

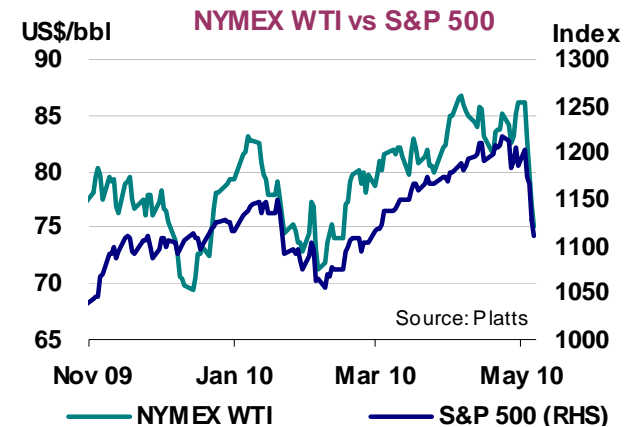
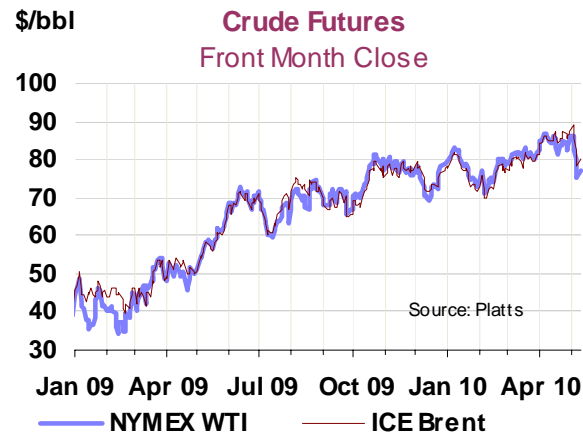
International Energy Agency (IEA)

Oil Market Update

Oil Market Report dated 12 May 2010

Oil Prices plummet on Eurozone debt crisis

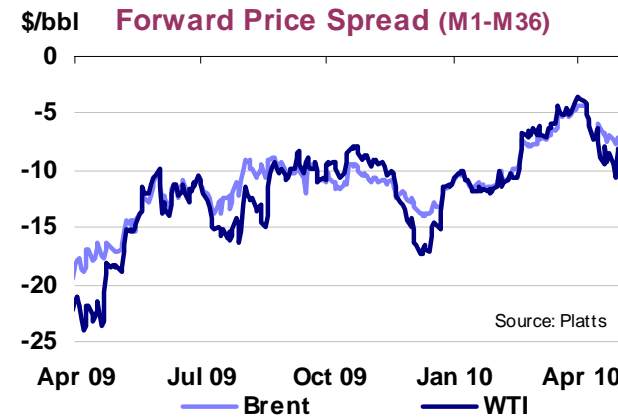
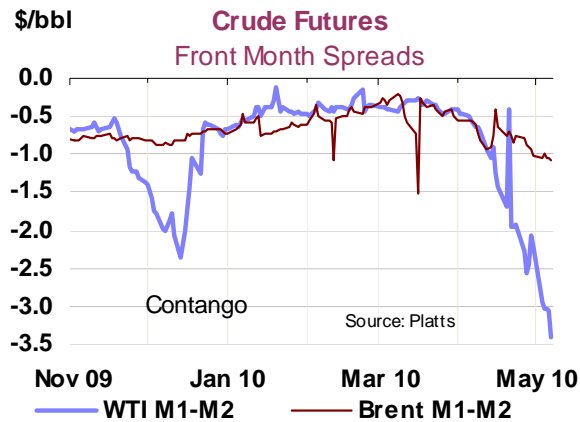
Benchmark crudes fall by more than \$10/bbl



- **Oil prices were hammered in early May** by the fallout from the Eurozone debt crisis and ensuing sell-off in global stock markets, posting their biggest weekly decline in nearly 18 months by 7 May
- **Benchmark prices partly recovered their losses after EU ministers voted to create a €750 billion fund for debt-stricken member countries**
- **WTI futures prices were trading around \$76/bbl and ICE Brent at \$79.50/bbl at press time**
- **Several OPEC ministers say the oil price collapse is largely a correction of overheated markets** and dismissed the need for further action on production levels, especially given prices remained in a \$75-\$80/bbl range that arguably represents something of a comfort zone for OPEC

Market Contango Widened Again in April

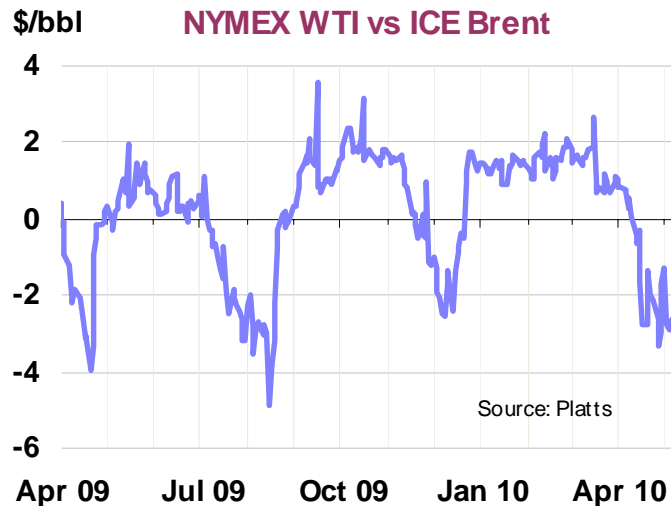
Rising crude stocks at Cushing behind prompt month collapse



- The contango between front-month WTI crude prices and forward markets widened in April and into early May, especially for WTI
- WTI June crude oil fell \$3/bbl below the July-delivery contract--the biggest M1-M2 discount in a year--compared with \$1.36/bbl on average in April and just 37 cents/bbl in March
- Further out, after steadily narrowing since the start of the new year, the **WTI M1-M36 spread widened markedly over the last five weeks**, to \$14.38/bbl by 7 May from \$3.77/bbl on the 1st of April
- The widening in the Brent M1-M2 was more muted due to relatively tight European crude stocks, which are hovering at the bottom of the 5-year average
- The Brent M1-M2 was running about \$1/bbl in early May, compared with around 75 cents/bbl in April and 44 cents in March

WTI Loses Premium to Brent...Again

Diverging trends emerged for benchmark crudes

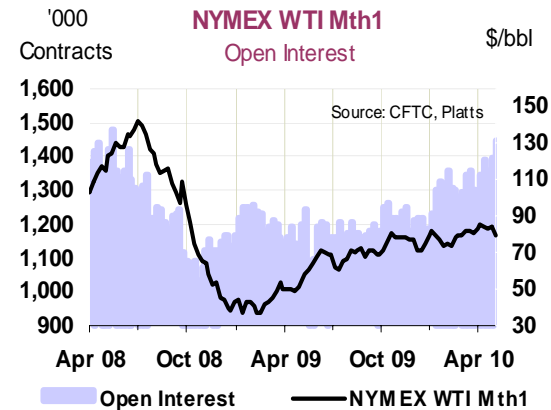
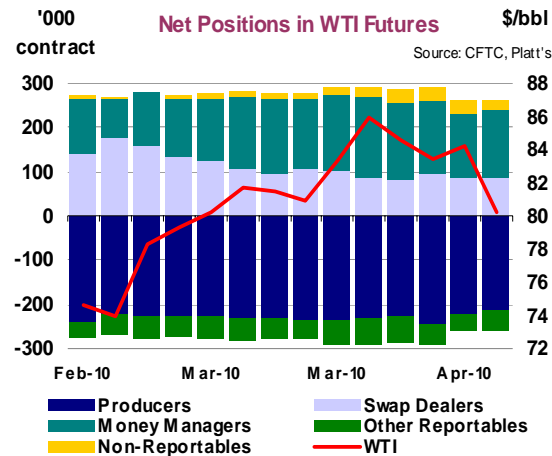


- **WTI-Brent front month price spread widened again in April**
- **WTI traded at \$1.18/bbl discount to Brent on average compared with a premium of +\$1.36/bbl in March and +\$1.66/bbl in February**
- **By early May, the spread had deepened further, with WTI trading closer to a \$3/bbl discount**

