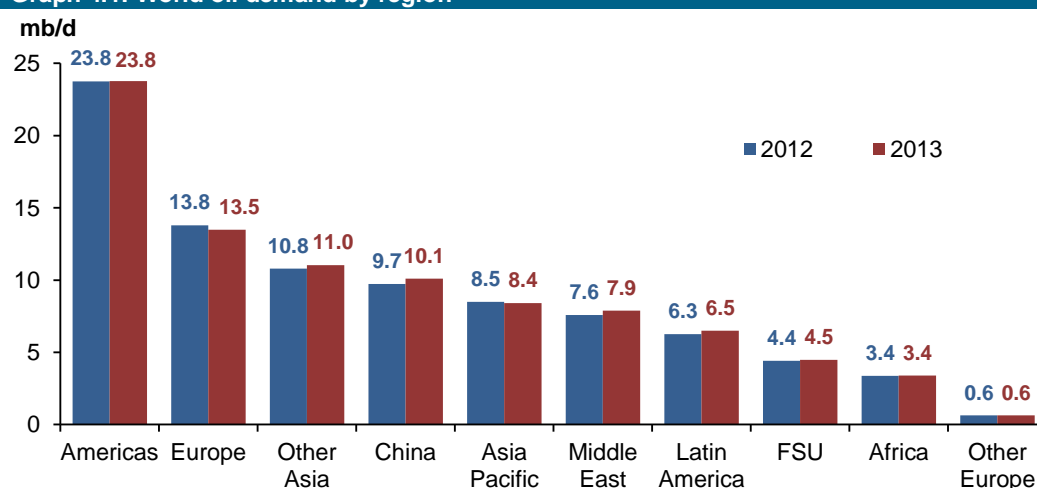
In **OECD Europe**, the huge decline in oil demand last year seems to have eased in 1Q13, leading to a contraction of 0.3 mb/d compared with minus 0.5 mb/d in 2012. However, the ongoing financial crisis in the region may further reduce oil consumption.

For **Japan**, March data indicated a decline in domestic consumption of 0.2 mb/d, driven by lower direct burning demand and lower fuel oil consumption. Although power sector demand for petroleum products remained higher than before the triple catastrophe, the expected new guidelines for nuclear safety to come in July from the Nuclear Regulation Authority may imply lower oil use in the power sector by the latter part of the year. For the Asia Pacific region, oil demand is projected to decrease by 0.1 mb/d for the whole year, reversing higher positive growth of 0.35 mb/d in 2012.

In March, China's apparent demand grew only by 2%

Recent data for **Chinese** apparent oil demand dropped significantly between January and March, with March slowing to the most sluggish rate in seven months. Indeed, March apparent oil demand grew by just 2.0% compared with last year, a further deceleration from the average growth rate of 4.3% in the first two months of this year. This likely reflects some weakness in Chinese economic activity. The release of Chinese GDP data for 1Q13 came in below consensus at 7.7% versus an expected 8.1%, and down from the 7.9% set in the final quarter of 2012. The increased risk that Chinese oil demand growth will remain relatively weak in coming months is in line with the lower expected April PMI of 50.5 versus the consensus expectation of 51.5.

Graph 4.1: World oil demand by region



In contrast to disappointing data from China, India's oil demand returned back to normal growth of 2.1% in March. This, combined with gradually improving economic activity in the rest of **non-OECD Asia**, will result in oil demand increasing by around 0.2 mb/d this year.

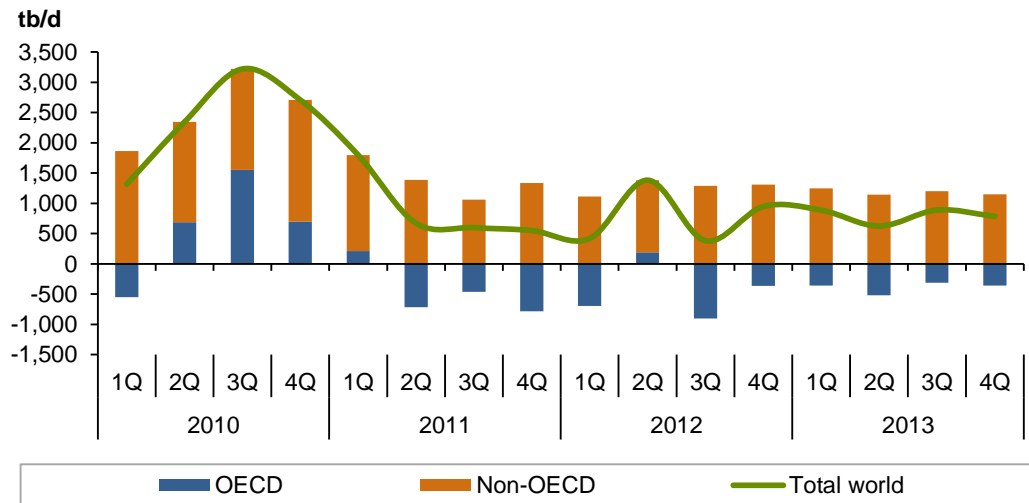
Brazil also saw healthy growth of 0.1 mb/d in February, following three consecutive months of growth. For the whole year, **Latin America** is expected to increase by 0.2 mb.

Saudi Arabian demand grew by 7% in 1Q13

Looking beyond Asia and Latin America to elsewhere in the non-OECD, oil demand in the **Middle East** is projected to increase by 0.3 mb/d in 2013. This has been supported by remarkable growth in Saudi Arabian oil demand of 7% in 1Q13, driven by increasing requirements for industrial and transportation fuels.

Overall, current estimates call for global oil demand to increase by 0.8 mb/d this year, slightly higher than the growth seen in 2012. A large portion of the growth is seen coming from China, with a 0.4 mb/d increase. The other non-OECD countries are expected to add some 0.8 mb/d, with the Middle East region accounting for around 0.3 mb/d, followed by Other Asia and Latin America with growth of about 0.2 mb/d each. In contrast, OECD demand is expected to see a contraction of around 0.4 mb/d, which is slightly less than in 2012.

Graph 4.2: Quarterly world oil demand growth



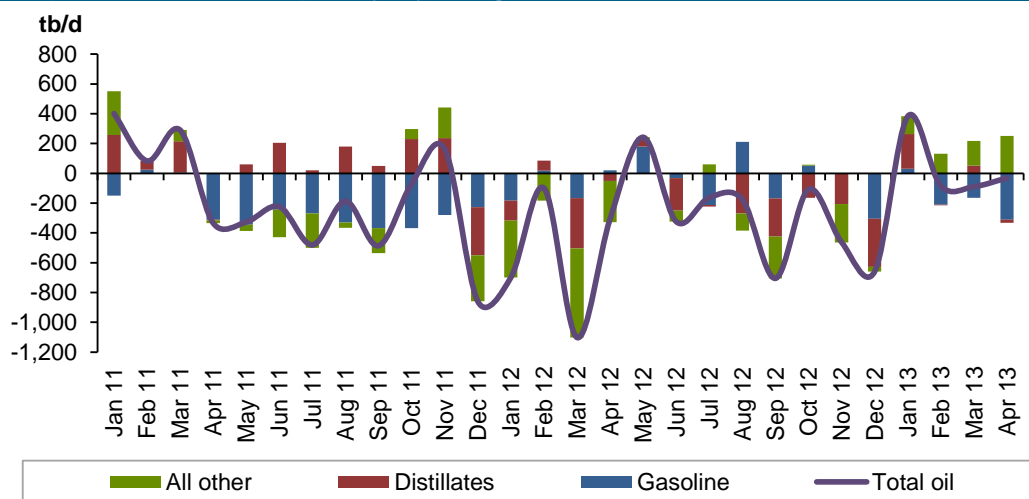
OECD Americas' demand projected to remain flat in 2013

OECD Americas

Most recent available monthly **US** oil demand data for February 2013 indicates a slight decline in oil demand of 0.4%, or 90,000 b/d compared with the same month in the previous year. Increasing industrial production was the main factor behind a solid increase in propane/propylene requirement, while a decrease in driving primarily stemmed from higher fuel prices.

There was a sharp drop in gasoline demand compared to the previous month and the same month a year earlier. Cold weather also reduced driving miles, which negatively impacted growth in gasoline demand. Moreover, residual fuel oil requirements continued their downward trend for another month, showing a strong decrease of almost 23% y-o-y. The last month which recorded growth in residual fuel oil demand was August 2012. Preliminary weekly figures for March and April 2013 show that the picture remains unchanged compared to February 2013, with industrial fuels — mainly propane/propylene — on the rise, while transportation fuels are declining. Both months show slight y-o-y declines in the range of 0.2% to 0.4%.

Graph 4.3: US oil consumption, y-o-y changes



The **outlook in US oil consumption for 2013** is strongly dependent on the development and recovery pace of the US economy. Unemployment rates and fears of future rising inflation are some of the factors which could influence oil demand in the country. Nevertheless, the US Federal Reserve has already announced that it will continue efforts to keep interest rates low in order to support economic growth. Therefore, the outlook for US oil demand in 2013 remains unchanged from the situation one month ago. However, as the outlook of the US fiscal policy becomes clearer, oil demand could experience revisions in either direction.

In the latest report from March 2013, **Mexico's** oil demand declined for the first time since September 2012 y-o-y by almost 0.12 mb/d. Both industrial and transportation fuels declined as Mexican factory activity saw its slowest rate since January 2013, driven by lower exports to the US, which is suffering from weak demand. Since manufacturing exports account for around one fourth of the country's GDP, further developments in the Mexican economy and oil requirements are closely related with developments in the US economy in 2013.

Cold weather and increasing industrial activity pushed up **Canada's** oil demand in February 2013 following a strong January. Oil usage in industrial fuels, and especially fuel oil, dominated these increases. Projections for Canadian oil demand in 2013 remain unchanged from those of the previous month, with expected oil requirements in 2013 remaining at the same level as in 2012. The country's strong economic dependence on the US is — as is the case of Mexico — a leading influence.

While OECD Americas oil demand shrank by 0.27 mb/d last year, oil demand this year is expected to remain at roughly the same level.

OECD Europe

European oil demand contracted in year-on-year terms for another month in March 2013. Oil demand was on the decline not only in countries facing sovereign debt concerns, such as Spain, Italy, Portugal and Greece, but also in the UK and France. However, a cold March in 2013 did manage to limit these declines.

Oil demand in **Europe's Big Four economies** was characterised by a strong contraction in industrial and transportation fuels, indicating that the region is moving steadily towards a deep economic recession. Additionally, the European **auto industry** saw another month of declining car sales in March of around 10% y-o-y, and projections show 2013 car sales declining 7% over 2012. Car sales are moving towards their lowest level in the last 20 years. In Germany and France, March 2013 car sales slumped by 17% and 16%, respectively. The UK was the only country which saw car sales increase in March 2013, with a rise of nearly 5%. The latest information shows German business sentiment falling in April 2013 for the second consecutive month, as a result of declining exports to Euro-zone and Chinese markets.

General expectations for the region's oil consumption during 2013 have once more worsened since last month's projections, mainly due to recent downward revisions to GDP in 2013. The only factor which might somewhat offset the expected declines in oil demand in 2013 would be the very low historical baseline.

European oil consumption in **2012** shrank by 0.52 mb/d as a result of the economic crisis in several regional economies. In **2013**, oil consumption is projected to again decrease, but by a lower 0.32 mb/d, although risks remain skewed towards the downside.

Table 4.2: Europe Big 4* oil demand, mb/d

	<u>Mar 13</u>	<u>Mar 12</u>	<u>Change from Mar 12</u>	<u>Change from Mar 12, %</u>
LPG	456	421	34	8.2
Gasoline	1,059	1,160	-100	-8.6
Jet/Kerosene	688	698	-9	-1.3
Gas/Diesel oil	2,893	3,029	-136	-4.5
Fuel oil	347	396	-49	-12.3
Other products	966	1,013	-47	-4.6
Total	6,409	6,716	-307	-4.6

* Germany, France, Italy and the UK.

In 2013, OECD Europe's demand expected to decline by 0.3 mb/d

OECD Asia Pacific

In **Japan**, March 2013 oil demand fell by 7.4% y-o-y as a result of milder weather leading to lower requirements for kerosene. A decline in petroleum product use in the power sector also affected Japanese demand in March. As was the case in the first two months of the year, March saw a decline of approximately 0.2 mb/d in direct burning of crude and fuel oil for electricity generation.

In contrast, demand in certain product categories improved compared with the previous month, most notably naphtha requirements for the petrochemical industry and jet fuel. Improving industrial activity implied increasing distillate demand in March relative to the previous year, while the same time frame saw decreasing new car sales, causing a substantial fall in gasoline requirements. The latest data, however, indicate an increase of almost 2% in car sales during April 2013; the first monthly increase since August 2012.

The wild card for the 2013 **Japanese oil demand outlook** is whether or not some nuclear power plants will restart later in the year. Currently, only two of Japan's 50 nuclear reactors — Kansai Electric's Ohi No. 3 and No. 4 units in Fukui prefecture — are operating, but they are expected to interrupt their operation for maintenance in September 2013. In addition, the finalisation of new safety regulations from the Japanese Nuclear Regulation Authority (NRA) will not take place before mid-July. All nuclear power utilities will be required to comply with these safety regulations prior to resuming operations. Japanese government officials have recently stated that there is a possibility that operations will resume at some of the country's nuclear reactors later this year, possibly by the end of 3Q13, at the earliest.

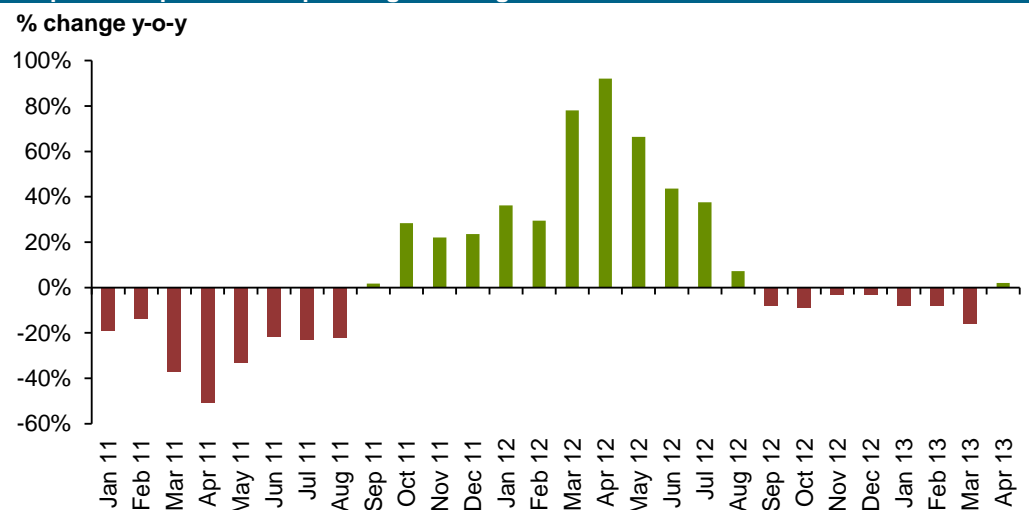
As far as the outlook for 2013 is concerned, current indications remain unchanged from last month's forecasts and imply that Japanese oil demand will fall by around 0.1 mb/d compared to 2012, with risks continuing to be on the downside.

In **South Korea**, oil consumption in February 2013 fell by 0.08 mb/d, y-o-y. The increase in naphtha for the petrochemical industry was more than offset by shrinking requirements in all other main product categories, notably LPG, residual fuel oil, distillates and gasoline. Current projections for South Korean oil consumption during 2013 remain unchanged compared with last month's forecasts, i.e. with oil consumption expected to remain flat compared with 2012.

OECD Asia Pacific is expected to decline by 0.1 mb/d in 2013

OECD Asia Pacific oil consumption grew in **2012** by 0.35 mb/d, resulting mainly from Japanese direct crude/fuel oil burning for electricity generation. OECD Asia Pacific oil consumption is projected to fall slightly by 0.09 mb/d in **2013**, due to the fading out of baseline effects and to the possibility of more frequent substitution of fuel with natural gas.

Graph 4.4: Japanese new passenger car registrations



In March, India's oil demand rose by 2.1%

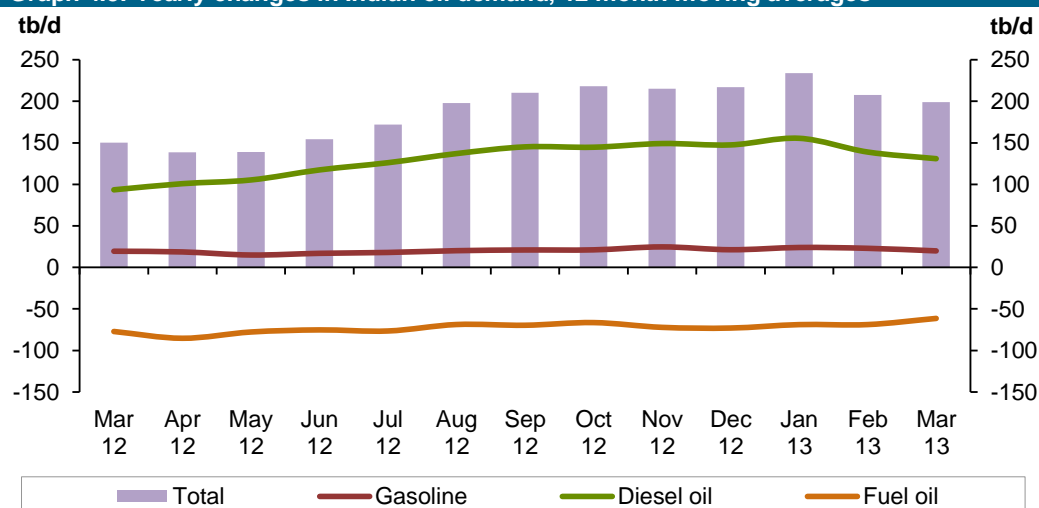
Other Asia

In March 2013, **India's** oil demand returned back to normal growth at 2.1% y-o-y. All product requirements grew y-o-y, with the exception of jet fuel/kerosene and fuel oil, which fell 3% and 4%, respectively. Growth in naphtha sales was solid for another month as a result of increasing activity in the country's petrochemical sector.

As new **auto sales** continued to decline in March 2013, gasoline requirements grew marginally, despite reductions in fuel prices. During the fiscal year, which ended in March 2013, Indian car sales declined for the first time in the last 10 years as a result of the country's economic slowdown. LPG requirements did not grow for the fifth consecutive month due to increasing LPG retail prices and caps on LPG cylinders.

The **overall forecast for 2013** Indian oil consumption remained unchanged compared with last month's projections, with the country's fiscal deficit continuing to impose some downside risks.

Graph 4.5: Yearly changes in Indian oil demand, 12 month moving averages



In **Indonesia**, increasing transportation and industrial fuel requirements — notably gasoline — resulted in an overall increase of 1.2% in oil requirements during February 2013 y-o-y. The Indonesian government announced on 30 April 2013 its decision to raise subsidised fuel prices in an effort to reduce state costs, leaving the time and exact value open. Indonesia subsidises 88 RON gasoline, gasoil and kerosene, but not 92 RON and 95 RON gasoline. The subsidised prices for 88 RON gasoline and gasoil are 4,500 rupiah per liter, compared with the market price of 10,000 rupiah per liter. A future possible reduction in subsidies would definitely impose a strong downside risk to the country's oil demand, of which transportation fuels comprise around 40%.

In **Thailand**, February 2013 oil requirements grew strongly for one more month, by 7%, with the bulk of these volumes coming from distillates, LPG, gasoline and naphtha y-o-y, mostly driven by industrial and petrochemical activities. Thailand's oil demand is also, as is the case for Indonesia, influenced by existing LPG subsidies. Thailand's National Energy Policy Council (NEPC) plans to meet in the near future and decide on a reduction for at least part of the LPG subsidies. The plan was first announced last December by the Ministry of Energy's Energy Policy and Planning Office (EPPO); it proposed gradual price rises for the three consumers sectors — residential, industry and transportation. It has, however, been postponed several times due to a survey of a proposed subsidy scheme for street vendors and low-income earners. Thailand's LPG demand is approximately 0.25 mb/d; residential, transport, industry and petrochemical sectors account for approximately 40%, 12%, 13%, and 35% of this figure, respectively. The process of phasing out 91 RON gasoline in Thailand, which began in January 2013, led to approximately twice as much ethanol demand as vehicles switched to gasohol, a blend available in 10%, 20% and 85% ethanol concentrations.

Table 4.3: Consumption of petroleum products in Thailand, tb/d

	Feb 13	Feb 12	Change	Change, %
LPG	247	220	27	12.4
Gasoline	140	131	8	6.3
Jet Fuel/Kerosene	105	100	5	5.4
Diesel	379	368	11	2.9
Fuel oil	41	36	5	14.1
Other products	159	148	11	7.2
Total	1,071	1,003	68	6.7

Overall, Other Asia's oil demand saw strong growth of 0.31 mb/d y-o-y in 2012, partly as a result of excessive Indian diesel demand for the power generation sector. In 2013, oil demand is expected to see continued solid growth of 0.23 mb/d.

Latin America

February 2013 was another month showing strong growth in **Brazil**, with oil demand increasing by 0.1 mb/d compared with February 2012. As was the case in January 2013, industrial fuels — notably residual fuel oil — were the main contributors to this growth which stemmed from strong industrial production, especially manufacturing activity.

Latin American demand growth forecast at 0.2 mb/d in 2013

Table 4.4: Brazilian inland deliveries, tb/d

	Feb 13	Feb 12	Change	Change, %
LPG	218	216	2	1.0
Gasoline	671	666	5	0.7
Jet/Kerosene	117	127	-10	-8.2
Diesel	908	906	1	0.1
Fuel oil	102	54	47	87.2
Alcohol	184	172	12	7.0
Total	2199	2142	57	2.7

In **Argentina**, oil demand in February 2013 grew only marginally by 0.4% y-o-y; increasing requirements for gasoline and LPG have been mostly offset by decreasing distillates demand. Latest preliminary Ecuadorian data for March 2013 showed a slight decrease in oil requirements y-o-y — gasoline requirements rose marginally, while fuel oil demand shrank slightly.

Latin American oil consumption in **2012** grew by 0.20 mb/d. In **2013**, Latin American oil consumption is projected to increase by around 0.23 mb/d.

Middle East

In **Saudi Arabia**, 1Q13 oil demand grew remarkably at 7% y-o-y as a result of increasing requirements for industrial and transportation fuels, while relatively mild weather implied less direct crude burning. In addition to road transport, which is anticipated to continue to increase in the coming months, the petrochemical sector is also expected to add a significant amount to oil demand growth as a result of new ethylene capacity additions.

Oil consumption in **Kuwait** also grew strongly during 1Q13, by 4% y-o-y, with distillates accounting for the bulk of the increase. Similarly strong oil demand in 1Q13 has been observed in **Iraq** (10%) and **Qatar** (18%), y-o-y. Growth in Middle East oil use during 1Q13 was mainly led by industrial and transportation fuels, as a result of a strongly growing economy and industrial production.

The outlook for Middle East oil demand in 2013 has been revised upward since last month's projections, reflecting the upward revision in GDP growth, and the risk remained skewed to the upside.

Middle East oil consumption grew by 0.25 mb/d in **2012**; oil consumption in **2013** is projected to increase by a higher 0.30 mb/d.

Middle East is projected to increase by 0.3 mb/d in 2013

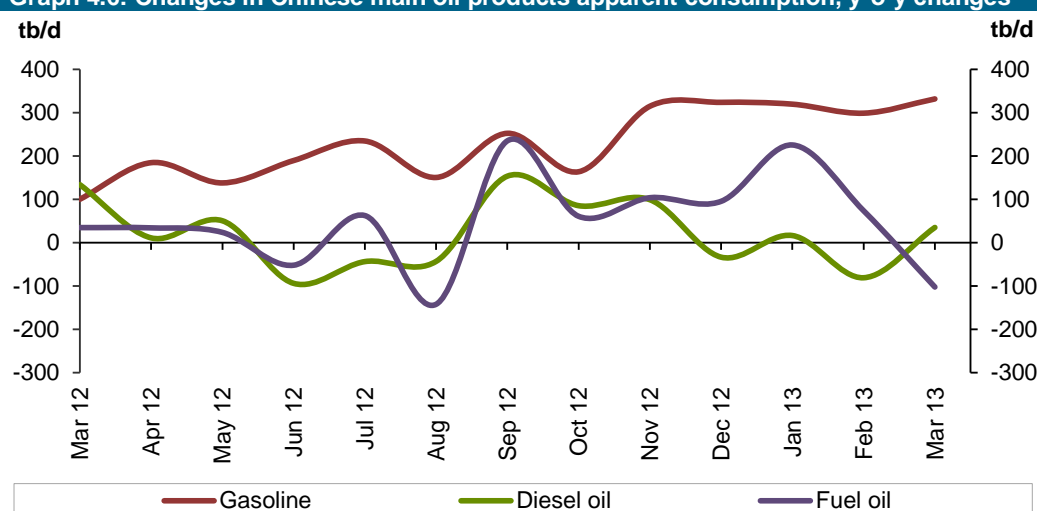
China's oil demand is projected to increase by 0.35 mb/d in 2013

China

The growth in **China's** oil demand in March fell by just 2% y-o-y, the lowest percentage seen since August 2012. This was a result of a slowdown in economic growth, mainly affecting industrial fuel demand. For all of 1Q13, China's oil demand grew by only 0.3 mb/d or 3.5%, compared with 0.6 mb/d or 5.0% in 4Q12. This likely reflects some weakness in Chinese economic activity as Chinese GDP data for 1Q13 came in below consensus.

Nevertheless, March demand for **transportation fuels**, especially gasoline, grew as a result of lower fuel prices and rising auto sales, up 13% in March 2013, y-o-y. Moreover, jet fuel demand rose for another month due to healthy growth in the country's aviation sector. The latter was supported by reductions in domestic jet fuel prices by the National Development and Reform Commission (NDRC). Most recently, the NDRC also announced cuts in gasoline and diesel retail prices by 395 and 400 yuan/mt respectively, effective 25 April 2013. These are the first adjustments since the introduction of a new pricing mechanism last month and account for a 4.6% and 5.2% reduction in the prices of the two products. Finally, the NDRC announced that it posts regular updates every 10 working days on product price adjustments in an effort to increase transparency.

Graph 4.6: Changes in Chinese main oil products apparent consumption, y-o-y changes



Chinese oil demand is expected to pick up in 2Q13 due to increasing oil usage in the agricultural sector. However, any rise is likely to be limited given the slower economic momentum. Chinese oil consumption grew by 0.33 mb/d in **2012**, while oil consumption in **2013** is projected to increase by 0.35 mb/d, unchanged from last month's projections.

Table 4.5: World oil demand in 2013, mb/d

	2012	1Q13	2Q13	3Q13	4Q13	2013	Change 2013/12	
							Growth	%
Americas	23.76	23.59	23.71	23.93	23.88	23.78	0.02	0.10
Europe	13.80	13.42	13.47	13.57	13.42	13.47	-0.33	-2.39
Asia Pacific	8.50	8.93	7.86	8.19	8.65	8.41	-0.09	-1.05
Total OECD	46.05	45.94	45.04	45.70	45.96	45.66	-0.39	-0.86
Other Asia	10.80	10.84	11.03	11.13	11.12	11.03	0.23	2.17
Latin America	6.26	6.23	6.44	6.70	6.59	6.49	0.23	3.67
Middle East	7.58	7.80	7.76	8.18	7.77	7.88	0.30	3.93
Africa	3.38	3.39	3.40	3.32	3.47	3.39	0.01	0.38
Total DCs	28.02	28.26	28.63	29.33	28.95	28.79	0.78	2.77
FSU	4.41	4.33	4.17	4.58	4.83	4.48	0.06	1.46
Other Europe	0.64	0.63	0.59	0.63	0.71	0.64	-0.01	-0.81
China	9.74	9.79	10.24	9.91	10.43	10.09	0.35	3.63
Total "Other regions"	14.80	14.75	14.99	15.11	15.97	15.21	0.41	2.79
Total world	88.87	88.95	88.66	90.14	90.87	89.66	0.79	0.89
Previous estimate	88.87	89.02	88.62	90.12	90.86	89.66	0.80	0.90
Revision	0.00	-0.07	0.04	0.01	0.01	0.00	0.00	0.00

Totals may not add up due to independent rounding.

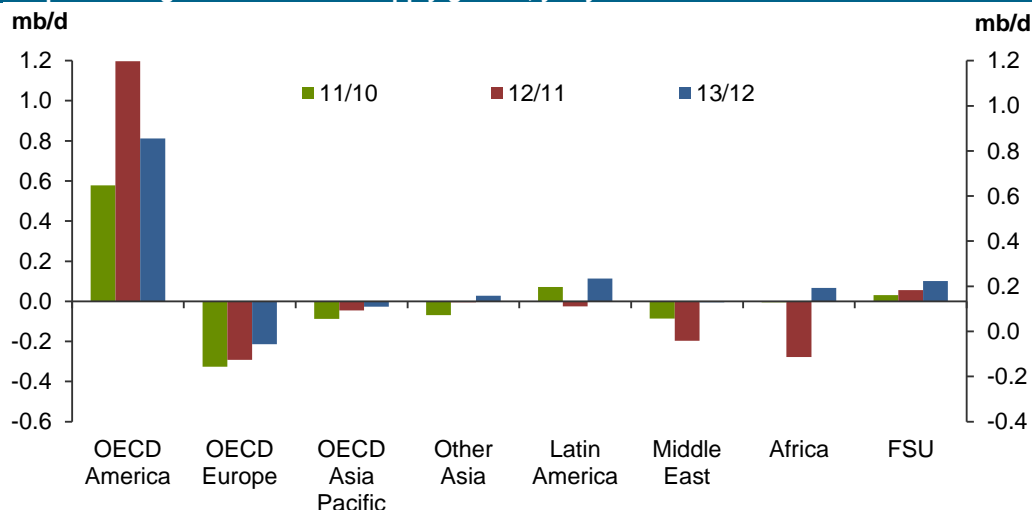
World Oil Supply

Non-OPEC supply increased by 0.53 mb/d in 2012

Non-OPEC Estimate for 2012

Non-OPEC oil production is estimated to have averaged 52.98 mb/d in 2012, indicating an increase of 0.53 mb/d over the previous year. The estimate represents an upward revision of 22 tb/d from the last Monthly Oil Market Report (MOMR). Updated production figures as well as historical revisions led to the changes undertaken. In addition to these historical changes, updated 2012 production data for the US, Canada, India and China has required revisions to the estimate for 2012.

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



In 2012, non-OPEC supply saw healthy growth over the previous year. On a regional basis, OECD Americas was the main supporter of this growth, with a supply increase of 1.20 mb/d. This was, in turn, supported by a healthy additions to volume from tight oil and oil sand developments. China's production followed with supply growth of 70 tb/d, and the FSU came next with an increase of 60 tb/d.

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

	2011	1Q12	2Q12	3Q12	4Q12	2012	Change 12/11
Americas	15.55	16.53	16.42	16.54	17.50	16.75	1.20
Europe	4.06	4.08	3.92	3.49	3.61	3.77	-0.29
Asia Pacific	0.57	0.51	0.53	0.55	0.49	0.52	-0.05
Total OECD	20.18	21.12	20.86	20.58	21.61	21.05	0.86
Other Asia	3.63	3.66	3.59	3.62	3.64	3.63	0.00
Latin America	4.73	4.79	4.66	4.63	4.73	4.70	-0.03
Middle East	1.69	1.44	1.51	1.52	1.51	1.50	-0.20
Africa	2.59	2.39	2.28	2.28	2.30	2.31	-0.28
Total DCs	12.65	12.29	12.04	12.05	12.18	12.14	-0.50
FSU	13.24	13.36	13.24	13.23	13.36	13.30	0.06
Other Europe	0.14	0.14	0.14	0.14	0.14	0.14	0.00
China	4.11	4.08	4.16	4.20	4.30	4.19	0.07
Total "Other regions"	17.49	17.58	17.53	17.57	17.81	17.62	0.13
Total Non-OPEC production	50.32	50.99	50.44	50.20	51.60	50.81	0.48
Processing gains	2.12	2.17	2.17	2.17	2.17	2.17	0.05
Total Non-OPEC supply	52.45	53.16	52.61	52.37	53.77	52.98	0.53
Previous estimate	52.45	53.19	52.61	52.33	53.70	52.96	0.50
Revision	-0.01	-0.02	0.00	0.04	0.07	0.02	0.03

In contrast, OECD Europe experienced the largest supply decrease among all non-OPEC regions in 2012, down 0.29 mb/d from the year before. Africa, the Middle East, OECD Asia Pacific and Latin America followed, with supply declines of 280 tb/d, 200 tb/d, 50 tb/d and 30 tb/d, respectively.

Individually, the US, Canada, Russia and China were the main countries where supply experienced healthy growth in 2012, while South Sudan and Sudan, the UK, Syria, Norway, Azerbaijan and Yemen encountered significant declines. Political, technical and weather factors had a strong impact on output in 2012. On a quarterly basis, non-OPEC supply in 2012 is estimated at 53.16 mb/d, 52.61 mb/d, 52.37 mb/d and 53.77 mb/d respectively.

Revisions to 2012 estimate

There have been a few upward and downward revisions to individual countries' supply estimates for 2012. The US and India have seen upward revisions, while Canada and China saw downward changes. All revisions have been made to adjust for updated production data. The upward revisions more than offset the downward ones, and total non-OPEC supply experienced a minor upward revision of 22 tb/d compared to the previous MOMR.

Forecast for 2013

Non-OPEC supply in 2013 is expected to increase by 0.98 mb/d to average 53.96 mb/d, representing an upward revision of 20 tb/d from last month's report; however, the annual growth level remained steady. Updated production data for the first quarter for some producers was the main driver of the upward revision, as well as the historical updates. The first-quarter supply figure saw an upward revision, while the rest of the quarters remained steady.

There have been upward and downward revisions to individual countries' supply projections. On an annual basis, the forecasts for seven countries required upward revisions, while those for eight other countries were revised down. However, the upward revisions were larger in volume than the downward ones. The overall supply forecast remains relatively stable, with OECD Americas and Latin America expected to show the highest growth, followed by the FSU and Africa, while supply in OECD Europe and OECD Asia Pacific is projected to decline. On a quarterly basis, non-OPEC supply is seen to average 53.85 mb/d, 53.68 mb/d, 53.88 mb/d and 54.41 mb/d, respectively.

Non-OPEC supply expected to grow by 0.98 mb/d in 2013 to average 53.96 mb/d

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

	2012	1Q13	2Q13	3Q13	4Q13	2013	Change 13/12
Americas	16.75	17.57	17.54	17.53	17.60	17.56	0.81
Europe	3.77	3.67	3.54	3.44	3.60	3.56	-0.21
Asia Pacific	0.52	0.45	0.49	0.51	0.53	0.50	-0.03
Total OECD	21.05	21.69	21.57	21.48	21.73	21.62	0.57
Other Asia	3.63	3.64	3.64	3.67	3.68	3.66	0.03
Latin America	4.70	4.70	4.76	4.87	4.93	4.82	0.11
Middle East	1.50	1.47	1.49	1.50	1.50	1.49	-0.01
Africa	2.31	2.32	2.33	2.42	2.45	2.38	0.07
Total DCs	12.14	12.12	12.22	12.45	12.57	12.34	0.20
FSU	13.30	13.45	13.32	13.36	13.47	13.40	0.10
Other Europe	0.14	0.14	0.14	0.14	0.14	0.14	0.00
China	4.19	4.24	4.21	4.25	4.29	4.25	0.06
Total "Other regions"	17.62	17.82	17.68	17.74	17.90	17.79	0.16
Total Non-OPEC production	50.81	51.64	51.47	51.67	52.20	51.75	0.94
Processing gains	2.17	2.21	2.21	2.21	2.21	2.21	0.04
Total Non-OPEC supply	52.98	53.85	53.68	53.88	54.41	53.96	0.98
Previous estimate	52.96	53.81	53.67	53.88	54.39	53.94	0.98
Revision	0.02	0.04	0.01	0.01	0.02	0.02	0.00

OECD supply to increase by 0.57 mb/d in 2013 to average 21.62 mb/d

OECD

Total OECD oil production is expected to average 21.62 mb/d in 2013, a strong increase of 0.57 mb/d from last year and an upward revision of 40 tb/d from the previous MOMR. The upward revision has come from OECD Americas, while OECD Europe and OECD Asia Pacific supply forecasts have been revised down from the previous month. The anticipated supply growth is the second highest after 2012 for the OECD since 1996.

Among the OECD regions, OECD Americas supply is expected to see the biggest growth in 2013 among all non-OPEC regions; while OECD Europe's output is projected to see the largest decline among all non-OPEC regions. OECD Asia Pacific production is seen to encounter a minor drop. On annual basis, OECD share of non-OPEC supply is expected to continue to increase in 2013 and surpass 40%, supported by the continued growth from OECD Americas. Compared with the previous MOMR, the supply forecasts for the US and Canada have been revised up, while those for Mexico, Norway, the UK, Other OECD Europe and Australia have undergone downward revisions.

On a quarterly basis, OECD oil supply is seen to average 21.69 mb/d, 21.57 mb/d, 21.48 mb/d and 21.73 mb/d respectively. Preliminary data shows that the first quarter indicated an increase of 0.57 mb/d from a year ago.

Graph 5.2: OECD's quarterly production



OECD Americas

OECD Americas oil supply is anticipated to grow by 0.81 mb/d in 2013 to average 17.56 mb/d, representing an upward revision of 0.11 mb/d from the previous MOMR. US oil supply is seen to lead growth in 2013, followed by that of Canada, while Mexico's supply is expected to see a minor decline. OECD Americas' anticipated supply growth this year is the second highest on record after 2012 and the largest among all the non-OPEC regions.

On a quarterly basis, OECD Americas production is expected to stand at 17.57 mb/d, 17.54 mb/d, 17.53 mb/d and 17.60 mb/d respectively.

US

US oil production is forecast to increase by 0.59 mb/d to average 10.63 mb/d in 2013, the highest growth among all non-OPEC countries. This strong growth represents an upward revision of 60 tb/d from the previous MOMR, due mainly to updated production data for the early months of 2013, as well as historical updates. On average, total US supply increased by 0.84 mb/d in January and February, compared with the same period a year ago.

The robust ramp-up of tight oil production is the main force behind the strong growth seen so far in 2013. Tight oil output from the Bakken, Eagle Ford, and Permian

Strong growth to continue in 2013 for US oil production

formations has already shown strong growth this year, supporting the upward revision. Drilling activity levels have surpassed expectations mainly on improved efficiency, and this could lead to further revisions in the future. In February, Texan crude oil production increased by 0.51 mb/d compared to the same period a year earlier and reached 2.30 mb/d, the highest level since April 1986. The growth was supported by the strong increase from the Eagle Ford which reached 471 tb/d in February, a 74% increase from the same period in 2012. During the first four months of 2013, oil drilling activities increased by 61% compared to the same period a year earlier. North Dakota oil supply averaged 0.78 mb/d in February 2013, a new record and 220 tb/d higher than February 2012. The increase in reserve estimation for the Williston basin is seen to support the growth.

Other tight oil activity is seen to continue to grow in 2013 and support growth. Reports suggested that tight oil drilling will start soon in Kentucky.

Furthermore, NGL production is seen to experience some increase and support the US oil production. Additionally, Gulf of Mexico output is expected to increase in 2013 supported by ramp-up of new developments, despite the report of the halt on Mad Dog phase two developments. However, weather conditions could affect production in the coming months, especially during the hurricane season, while upward revisions in the coming period might be possible on continued strong tight oil activities.

On a quarterly basis, US oil supply is seen to average 10.62 mb/d, 10.67 mb/d, 10.62 mb/d and 10.61 mb/d respectively.

Canada and Mexico

Canada's oil production is expected to increase by 0.26 mb/d in 2013 to average 4.03 mb/d, indicating an upward revision of 60 tb/d from the previous month. The anticipated supply increase in 2013 is the highest since 1973. The revision has come mainly in the first quarter, where updated production data for the early part of the year has required the change. The startup of the Kearl projected supported the upward revision. The facility's output of 110 tb/d is expected to be reached by year end. The return of output from the eastern fields is supporting the upward revision. The forecast output growth is seen coming from oil sand and tight oil developments in 2013. In the second quarter, Canada's production is seen to decline on the back of maintenance program.

On a quarterly basis, Canada's production is anticipated to average 4.02 mb/d, 3.97 mb/d, 4.02 mb/d and 4.12 mb/d respectively.

Oil production from **Mexico** is anticipated to decline by 40 tb/d in 2013 to average 2.88 mb/d, representing a minor downward revision of 10 tb/d compared to the previous MOMR. The downward revision came on the back of updated production data for the first quarter, where output came slightly below last month's expectation. During the first four months of 2013, according to preliminary data, Mexico's crude oil production declined in March and April on an annual basis. The experienced decline came mainly from the Cantarell field, while the Ku-Maloob-Zaap (KMZ) and Chicontepec fields output saw an increase. According to preliminary data, Mexico's oil supply dropped by 10 tb/d in the first quarter of 2013, compared with the same period last year.

On a quarterly basis, Mexico production is expected to average 2.91 mb/d, 2.89 mb/d, 2.88 mb/d and 2.86 mb/d respectively.

OECD Europe

Total oil supply from **OECD Europe** is forecast to decline by 0.21 mb/d to average 3.56 mb/d in 2013, a downward revision of 50 tb/d from last month. The downward revision came on the back of adjustments to recently updated production data in the first quarter, as well as various other technical issues that necessitated the other downward revisions for the rest of the year. All major producers' output in the region is expected to decline in 2013. All quarters have experienced downward revisions, with the first quarter having the smallest one.

Startup of Kearl to support Canadian growth in 2013

Mexico's production to average 2.88 mb/d in 2013, a drop of 40 tb/d

Norway's production to drop 140 tb/d in 2013 and average 1.78 mb/d

On a quarterly basis, OECD Europe supply is seen to average 3.67 mb/d, 3.54 mb/d, 3.44 mb/d and 3.60 mb/d respectively. Preliminary first-quarter estimates indicate that output declined by 0.41 mb/d, compared with the same period in 2012.

Norway's oil production is projected to decrease by 0.14 mb/d to average 1.78 mb/d in 2013, indicating a downward revision of 30 tb/d from the last MOMR. The downward revision impacted all quarters with the first quarter seeing the smallest revision. Updated production data for the first quarter led to the downward revision, since the data indicated lower production than expected. During the first quarter, Norway oil supply encountered a gradual decline, mainly due to technical issues and natural decline, despite new barrels coming from recently started up projects. In March, Norway oil supply, as per preliminary data, averaged 1.79 mb/d, a drop of 20 tb/d compared to the previous month. The drop came on the back of technical issues at Oseberg, Skarv, Snorre, Troll, and Valhall. Norway oil supply is seen to decline in the second and third quarter for the upcoming maintenance season. Reports suggested that the Ekofisk area will have a four-week maintenance in June, expected to impact production.

On a quarterly basis, Norway's supply is seen to average 1.82 mb/d, 1.76 mb/d, 1.72 mb/d and 1.81 mb/d respectively. During the first quarter, Norway oil supply averaged 1.82 mb/d, a decline of 0.26 mb/d compared to the same period a year earlier.

Tonto is adding new barrels to the UK oil supply

The **UK's** oil production is expected to decline by 50 tb/d to average 0.91 mb/d in 2013, a downward revision of 100 tb/d from the previous MOMR. The revision has affected the second, third, and fourth quarters while the first quarter saw a minor upward revision. The upward revision in the first quarter came on the back of updated production data that indicated slightly higher output than previously expected. The anticipated decline in 2013 is seen to be slower than the previous year on new field startups and expected higher upstream investment. The startup on the Huntington field, with an expected peak of 25 tb/d, is seen to support the output. Additionally, the startup of the Tonto project is seen to further improve output as well as the increase in the reserve estimation for the Bentley field. Yet the expected decline from mature producing areas is seen to more than offset the new barrels. During the first quarter, the UK oil production averaged 0.97 mb/d, a decline of 0.12 mb/d compared to the same period a year earlier.

On a quarterly basis, UK supply is estimated at 0.97 mb/d, 0.90 mb/d, 0.85 mb/d and 0.92 mb/d respectively.