- **Prompt WTI prices were pressured by record high levels of crude oil stored at Cushing, Oklahoma and increased flows of Canadian crude into the Mid-continent region**
- **At the same time, Brent crude remained relatively firm due to a combination of crude oil stocks in Europe hovering at five-year lows and upcoming maintenance work at the key North Sea Buzzard field**

CFTC Watching Trading Limits

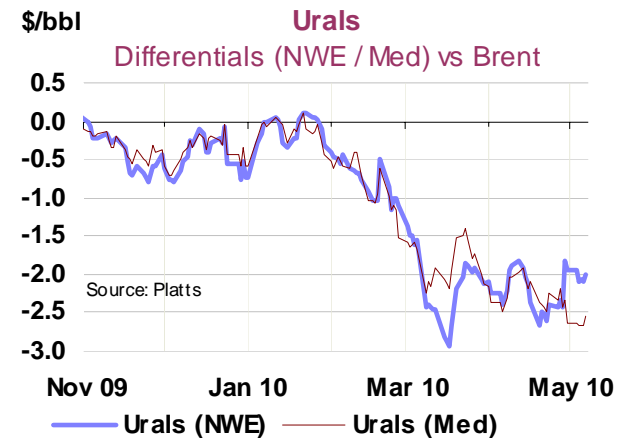
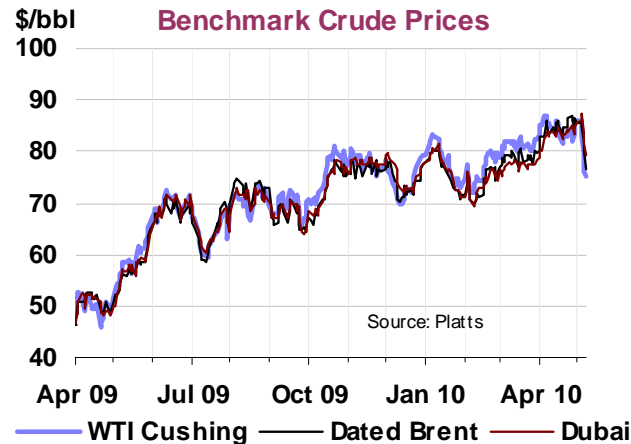
In Wake of Early May Equity Market Sell-off



- Open interest in crude oil contracts traded on the New York Mercantile Exchange **flirted near record highs in the week ended 4 May**, rising to 2,922,000 contracts, which does not include last week's most volatile trading day, 6 May
- The wild price swing in equity and commodity markets has prompted the **US SEC and the CFTC to investigate any unusual trading activity** following the plunge in financial markets on 6 May in the wake of the European debt crisis
- **The CFTC closed out the period for comments on its proposals** for setting limits on energy futures positions on 26 April
- CFTC officials are reviewing the comments but there is ***no fixed time limit when or if*** the agency will follow through to formally propose new rules

Spot crude oil prices strengthen in April

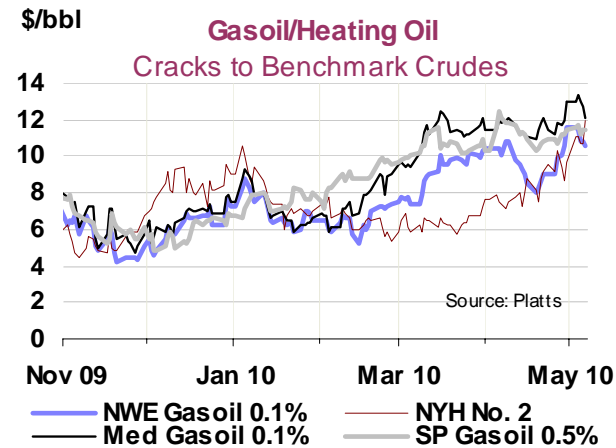
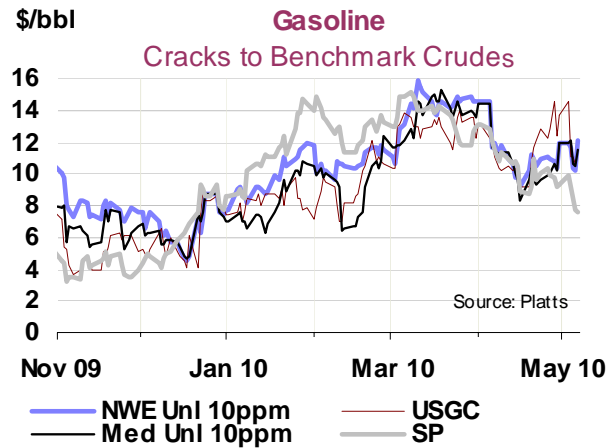
But spiralled lower in tandem with futures by early May



- **Spot crude oil markets strengthened across all major regions in April**, with prices up on average by between \$3-6/bbl month-on-month
- **Markets turned lower mid-month after the volcanic ash incident** hit demand and again in early May in tandem with the Eurozone meltdown
- **Medium-heavy sour grades also weakened** relative to lighter crudes as higher OPEC production in recent months worked its way into the market
- An armada of tankers storing **unsold Iranian crude is also weighing** on Asia-Pacific markets as refiners curtailed term-contract purchases of the country's relatively uncompetitive priced crude.
- **Rising competition from Russian ESPO crude** has also hurt Iranian sales

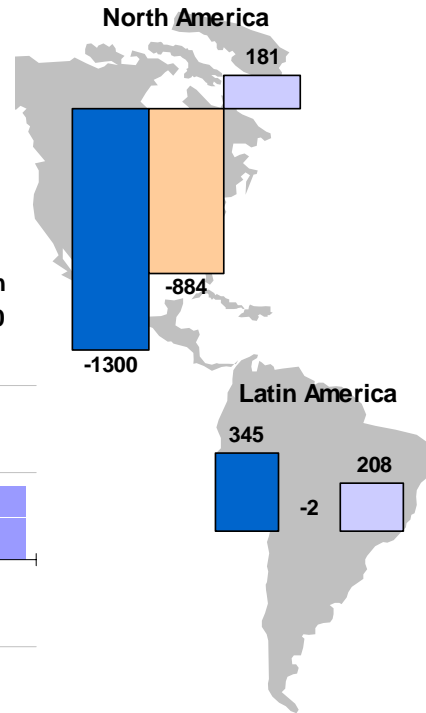
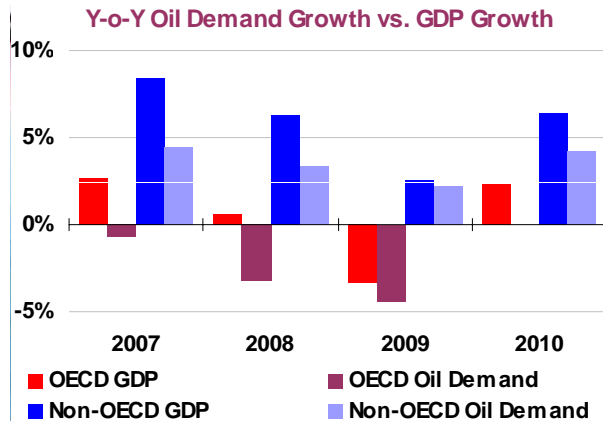
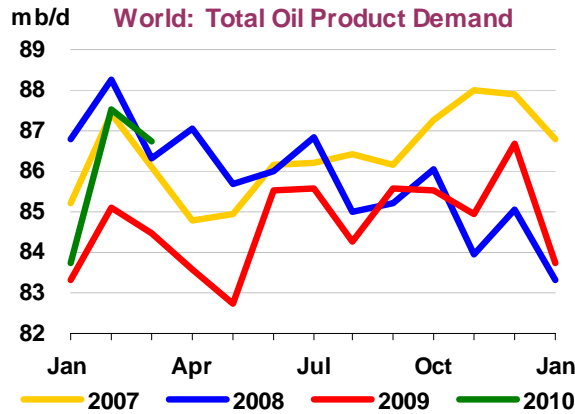
Spot product prices post sharp recovery in April

Crack spreads firm for gasoil/diesel



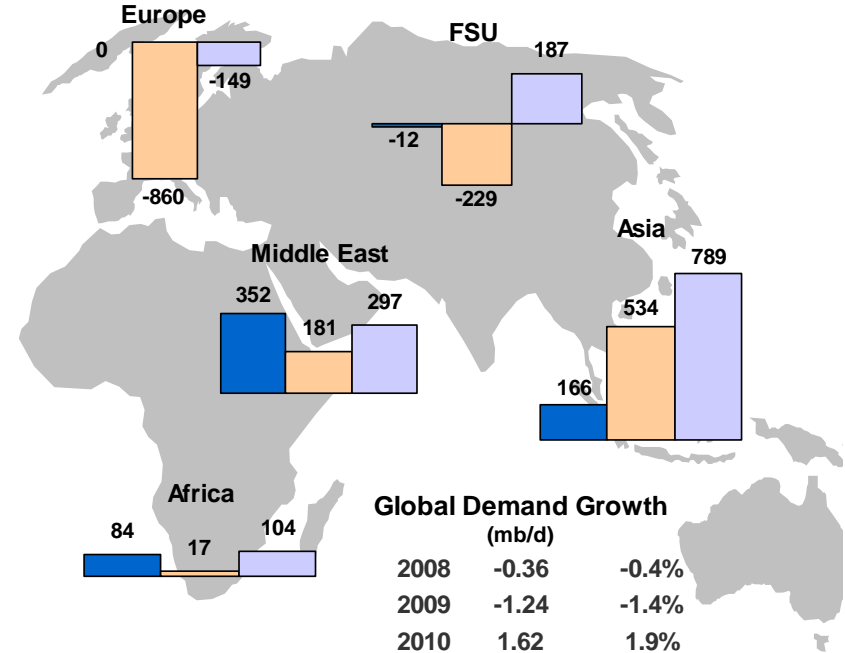
- Spot prices for refined products rose across the board in April but crude price increases largely outpaced the month-on-month gains in products, with only crack spreads for gasoil and diesel posting modest improvement
- Gasoline crack spreads weakened \$1-2/bbl on average in April as refiners cranked up production after turnarounds
- In the US, however, cracks rebounded again in early May on expectations of stronger demand going into the peak driving season as well as fears that the Gulf of Mexico oil spill could affect refining operations in the region
- US gasoline cracks vs. relatively weak WTI surged to near \$15/bbl by early May

Global oil demand: resilient outside OECD



Global Demand Growth 2008/2009/2010

thousand barrels per day



Global Demand Growth

(mb/d)

2008	-0.36	-0.4%
2009	-1.24	-1.4%
2010	1.62	1.9%

Global product demand projected at **84.8 mb/d in 2009** & **86.4 mb/d in 2010**

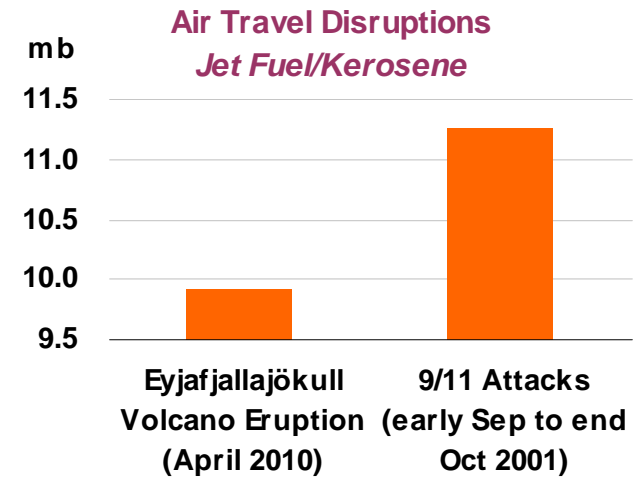
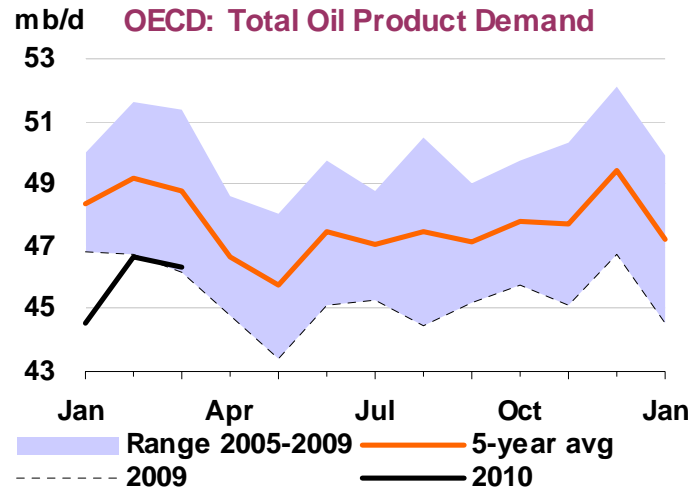
- **Yearly growth:** -1.4% (-1.2 mb/d) in 2009; +1.9% (+1.6 mb/d) in 2010
- **Changes vs. last report:** -190 kb/d on average for both 2009 & 2010

Revisions largely from baseline changes to historical non-OECD data; slightly higher IMF GDP prognoses counterbalanced by a higher price



OECD demand

European clouds



Latest submissions

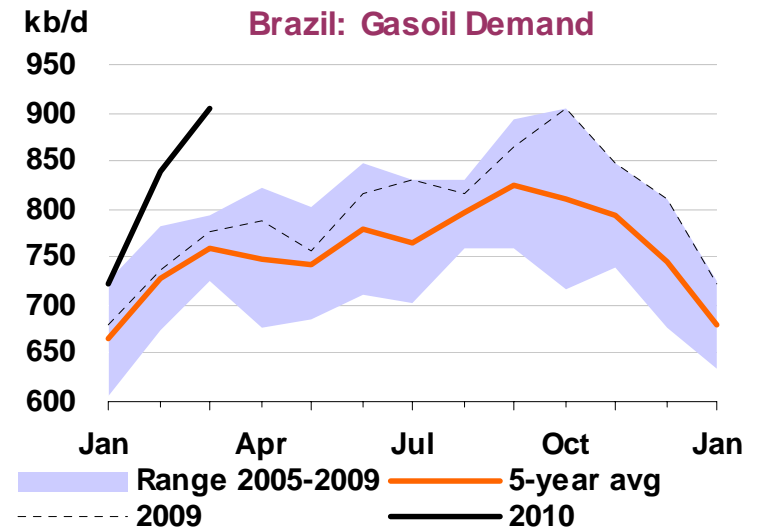
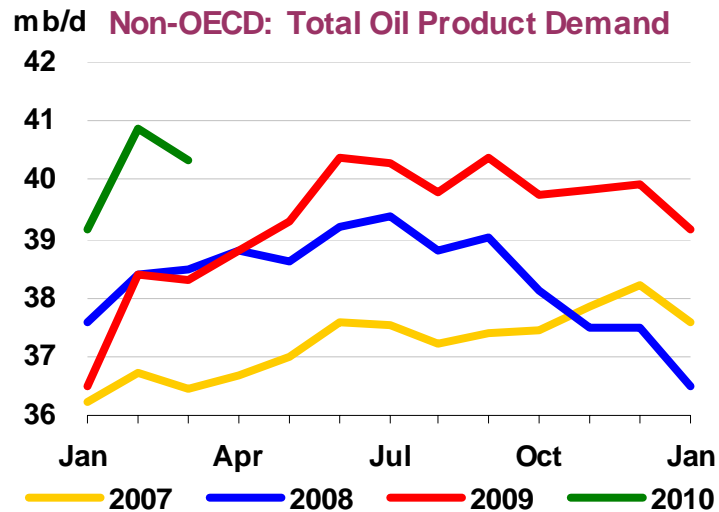
- Total **inland deliveries** (oil products supplied by refineries, pipelines and terminals) rose by 0.4% year-on-year in March
- Yet again **stronger North American and Pacific demand** barely offset **continued European weakness**
- Relative minor **downward revisions to February** data (-120 kb/d) – but demand fell that month (-0.1%), rather than growing for the first time since April 2008