OECD Asia Pacific

OECD Asia Pacific supply is foreseen to decline by 30 tb/d to average 0.50 mb/d in 2013, indicating a downward revision of 20 tb/d compared to the previous month. The downward revision came on the back of updated production data.

On a quarterly basis, OECD Asia Pacific supply is expected to average 0.45 mb/d, 0.49 mb/d, 0.51 mb/d and 0.53 mb/d respectively.

Cyclone season reduces Australia's first quarter output to the lowest level since 1972

Oil supply from **Australia** is predicted to decline by 20 tb/d and average 0.42 mb/d in 2013, a downward revision of 20 tb/d from the previous MOMR. The downward revision came on the back of updated production data in the first quarter that was partially carried over to the rest of the year. The startup of the relatively small Hanson fields did not have a large impact on the forecast. According to preliminary and estimated data, Australia's first quarter oil production averaged 0.36 mb/d, the lowest level since the fourth quarter 1972, a decline of 70 tb/d compared to the same period a year earlier. The low output was partially driven by the impact of the cyclone season, which also influenced the progress of bringing in new supply. However, output is seen to rebound in the coming quarter as new projects such as Montara are expected to start up.

On a quarterly basis, Australian supply is expected to average 0.36 mb/d, 0.42 mb/d, 0.44 mb/d and 0.46 mb/d respectively.

Latin America and Africa to drive growth in DC supply in 2013

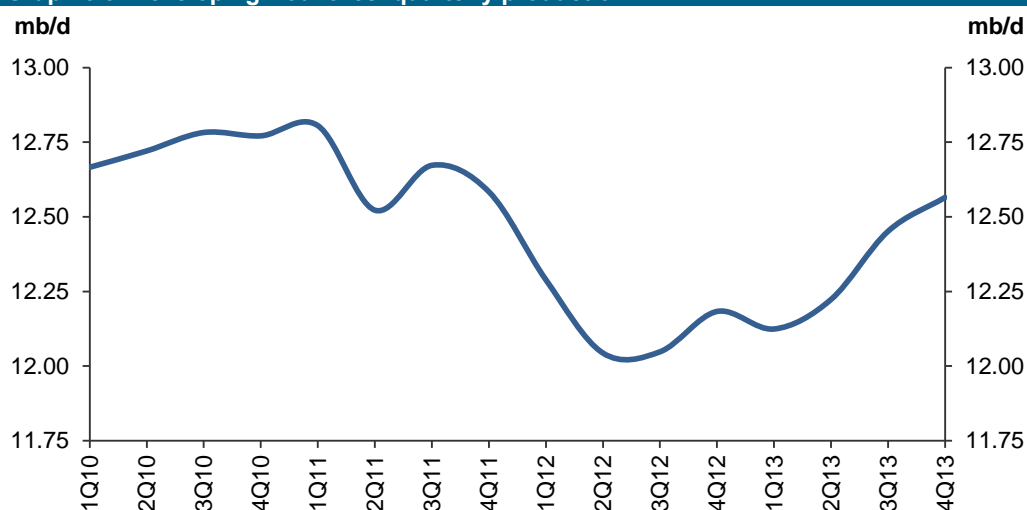
Developing countries

Total **Developing Countries** (DCs) oil output is expected to average 12.34 mb/d in 2013, representing an increase of 0.20 mb/d and a minor downward revision of 10 tb/d from the last report. The supply forecasts from Latin America and the Middle East drove the downward revisions, while Other Asia's and Africa's supply projections saw minor upward revisions compared with the last MOMR. The downward revisions came mainly from the first half, while the second half supply projection has been revised slightly up.

This first half revision was due to updated production data in the first quarter that was partially carried over to the second quarter, while the revisions for the rest of the year reflect changes to individual country supply profiles. Latin America remains the region with the highest expected growth in 2013 among the DC regions, supported by Colombia and Brazil. Africa oil supply is seen to follow on growth, while the Middle East supply is expected to experience decline.

On a quarterly basis, total DC oil production is seen to average 12.12 mb/d, 12.22 mb/d, 12.45 mb/d and 12.57 mb/d respectively. During the first quarter, preliminary data indicated that DC oil supply decreased by 0.17 mb/d, compared with the same period of 2012.

Graph 5.3: Developing Countries' quarterly production



Malaysia supply to support growth in Other Asia in 2013

Other Asia's oil supply is anticipated to increase by 30 tb/d to average 3.66 mb/d in 2013, indicating a minor upward revision of 10 tb/d from the previous MOMR. This revision has affected India oil supply, compared with the previous month, while other producers supply forecasts in the region remain steady.

India's oil supply is expected to average 0.88 mb/d in 2013, steady from the previous year, and representing an upward revision of 10 tb/d compared to last month. The upward revision came on the back of updated production figures in the first quarter that were partially carried over to the rest of the year. The output increase from the Rajasthan field is seen supporting the upward revision. The field operator reported output growth of 12% compared to the first quarter 2012.

Vietnam oil production is seen to average 0.39 mb/d in 2013, a minor increase from the previous year. The increase is supported by expected new barrels from new developments which are seen to more than offset the natural decline. The startup of the small Hai Su Trang project is seen to support output in 2013. Additionally, the expected capacity increase of the floating, production, storage, and offload (FPSO) vessel at the Te Giac Trang field from 55 tb/d to 70 tb/d is seen to support the production.

On a quarterly basis, Other Asia's supply is expected to stand at 3.64 mb/d, 3.64 mb/d, 3.67 mb/d and 3.68 mb/d, respectively.

Malaysia's oil supply is seen to average 0.72 mb/d in 2013, an increase of 60 tb/d compared to previous year, the highest growth in Other Asia. Growth is expected to be steady on the the ramp-up of the Gumusut project.

Latin America supply to increase by 0.11 mb/d in 2013 and average 4.82 mb/d

Indonesia oil production is expected to decline by 50 tb/d in 2013 and average 0.92 mb/d, unchanged from previous MOMR. The drop is seen on the back of limited new developments and decline at mature producing areas. The decline is seen in Indonesia oil supply in 2013 despite start of hydraulic fracturing at mature fields.

Latin America oil production is forecast to increase by 0.11 mb/d to average 4.82 mb/d in 2013, representing a downward revision of 25 tb/d from the previous MOMR. The downward revision came from Brazil, while the supply forecast for Colombia and Trinidad and Tobago encountered upward revisions, yet the downward revision was larger. Latin America production growth in 2013 is the second highest, after OECD Americas, among all the non-OPEC regions.

Colombia's oil production is expected to increase by 70 tb/d, the highest in the region, to average 1.03 mb/d, indicating a minor upward revision of 10 tb/d compared to previous MOMR. The growth expected on continued ramp-up of the Rubiales, Quifa, and Castilla fields. In the first quarter of the year, Colombia's oil production averaged 1.02 mb/d, an increase of 70 tb/d over the same period of 2012. The first quarter 2013 production is the first on record for Colombia, where output exceeded 1 mb/d. Yet the risk remains on the Colombia oil supply forecast on the back of security issues.

Argentina's oil supply is forecast to average 0.69 mb/d in 2013, a decline of 30 tb/d from last year and steady from the previous month. During the first quarter, as per preliminary data, Argentina's oil supply averaged 0.68 mb/d, a decline of 40 tb/d from the same period in 2013. Reports provided that limited shale developments were achieved so far due to above-ground complications that need resolution.

On a quarterly basis, Latin American supply is expected to stand at 4.70 mb/d, 4.76 mb/d, 4.87 mb/d and 4.93 mb/d respectively. Preliminary data indicates that the region's production decreased by 90 tb/d in the first quarter of 2013, compared with the same period of 2012.

Brazil Frade approved to restart partial output

Brazil's oil production is anticipated to increase by 60 tb/d and average 2.66 mb/d in 2013, indicating a downward revision of 35 tb/d from the previous MOMR. This revision has come from the first quarter, as preliminary production data indicated lower output than previously expected. During the first quarter, Brazil's oil production experienced a gradual decline, with March output being the lowest. Production declined in March due to technical and maintenance issues at P-9, PCE-1 and P-54 projects.

Maintenance is expected to continue to impact Brazil oil supply in the second quarter. Brazil oil supply is seen to pick up in the second half of 2013, as new platforms bring in new barrels. The approval to restart the Frade field is seen to further support output. However, limited volumes are expected from the field as the authorities approved the restart of four wells for a year and two wells for two months out of the ten wells that used to produce around 70 tb/d prior to the shutdown. Reports suggested that new technology will be used to increase subsalt recovery which could positively support production. On the other hand, ethanol production could be impacted by the taxation and economic issues in the coming period.

On a quarterly basis, Brazil's oil supply is expected to stand at 2.54 mb/d, 2.62 mb/d, 2.71 mb/d and 2.76 mb/d respectively. Brazil first quarter oil production indicated a decline of 0.17 mb/d compared to the same period in 2012.

Middle East 2013 supply forecast associated with high level of risk

Middle East oil supply is believed remain steady in 2013 and drop 10 tb/d to average 1.49 mb/d, representing a downward revision of 10 tb/d from the previous month. This revision comes from Syria as updated estimated data in the first quarter required a minor down revision.

Syria's oil supply is estimated to average 0.16 mb/d in 2013, a decline of 50 tb/d from the estimation of 2012. Syria's oil supply is associated with a high level of risk on unavailability of data and the security situation.

Oman's production is expected to see the main increase in the region, of 30 tb/d, to average 0.94 mb/d in 2013, unchanged from last MOMR. Growth is supported by

expected new volumes from enhanced oil recovery (EOR) projects. **Yemen** oil supply is seen to average 0.19 mb/d in 2013, steady from previous year. More wells are planned to be drilled in Block 5 to increase production.

On a quarterly basis, Middle East supply is seen to average 1.47 mb/d, 1.49 mb/d, 1.50 mb/d and 1.50 mb/d respectively.

South Sudan restarts production in April

Africa's oil supply is forecast to increase by 70 tb/d to average 2.38 mb/d in 2013, representing an upward revision of 15 tb/d from the previous MOMR. This revision has come from South Sudan and Sudan and Ghana, while the supply outlook for Gabon experienced a downward revision and the other producers forecast remains steady from a month earlier.

South Sudan restarted production in April from Thar Jath field and production is expected to ramp-up slowly to pre-shutdown level. Security concerns remain a major risk factor for return of the halted output. South Sudan and Sudan oil production is expected to increase gradually in 2013 and average 0.19 mb/d, an increase of 80 tb/d from previous year, indicating an upward revision of 15 tb/d compared to previous MOMR.

Ghana's oil supply encountered an upward revision of 10 tb/d compared to last month on updated production data that came higher than expected. The Jubilee field is reported to produce near peak output of 120 tb/d. **Gabon** oil supply experienced a minor downward revision on updated production data for the first quarter.

On a quarterly basis, Africa oil supply is seen to average 2.32 mb/d, 2.33 mb/d, 2.42 mb/d and 2.45 mb/d respectively.

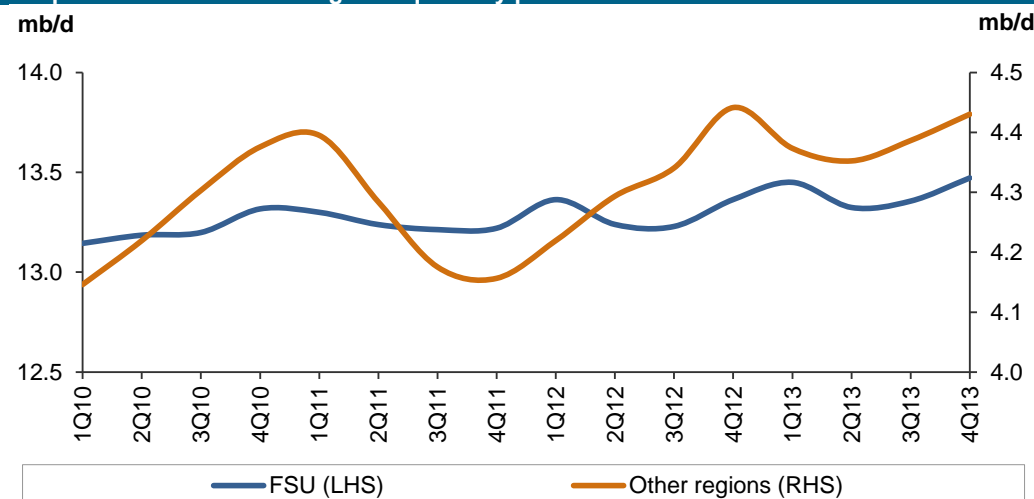
FSU, Other regions

FSU supply to average 13.40 mb/d in 2013

Total **FSU** oil production is expected to increase by 0.10 mb/d to average 13.40 mb/d in 2013, indicating a downward revision of 10 tb/d from the last MOMR. The downward revision was introduced due to changes to individual countries' supply forecast profiles as well as adjustment to updated production data in the first quarter. Kazakhstan's oil supply forecast was revised. The FSU supply growth forecast is the third-largest among all the non-OPEC regions, following OECD Americas and Latin America in 2013. For the first quarter of the year, preliminary data indicates that the FSU's oil supply increased by 90 tb/d, compared with the same period of 2012.

On a quarterly basis, total **FSU** supply is expected to stand at 13.45 mb/d, 13.32 mb/d, 13.36 mb/d and 13.47 mb/d respectively. **Other Europe's** supply is anticipated to remain steady and average 0.14 mb/d in 2013, unchanged from the previous month. **China's** oil production is forecast to rise by 60 tb/d over a year earlier to average 4.25 mb/d in 2013.

Graph 5.4: FSU and other region's quarterly production



Russia oil production to increase 60 tb/d in 2013 to average 10.40 mb/d

Russia

Russia's oil supply is forecast to grow by 60 tb/d to average 10.43 mb/d in 2013, unchanged compared with the previous month. According to preliminary data, Russia oil supply averaged 10.46 mb/d in April, an increase of 10 tb/d compared with the previous month and growth of 0.14 mb/d compared to the same month a year ago. Russia's oil supply remained strong so far in 2013 and is expected to maintain this level to the year end. Government officials announced that Russia's oil supply will increase to around 10.44 mb/d, surpassing last year's record annual level. Growth continues from the ramp-up of the Vankor project in addition to other fields, where growth is more than offsetting the decline from mature producing areas. Reports suggested that some shale developments have started in West Siberia.

On a quarterly basis, Russian oil supply is seen to average 10.45 mb/d, 10.43 mb/d, 10.43 mb/d and 10.43 mb/d respectively.

Kashagan startup might be delayed to September

Caspian

Oil production from **Kazakhstan** is forecast to average 1.66 mb/d in 2013, an increase of 70 tb/d over the previous year, indicating a downward revision of 10 tb/d compared to the previous MOMR. The downward revision was introduced to the second, third, and fourth quarters while updated production data in the first quarter required an upward revision. The downward revision came on the back of uncertainties on the startup and initial production of the Kashagan field's first phase. Conflicting reports emerged regarding the startup of the field in June or September as well as on the initial production level. However, further adjustment might be coming in the near future as the startup date comes closer.

On a quarterly basis, Kazakhstan's supply is expected to stand at 1.68 mb/d, 1.61 mb/d, 1.64 mb/d and 1.72 mb/d respectively. According to the preliminary data, during the first quarter of 2013, Kazakh oil production increased by 60 tb/d, compared with the same period in 2012.

Azerbaijan supply to average 0.85 mb/d in 2013, a drop of 50 tb/d

Azerbaijan's oil supply is forecast to average 0.85 mb/d in 2013, a decline of 50 tb/d over 2012 and unchanged from the previous month. According to preliminary data, Azeri oil supply declined by 70 tb/d in the first quarter, compared with the same period a year ago. This decline has been driven by technical issues that had an impact on the Azeri-Chirag-Guneshli (ACG) field's output, which had affected production in previous years. The decline is coming mainly from the Central Azeri and Guneshli parts. Limited new developments have also influenced the forecast for 2013.

On a quarterly basis, Azerbaijan's output is estimated to average 0.89 mb/d, 0.84 mb/d, 0.83 mb/d and 0.85 mb/d respectively.

China's Weizhou 6-12 started up

China

China's oil production is expected to increase by 60 tb/d to average 4.25 mb/d in 2013, steady from the last report. However, there were upward and downward revisions seen in the quarters, that offset each other. During the first quarter of this year, China's oil supply increased by 0.16 mb/d, compared with the same period of 2012. However, the updated first quarter data required a downward revision. The other quarters' supply forecasts encountered upward revisions on the back of field startups. The Weizhou 6-12 field started recently and is expected to support growth. During the first quarter, the Shegli field production increased by 1% compared to the same period in 2012. In March, China oil supply averaged 4.24 mb/d, an increase of 20 tb/d compared to February, from the offshore production.

On a quarterly basis, China's oil supply is forecast to average 4.24 mb/d, 4.21 mb/d, 4.25 mb/d and 4.29 mb/d respectively.

OPEC natural gas liquids and non-conventional oils

OPEC NGLs and non-conventional oils are estimated to have averaged 5.66 mb/d in 2012, representing growth of 0.29 mb/d over the previous year. In 2013, OPEC NGLs and non-conventional oils are expected to increase by 0.21 mb/d over 2012 to average 5.87 mb/d.

Table 5.3: OPEC NGLs + non-conventional oils, 2010-13

			Change					Change		Change	
	2010	2011	11/10	1Q12	2Q12	3Q12	4Q12	2012	12/11	2013	13/12
Total OPEC	4.98	5.37	0.39	5.52	5.72	5.79	5.58	5.66	0.29	5.87	0.21

OPEC crude oil production

OPEC production rose 0.28 mb/d to average 30.46 mb/d in April

Total OPEC crude oil production averaged 30.46 mb/d in April, according to secondary sources, indicating an increase of 0.28 mb/d from the previous month. Crude oil production in Saudi Arabia and Iraq increased in April. OPEC crude oil production, excluding Iraq, stood at 27.32 mb/d in April, up 174 tb/d from the previous month.

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

	2011	2012	3Q12	4Q12	1Q13	Feb 13	Mar 13	Apr 13	Apr/Mar
Algeria	1,240	1,210	1,209	1,186	1,168	1,166	1,162	1,171	8.6
Angola	1,667	1,738	1,719	1,728	1,745	1,724	1,759	1,770	11.7
Ecuador	490	499	501	502	502	503	501	507	6.3
Iran, I.R.	3,628	2,973	2,742	2,680	2,706	2,723	2,685	2,695	9.7
Iraq	2,665	2,979	3,135	3,118	3,032	3,054	3,037	3,139	102.7
Kuwait	2,538	2,793	2,799	2,820	2,789	2,793	2,774	2,784	10.2
Libya	462	1,393	1,466	1,468	1,399	1,406	1,398	1,399	1.6
Nigeria	2,111	2,073	2,110	1,965	1,991	1,989	1,949	1,940	-9.3
Qatar	794	753	745	732	736	738	732	737	5.0
Saudi Arabia	9,290	9,737	9,792	9,436	9,108	9,119	9,131	9,270	138.5
UAE	2,516	2,624	2,653	2,650	2,690	2,699	2,700	2,710	10.0
Venezuela	2,380	2,360	2,348	2,343	2,358	2,351	2,355	2,337	-17.9
Total OPEC	29,782	31,132	31,217	30,628	30,224	30,264	30,182	30,459	277.1
OPEC excl. Iraq	27,116	28,153	28,082	27,509	27,192	27,210	27,145	27,319	174.5

Totals may not add up due to independent rounding.

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

	2011	2012	3Q12	4Q12	1Q13	Feb 13	Mar 13	Apr 13	Apr/Mar
Algeria	1,173	1,203	1,201	1,184	1,199	1,198	1,203	1,195	-8.0
Angola	1,618	1,704	1,677	1,690	1,734	1,714	1,749	1,711	-38.0
Ecuador	500	504	509	503	506	509	504	516	11.5
Iran, I.R.	3,576	3,740	3,746	3,713	3,704	3,701	3,705	..	..
Iraq	2,653	2,944	3,150	3,058	2,957	2,963	2,988	3,061	73.0
Kuwait	2,660	2,977	2,957	2,967	2,813	2,840	2,725	2,970	245.0
Libya	462	1,449	1,504	1,493	1,487	1,464	1,516	1,513	-2.9
Nigeria	1,896	1,943	2,032	1,891	1,820	1,722	1,746	1,734	-11.9
Qatar	734	734	726	727	728	738	720	..	..
Saudi Arabia	9,311	9,763	9,760	9,413	9,111	9,150	9,137	9,310	173.0
UAE	2,565	2,652	2,727	2,664	2,823	2,864	2,801	2,771	-30.5
Venezuela	2,795	2,804	2,820	2,785	2,745	2,739	2,745	..	..
Total OPEC	29,942	32,418	32,808	32,088	31,626	31,602	31,539	..	..
OPEC excl. Iraq	27,290	29,474	29,658	29,030	28,670	28,639	28,551	..	..

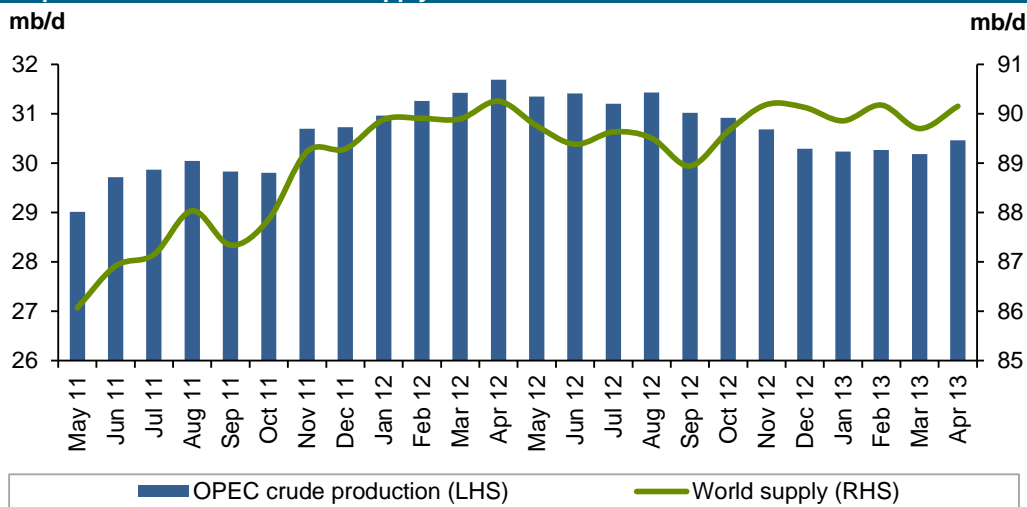
Totals may not add up due to independent rounding.