Outlook

- The **outlook is unchanged** at **45.5 mb/d for 2009** (-4.4% or -2.1 mb/d y-o-y), but is **slightly raised to 45.4 mb/d for 2010** (-0.1% or -20 kb/d y-o-y) on stronger preliminary readings in North America and the Pacific
- **European oil demand prospects have been trimmed again**
 - Volcano-driven grounding of airline flights in mid-April, occasionally in May (so far)
 - Persistent concerns on the region's economic outlook, dramatically highlighted by the ongoing Greek turmoil, although latest recue package has brought some stability

Non-OECD demand

Baseline revisions

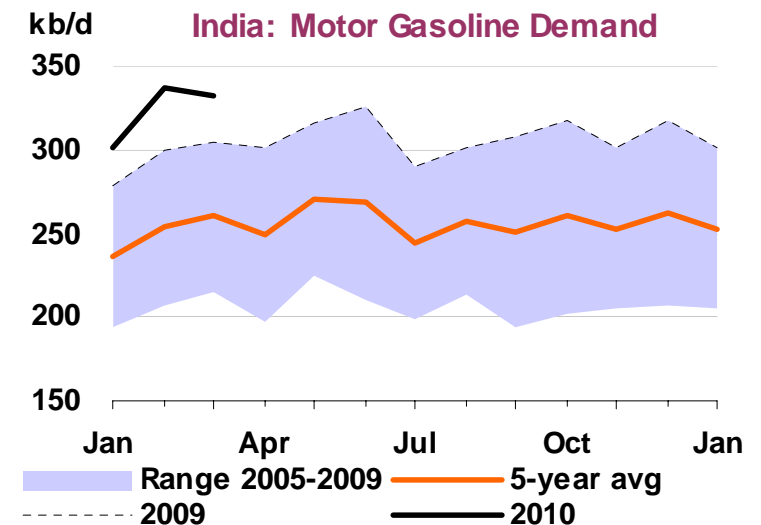


Latest developments

- *Historical data revisions* for most countries
- *Weaker readings in Asia* (poor Malaysian readings, possibly related to data quality issues) **and the Middle East** (with reported Iranian figures suggesting an ongoing economic slowdown)

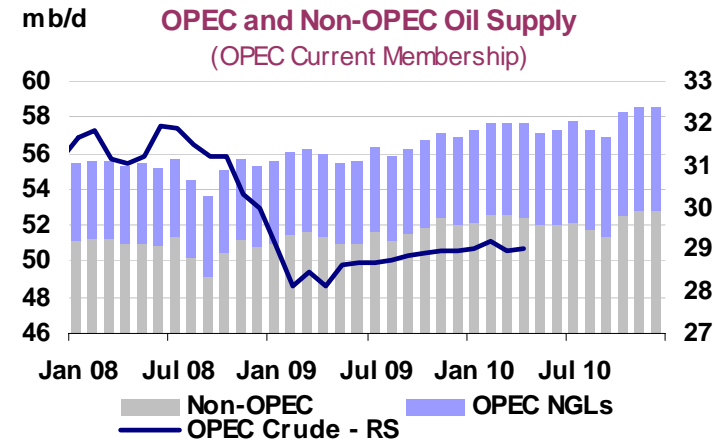
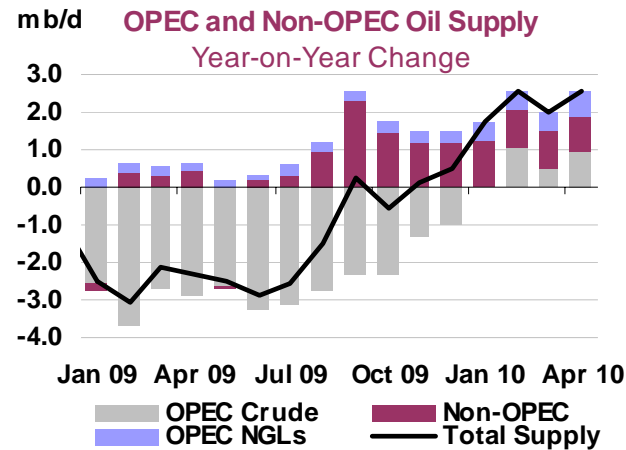
Outlook

- **BRICs racing ahead** – India, for example, is now the 2nd largest growing vehicle market
- **Non OECD demand** estimates:
 - **2009: 39.3 mb/d** (+2.2% or +0.9 mb/d y-o-y);
 - **2010: 40.9mb/d** (+4.2% or +1.6 mb/d y-o-y)
 - **Changes to preliminary data:** -230 kb/d on average in both 2009 & 2010



Global oil supply unchanged in April

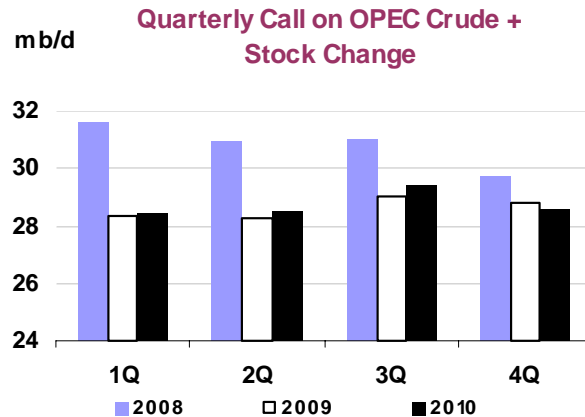
Production averaged 86.6 mb/d



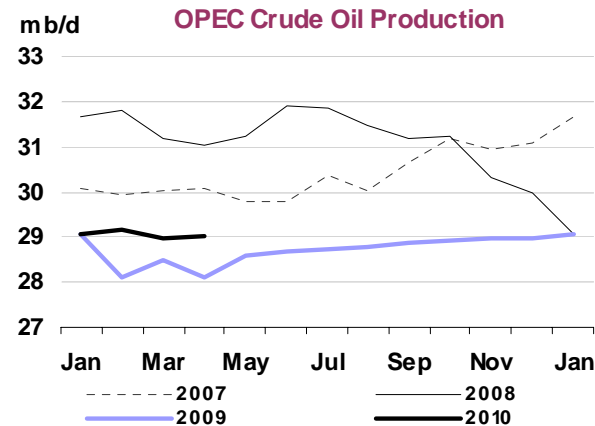
- **Global oil supply was unchanged at 86.6 mb/d in April** from March, as lower non-OPEC output was offset by a rise in OPEC NGLs and crude
- However, **year-on-year, total production was up by 2.6 mb/d**, with growth in non-OPEC supply of +1 mb/d, OPEC NGLs +0.7 mb/d and OPEC crude +0.9 mb/d
- The ‘call on OPEC crude and stock change’ for 2010 is reduced by 400 kb/d to an average 28.7 mb/d due to this month’s downward demand revisions and higher forecast for non-OPEC supply
- In 3Q10 the ‘call’ peaks at 29.4 mb/d but recedes in 4Q10 to 28.6 mb/d when other supplies rise sharply

OPEC output up modestly in April

OPEC production relatively steady at 29 mb/d since mid-2009



Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)



Entire series based on OPEC Composition as of January 2009 onwards (including Angola & Ecuador & excluding Indonesia)

OPEC crude oil production rose by a modest 40 kb/d in April, to 29.03 mb/d

- Excluding Iraq, production by the **11 OPEC members with output targets increased** by 70 kb/d, to 26.79 mb/d
- **OPEC-11 compliance with targets slipped to 55%** in April, with production now estimated 1.95 mb/d above the group's 24.845 mb/d collective quota
- **Saudi Arabia, the UAE and Kuwait most compliant** with targeted output cuts, while Angola and Nigeria continue to produce above their allotted output levels
- **OPEC is not scheduled to meet to review market fundamentals** for another five months, in early October

Iran's Floating Crude Armada

Crude production jumps to 20-month highs



- Iran ramped up output in April by 70 kb/d, to 3.75 mb/d, but **extra barrels appear destined to end up in storage at sea**
- **Weaker demand for heavier grades, unattractive price formulas and the threat of new sanctions** have combined to reduce buyer interest in Iran's crudes
- **Estimates of unsold Iranian crude held in floating storage vary but generally ranged between 30-38 mb by early May, about double end-March levels**