.. Not available.

World Oil Supply

Preliminary figures indicate that global oil supply experienced an increase of 0.45 mb/d in April compared to the previous month. This was due to a 0.18 mb/d rise in non-OPEC supply, as well as a 0.28 mb/d increase in OPEC crude production. The share of OPEC crude oil in global production increased to 33.8% in April. The estimate is based on preliminary data from non-OPEC supply, OPEC NGLs and OPEC production. Estimates for OPEC NGLs and OPEC production are derived from secondary sources.

Graph 5.5: OPEC and world oil supply



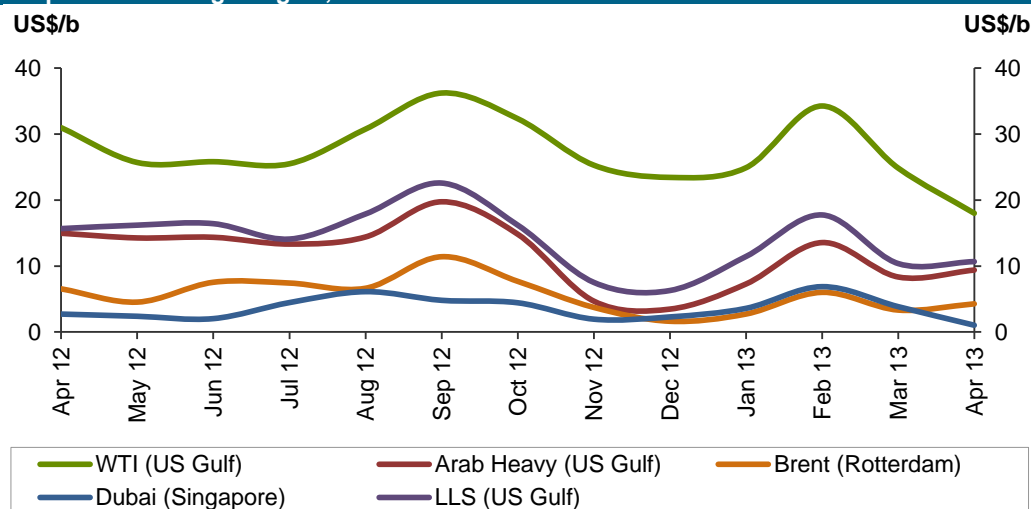
Product Markets and Refinery Operations

Refinery margins in the US impacted by WTI crude price recovery

Product markets continued losing ground in April due to sharp declines in light and middle distillate cracks, pressured by increasing supplies, along with weaker demand worldwide. Refinery margins in Asia fell mostly for the top of the barrel, while the WTI price recovery caused a strong correction in US margins.

Meanwhile, despite product market fundamentals remaining weak in Europe due to lacklustre domestic demand, the drop in the Brent crude price allowed European margins to recover.

Graph 6.1: Refining margins, 2012-13



US product cracks narrowed across the barrel versus WTI crude, with high losses at the top and middle end of the barrel, as, in addition to the weaker product fundamentals, the WTI price remained stable, while other benchmark crudes fell more than \$6 during April.

The gasoline cracks lost the ground gained over the last two months due to poorer demand perspectives in the market and higher volumes from Europe exerting pressure on the United States East Coast (USEC).

Meanwhile, middle distillates have been losing ground due to weaker demand and reduced export opportunities to Europe, and the bearish sentiment led to the largest net short positions in Nymex heating oil futures, not seen since the beginning of 2007.

The margin for WTI dropped sharply by more than \$6 to average around \$18/b, while the margins for Light Louisiana Sweet (LLS) remained around the same level of the previous month of around \$10/b, as weaker product markets were offset by the drop in the LLS crude price.

The refinery margin for Arab Heavy crude on the US Gulf Coast (USGC) showed a slight gain of \$1 in April to average \$ 9.4/b.

Refining margins in Northwest Europe recovered some ground during April, with most support stemming from the bottom of the barrel. Weak product market fundamentals, due to lacklustre domestic demand, were more than offset by the drop in the Brent crude price, allowing the refinery margin for Brent crude in Northwest Europe to show a recovery of \$1 to average \$4.3/b in April.

Despite weaker domestic demand in Europe, some support came from the switch from winter to summer grade gasoline, fuelling a temporarily tight sentiment. Additionally, gasoline was supported by strong exports to the USEC and to Latin America, which, along with falling Brent crude prices allowed gasoline crack spreads to gain slightly.

The middle of the barrel remained relatively well balanced. Temporary signs of increasing demand in some countries and falling inventories offered some support.

Refinery margins in Asia continued losing ground as bearish developments in light and middle distillates outpaced a slight uptick at the bottom of the barrel, causing refinery margins in Singapore to drop almost \$3 to average \$1/b in April, the lowest level seen this year.

Product prices weakened on rising supplies, as increased production following the return of refineries from maintenance weighed on prices, causing the light distillate cracks to plunge to the lowest levels seen in several months, impacting the refinery margins in the region.

Refinery operations

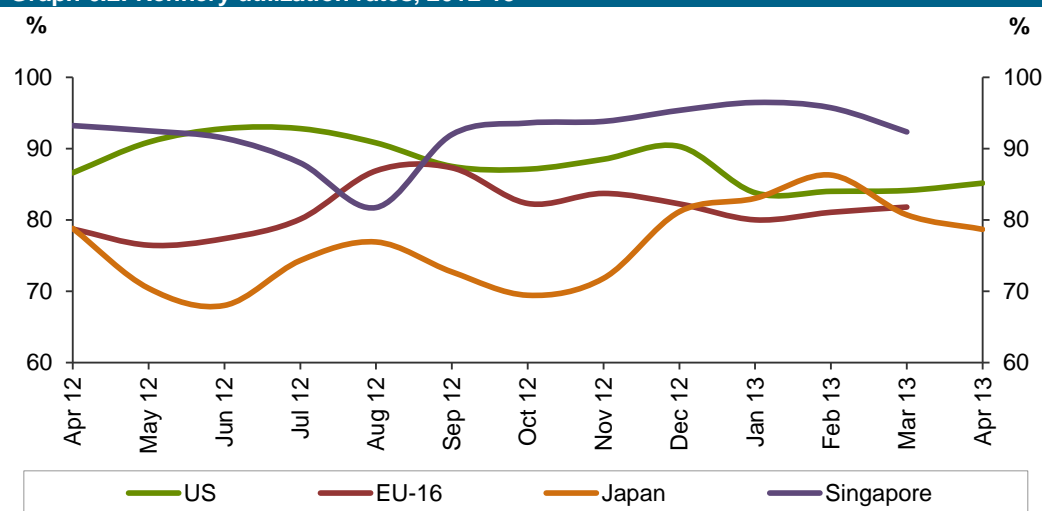
Asia refinery runs to be moderate

Refinery throughputs in the US continued to hold at moderated levels, with the maintenance season ending. Refineries were adjusting their throughputs and operational modes to the development in demand and inventory levels.

US refinery runs averaged 85% of capacity in April, rising 1.1 percentage point (pp) versus the previous month.

The margins for WTI have been falling during the last months and gasoline inventories remained above average at the start of the driving season. This situation could encourage refiners to keep utilization rates at moderated levels in order to reduce inventories in order to improve margins.

Graph 6.2: Refinery utilization rates, 2012-13



Demand in the **European** market has been hit by the region’s weak economic outlook, and increasing inflows into the region have kept the market well supplied, even during the spring maintenance period, causing the margins to remain low. This has caused refiners to continue their moderated **throughputs** and refinery utilisation averaged around 82% in March. Despite the end of the maintenance season, moderated throughput levels are expected to continue due to the weak light distillates market in the Atlantic Basin.

In **Asia**, several refineries are returning from their scheduled maintenance during March and April. Some refineries have moderated runs as demand has been weaker and distillate inventories have continued to rise. Chinese refineries have dropped runs to levels below 86% in March and April.

In Singapore, runs continued above 93%, while Japanese throughputs fell to 79% of capacity in April, with refiners continuing to boost gasoil yields and refineries in Osaka and Ichihara returning from maintenance.

WTI recovery
caused cracks to fall

US market

US gasoline demand stood at around 8.5 mb/d in April, a level similar to that of the previous month, but down by around 300 tb/d from the same month a year earlier.

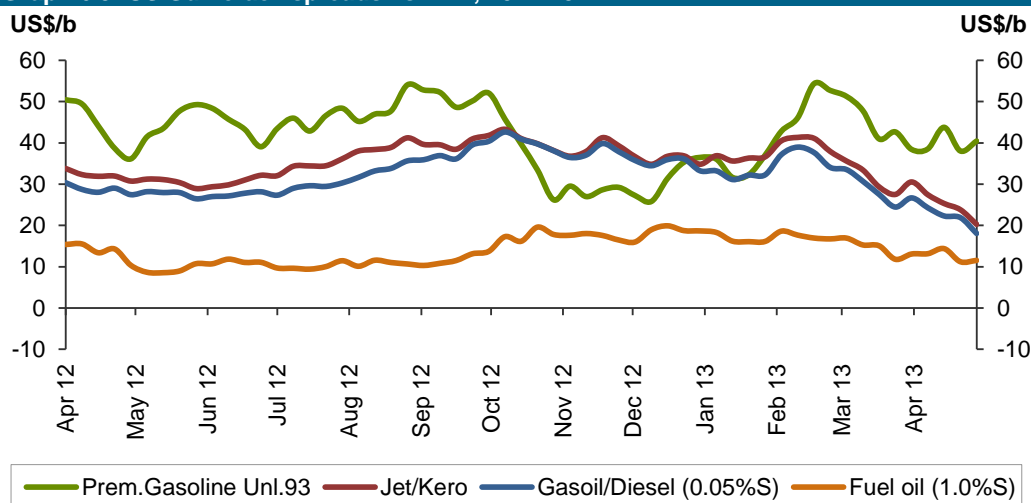
The gasoline cracks lost the ground achieved over the last two months due to poorer demand perspectives in the market and some pressure coming from higher volumes from Europe as the return of refineries from maintenance pushed utilization rates up.

Demand-side worries have also been hitting the market, as money managers consistently cut their net length on the Nymex RBOB futures contracts. Demand for winter-grade gasoline on the US East Coast (USEC) fell as stocks were run down to make room for summer-grade material arriving from Europe, with several cargoes being sent from Europe, exerting pressure on East Coast prices. Imports slowed later in the month with arbitrage narrowing, as the New York Harbor market lost its premium to Northwest Europe.

Prices for RINs – which are used to show compliance with biofuel mandates – remained firm, despite some volatility generated by the expected corn harvests resulting in a drop in physical ethanol in the Chicago market.

The gasoline crack lost \$7 during April to average \$40/b.

Graph 6.3: US Gulf crack spreads vs. WTI, 2012-13



Middle distillate demand stood at around 3.7 mb/d in April, around 100 tb/d lower than the previous month and around 20 tb/d below the same month a year earlier.

Middle distillate cracks continued to narrow over the last month due to a lack of demand and weaker export opportunities. Domestic demand, although recovering from the low level seen in 1Q13, remained below 4 mb/d.

Production rose on the back of higher refining runs and inventories reversed the falling trend showed during the 1Q13 to recover 3 mb in April, as imports contributed to a rebalancing at the middle of the barrel, with forward demand cover rising slightly while implied demand fell.

On the other hand, ultra-low sulphur diesel (ULSD) exports to Europe continued falling, amid lacklustre demand.

The cold spell that hit some parts of the country has boosted natural gas prices at Henry Hub to above \$4/mbtu, the highest level seen in months. Accordingly, money managers have increased their bullish bets on Nymex Henry Hub futures.

However, this bullish environment has not been shared by heating oil, which has not received sufficient support to provide any improvement in the middle distillates cracks. Nymex heating oil futures saw money managers piling in the biggest net short positions

since the beginning of 2007. Nymex heating oil futures have switched to a 10ppm sulphur grade from the high-sulphur specification starting with the May contract.

The gasoil crack on the USGC exhibited a sharp loss of \$7 to stand at around \$23/b in April. Although weak demand has impacted this performance, the relative stronger WTI crude prices this month also played a role in the narrowing crack.

At the **bottom of the barrel**, fuel oil cracks continued losing ground affected by weaker demand along with higher crude prices. Bunker demand continued to weaken due to thin shipping activity, causing heavy bunker fuel prices to fall.

Activity at the ports of New York and New Jersey has been decreasing during the last months with steeper declines recorded at the ports of Savannah and Los Angeles in March, respectively, according to data from the Georgia Port Authority and Port of Los Angeles.

While demand for bunker remained weak – impacting HSFO – LSFO received some support from the outage at the La Plata refinery, with Argentina looking for additional fuel oil to meet its impending power requirements. Another supporting factor was the increasing consumption of straight run fuel oil (SRFO).

Meanwhile, the New York fuel oil market weakened amid uncertainty surrounding power utility demand following the end of winter.

The fuel oil crack averaged \$13/b in April, losing more than \$2 from the previous month.

European market

Weak gasoline cracks saw a respite

Product market fundamentals remained weak in Europe due to lacklustre domestic demand. However, the drop in the Brent crude price allowed the margins to recover.

The **gasoline crack** in Northwest Europe managed to stop declining from the previous month, supported by strong exports to the US East Coast market amid Brent crude prices continuing to fall.

During April, European gasoline crack spreads showed a slightly gain as the market was supported by exports to the US, with several fixtures being sent to the USEC. However, as US demand has not been as strong as could be expected, exporters have started looking to Latin America, where demand has been stronger. Despite the weaker domestic demand in Europe, some support came from the switch from winter to summer grade gasoline, fuelling a temporary tight sentiment.

Meanwhile, limited support has come from exports to West Africa, with Nigeria's state fuel regulator having announced second quarter gasoline import permits.

The market also received pressure from inventories at the ARA hub increasing by 4% m-o-m to reach the highest level in years.

The gasoline crack spread against Brent crude slightly recovered by 60¢ from an average of \$14.2/b in March to around \$14.8/b in April.

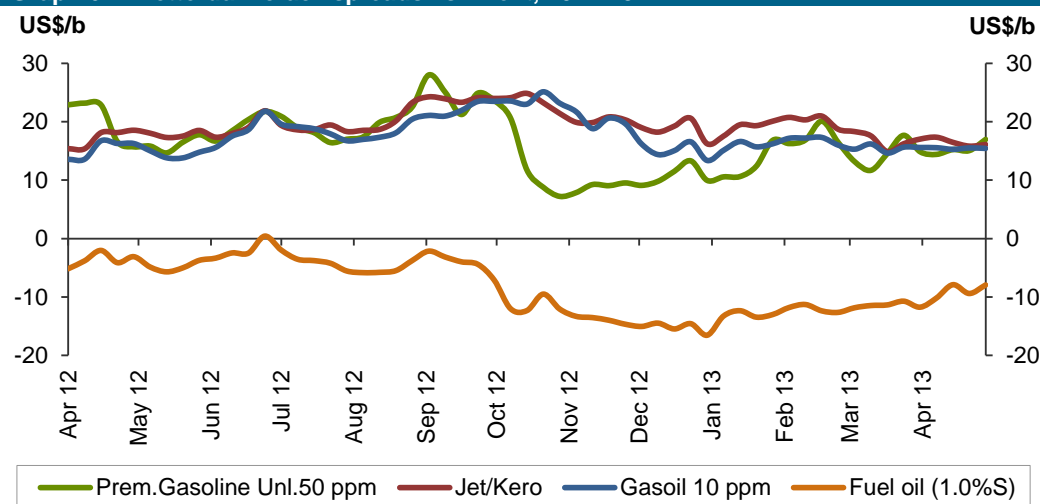
Northwest European naphtha continued weakening due to low demand and limited arbitrage to Asia-Pacific.

Demand from gasoline blenders remained subdued and had a knock-on effect on naphtha markets, pulling Northwest European values down.

The drop in **naphtha** prices lifted downstream ethylene and propylene margins for petrochemical producers, but this failed to stimulate additional demand as prices for alternative feedstock propane have also started to decline from seasonal winter highs. Naphtha prices fell as plentiful supply was exacerbated by a lack of arbitrage opportunities to Asia-Pacific, particularly from Northwest Europe.

Additionally the demand from petrochemical producers is expected to fall as spring maintenance begins in Europe and Asia-Pacific.

Graph 6.4: Rotterdam crack spreads vs. Brent, 2012-13



The **middle of the barrel** continued losing ground due to increasing supplies; despite temporary signs of increasing demand in some countries, and falling inventories, limiting losses.

Some support came from the steady demand from North Africa, causing the crack to show a temporary positive upside swing, which received additional support from the cold snap in Northwest Europe during the first week of April, extending the heating season somewhat longer than usual.

The Northwest Europe diesel crack has continued its downward trend, despite demand picking up in key markets such as Germany and France; however the crack continued to soften as supply outweighed demand in a poor domestic market.

Demand in the Mediterranean market has been hit by the region's weak economic outlook, with hydrocracking capacity expansions in Europe and Russia keeping the market well supplied, even during the spring maintenance period.

The gasoil crack spread against Brent crude at Rotterdam lost around 40¢ to average \$15.1/b in April.

At the **bottom of the barrel**, both fuel oil cracks – HSFO and LSFO – continued to rise on the back of Europe-to-Asia Pacific arbitrage, and mainly due to the decline in Brent crude prices. Both fuel oil grades showed an improvement over the month, as strong Asian markets were supporting European fuel oil prices. Western arrivals to Asia were up 1.8% in April compared to the previous month.

On the other hand, shipments of straight-run fuel oil (SRFO) to the US took some Russian supply out of the European market, which also received some support from the regional reduced supply of low-sulphur straight-run fuel oil.

The Northwest European fuel oil crack spread against Brent gained more than \$1 in April to stand at minus \$9.9/b.

Looking forward, exports to Asia could continue lending support with the approach of the air-conditioning season and demand picking up for electricity generation.

Product cracks continued falling amid seasonal weaker demand in Asia

Asian market

The Asian market continued bearish on the back of increasing supplies outpacing the regional seasonal weak demand, causing margins to fall, with the exception of fuel oil, which remained strong on the back of tight supply.

The **gasoline crack** continued its downward trend during April. The decline came on the back of increasing supplies of light distillates amid rising stocks in Singapore and regional demand remaining relatively weak.

The gasoline crack fell on thin demand and increasing supplies, with an Indian refiner selling spot cargoes for the first time this year. Some volumes from India were diverted to Asia-Pacific from the Middle East, where imports from the Mediterranean arrived.

The gasoline crack saw more pronounced losses. Although some buying interest was observed from Vietnam and South Korea, this failed to provide a boost for the gasoline crack, due to relatively high availability of the motor fuel in the region.

Despite the turnarounds at export-oriented refineries in Northeast Asia limiting availability, the expectations of higher supplies from Taiwan weighed on the market, while fresh demand from regional importers did little to lend support to the gasoline market.

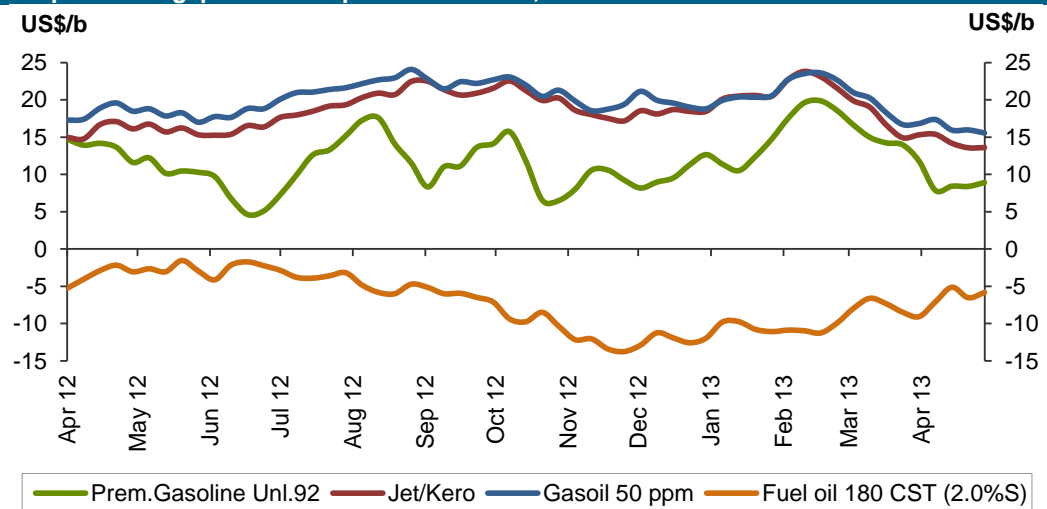
The gasoline crack spread against Dubai crude in Singapore lost more than \$6 to average \$9/b in April.

Light distillate **naphtha** continued falling and the crack moved further into the negative, falling from minus \$3.5/b to minus \$8/b, while ample supply in the region remained a concern for the market as sizeable arbitrage arrivals from the West are expected to retain pressure on the supply side.

The Asian naphtha market continues to struggle to find any positive supporting factors, with the prospect of growing supplies weighing heavily. The market currently expects the arrival of around one million tonnes of western naphtha in May while the spring refinery maintenance season is expected to continue easing in coming weeks.

This would be the fourth month in a row to see imports above one million tonnes as refiners in Europe, especially the Mediterranean, seek outlets for their excess supplies.

Graph 6.5: Singapore crack spreads vs. Dubai, 2012-13



At the **middle of the barrel**, the gasoil crack continued losing ground due to supply side pressure amid weak demand.

The Asian gasoil crack fell to a near twelve month low. Lacklustre demand in key importing countries, China's emergence as a significant exporter due to mainly slowing domestic diesel demand and ample supply availability in the region are seen as the key factors for this development.

The end of winter reduced demand for heating fuel in northeast Asia, causing gasoil production to rebound, with refiners continuing to boost gasoil yields, thus weighing on the middle distillates market. Another bearish factor has been the subdued demand from key import countries like Indonesia.