- **Iran had similar problems selling its heavier, high-metal content crude in early 2008, was forced to resort to floating storage and then it took five months to sell off**
- **Notably, Iran is the only major supplier to Chinese buyers to have its term contract volumes cut** this year while refiners in Japan, South Korea and India have also cut or cancelled contracts with NIOC for 2010
- **Although the threat of further sanctions against the country also intensified this month, it is difficult to draw a direct link to the growing stockpile of crude inventories, which remains largely a marketing issue**
- **Looming sanctions do help to explain the country's shrinking list of gasoline suppliers**
- **Securing credit terms and insurance risks are major issues for traders dealing with Iran**

OPEC Ministers take price drop in stride

Say no need for extraordinary meeting before October

OPEC Crude Production

(million barrels per day)

	Feb 2010 Supply	Mar 2010 Supply	Apr 2010 Supply	Sustainable Production Capacity ¹	Spare Capacity vs Apr 2010 Supply	OPEC Target Cuts	Percent Compliance with Volume Cuts
Algeria	1.25	1.24	1.24	1.40	0.16	0.200	65%
Angola	1.95	1.91	1.89	2.10	0.20	0.244	0%
Ecuador	0.47	0.47	0.47	0.50	0.03	0.067	42%
Iran	3.74	3.68	3.75	4.00	0.25	0.562	11%
Kuwait ²	2.29	2.28	2.29	2.65	0.36	0.374	86%
Libya	1.53	1.53	1.54	1.70	0.16	0.252	63%
Nigeria ³	1.98	2.01	2.00	2.20	0.20	0.319	0%
Qatar	0.82	0.82	0.82	0.90	0.08	0.122	33%
Saudi Arabia ²	8.16	8.25	8.25	12.00	3.75	1.318	91%
UAE	2.28	2.28	2.29	2.70	0.41	0.379	95%
Venezuela ⁴	2.23	2.25	2.25	2.40	0.15	0.364	33%
OPEC-11	26.70	26.72	26.79	32.55	5.75	4.201	54%
Iraq	2.47	2.27	2.24	2.60	0.36		
Total OPEC	29.17	28.99	29.03	35.15	6.11		
					5.40)		

(excluding Iraq, Nigeria, Venezuela)

1 Capacity levels can be reached within 30 days and sustained for 90 days.

2 Includes half of Neutral Zone production.

3 Nigeria excludes some 0.5 mb/d of shut-in capacity.

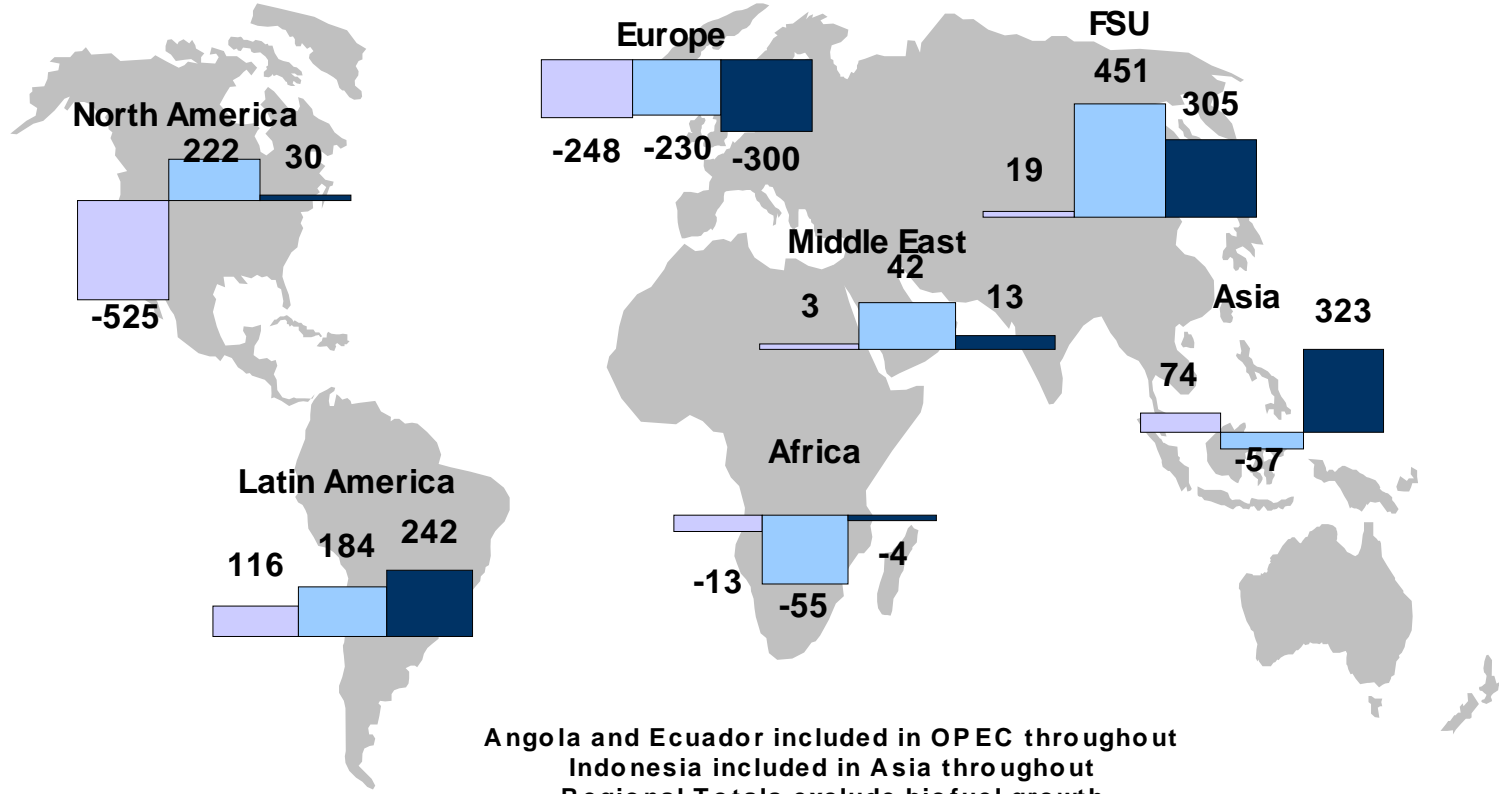
4 Includes upgraded Orinoco extra-heavy oil assumed at 480 kb/d in April.

- Some OPEC ministers dismissed the need for further action on production levels, attributing the latest price downturn to a correction in overheated markets
- Crude prices at \$75-\$80/bbl remain within the group's apparent comfort zone

- However, Kuwait's Oil Minister said a decline in oil prices to \$65/bbl would 'ring a bell' and possibly lead to an extraordinary ministerial meeting
- Latest data show the 'call on OPEC crude and stock change' for 2010 at 28.7 mb/d, a downward revision of 0.4 mb/d from last month's report.

Non-OPEC supply growth in 2010 hiked to +755 kb/d

Non-OPEC Supply Growth 2008/2009/2010
thousand barrels per day

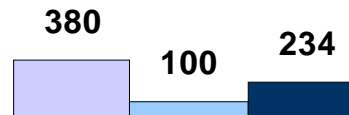


Angola and Ecuador included in OPEC throughout
Indonesia included in Asia throughout
Regional Totals exclude biofuel growth

Total Non-OPEC Supply Growth (kb/d)

2008	-120
2009	700
2010	756

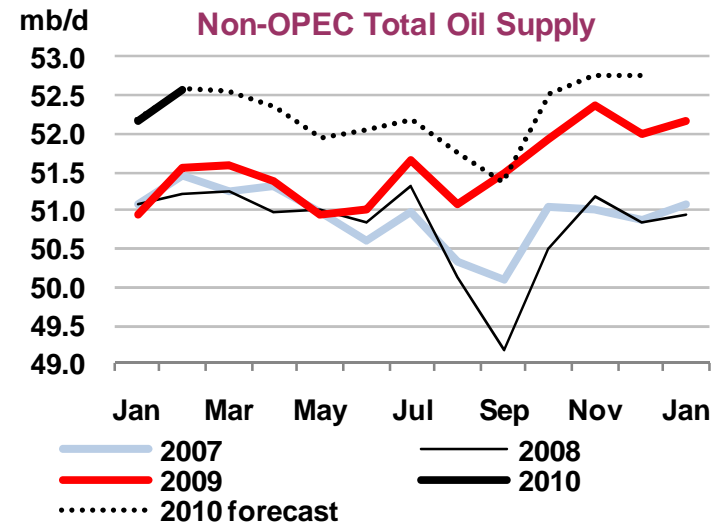
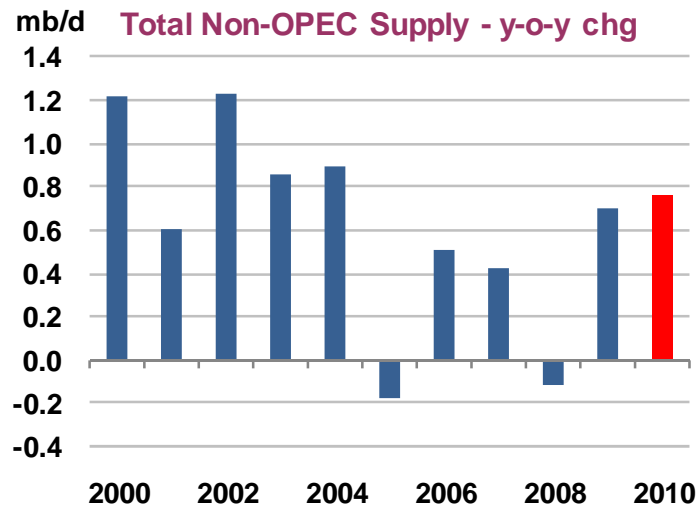
Global Biofuels (kb/d)



OPEC NGLs (kb/d)

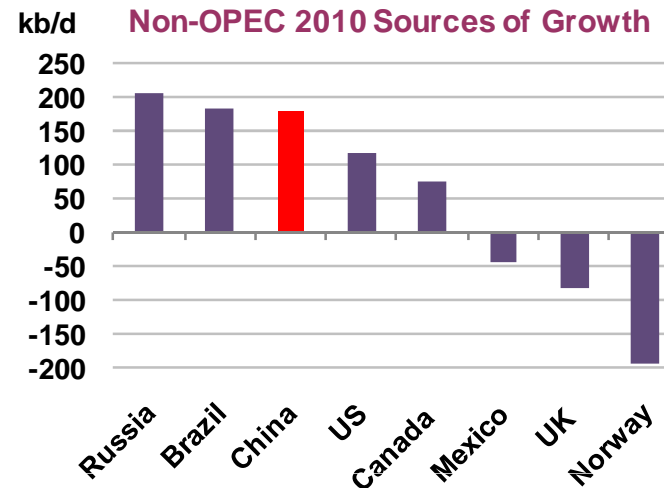
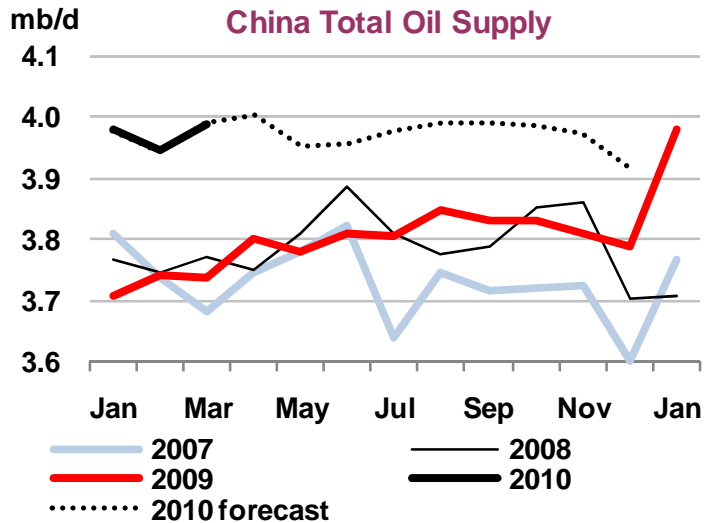
2008	111
2009	251
2010	749

2010 Non-OPEC supply revised +210 kb/d to 52.3 mb/d



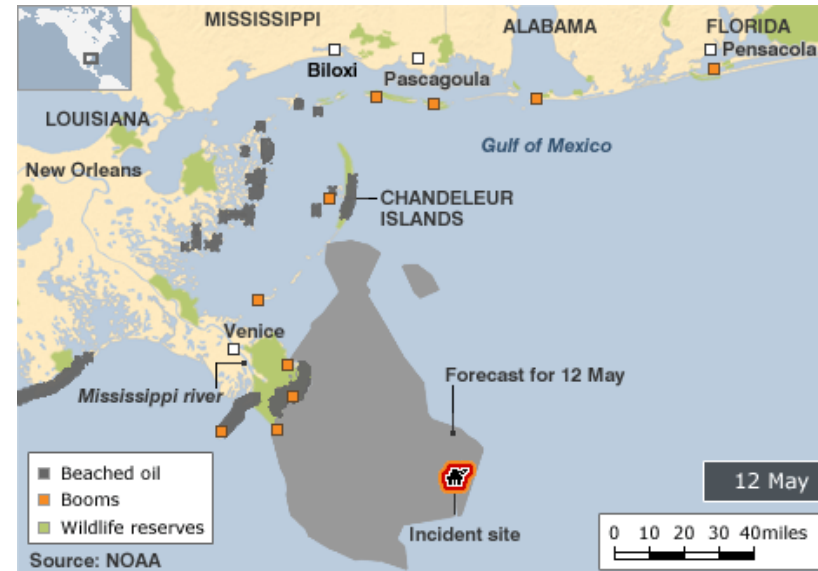
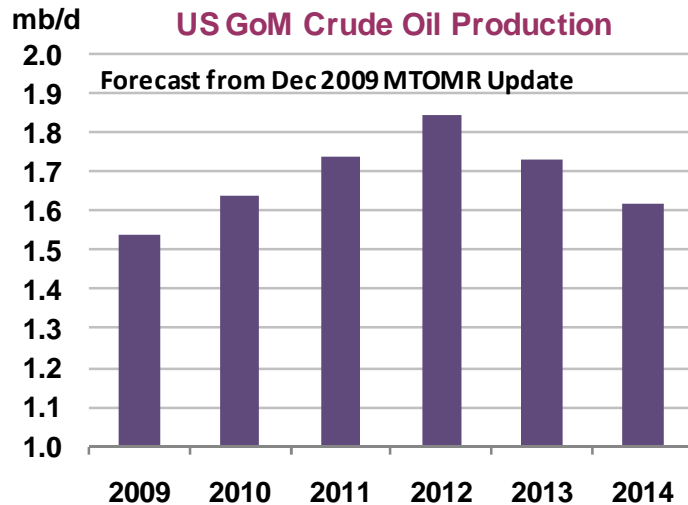
- Revision to 2009 of +15 kb/d to 51.5 mb/d
- Revision to 2010 of +210 kb/d to 52.3 mb/d
 - +130 kb/d in the US, largely due to higher NGL forecast on stronger Jan/Feb production and EIA gas forecast hike; but also stronger Other Lower-48
 - +50 kb/d from Canada on higher bitumen and NGL
 - China also sees uncommon +100 kb/d baseline adjustment, plus robust output in March, resulting in total upward revision of +60 kb/d
 - Partial offsets by downward revisions in Other Asia, Africa
- 2010/09 growth at +755 kb/d now higher than 2009 and strongest since 2004

China (and Russia, Brazil, US/Canada) significant contributors to non-OPEC growth



- China 2010 production adjusted +60 kb/d following uncommon +100 kb/d revision to January data and strong March output
- China now forecast to grow from 3.8 mb/d in 2009 to 4.0 mb/d in 2010
- At +180 kb/d, this puts China in a league with Russia (+205 kb/d), Brazil (+185 kb/d) and US/Canada combined (+190 kb/d) as the main sources of growth for 2010
- Year-on-year drop strongest in Norway (-190 kb/d), UK (-80 kb/d) and Mexico (-45 kb/d), despite some slowing of decline observed (see 13 April OMR)