The gasoil crack losses were capped due to fundamentals – i.e. buying interest from Sri Lanka, Philippines and Vietnam – thus preventing the market from weakening further. In addition, the pick-up in exports from Singapore to Australia, Africa and the Middle East, where gasoil demand rises in the summer to meet higher power consumption, also helped support the market.

Looking ahead, further support may come from China where diesel prices were lowered at the end of last month, although this may be counterbalanced by increased regional output in line with the return of refineries from maintenance.

The gasoil crack spread in Singapore against Dubai fell \$3 to average \$16/b in April.

At the **bottom of the barrel**, fuel oil cracks strengthened mostly due to lower regional fuel oil production and a shortage in low viscosity blending components. These factors outweighed concerns about high arbitrage volumes expected from the West over the coming month, which have been estimated at around 4.7 million tonnes.

The shortage of low-viscosity fuel oil in the Asian market may be partly due to lower exports from the Middle East as countries in the region have seen a typical seasonal ramp-up in demand from the power sector.

Despite lower demand and the continuing steady inflow of residual fuel oil imports to the region, the limited supplies of cutter stock needed to blend cargoes into bunker fuel supported prices and this, along with the drop in crude prices, caused the fuel oil crack spread in Singapore against Dubai to gain more than 70¢ to average minus \$7/b in April.

Table 6.1: Refinery operations in selected OECD countries

	<i>Refinery throughput, mb/d</i>			<i>Refinery utilization, %</i>		
	Mar 13	Apr 13	Apr/Mar	Mar 13	Apr 13	Apr/Mar
US	14.60	14.85	0.25	84.13	85.15	1.03
France	1.11	-	-	63.35	-	-
Germany	1.81	-	-	80.68	-	-
Italy	1.32	-	-	60.08	-	-
UK	1.23	-	-	69.32	-	-
Euro-16	10.31	-	-	81.79	-	-
Japan	3.58	3.52	-0.06	80.70	78.67	-2.03

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

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

	Feb 13	Mar 13	Apr 13	Change Apr/Mar
US Gulf (Cargoes):				
Naphtha	132.73	124.84	102.15	-22.70
Premium gasoline (unleaded 93)	142.94	139.46	131.65	-7.82
Regular gasoline (unleaded 87)	126.78	124.87	118.53	-6.35
Jet/Kerosene	135.65	124.89	118.07	-6.82
Gasoil (0.05% S)	132.36	122.42	115.15	-7.27
Fuel oil (1.0% S)	105.70	102.44	98.17	-4.27
Fuel oil (3.0% S)	99.03	95.79	91.49	-4.30
Rotterdam (Barges FoB):				
Naphtha	109.76	100.70	90.19	-10.51
Premium gasoline (unleaded 10 ppm)	117.74	107.77	102.83	-4.94
Premium gasoline (unleaded 95)	133.87	122.54	116.92	-5.62
Jet/Kerosene	136.61	125.31	118.43	-6.88
Gasoil/Diesel (10 ppm)	133.30	123.85	117.31	-6.55
Fuel oil (1.0% S)	104.22	96.98	92.30	-4.69
Fuel oil (3.5% S)	99.85	95.40	92.19	-3.21
Mediterranean				
Naphtha	106.22	97.71	86.06	-11.65
Premium gasoline (50 ppm)	136.03	125.94	121.22	-4.72
Jet/Kerosene	130.54	119.87	111.68	-8.19
Gasoil/Diesel (50 ppm)	116.49	107.43	100.29	-7.14
Fuel oil (1.0% S)	103.91	96.65	91.24	-5.40
Fuel oil (3.5% S)	98.97	94.53	91.18	-3.35
Singapore (Cargoes):				
Naphtha	111.89	102.09	93.43	-8.66
Premium gasoline (unleaded 95)	132.98	124.00	113.95	-10.05
Regular gasoline (unleaded 92)	129.78	120.78	110.77	-10.00
Jet/Kerosene	133.77	123.50	116.20	-7.30
Gasoil/Diesel (50 ppm)	134.11	124.88	118.11	-6.77
Fuel oil (180 cst 2.0% S)	102.05	99.53	96.42	-3.11
Fuel oil (380 cst 3.5% S)	101.44	98.49	95.45	-3.04

Tanker Market

Global fixtures in April declined by 2.4% compared with the previous month to average 17.44 mb/d.

Global fixtures in April declined by 2.4% compared with the previous month to average 17.44 mb/d. According to preliminary data, **OPEC spot fixtures** were stable from last month's level to average 12.81 mb/d. Middle East-to-East fixtures reported a decline of 11.1% or 0.30 mb/d from the previous month while Middle East-to-West and fixtures from outside the Middle East both increased by 0.14 and 0.16 mb/d, respectively.

Preliminary data showed that **OPEC sailings** declined in April by 0.18 mb/d or 0.8% to average 23.64 mb/d. Sailing from the Middle East dropped by 0.16 mb/d to average 17.31 mb/d. April arrivals in all areas were seen lower on a monthly basis, with the greatest decline registered on arrivals in North America and Far East ports, which declined by 0.35 mb/d and 0.34 mb/d, respectively. Arrivals in Europe were down by 0.18 mb/d or 1.4% from the previous month while arrivals in West Asia declined by 0.1 mb/d.

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

	<u>Feb 13</u>	<u>Mar 13</u>	<u>Apr 13</u>	<i>Change Apr/Mar</i>
Spot Chartering				
All areas	16.79	17.87	17.44	-0.43
OPEC	12.30	12.81	12.81	0.00
Middle East/East	2.58	2.69	2.39	-0.30
Middle East/West	5.38	5.85	6.00	0.14
Outside Middle East	4.35	4.27	4.42	0.16
Sailings				
OPEC	23.55	23.82	23.64	-0.18
Middle East	17.24	17.47	17.31	-0.16
Arrivals				
North America	8.49	8.71	8.36	-0.35
Europe	12.35	12.44	12.26	-0.18
Far East	8.18	8.44	8.10	-0.34
West Asia	4.72	4.58	4.56	-0.01

Source: Oil movements and Lloyd's marine intelligence unit.

Freight rates declined for both dirty and clean tankers in April

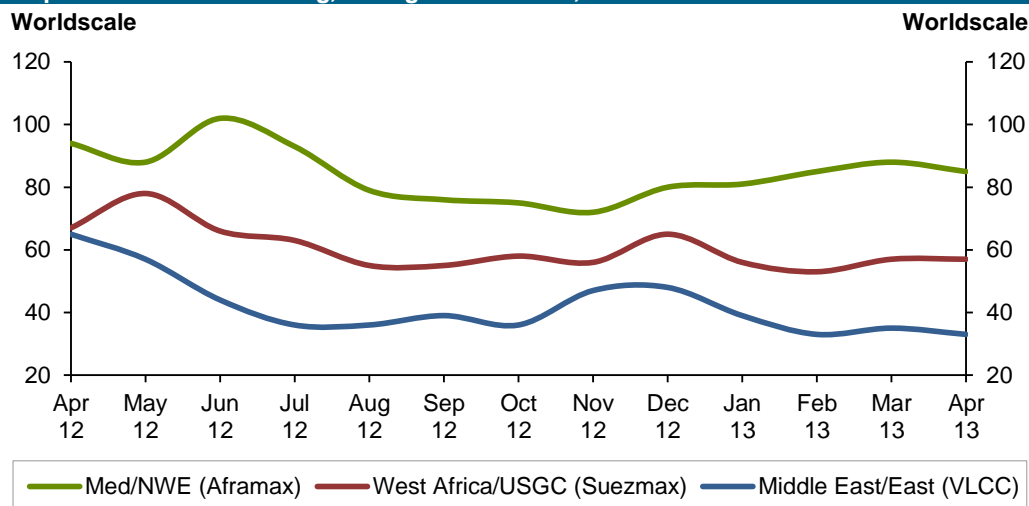
In the **tanker market**, the month of April was unkind to tanker owners in all sectors, as both clean and dirty vessels saw a decline in market activity and freight rates.

The decline in **freight rates** and market activity was present for the remainder of April fixtures and continued as the May requirement came along. No improvement has been registered in between, knowing that the month of May is usually quiet due mainly to the end of winter season demand and the start of refinery maintenance season.

In April, the decline in **dirty rates** was experienced on nearly all reported routes with the exception of Suezmax trading Northwest Europe to US East Coast (USEC)-US Gulf Coast (USGC), which increased by 6% from last month. Other routes reported flat, staying at the same low level seen a month earlier. On average, dirty spot freight rates declined by 4% from the previous month.

Meanwhile the situation was no better in the **clean tanker market** as both East and West of Suez freight rates dropped in monthly terms by 4% and 5%, respectively. The clean tanker market lacked activity in April, and no real driver was seen to support freight rates during the month.

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



Declining trend in VLCCs persists for April

In April, the downward pressure seen earlier on **VLCC** market and freight rates remained dominant. The declining trend persisted clearly on the Middle East-to-East and Middle East-to-West loadings as a result of low activity and limited tonnage demand. On a whole, April fixtures were found to be low in numbers.

The May requirement saw a slow start as charterers were comfortable to secure their equipment knowing that the tonnage supply remained ample at all times. Consequently, each inquiry received many offers as result of the prevailing situation. Moreover, the slow release of the May requirements was considered a tactic by charterers to put pressure on owners and maintain the low freight rates.

In a monthly comparison, spot freight rates for VLCCs operating from the Middle East-to-East declined by 6% to average 33 WS points while those from the Middle East-to-West ended the month flat to average 20 WS points, same as the average rates it registered in the previous two months. Even though West African tonnage demand saw a slight increase in its freight rates in mid-April as a result of a slightly tighter position list and an increased interest from Indian charterers for discharging at the east and west coast in India, the monthly average freight rates for VLCCs operating on the route from West Africa to East declined by 3% in May to average 35 WS points. In an annual comparison, average spot freight rates for all reported routes registered a worthy decline ranging between 45% and 53%.

Generally **Suezmax** freight rates remained low in April. Spot freight rates for vessels operating West Africa-to-USGC were flat to average 57 WS points as seen in the previous month. Despite some increase in activity seen occasionally during the month, spot freight rates were mostly flat as tonnage surplus remained the main factor affecting rates.

By the end of April, fewer vessels were available, and, after the month's requirement was completed, tonnage continued to build up for May loadings. As a result, the tonnage supply and demand imbalance continued to prevent rates from achieving any improvements.

On the other hand, spot freight rates for vessels operating on Northwest Europe-to-USEC-USGC saw an increase of 6% from a month earlier yet a drop of 25% from last year's level. This monthly gain came as result of a relatively active market and a balanced vessel situation to some degree as tonnage availability was tight for some dates. This minor increase registered on freight rates of the said routes is found to be the only positive performance registered in April among all reported routes.

Aframax freight rates declined on all reported routes in April with no exceptions. Spot freight rates at different areas followed the same scenario as the result of being under the influence of the same factors. The limited cargoes available versus the abundant tonnage supply gave no hope to owners to see any increase in rates in different

regions. Furthermore, no effect has been seen from weather disturbances or delays at the Turkish straits.

The Caribbean Aframax market had a quiet feel in general with softer rates as the amount of tonnage available exceeded the number of cargoes. Aframax Caribbean-to-USEC spot freight rates showed the greatest decline amid all reported routes as it fell by 17% from the previous month to average 88 WS points, while freight rates for vessels operating on the Mediterranean-to-Mediterranean and Mediterranean-to-Northwest Europe experienced lesser declines as it dropped by 3% and 6%, respectively, to average 85 WS and 83 WS points. The rate on the Indonesia-to-the-East route experienced the lowest decline amid other reported routes in April as it fell by 1% to average 71 WS points.

Table 7.2: Spot tanker crude freight rates, Worldscale

	Size 1,000 DWT	Feb 13	Mar 13	Apr 13	Change Apr/Mar
Crude					
Middle East/East	230-280	33	35	33	-2
Middle East/West	270-285	20	20	20	0
West Africa/East	260	34	36	35	-1
West Africa/US Gulf Coast	130-135	53	57	57	0
NW Europe/USEC-USGC	130-135	47	47	50	3
Indonesia/US West Coast	80-85	75	72	71	-1
Caribbean/US East Coast	80-85	96	106	88	-18
Mediterranean/Mediterranean	80-85	85	88	85	-3
Mediterranean/North-West Europe	80-85	85	88	83	-5

Source: Galbraith's tanker market report and Platts.

Freight rates for the clean tanker market seen lower in April

In April, the bearish sentiment seen in the dirty tanker market was mirrored in the **clean market**. Overall, freight rates were reported lower for all reported routes or stayed flat at the best. The enhanced sentiment seen in the past couple of months in the clean tanker market was short lived as rates fell this month. However, rates in almost all reported routes remain higher than seen one year earlier.

The first week of April showed improved activity seen mainly for MR vessels in Northwest Europe, which resulted in a shorter position list and thus a minor increase in freight rates in that region. However, the upward trend did not last for long as rates stabilized afterwards despite some delays seen in the US Gulf. Therefore, freight rates registered on NW Europe-to-USEC-USGC stood at 146 WS points as it ended the month flat.

In East of Suez, the continuous efforts of tanker owners to at least stabilize the rates were in vain as freight rates declined as a result of tonnage build-up and declining activity. Consequently, clean spot freight rates for tankers operating the Middle East-to-East and Singapore-to-East routes both declined by 8.5% and 0.6% to average 119 WS points and 157 WS points, respectively.

The situation in the Mediterranean was no better as activity was limited in the market, and the position list was lengthy even for prompt vessels. Therefore, freight rates seen on the Mediterranean-to-Mediterranean and Mediterranean-to-NW Europe routes declined by 8% and 7.5% to average 150 WS points and 160 WS points, respectively.

Graph 7.2: Monthly averages of clean spot freight rates

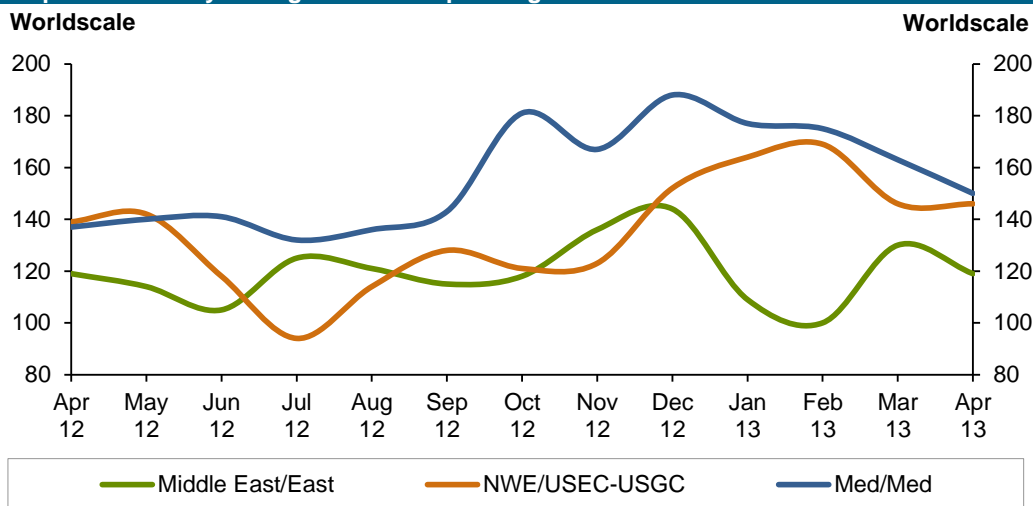


Table 7.3: Spot tanker product freight rates, Worldscale

Products	Size 1,000 DWT	Feb 13	Mar 13	Apr 13	Change Apr/Mar
Middle East/East	30-35	100	130	119	-11
Singapore/East	30-35	128	158	157	-1
NW Europe/USEC-USGC	33-37	169	146	146	0
Mediterranean/Mediterranean	30-35	175	163	150	-13
Mediterranean/North-West Europe	30-35	185	173	160	-13

Source: Galbraith's tanker market report and Platts.

Oil Trade

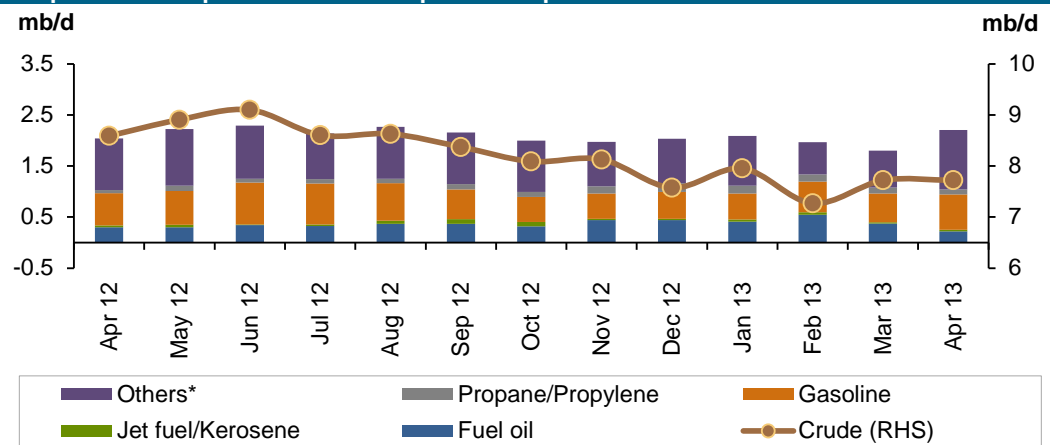
April US crude imports stable from last month

USA

According to preliminary data, **US crude oil imports** in April were almost stable compared with last month's level, averaging 7.7 mb/d, though they lost 870 tb/d or 10% over last year. Year-to-date, US crude oil imports averaged 7.7 mb/d, reflecting a decline of 948 tb/d or 11% from the same period last year. However, **US product imports** increased by 404 tb/d or 22% from last month, rising on an annual basis by 164 tb/d or 8% from last year.

Looking into **US product exports**, April saw a decline by 109 tb/d or 4% m-o-m, with a greater y-o-y decline registered of 383 tb/d or 12%. Consequentially, **US net imports increased in April to average 7 mb/d**, reflecting a monthly gain of 511 tb/d, but an annual drop of 743 tb/d.

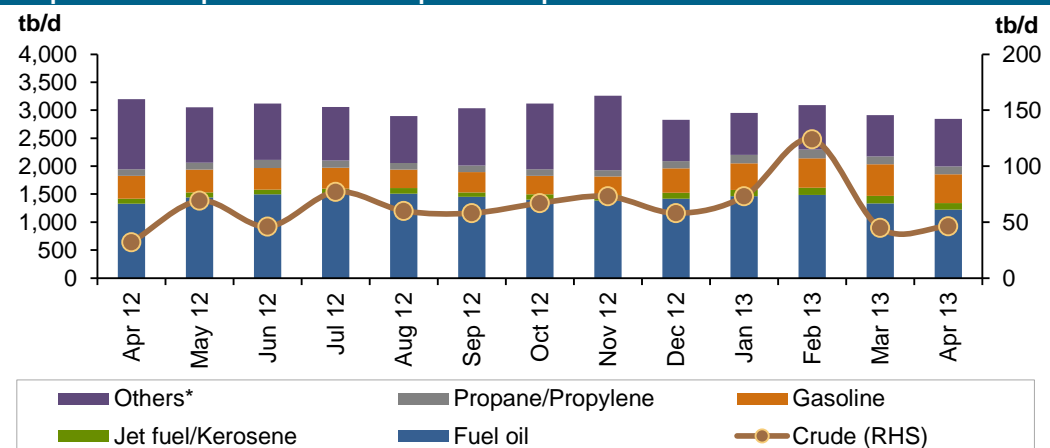
Graph 8.1: US imports of crude and petroleum products



*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.

Canada continued to be the **top crude supplier** to the US in February, averaging 2.8 mb/d, 118 tb/d or 4 % higher than the previous month. Canada accounted for 39% of total US crude imports. Saudi Arabia was the second largest supplier, with imports also up over the previous month. The country accounted for 14% of total US crude imports, with monthly imports higher by 61 tb/d or 6% over January. Mexico was third, with a share of 12%, though monthly volumes were lower by 135 tb/d or 13% over the previous month. Venezuela was the fourth biggest supplier with a share of 8%, averaging 579 tb/d, 33% lower than one month ago. In an annual comparison, Canada increased its export volumes to the US, while the volumes from all other top suppliers were found to be lower than the same period a year ago, ranging from 13% to 34%.

Graph 8.2: US exports of crude and petroleum products



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

Crude imports from **OPEC Member Countries** declined from the previous month by 645 tb/d or 18% to average 2.9 mb/d in February. OPEC Member Countries accounted for 40.5% of imports. US product imports from OPEC Member Countries decreased by 111 tb/d or 43% over the previous month to average 148 tb/d; they accounted for 7.5% of total US product imports.

Canada and Russia maintained their position as **top product suppliers** to the US, holding shares of 31% and 20%, respectively. Canada decreased its product exports to the US by 136 tb/d or 18%, while Russia increased its quantities by 101 tb/d or 34%. The Netherlands was the third largest product supplier to the US in February, with an unchanged share of 6% from one month earlier.

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

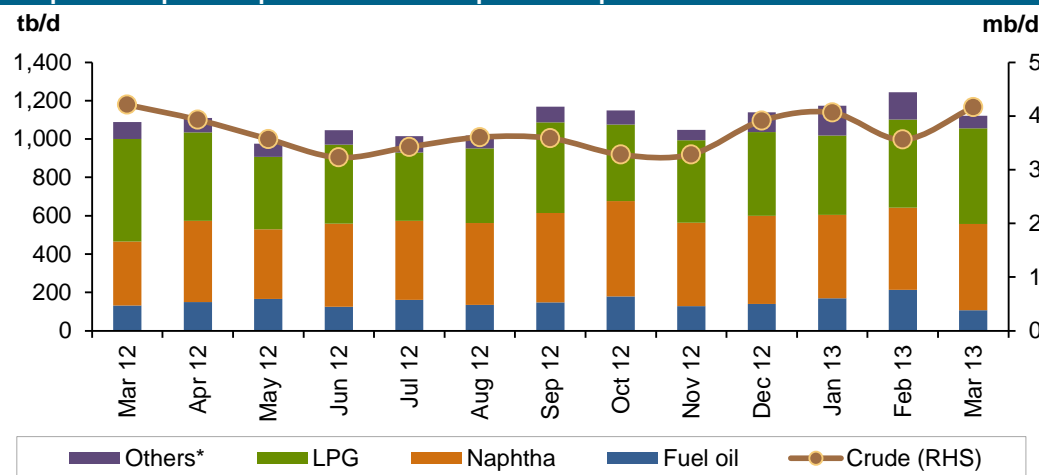
	Feb 13	Mar 13	Apr 13	Change Apr/Mar
Crude oil	7,146	7,676	7,674	-2
Total products	-1,154	-1,154	-641	513
Total crude and products	6,387	6,522	7,034	512

Japan

In March, Japan saw an increase in its **crude oil imports** by 604 tb/d or 17% to average 4.2 mb/d m-o-m. This monthly gain was a rebound after last month's decline. An annual comparison showed crude imports dropping by 45 tb/d or 1.1%. Regarding crude supplier share, Saudi Arabia, the United Arab Emirates and Qatar all maintained their top position, as in previous months; share-wise they accounted for 20%, 19% and 13%, respectively.

Japan crude imports rebounded in March from the previous month

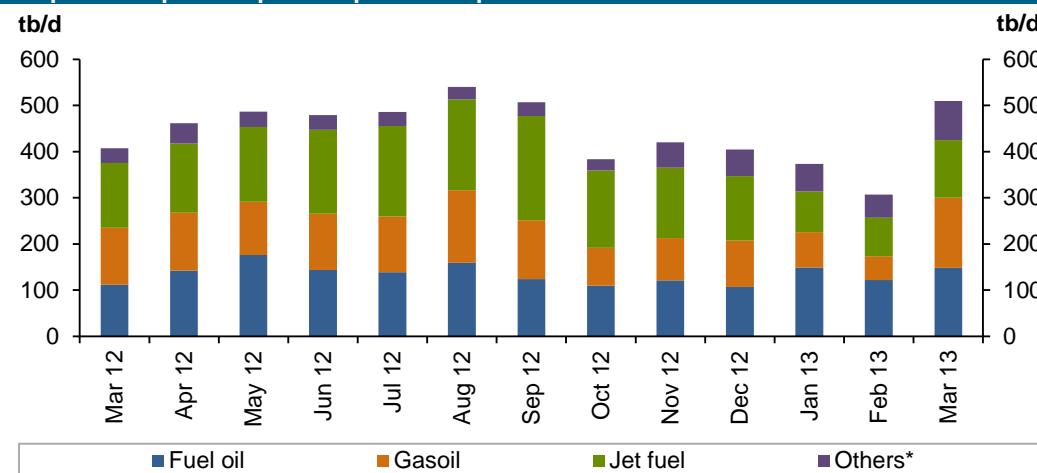
Graph 8.3: Japan's imports of crude and petroleum products



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

Product imports declined in March on a monthly basis by 164 tb/d or 21%, yet increased over the previous year by 67 tb/d or 12% to average 622 tb/d; this represents the lowest level since November 2012. Product sales in Japan decreased as a result of warmer than usual weather conditions.

Graph 8.4: Japan's exports of petroleum products



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

Japan's **product exports** saw a significant increase of 200 tb/d or 66% from the previous month and 96 tb/d or 23% from the same month one year earlier. On a year-to-date comparison, product exports were 32 tb/d or 9% higher, resulting in a **net trade import increase of 240 tb/d or 6% to average 4.3 mb/d**. However, a drop of 73 tb/d or 2% is reflected on an annual basis.

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

	Jan 13	Feb 13	Mar 13	Change Mar/Feb
Crude oil	4,063	3,561	4,165	604
Total products	392	482	118	-364
Total crude and products	4,455	4,043	4,283	240

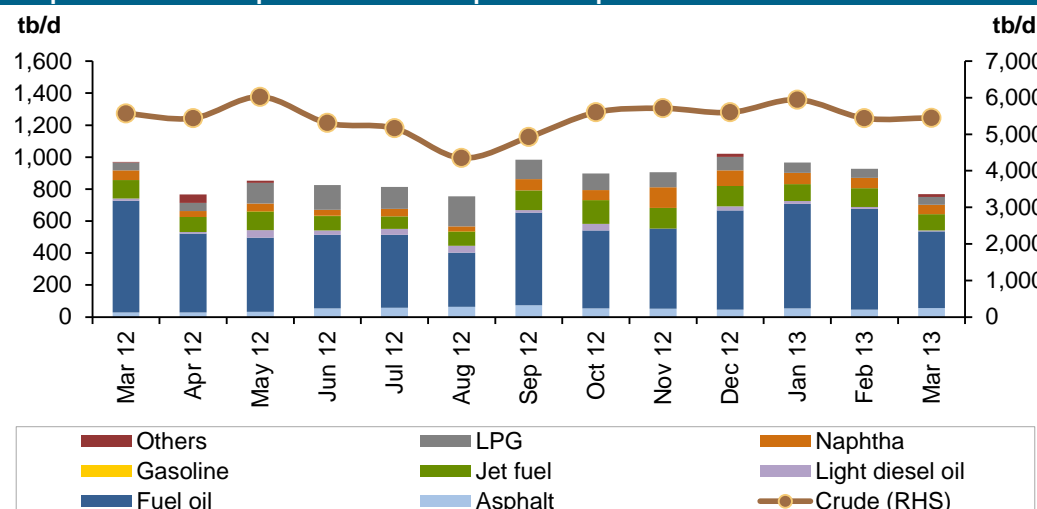
China

China's crude imports averaged 5.5 mb/d

China's **crude oil imports** rose slightly in March by 10 tb/d or 0.2% to average 5.5 mb/d, while refineries registered lower crude runs. In an annual comparison, crude imports dropped by 119 tb/d or 2% from last year's level. On a year-to-date basis, the numbers show a marginal decline of 65 tb/d or 1.2%.

Saudi Arabia, Angola and Iraq were first, second and third **biggest suppliers** of crude in that order, accounting for 19%, 15% and 9% of total Chinese imports. In a monthly comparison, volumes imported from Saudi Arabia and Angola were nearly stable, while Iraq increased its exports to China by 16.5%. Russia and Iran were fourth and fifth largest suppliers to China in March, with shares of 8% and 7.5%, respectively.

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



Chinese **product imports** declined by 152 tb/d or 16.5% from the previous month to average 768 tb/d, the lowest seen since August 2012, also representing a drop of 195 tb/d or 20% y-o-y.

However, Chinese **product exports** saw a monthly gain of 54 tb/d or 9%, and an annual increase of 146 tb/d or 29% from the previous year's level. Chinese product exports reached their highest point since September 2011, as a result of newly added refining capacity and slower growth in domestic demand. Accordingly, **China's net oil trade declined by 235 tb/d or 4%** on a monthly basis, while on annual basis the decline was greater at 476 tb/d or 8%.

Graph 8.6: China's exports of crude and products

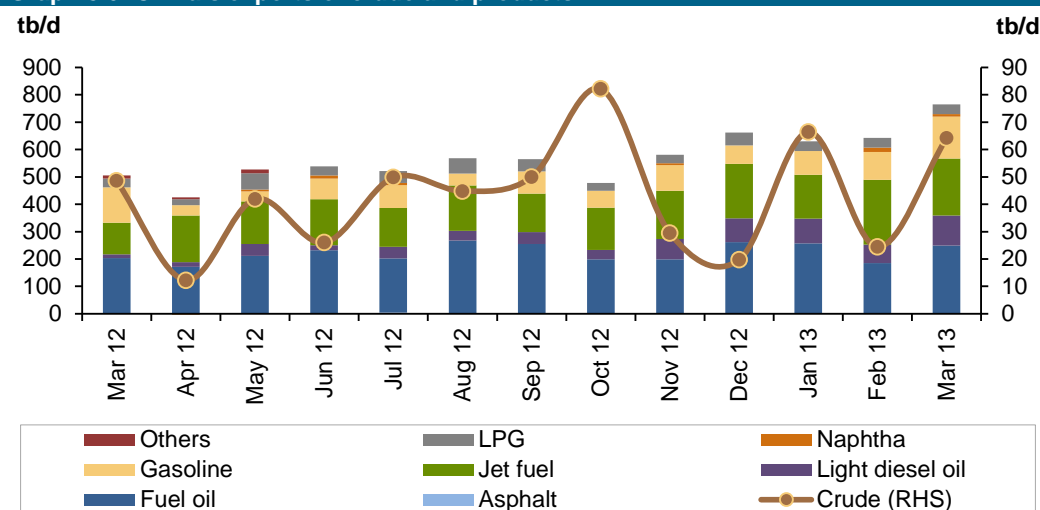


Table 8.3: China's crude and product net imports, tb/d

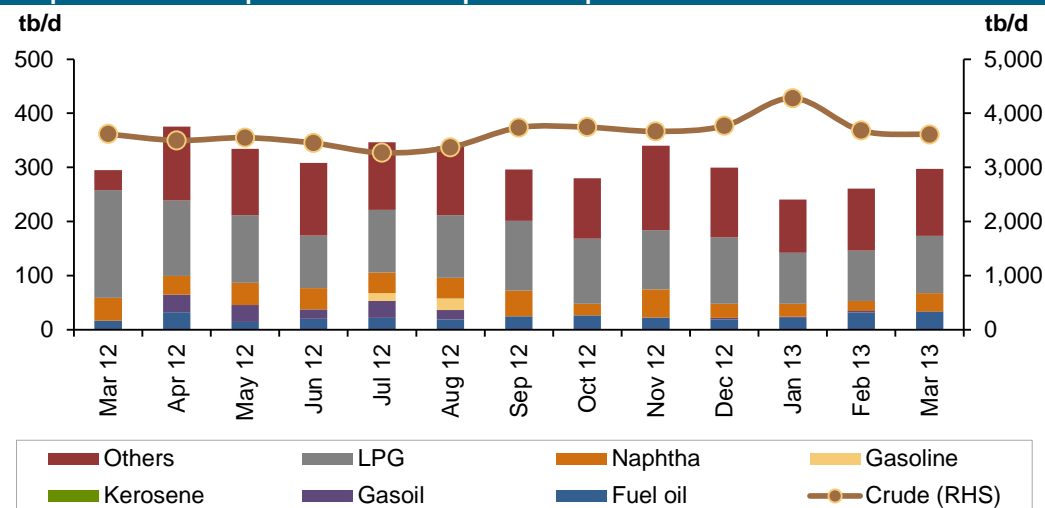
	<u>Jan 13</u>	<u>Feb 13</u>	<u>Mar 13</u>	<u>Change Mar/Feb</u>
Crude oil	5,880	5,416	5,386	-30
Total products	364	322	117	-205
Total crude and products	6,244	5,738	5,503	-235

India

India's crude oil imports dropped in March to 3.6 mb/d

India's **crude oil imports** dropped in March both on a monthly and on an annual basis. The drop is equal to 75 tb/d or 2% m-o-m, while y-o-y it saw a slight decline of 9 tb/d or 0.3%, to average 3.60 mb/d. The monthly imports in March were the lowest since August 2012.

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



India's **product imports** increased in March by 36 tb/d or 14% to average 297 tb/d, representing a marginal annual increase of 2 tb/d or 0.8%. The monthly gain came as a result of increased imported volumes of naphtha and LPG, while no diesel imports were observed in March.

Indian **product exports** reflect a gain both in monthly and annual comparisons. In March, Indian product exports increased by 4% to average 1.4 mb/d, while they are expected to be equal at 76 tb/d or 5.5% from a year earlier. All products saw an increase in exported volumes during the month, however the largest increase was seen in fuel oil and diesel, which rose by 9% and 18%, respectively. Thus, **Indian net trade imports declined by 99 tb/d or 4% m-o-m**, while y-o-y they declined by 83 tb/d or 3% to average 2.4 mb/d.

Graph 8.8: India's exports of petroleum products

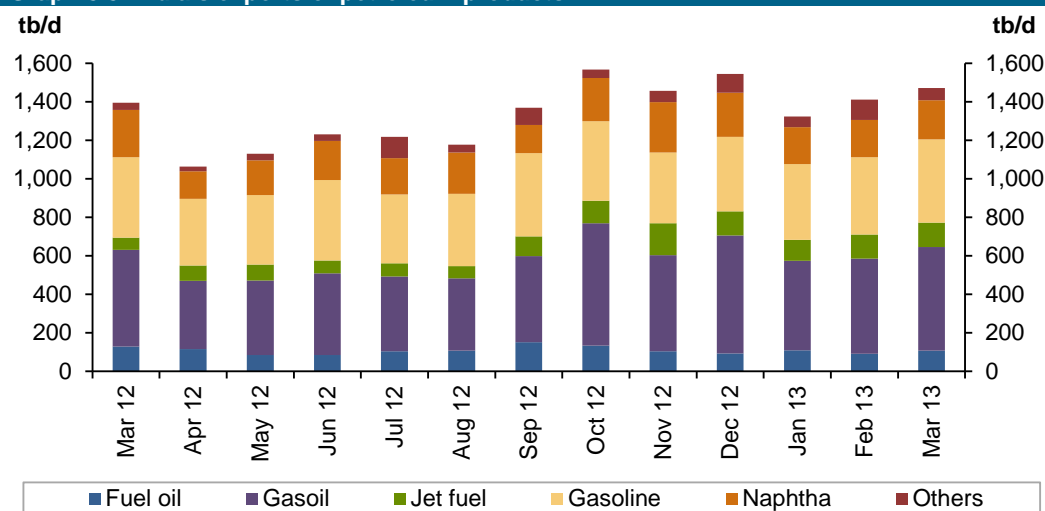


Table 8.4: India's crude and product net imports, tb/d

	<u>Jan 13</u>	<u>Feb 13</u>	<u>Mar 13</u>	<u>Change Mar/Feb</u>
Crude oil	4,280	3,681	3,606	-75
Total products	-1,083	-1,150	-1,174	-24
Total crude and products	3,196	2,530	2,432	-99

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

FSU

In March, FSU crude oil exports declined to 6.4 mb/d

In March, **total crude oil exports** from the FSU declined by 57 tb/d or 0.9% to average 6.4 mb/d. Crude exports through the Russian pipeline increased by 62 tb/d or 1.5% to average 4.1 mb/d, while crude exports from the Baltics increased by 135 tb/d or 9%. Exports from the Black Sea, Druzhba and Kozmino declined in March by 2.5%, 2% and 4%, respectively. Flows from Russian rail, Russian-to-Far East and Kazakh rail saw a gain of 9%, 10% and 11%, respectively.

FSU **total product exports** declined in March by 274 tb/d or 8.5% to average 2.9 mb/d. Product exports of gasoline and jet fuel increased by 11% and 41%, while exports of naphtha, gasoil, fuel oil and VGO dropped in a range of between 2% to 26% over February.

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

	<u>2011</u>	<u>2012</u>	<u>3Q12</u>	<u>4Q12</u>	<u>1Q13</u>	<u>Feb 12</u>	<u>Mar 12*</u>
Crude							
Russian pipeline							
Black Sea	918	858	932	774	769	831	810
Baltic	1,511	1,747	1,611	1,665	1,574	1,476	1,611
Druzhba	1,170	1,079	1,006	980	991	1,026	1,005
Kozmino	309	331	315	380	438	451	432
Total	4,224	4,322	4,174	4,100	4,086	4,102	4,164
Other routes							
Russian rail	173	107	87	195	196	214	234
Russian-Far East	283	258	249	242	243	226	249
Kazakh rail	158	97	78	165	183	198	220
Vadandey	82	66	57	104	103	106	101
Kaliningrad	23	20	22	17	18	21	11
CPC	685	656	654	614	672	707	680
BTC	695	654	638	590	601	611	567
Kenkiyak-Alashankou	222	210	213	252	240	243	237
Caspian	170	173	198	166	189	227	155
Total crude exports	6,558	6,466	6,292	6,280	6,349	6,457	6,400
Products							
Gasoline	162	130	113	124	141	129	143
Naphtha	259	313	307	345	339	380	280
Jet	10	9	12	10	14	17	24
Gasoil	773	791	734	787	977	1,030	1,013
Fuel oil	1,305	1,416	1,415	1,314	1,339	1,412	1,279
VGO	211	250	281	234	219	240	197
Total	2,721	2,909	2,863	2,814	3,028	3,208	2,934
Total oil exports	9,279	9,375	9,154	9,095	9,377	9,665	9,334

* Preliminary

Totals may not add due to independent rounding.

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

Stock Movements

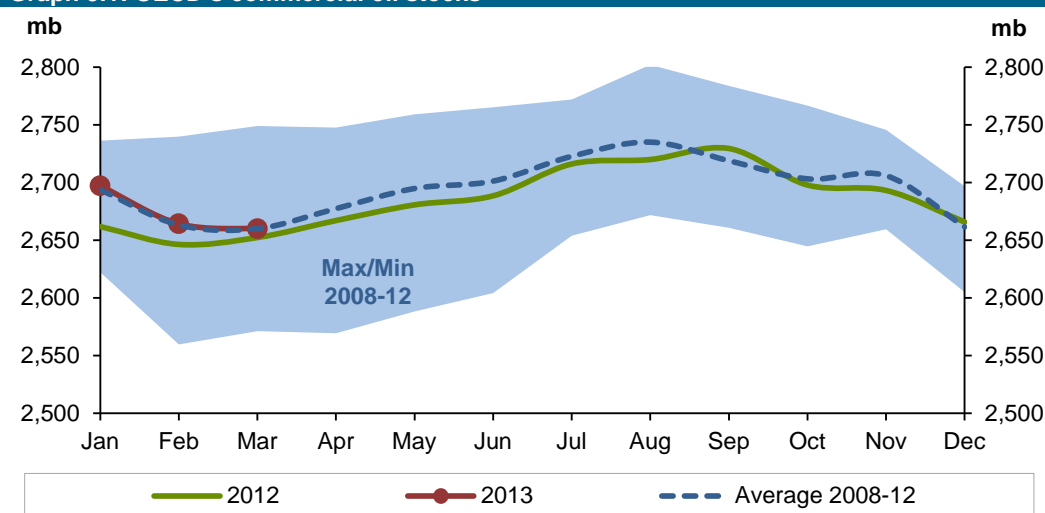
Preliminary data for March shows that total OECD commercial oil stocks fell by 4.2 mb

OECD

Preliminary data for March shows that **total OECD commercial oil stocks** fell by 4.2 mb following the sharp decline in the previous month to stand at 2,660 mb. At this level, inventories were in line with the five-year average, but showed a surplus of 7.7 mb with a year ago at the same time. Within the components, crude saw a build of 13.8 mb, while product stocks declined by 18.0 mb.

At 1,289 mb, **OECD crude commercial stocks** stood at a comfortable level, with a surplus of 11.2 mb over the same time a year earlier and nearly 19 mb above the five-year average. In contrast, **product stocks** ended the month of March at 1,372 mb, remaining tight and showing a deficit of 3.5 mb with the previous year and 18.6 mb with the seasonal norm. Within the OECD regions, OECD America and Europe declined by 12.4 mb and 3.9 mb, respectively, while OECD Asia-Pacific stocks rose by 12.4 mb.

Graph 9.1: OECD's commercial oil stocks



Despite the fall, **OECD Americas'** inventories remained at a healthy level in March, up 7.1 mb from the same month a year earlier and 44.5 mb higher than the seasonal norm. This surplus was mainly driven by crude stocks, which stood at 20.0 mb above a year ago and nearly 50 mb above the five-year average. It should be noted that at the end of March, US commercial stocks reached the highest level since July 1990 to stand at 388.6 mb. The comfortable level of US crude commercial stocks came mainly on the back of higher domestic crude supply reaching more than 7.0 mb/d.

In contrast to the healthy level of crude stocks, OECD America's product inventories indicated a deficit of 12.9 mb with a year ago and 4.5 mb with the seasonal average. The tightness came mainly from middle distillates, which were reduced due to the increase in exports to Latin America. At the end of the first quarter of 2013, middle distillates were 23 mb below the seasonal norm, while gasoline stocks started to gain, indicating a minor surplus of 4.0 mb.

OECD Europe's inventories fell for the second consecutive month, ending the month of March at 924 mb. At this level, they indicated a deficit of 53.7 mb with the five-year average and stood around 20.2 mb lower than at the same period the year before. The shortfall with the seasonal average is attributed to both crude and products, which were down by 28 mb and 26 mb, respectively. The deficit with the previous year was divided between crude and products, showing a deficit of around 10 mb each.

Commercial inventories in **OECD Asia-Pacific** in March reversed the previous month's fall and rose considerably by 12.1 mb to end the month at nearly 400 mb. As this level, they were 20.8 mb above a year ago at the same period and stood 9.2 mb higher than the last five-year average. The total of the build came from crude, which increased by

12.4 mb, while product stocks declined slightly by 0.3 mb.

Higher Japanese crude imports contributed to the sharp build in Asia-Pacific crude inventories. Despite this build, they still stood at 3.3 mb below the five-year average, but switched the shortfall with the year ago of 18.8% in the previous month to a surplus of 1.7%. On the product side, OECD Asia-Pacific total product inventories indicated a surplus of 19 mb over a year ago and stood 12 mb higher than the five-year average.

Although OECD commercial stocks fell in March, **days of forward cover** rose by 0.2 days to end the month at 59.2 days, reflecting mainly low seasonal demand in the second quarter of this year. At this level, inventories were 1.1 days above the same period last year and 1.7 days more than the latest five-year average.

It should be noted that despite the lower absolute level of OECD Europe's commercial stocks, the days of forward cover stood at around 70 days in March, reflecting the weakness of demand in this region. The current level of days of forward cover is not expected to decline over the coming quarters, as OECD consumption is projected to decrease in each of the following three quarters by at least 300,000 b/d, while non-OPEC supply is forecast to increase by more than 1.0 mb/d over the same period.