US Gulf oil spill raises offshore drilling stakes

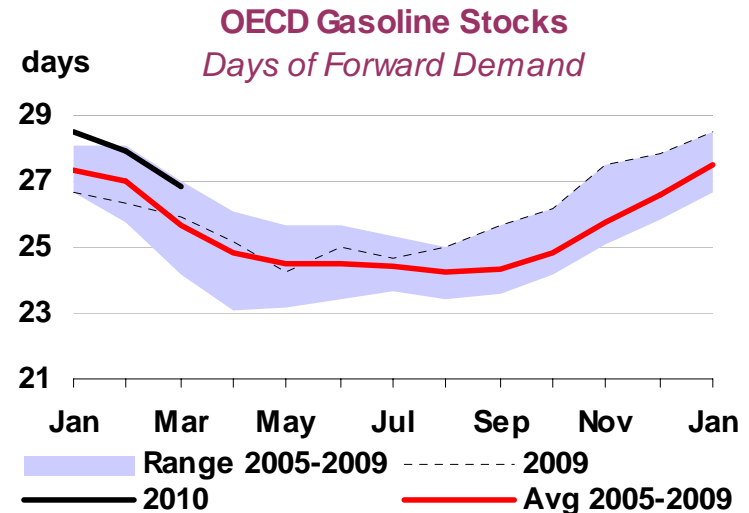
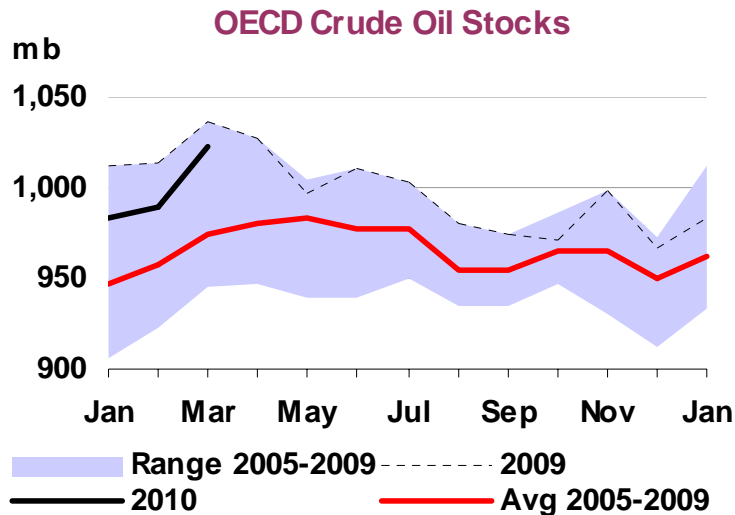


- On 22 April, drilling rig Deepwater Horizon sank, probably due to well blowout
- BP has tried to halt a now widely-dispersed leak of 5+ kb/d of crude, which has now made landfall. Latest attempts include funneling oil from leaking infrastructure to surface vessel
- If quick fixes do not work, will take 2-3 months to drill relief wells and stop the flow
- In short-term, wider spread of crude slick could hamper production and shipping, including supply to coastal refineries (though currently very little production shut-in)
- Longer-term, risks to GoM and other offshore drilling are threefold:
 - Drilling costs likely to rise on higher insurance premiums, stricter safety mechanisms
 - Concerns could derail Obama administration's recent plan to open up more offshore acreage (new permits already put on hold until investigation of current accident)
 - Heavy financial hit on companies responsible and wider damage to oil industry reputation



OECD industry stocks up in March

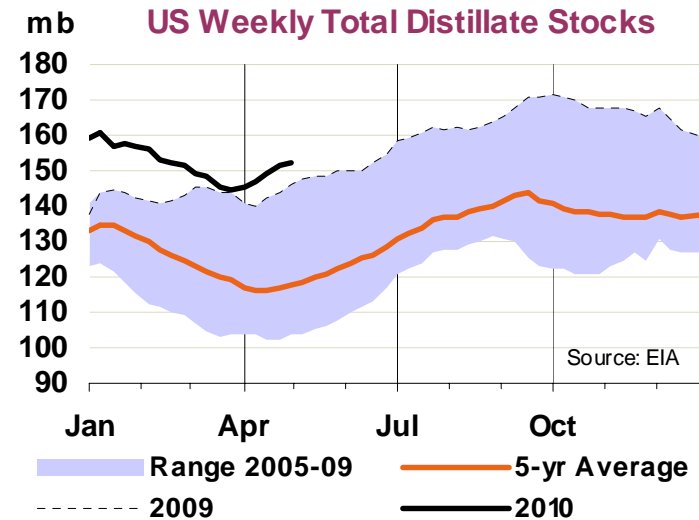
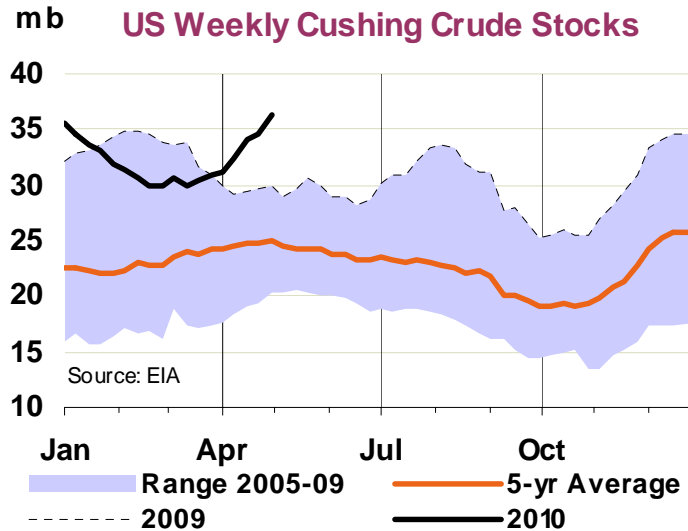
Preliminary data showing a strong 47.4 mb build



- **Stocks rose counter-seasonally by 7.3 mb in March** with diverging movements in crude and products
- **Forward demand cover rose to 60.5 days, up from 59.9 at end-February**
 - distillate days cover at relatively high levels at the end of winter
- **Short-term floating storage rose to 121 mb in April, from 117 mb in March**
 - Crude floating storage rose to 81 mb on further barrels of Iranian crude in the Middle East Gulf while refined product floating storage decreased to 40 mb
- **Preliminary data point to a sharp 47.4 mb OECD stock build in April** led by product restocking in the US

North American stocks rose by 3.8 mb in March

With preliminary data show 29.5 mb product restocking



- **North America crude stocks rose by 13.3 mb in March**

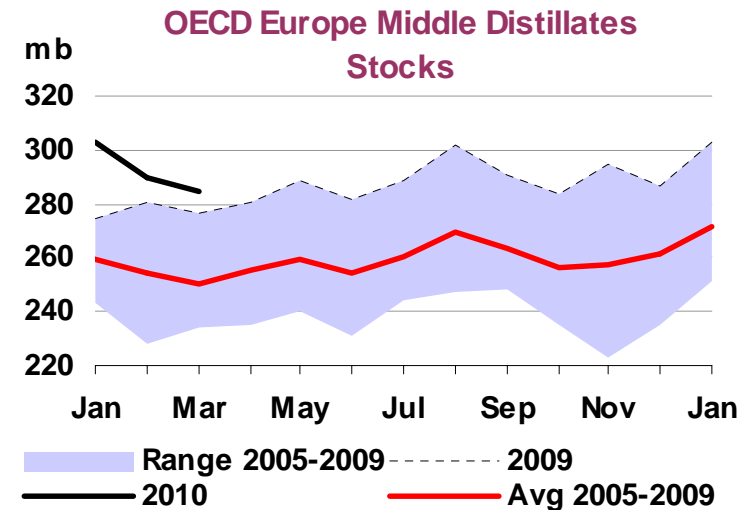
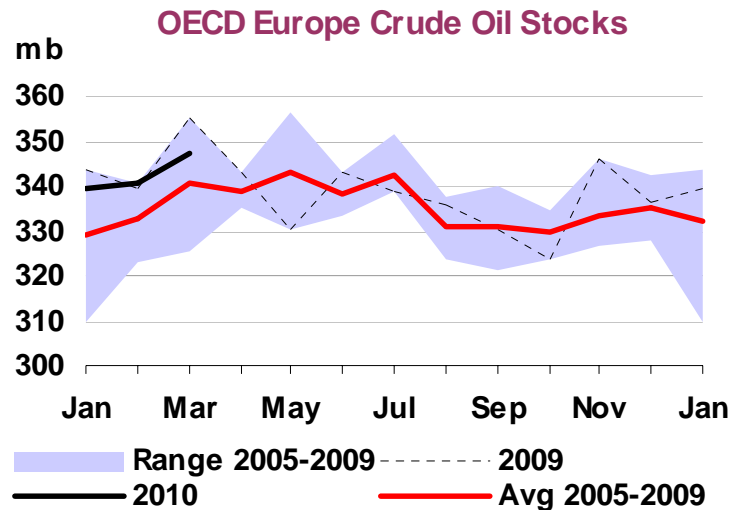
- Crude stocks in the US built by 13.7 mb in March, while preliminary data point to further 4.7 mb increase in April
- Cushing stocks reached 36.2 mb at end-April, which is almost 70% of *nameplate capacity* (market sources assess *operable capacity* at 80%)

- **Product stocks drew by 10.8 mb in March and built by a strong 29.5 mb in April** led by a rise in US propane stocks and middle distillates.