Table 9.1: OECD's commercial stocks, mb

	<u>Jan 13</u>	<u>Feb 13</u>	<u>Mar 13</u>	<u>Change</u> <u>Mar 13/Feb 13</u>	<u>Mar 12</u>
Crude oil	1,279	1,275	1,289	13.8	1,277
Products	1,419	1,390	1,372	-18.0	1,375
Total	2,697	2,664	2,660	-4.2	2,652
Days of forward cover	59.0	59.2	59.1	-0.1	58.2

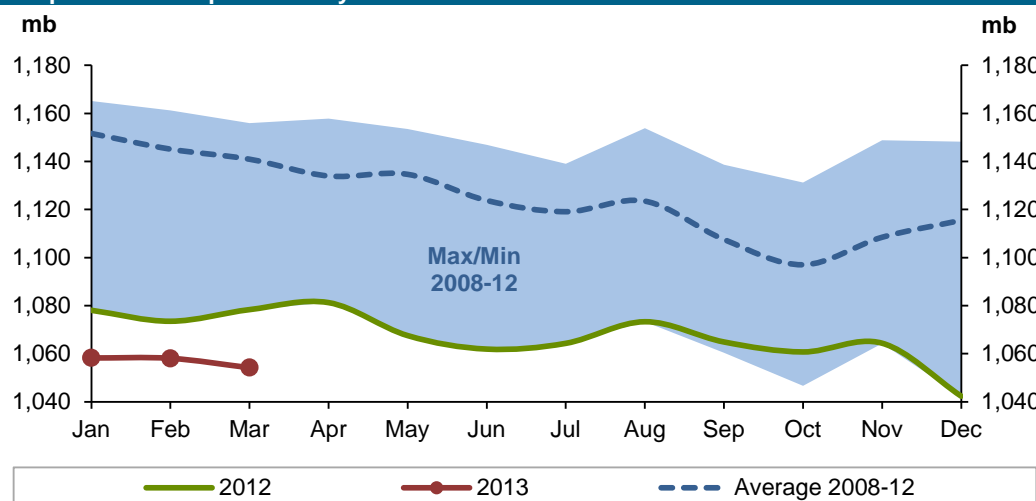
EU plus Norway

The latest available data for March shows that European stocks fell by 3.9 mb for the second consecutive month

The latest available data for March shows that **total European stocks** fell for the second consecutive month, down by 3.9 mb, to stand at 1,054.2 mb. With this build, stocks ended the month 24.2 mb, or 2.2%, below the same time last year and 74.5 mb, or 6.6%, below the latest five-year average. The total stock-draw came from both crude and products, which declined by 2.3 mb and 1.6 mb, respectively.

European crude inventories fell in March ending the month at 449.3 mb. This represents a deficit of 3.2 mb or 0.7% above a year earlier, and 25.8 mb or 5.4% below the latest five-year average. The fall in crude oil stocks came on higher refinery throughputs, which rose by around 90,000 b/d to average 10.3 mb/d, but they are also 175,000 b/d higher than a year ago at the same time. In March, European refiners were running at 82 percentage points (pp), higher than the previous month and around 5.4 pp above the same time a year ago.

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



Product stocks in Europe fell in March, reversing the build of the last two months and ending the month at 604.9 mb. This level represented a deficit of 20.9 mb or 3.3% with the same period last year and constituted a shortfall of 48.0 mb or 7.4% with the five-year average. Within products, and with the exception of naphtha, all other products witnessed draws.

Gasoline stocks fell by 1.4 mb for the second consecutive month, finishing March at 110.4 mb. Despite this drop, inventories were 3.1 mb or 2.9% higher than the year before and 9.7 mb or 8.1% below the seasonal average. Refinery maintenance amid higher gasoline imports to the US contributed to the fall in gasoline stocks.

Distillate stocks fell slightly by 0.4 mb, reversing the build of the last three months and ending March at 380.3 mb. At this level, they were 9.0 mb or 2.3% lower than a year ago and 10.9 mb or 2.8% below the seasonal average. The stock-draw mainly reflected lower refinery output as weak regional demand and higher imports from Russia limited further stock-draws in distillate inventories.

Residual fuel oil stocks also dropped in March by 0.8 mb, reversing the stock-build of the last month to stand at 85.2 mb. With the drop, they were 7.3 mb or 7.8% lower than the year before and 21.9 mb or 20.4% below the seasonal average. The fall in residual fuel oil came on the back of higher exports to Singapore driven by higher demand in the region.

In contrast to the fall in gasoline, middle distillates and residual fuel oil stocks, **naphtha stocks** saw a build of 0.9 mb to end March at 29.0 mb, leaving them 7.7 mb or 21% below the same period last year and 5.5 mb or 16.0% lower than the five-year average.

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

	<u>Jan 13</u>	<u>Feb 13</u>	<u>Mar 13</u>	<u>Change</u> <u>Mar 13/Feb 13</u>	<u>Mar 12</u>
Crude oil	455.3	451.6	449.3	-2.3	452.6
Gasoline	112.5	111.8	110.4	-1.4	107.4
Naphtha	29.0	28.2	29.0	0.9	36.7
Middle distillates	377.3	380.6	380.3	-0.4	389.3
Fuel oils	84.2	85.9	85.2	-0.8	92.4
Total products	602.9	606.5	604.9	-1.6	625.8
Total	1,058.2	1,058.1	1,054.2	-3.9	1,078.4

Source: Argus and Euroilstock.

USA

Preliminary data for April shows that US total commercial oil stocks rose by 19.9 mb, reversing the drop of the previous two months

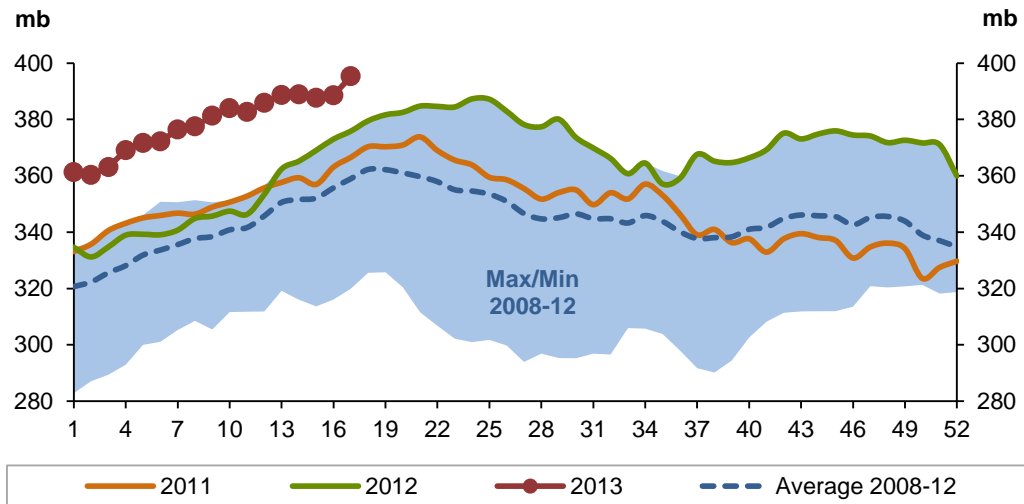
Preliminary data for April shows that **US total commercial oil stocks** rose by 19.9 mb, reversing the drop of the last two months to end the month at 1,096.2 mb. With this build, the inventories widened the surplus with last year at the same time to 14.9 mb and stood at a comfortable level, indicating a gain of 42 mb or 4.0% over the five-year average. The stock-build was attributed to both products and crude as they increased by 12.2 mb and 6.7 mb, respectively.

US commercial crude stocks rose in April for the fourth consecutive month, accumulating a more than 30.0 mb build since the beginning of this year. At 395.3 mb, crude oil commercial stocks finished the month at the highest level since the EIA began collecting data in 1982. At this level, they are 18.4 mb or 4.9% above a year ago and 35.8 mb or 9.9% higher than the five-year average.

The total of the build in US crude stocks came during the week ending 26 April driven by the jump in crude oil imports versus the previous week, which increased by more than 600,000 b/d to reach 8.1 mb/d. A continued increase in domestic production, remaining above 7.0 mb/d, also contributed to the build in US commercial crude stocks. Increased refinery inputs in April have limited further builds in crude stocks. Indeed, US crude oil refinery inputs rose by almost 250,000 b/d to average 14.8 mb/d, around 350,000 b/d higher than the same period last year. In April, US refineries operated at around 85.2%, which was 1.1 pp higher than March and 0.4 pp more than last year at the same time.

In contrast to the increase in national crude oil stocks, inventories in **Cushing** showed a decline of 1.4 mb during the week ending 26 April from the previous week to end the month at 49.8 mb, but leaving the stock overhang some 20% above last year's level.

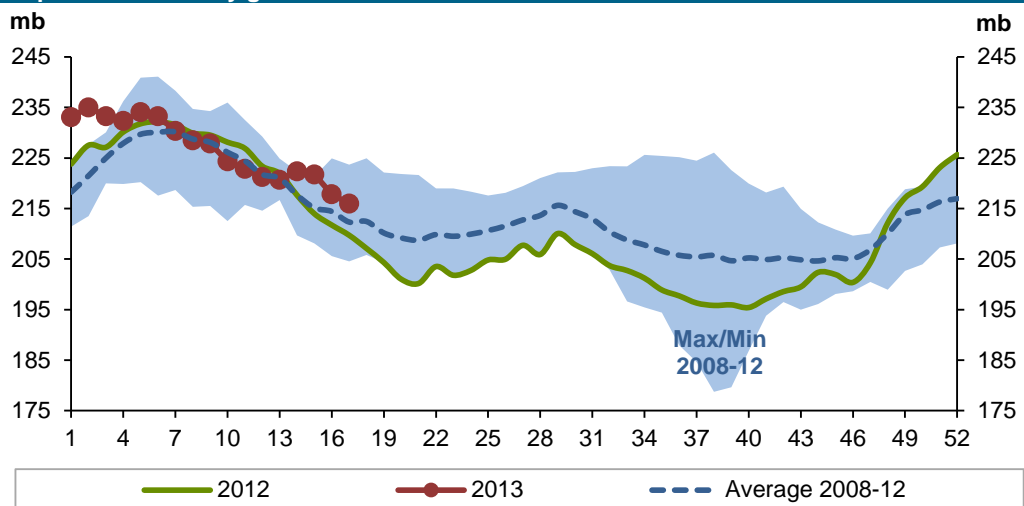
Graph 9.3: US weekly commercial crude oil stocks



Total product stocks saw a build in April, reversing the drop of the last three months, and ended the month at 700.9 mb. With this build, product inventories narrowed the deficit with a year ago to 3.5 mb from 25.2 mb a month earlier. This build also helped to switch the deficit with the five-year average in the previous month to a surplus of 0.9%. With the exception of gasoline, all other products saw a build, with the bulk of the increase coming from unfinished products, distillates and residual fuel oil.

Gasoline stocks fell by 4.7 mb for the third consecutive month to end April at 216.0 mb. Despite this draw, gasoline stocks stood at 5.5 mb or 2.6% above a year ago, and 4.7 mb or 2.2% higher than the seasonal average. The decline in gasoline stocks was driven mainly by relatively higher gasoline demand as output remained almost unchanged. The slight decrease in gasoline imports also contributed to the stock-draw.

Graph 9.4: US weekly gasoline stocks



Distillate stocks rose by 2.8 mb, reversing the drop of last three months and ending the month of April at 115.8 mb. Despite this stock-build, distillate stocks remained at 8.8 mb or 7.1% below the year-ago level and 18.1 mb or 13.5% lower than the seasonal norm. Higher imports were behind the build in distillate stocks as domestic production and demand offset each other. Indeed, the four weekly averages of April show that distillate demand fell by around 100,000 b/d, while output increased by almost the same amount.

Residual fuel oil stocks rose by 2.7 mb to finish the month of April at 38.5 mb. At this level, they were 4.1 mb or 12.0% higher than a year ago, and indicated a slight surplus of 0.3 mb or 0.8% over the seasonal norm. Jet fuel stocks also increased by 0.5 mb in April to stand at 40.0 mb, but were still 0.4 mb or 0.9% lower than the same month a year ago, and 1.2 mb or 3.0% below the latest five-year average.

Table 9.3: US onland commercial petroleum stocks, mb

	<u>Jan 13</u>	<u>Feb 13</u>	<u>Mar 13</u>	<u>Change</u> <u>Mar 13/Feb 13</u>	<u>Mar 12</u>
Crude oil	377.7	384.9	388.6	3.7	368.1
Gasoline	234.5	226.8	220.7	-6.2	218.8
Distillate fuel	131.3	121.8	113.0	-8.8	133.8
Residual fuel oil	35.4	37.8	35.8	-1.9	36.3
Jet fuel	39.7	40.5	39.4	-1.1	39.1
Total	1,116.7	1,094.8	1,077.3	-17.5	1,081.9
SPR	695.8	696.0	696.0	0.0	696.0

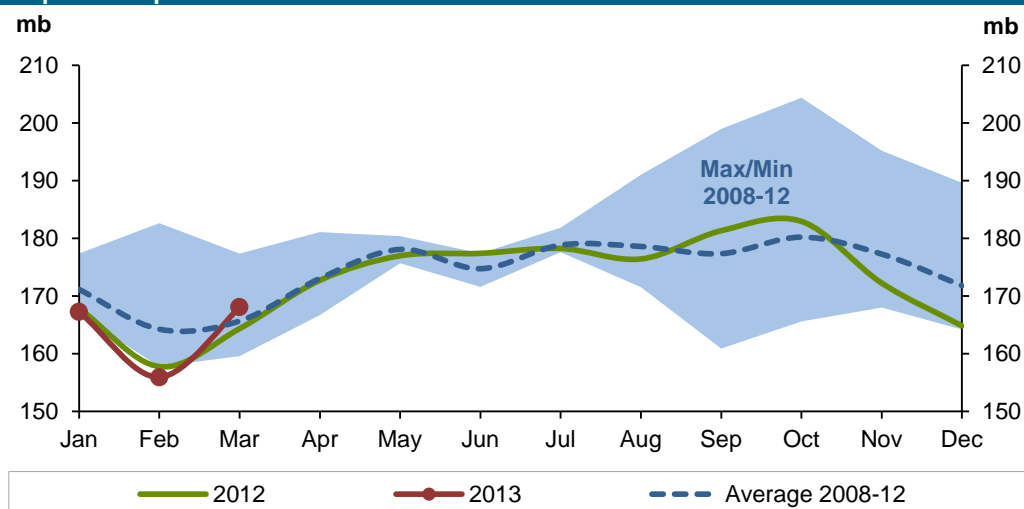
Source: US Department of Energy's Energy Information Administration.

Japan

In March, total commercial oil stocks in Japan reversed the drop of the last month with a gain of 12.2 mb

In March, total **commercial oil stocks** in Japan reversed the drop of the last month and rose considerably by 12.2 mb to end the month at 168.1 mb. As this level, they are 3.7 mb or 2.3% above a year ago at the same period, and stood 2.4 mb or 1.5% higher than the last five-year average. The total of the build came from crude which increased by 12.4 mb, while product stocks abated the stock-draw and declined slightly by 0.3 mb.

Graph 9.5: Japan's commercial oil stocks



Japanese commercial crude oil stocks saw a significant build of 12.4 mb in March, reversing the stock-draw in February, and ended the month at 98.7 mb, the highest level in four months. Despite this build, they still stood at 2.2 mb below a year ago at the same time, but switched the deficit with the five-year average of 9.2% to a surplus of 1.4%.

The build in crude oil stocks was driven by higher crude oil imports as they increased by around 604,000 b/d or 17.0% from the previous month to average 4.2 mb/d, but still represent a deficit of 1.1% compared with the previous year at the same time. The build in Japanese crude oil stocks was also driven by the decline in crude throughput, which fell by around 200,000 b/d or 5.4%, averaging 3.8 mb/d. At this level, stocks are 2.7% lower than March 2012. Japanese's refiners were running at 80.0%, around 4.5 pp lower than in the previous month and 1.8 pp above the same period last year. Direct crude burning in power plants declined in March by 29.4% to end the month at around 185,068 b/d, 34% less than the same period last year.

On the product side, **Japan's total product inventories** saw a slight drop of 0.3 mb following a build during the last two months and ended March at 69.4 mb. At this level,

they indicated a surplus of 5.9 mb or 9.3% over a year ago and 1.1 mb or 1.6% higher than the five-year average. The decline in total imports in March was behind the fall in product stocks; higher exports also contributed to the decline of total product stocks. However, lower Japanese total oil product sales, which fell by 11.3% from a month earlier, limited a further product stock-draw. Within products, the picture was mixed: gasoline and naphtha increased, while distillate and residual fuel oil stocks witnessed a draw.

Gasoline stocks saw a build for three consecutive months, ending March at 13.9 mb. At this level, they were 0.4 mb or 2.7% lower than a year ago, and 0.4 mb or 2.8% below the five-year average. The build in gasoline stocks came on the back of higher gasoline output, which increased by 11.4%. An increase of 13% in imports also contributed to the build in gasoline stocks. However, higher domestic sales limited a further build.

Naphtha stocks also rose by 0.8 mb to finish March at 10.9 mb, which represents a surplus of 2.4 mb or 29% above a year ago, but they remained 0.4 mb or 3.8% below the seasonal norm. The build in naphtha stocks came from higher production as they declined by 3.0%. An increase of 14% in imports also contributed to this build, however higher domestic sales limited a further increase.

Distillate stocks fell by 1.0 mb, ending the month of March at 28.2 mb, but were still 2.9 mb or 11.4% higher than a year ago and 1.8 mb or 6.7% above the seasonal average. Within distillate components, jet fuel went up, while kerosene and gasoil experienced a drop. Jet fuel stocks rose by 25% due to an almost 60% increase in output. Gasoil stocks fell by 3.6% on the back of higher domestic sales, which increased by 6.5%. Kerosene stocks also fell by 12.5%, reflecting lower output outpacing decline in domestic sales.

Total **residual fuel oil** stocks went down by 0.4 mb to end the month of March at 16.4 mb. At this level, they were 6.2% above a year ago and 0.9% higher than the five-year average. Fuel oil A inventories rose by 11.5%, while fuel oil B.C fell by almost 10%. The increase in fuel oil A stocks could be attributed to the fall of 8.8% in domestic sales. Fuel oil B.C stocks saw a drop of 9.2%, driven by the decline of imports by almost half from the previous month.

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

	<u>Jan 13</u>	<u>Feb 13</u>	<u>Mar 13</u>	<u>Change</u> <u>Mar 13/Feb 13</u>	<u>Mar 12</u>
Crude oil	99.2	86.2	98.7	12.4	100.8
Gasoline	13.2	13.6	13.9	0.4	14.3
Naphtha	9.6	10.1	10.9	0.8	8.4
Middle distillates	29.0	29.2	28.2	-1.0	25.3
Residual fuel oil	16.2	16.9	16.4	-0.4	15.5
Total products	68.0	69.7	69.4	-0.3	63.5
Total**	167.3	155.9	168.1	12.2	164.4

* At end of month.

** Includes crude oil and main products only.

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

At the end of March, product stocks in Singapore fell by 4.5 mb for the second consecutive month

Singapore and Amsterdam-Rotterdam-Antwerp (ARA)

At the end of March, **product stocks in Singapore** fell by 4.5 mb for the second consecutive month, ending at 37.8 mb, the lowest level since September 2012. With this stock-draw, they indicated a deficit of 5.0 mb or 11.6% with a year ago.

Within products, light distillates saw a build, while fuel oil stocks witnessed a sharp drop, followed by a minor decline in middle distillates.

Residual fuel oil fell by 4.9 mb, reversing the build of last two months and ending the month of March at 16.7 mb. This fall in fuel oil inventories has widened the deficit with a year ago to 6.2 mb from only 0.2 mb a month earlier. This stock-draw is mainly driven by lower imports from the Middle East as the refinery maintenance season in the region limited its supply. Arrivals from the West were also lower, contributing to the fall in residual fuel oil inventories.

Middle distillate stocks fell slightly by 0.1 mb in March, ending the month at 10.1 mb. Despite this stock-draw, they represented a surplus of 0.5 mb or 5.5% over a year ago at the same period. The fall in middle distillate stocks is attributed to higher demand, mainly from Vietnam and Indonesia.

In contrast, **light distillate stocks** rose by 0.6 mb after experiencing a fall last month and ended March at 11.1 mb, leaving them at 0.6 mb or 0.7% above the same period last year. This stock-build came mainly from higher imports outpacing exports to Singapore.

Product stocks in Amsterdam-Rotterdam-Antwerp (ARA) rose by 1.7 mb in March for the fourth consecutive month

Product stocks in **Amsterdam-Rotterdam-Antwerp (ARA)** rose by 1.7 mb in March for the fourth consecutive month to stand at 35.3 mb. With this stock-build, product stocks stood at 0.7 mb or 2.1% higher than last year at the same time.

Within products, the picture was mixed; gasoline and jet fuel experienced a drop, while gasoil, naphtha and fuel oil witnessed a build.

Gasoline fell by 0.6 mb, reversing the build of the last three months and ending March at 8.2 mb. At this level, gasoline stocks stood at 2.6 mb higher than last year at the same time. The stock-draw came from a lower level of arrival to the ARA hub outpacing the departure toward the UK, USA and Mexico. Jet fuel stocks also saw a drop of 0.2 mb and ended the month of March at 2.4 mb, remaining almost 27% less than the same level last year.

In contrast, **fuel oil stocks** rose by 1.4 mb, reversing the fall of the last two months and ending March at 5.6 mb, which is 0.7 mb or 13.3% higher than a year ago at the same period. Gasoil stocks saw a build of 0.8 mb in March after remaining flat in February. At 18.2 mb, ARA gasoline stocks stood at the highest level since March 2012, but they are still 1.6 mb or 8.3% less than they a year ago at the same period. In March, naphtha stocks rose by 0.2 mb from the previous month and ended the month at 0.9 mb, but they remained in line with the level of last year at the same time.

Balance of Supply and Demand

Required OPEC crude in 2012 estimated at 30.2 mb/d, almost unchanged from 2011

Estimate for 2012

Demand for OPEC crude for 2012 has been revised up by 0.1 mb/d to stand at 30.2 mb/d. This was due to the downward revision to OPEC NGLs following receipt of the latest data, as global oil demand and non-OPEC supply remain unchanged. Within the quarters, 1Q12 and 4Q12 have been revised up by 0.1 mb/d and 0.3 mb/d respectively, while 2Q12 and 3Q12 were unchanged from the previous assessment.

In quarterly terms, 1Q12 is estimated to decline by 0.3 mb/d from the same quarter last year; 2Q12 is estimated to increase by 0.4 mb/d, while 3Q12 and 4Q12 are seen declining by 0.2 mb/d and 0.1 mb/d, respectively.

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

	<u>2011</u>	<u>1Q12</u>	<u>2Q12</u>	<u>3Q12</u>	<u>4Q12</u>	<u>2012</u>
(a) World oil demand	88.09	88.06	88.05	89.25	90.10	88.87
Non-OPEC supply	52.45	53.16	52.61	52.37	53.77	52.98
OPEC NGLs and non-conventionals	5.37	5.52	5.72	5.79	5.58	5.66
(b) Total supply excluding OPEC crude	57.81	58.69	58.33	58.16	59.35	58.63
Difference (a-b)	30.27	29.37	29.71	31.08	30.75	30.23
OPEC crude oil production	29.78	31.21	31.48	31.22	30.63	31.13
Balance	-0.49	1.84	1.77	0.13	-0.12	0.90

Totals may not add up due to independent rounding.

Forecast for 2013

Demand for OPEC crude in 2013 has been revised up by 0.1 mb/d from the previous report to stand at 29.8 mb/d. This represents a decline of 0.4 mb/d, compared to a year earlier. The upward revision came from the adjustment in non-OPEC supply and OPEC NGLs, as demand remained unchanged. Within quarters, 1Q13 remained unchanged, while the other three quarters saw an upward revision of 0.1 mb/d.

In quarterly terms, 1Q13 is estimated to fall by 0.1 mb/d versus the same quarter last year; while 2Q13 and 3Q13 are expected to see negative growth of 0.6 mb/d and 0.7 mb/d, respectively. 4Q13 is forecast to drop by 0.2 mb/d versus the same quarter last year.

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>
(a) World oil demand	88.87	88.95	88.66	90.14	90.87	89.66
Non-OPEC supply	52.98	53.85	53.68	53.88	54.41	53.96
OPEC NGLs and non-conventionals	5.66	5.83	5.85	5.88	5.92	5.87
(b) Total supply excluding OPEC crude	58.63	59.67	59.52	59.76	60.32	59.82
Difference (a-b)	30.23	29.28	29.14	30.38	30.55	29.84
OPEC crude oil production	31.13	30.22				
Balance	0.90	0.95				

Totals may not add up due to independent rounding.

Graph 10.1: Balance of supply and demand

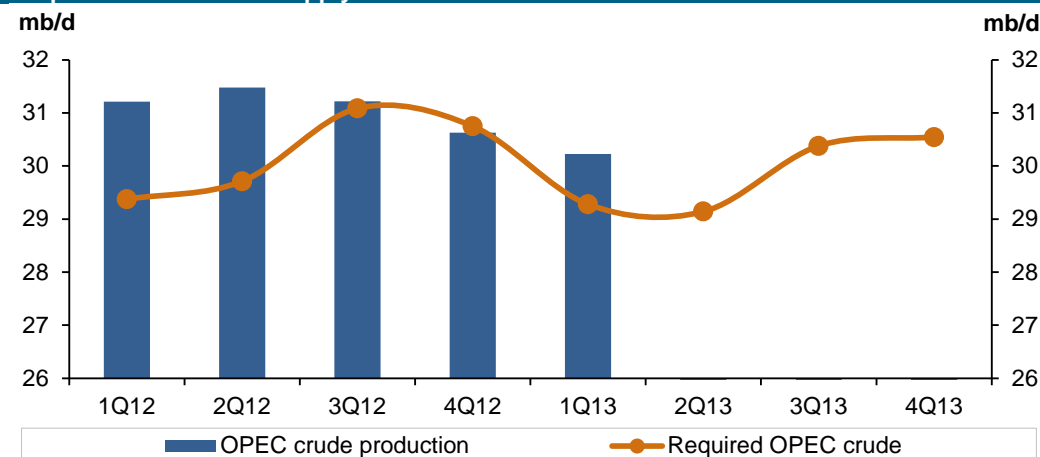


Table 10.3: World oil demand/supply balance, mb/d

	2007	2008	2009	2010	2011	2012	2012	3012	4012	2012	1013	2013	3013	4013	2013
World demand															
OECD	50.1	48.3	46.3	46.9	46.5	46.3	45.6	46.0	46.3	46.1	45.9	45.0	45.7	46.0	45.7
Americas	25.8	24.5	23.7	24.1	24.1	23.5	23.8	23.9	23.9	23.8	23.6	23.7	23.9	23.9	23.8
Europe	15.6	15.5	14.7	14.7	14.3	13.7	13.8	13.9	13.8	13.8	13.4	13.5	13.6	13.4	13.5
Asia Pacific	8.7	8.3	8.0	8.1	8.1	9.1	8.0	8.2	8.7	8.5	8.9	7.9	8.2	8.7	8.4
DCs	24.2	25.0	25.6	26.5	27.2	27.4	27.9	28.5	28.2	28.0	28.3	28.6	29.3	28.9	28.8
FSU	4.0	4.1	4.0	4.2	4.3	4.3	4.1	4.5	4.8	4.4	4.3	4.2	4.6	4.8	4.5
Other Europe	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.7	0.6
China	7.6	8.0	8.3	9.0	9.4	9.5	9.9	9.5	10.1	9.7	9.8	10.2	9.9	10.4	10.1
(a) Total world demand	86.6	86.1	84.8	87.2	88.1	88.1	88.0	89.2	90.1	88.9	88.9	88.7	90.1	90.9	89.7
Non-OPEC supply															
OECD	20.0	19.6	19.8	20.0	20.2	21.1	20.9	20.6	21.6	21.0	21.7	21.6	21.5	21.7	21.6
Americas	14.3	14.0	14.4	15.0	15.6	16.5	16.4	16.5	17.5	16.7	17.6	17.5	17.5	17.6	17.6
Europe	5.2	4.9	4.7	4.4	4.1	4.1	3.9	3.5	3.6	3.8	3.7	3.5	3.4	3.6	3.6
Asia Pacific	0.6	0.6	0.6	0.7	0.6	0.5	0.5	0.6	0.5	0.5	0.4	0.5	0.5	0.5	0.5
DCs	11.9	12.2	12.4	12.7	12.6	12.3	12.0	12.0	12.2	12.1	12.1	12.2	12.5	12.6	12.3
FSU	12.5	12.6	13.0	13.2	13.2	13.4	13.2	13.2	13.4	13.3	13.5	13.3	13.4	13.5	13.4
Other Europe	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
China	3.8	3.8	3.8	4.1	4.1	4.1	4.2	4.2	4.3	4.2	4.2	4.2	4.2	4.3	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	52.3	52.4	53.2	52.6	52.4	53.8	53.0	53.8	53.7	53.9	54.4	54.0
OPEC NGLs + non-conventional oils	3.9	4.1	4.3	5.0	5.4	5.5	5.7	5.8	5.6	5.7	5.8	5.8	5.9	5.9	5.9
(b) Total non-OPEC supply and OPEC NGLs	54.4	54.5	55.5	57.3	57.8	58.7	58.3	58.2	59.4	58.6	59.7	59.5	59.8	60.3	59.8
OPEC crude oil production (secondary sources)	30.2	31.3	28.8	29.2	29.8	31.2	31.5	31.2	30.6	31.1	30.2				
Total supply	84.6	85.8	84.2	86.6	87.6	89.9	89.8	89.4	90.0	89.8	89.9				
Balance (stock change and miscellaneous)	-2.0	-0.3	-0.6	-0.6	-0.5	1.8	1.8	0.1	-0.1	0.9	0.9				
OECD closing stock levels (mb)															
Commercial	2,582	2,697	2,663	2,678	2,605	2,652	2,689	2,730	2,666	2,666	2,660				
SPR	1,528	1,530	1,568	1,565	1,536	1,536	1,539	1,542	1,547	1,547	1,554				
Total	4,110	4,227	4,231	4,243	4,141	4,188	4,228	4,272	4,213	4,213	4,214				
Oil-on-water	948	969	919	871	825	787	812	797	801	801	804				
Days of forward consumption in OECD															
Commercial onland stocks	53	58	57	58	57	58	58	59	58	58	59				
SPR	32	33	33	34	33	34	33	33	34	34	35				
Total	85	91	90	91	90	92	92	92	91	92	94				
Memo items															
FSU net exports	8.5	8.5	9.0	9.1	9.0	9.1	9.1	8.7	8.6	8.9	9.1	9.2	8.8	8.6	8.9
(a) - (b)	32.2	31.6	29.3	29.9	30.3	29.4	29.7	31.1	30.7	30.2	29.3	29.1	30.4	30.5	29.8

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
World demand															
OECD	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-0.1	-0.1
Americas	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Europe	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-0.1	-
Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	-
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-	-	-	-	-	-	-0.1	-	-	-	-
(a) Total world demand	-	-	-	-	-	-	-	-	-	-	-0.08	-	-	-	-
Non-OPEC supply															
OECD	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	-
Americas	-	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	0.1	0.1
Europe	-	-	-	-	-	-	-	-	-	-	-	-0.1	-0.1	-0.1	-
Asia Pacific	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DCs	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FSU	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Europe	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
China	-	-	-	-	-0.1	-	-	-	-	-	-	-	-	-	-
Processing gains	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total non-OPEC supply	-	-	-	-	-	-	-	-	0.1	-	-	-	-	-	-
Total non-OPEC supply growth	-	-	-	-	-	-	-	-	0.07	-	0.06	-	-	-	-
OEPEC NGLs + non-conventionals	-	-	-	-	-	-	-	-	-0.4	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
(b) Total non-OPEC supply and OPEC NGLs	-	-	-	-	-	-0.1	-	-	-0.3	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
OEPEC crude oil production (secondary sources)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total supply	-	-	-	-	-	-0.1	-	-	-0.3	-0.1	-0.1	-	-	-	-
Balance (stock change and miscellaneous)	-	-	-	-	-	-0.1	-	-	-0.3	-0.1	-	-	-	-	-
OECD closing stock levels (mb)															
Commercial	-	-	1	-	-	-4	-2	-1	-	-	-	-	-	-	-
SPR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	1	-	-	-4	-2	-1	-	-	-	-	-	-	-
Oil-on-water	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Days of forward consumption in OECD															
Commercial onland stocks	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SPR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Memo items															
FSU net exports	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
(a) - (b)	-	-	-	-	-	0.1	-	-	0.3	0.1	-	-0.1	-0.1	0.1	0.1

* This compares Table 10.3 in this issue of the MOMR with Table 10.3 in the April 2013 issue.

This table shows only where changes have occurred.

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

	2008	2009	2010	2011	2012	1009	2009	3009	4009	1010	2010	3010	4010	1011	2011	3011	4011	1012	2012	3012	4012	1013	
Closing stock levels, mb																							
OECD onland commercial	2,697	2,663	2,678	2,605	2,666	2,749	2,765	2,784	2,663	2,682	2,763	2,751	2,678	2,646	2,685	2,669	2,605	2,652	2,689	2,730	2,666	2,660	
Americas	1,278	1,285	1,329	1,308	1,362	1,329	1,364	1,369	1,285	1,312	1,367	1,396	1,329	1,298	1,338	1,341	1,308	1,330	1,359	1,382	1,362	1,337	
Europe	1,012	995	959	906	907	1,013	1,000	996	995	986	994	957	959	962	941	916	906	944	916	920	907	924	
Asia Pacific	406	383	390	390	397	408	401	419	383	384	402	399	390	386	406	413	390	378	413	427	397	399	
OECD SPR	1,530	1,568	1,565	1,536	1,547	1,550	1,565	1,568	1,571	1,566	1,553	1,565	1,565	1,562	1,565	1,529	1,536	1,536	1,539	1,542	1,547	1,554	
Americas	704	729	729	697	696	715	726	727	729	729	729	728	729	727	727	696	697	697	697	697	696	696	697
Europe	420	431	427	426	437	427	430	433	431	433	426	423	427	424	427	424	426	425	429	433	437	444	
Asia Pacific	406	409	410	414	414	408	408	408	409	409	411	402	410	411	411	409	414	414	413	414	414	413	
OECD total	4,227	4,231	4,243	4,141	4,213	4,300	4,330	4,352	4,231	4,253	4,329	4,305	4,243	4,207	4,250	4,199	4,141	4,188	4,228	4,272	4,213	4,214	
Oil-on-water	969	919	871	825	801	899	904	869	919	919	897	926	871	891	853	835	825	787	812	797	801	804	
Days of forward consumption in OECD																							
OECD onland commercial	58	57	58	57	58	61	60	60	57	58	58	58	57	58	57	57	56	58	58	59	58	59	
Americas	54	53	55	55	57	57	58	57	54	54	56	58	55	55	55	56	56	56	57	58	58	56	
Europe	69	68	67	66	67	70	68	68	69	69	66	64	67	68	64	65	66	68	66	67	67	69	
Asia Pacific	51	47	48	46	47	54	53	50	44	50	51	48	45	52	51	48	43	48	50	49	44	51	
OECD SPR	33	33	34	33	34	34	34	34	34	34	33	33	33	34	33	33	33	34	33	33	34	35	
Americas	30	30	30	29	29	31	31	30	31	30	30	30	30	31	30	29	30	29	29	29	30	29	
Europe	29	29	30	31	32	29	29	30	30	30	28	28	30	30	29	30	31	31	31	31	31	32	
Asia Pacific	51	50	50	49	49	54	54	49	47	53	52	48	48	55	51	48	46	52	50	48	46	53	
OECD total	91	90	91	90	92	95	94	93	90	92	91	91	90	93	91	90	89	92	92	92	92	94	

Table 10.7: World Rig Count

	Change										Change 12/11	10/13	Mar 13	Apr 13	Change Apr/Mar							
	10/10	20/10	30/10	40/10	20/10	10/09	10/11	20/11	30/11	40/11						20/11	10/12	20/12	30/12	40/12	20/12	10/11
US	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	1,809	1,919	39	1,757	1,753	1,755	2
Canada	470	166	364	389	347	129	587	188	443	474	423	76	599	172	326	367	366	-57	536	463	163	-310
Mexico	118	106	84	80	97	-31	83	87	103	104	94	-3	98	110	108	108	106	12	114	120	113	-7
Americas	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	2,285	2,391	-6	2,407	2,336	2,021	-315
Norway	21	18	13	20	18	-2	21	17	16	16	17	-1	17	18	14	20	17	0	21	20	20	0
UK	15	20	21	21	19	1	18	17	15	15	16	-3	14	19	18	21	18	2	21	21	19	-2
Europe	87	96	92	100	94	11	118	112	123	119	118	24	112	117	117	129	119	1	134	133	136	3
Asia Pacific	22	18	23	22	21	-4	17	17	17	18	17	-4	19	25	25	27	24	7	30	26	29	3
Total OECD	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	2,441	2,534	2	2,571	2,495	2,186	-309
Other Asia	235	249	253	255	248	31	257	234	232	233	239	-9	231	216	205	215	217	-22	215	221	228	7
Latin America	183	203	220	213	205	48	191	192	196	201	195	-10	191	190	172	165	180	-15	167	170	176	6
Middle East	152	150	163	159	156	6	101	107	102	107	104	-52	116	112	110	100	110	6	72	60	72	12
Africa	20	19	19	18	19	9	1	2	0	5	2	-17	3	3	9	11	7	5	9	10	14	4
Total DCS	589	621	655	645	628	93	549	535	530	546	540	-88	542	522	496	491	513	-27	463	461	490	29
Non-OPEC rig count	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	2,931	3,047	-26	3,034	2,956	2,676	-280
Algeria	23	28	24	24	25	-2	29	33	30	33	31	6	31	31	44	38	36	5	44	47	49	2
Angola	10	8	9	9	9	5	11	11	11	8	10	1	10	12	7	7	9	-1	9	9	7	-2
Ecuador	11	11	11	11	11	1	11	11	11	15	12	1	17	17	22	25	20	8	25	24	24	0
Iran**	52	52	52	52	52	0	54	54	54	54	54	2	54	54	36	54	54	0	54	54	54	0
Iraq**	36	36	36	36	36	0	36	36	36	36	36	0	36	50	76	69	58	22	66	65	72	7
Kuwait**	19	18	21	23	20	8	56	56	57	60	57	37	56	56	58	58	57	0	59	57	57	0
Libya**	17	17	14	15	16	1	10	3	8	9	8	-8	12	11	11	14	12	4	16	15	14	-1
Nigeria	11	13	18	17	15	8	35	35	36	36	36	21	37	35	37	33	36	0	36	34	41	7
Qatar	8	8	9	9	9	0	10	8	7	7	8	-1	8	7	8	7	8	0	9	7	8	1
Saudi Arabia	68	67	67	65	67	-1	98	98	98	105	100	33	106	114	111	115	112	12	116	115	114	-1
UAE	13	13	13	13	13	1	17	21	24	22	21	8	22	24	23	26	24	3	28	28	27	-1
Venezuela	66	64	70	80	70	10	125	125	125	113	122	52	126	122	112	110	117	-5	119	123	116	-7
OPEC rig count	334	335	344	355	342	31	493	490	495	498	494	152	515	534	546	556	542	48	582	578	583	5
Worldwide rig count*	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	3,487	3,589	23	3,616	3,534	3,259	-275
of which:																						
Oil	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	2,682	2,654	397	2,781	2,722	2,512	-210
Gas	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	749	886	-376	795	774	694	-80
Others	43	40	42	46	43	8	48	49	47	52	49	6	54	46	51	59	52	3	44	43	57	14

Note: Totals may not add up due to independent rounding.
na: Not available.
Source: Baker Hughes Incorporated & Secretariat's estimates.
* Excludes China and FSU.
** Estimated figure when Baker Hughes Incorporated did not report the data.

Contributors to the *OPEC Monthly Oil Market Report*

Editor-in-Chief

Oswaldo Tapia, In Charge of Research Division
email: otapia@opec.org

Editor

Hojatollah Ghanimi Fard, Head, Petroleum Studies Department
email: h.ghanimifard@opec.org

Analysts

Crude Oil Price Movements	Eissa Alzerma email: ealzerma@opec.org
Commodity Markets	Eissa Alzerma email: ealzerma@opec.org Joerg Spitzzy email: jspitzzy@opec.org
World Economy	Afshin Javan email: ajavan@opec.org Joerg Spitzzy email: jspitzzy@opec.org
World Oil Demand	Aziz Yahyai email: ayahyai@opec.org
World Oil Supply	Haidar Khadadeh email: hkhadadeh@opec.org
Product Markets and Refinery Operations	Elio Rodriguez email: erodriguez@opec.org
Tanker Market <i>and</i> Oil Trade	Anisah Almadhayyan email: aalmadhayyan@opec.org
Stock Movements	Aziz Yahyai email: ayahyai@opec.org
Technical and editorial team	Aziz Yahyai email: ayahyai@opec.org Douglas Linton email: dlinton@opec.org

Data services

Adedapo Odulaja, Head, Data Services Department (aodulaja@opec.org),
Ramadan Janan (rjanan@opec.org)
Pantelis Christodoulides (World Oil Demand, Stock Movements),
Hannes Windholz (Oil Trade, Product & Refinery), Mouhamad Moudassir (Tanker Market),
Klaus Stoeger (World Oil Supply), Harvir Kalirai (Economics), Mohammed Sattar (Crude Oil Prices)

Editing, production, design and circulation

Maureen MacNeill, Scott Laury, Viveca Hameder, Hataichanok Leimlehner, Evelyn Oduro-Kwateng,
Andrea Birnbach

Disclaimer

The data, analysis and any other information contained in the Monthly Oil Market Report (the "MOMR") is for informational purposes only and is not intended as a substitute for advice from your business, finance, investment consultant or other professional. The views expressed in the MOMR are those of the OPEC Secretariat and do not necessarily reflect the views of its Governing Bodies and/or individual OPEC Member Countries.

Whilst reasonable efforts have been made to ensure the accuracy of the MOMR's content, the OPEC Secretariat makes no warranties or representations as to its accuracy, currency reference or comprehensiveness, and assumes no liability or responsibility for any inaccuracy, error or omission, or for any loss or damage arising in connection with or attributable to any action or decision taken as a result of using or relying on the information in the MOMR.

The MOMR may contain references to material(s) from third parties whose copyright must be acknowledged by obtaining necessary authorization from the copyright owner(s). The OPEC Secretariat shall not be liable or responsible for any unauthorized use of third party material(s). All rights of the Publication shall be reserved to the OPEC Secretariat, including every exclusive economic right, in full or per excerpts, with special reference but without limitation, to the right to publish it by press and/or by any communications medium whatsoever, including Internet; translate, include in a data base, make changes, transform and process for any kind of use, including radio, television or cinema adaptations, as well as sound-video recording, audio-visual screenplays and electronic processing of any kind and nature whatsoever.

Full reproduction, copying or transmission of the MOMR is not permitted in any form or by any means by third parties without the OPEC Secretariat's written permission, however the information contained therein may be used and/or reproduced for educational and other non-commercial purposes without the OPEC Secretariat's prior written permission, provided that OPEC is fully acknowledged as the copyright holder.

OPEC Basket average price

US\$ per barrel

↓	<i>down \$5.39 in April</i>	April 2013	101.05
		March 2013	106.44
		Year-to-date	107.28

April OPEC crude production

in million barrels per day, according to secondary sources

↑	<i>up 0.28 in April</i>	April 2013	30.46
		March 2013	30.18

World economy

Global growth expectations are unchanged at 3.2% for 2013 and 3.0% for 2012. For 2013, the US forecast remains at 1.8%, the Euro-zone at -0.5%, while Japan has been revised up to 1.1% from 0.8%. Growth expectations for China have been lowered slightly to 8.0% from 8.1% and India remains unchanged at 6.0%.

Supply and demand

in million barrels per day

2012		<i>11/12</i>	2013		<i>12/13</i>
World demand	88.9	0.8	World demand	89.7	0.8
Non-OPEC supply	53.0	0.5	Non-OPEC supply	54.0	1.0
OPEC NGLs	5.7	0.3	OPEC NGLs	5.9	0.2
Difference	30.2	0.0	Difference	29.8	-0.4

Totals may not add due to independent rounding.

Stocks

OECD commercial oil stocks fell marginally in March, remaining in line with the five-year average. Crude stood 19.0 mb over the seasonal average, while products indicated a deficit of roughly the same amount. In terms of forward cover, OECD inventories stood at 59.1 days, some 1.3 days above the five-year average. Preliminary data shows US commercial stocks in April rose by 20.0 mb. This represents a surplus of 42.0 mb compared to the seasonal average, with the bulk coming from crude.