- End-winter related heating oil stockbuild increased middle distillate surplus to five-year average levels
- **Gasoline** stocks posted counter-seasonal gains in April

European inventories fell slightly in March

April data point to a crude build



- **Industry inventories in OECD Europe fell by 0.5 mb in March**

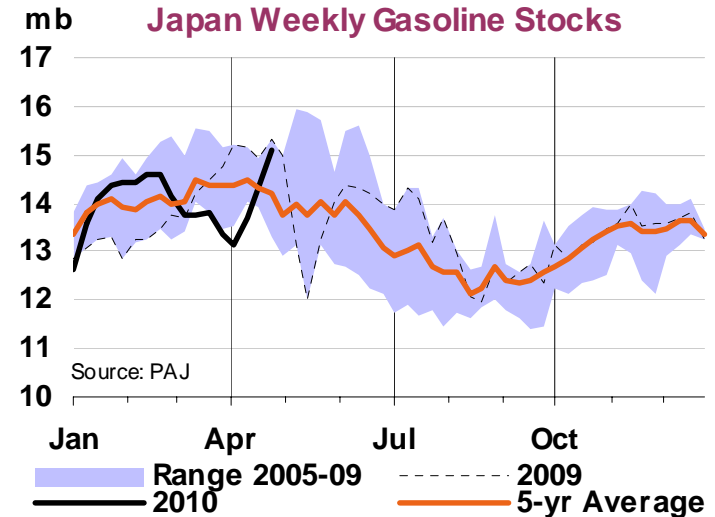
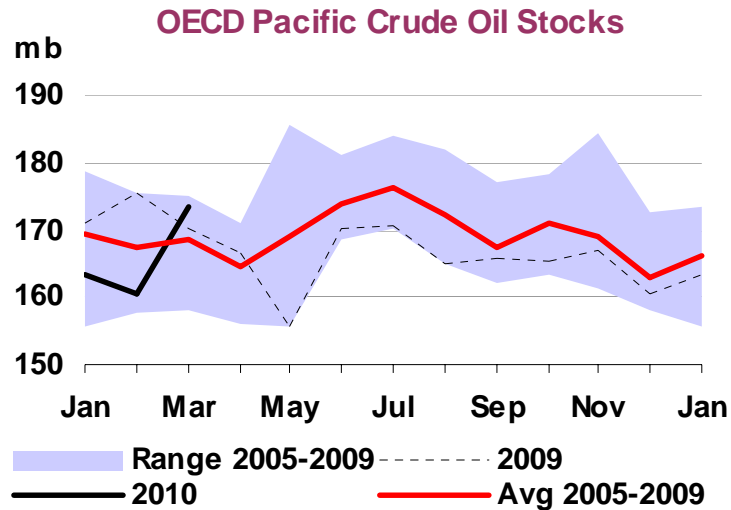
- Crude oil stocks rose by a combined 6.6 mb, partially due to a counter-seasonal build in French crude stocks reversing similar February draw following a labour strike at oil ports
- Products, mainly middle distillates, drew by 8.8 mb

- **Preliminary data point to a 10.1 mb rise in April oil inventories, led by a 11.2 mb crude build**

- Three tankers stored left-over jet/kerosene off Northwest European coast in floating storage following a curb in demand due to volcano disruption in April

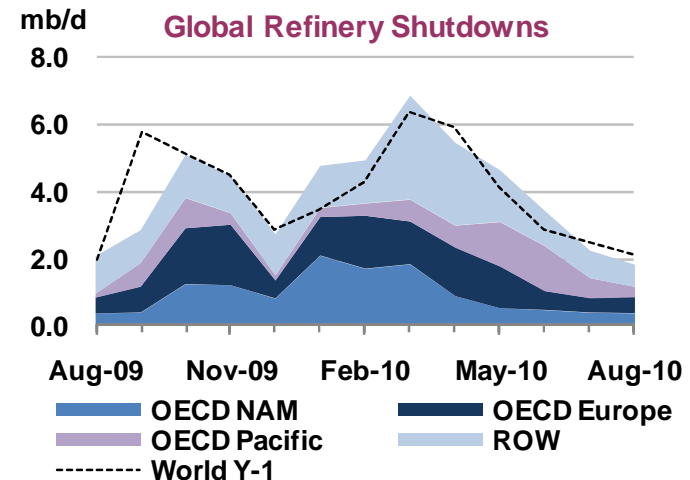
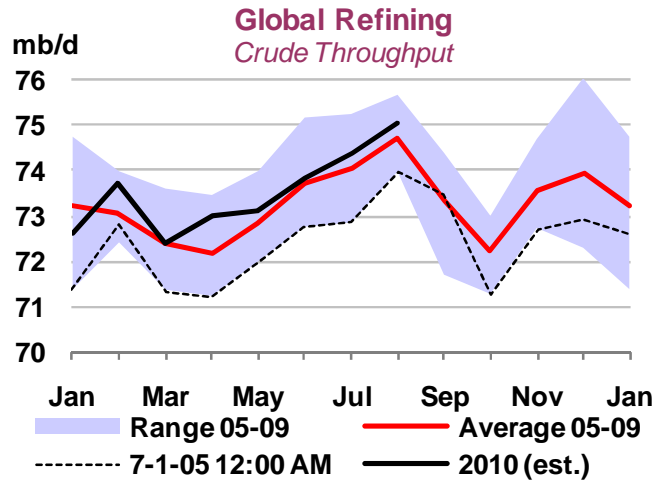
OECD Pacific stocks increased in March...

...and continued to rise in April

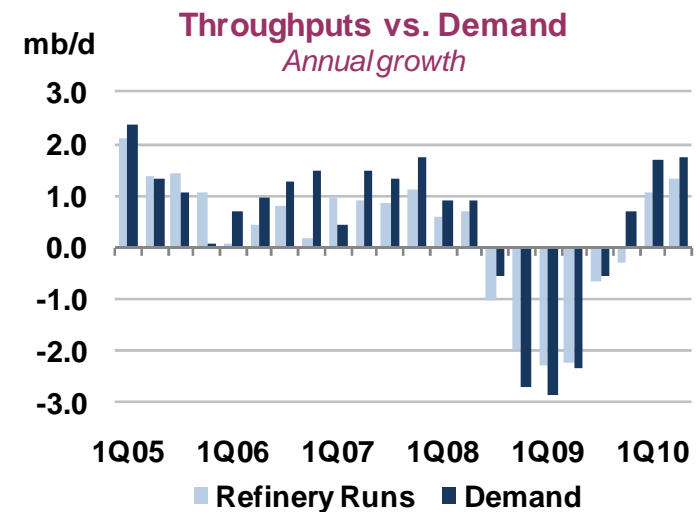


- **OECD Pacific commercial oil inventories** rose by 4.0 mb in March as crude oil stocks in Japan and Korea built by a combined 12.3 mb
- Preliminary data show **oil stocks** rose by 3.2 mb
 - **Gasoline stocks** rose sharply and jumped from the bottom to the top of the five-year average
 - Jet fuel inventories built, possibly because of flight disruptions in Europe
 - Following a burst of colder weather, kerosene stocks fell to its lowest levels in at least the past seven years

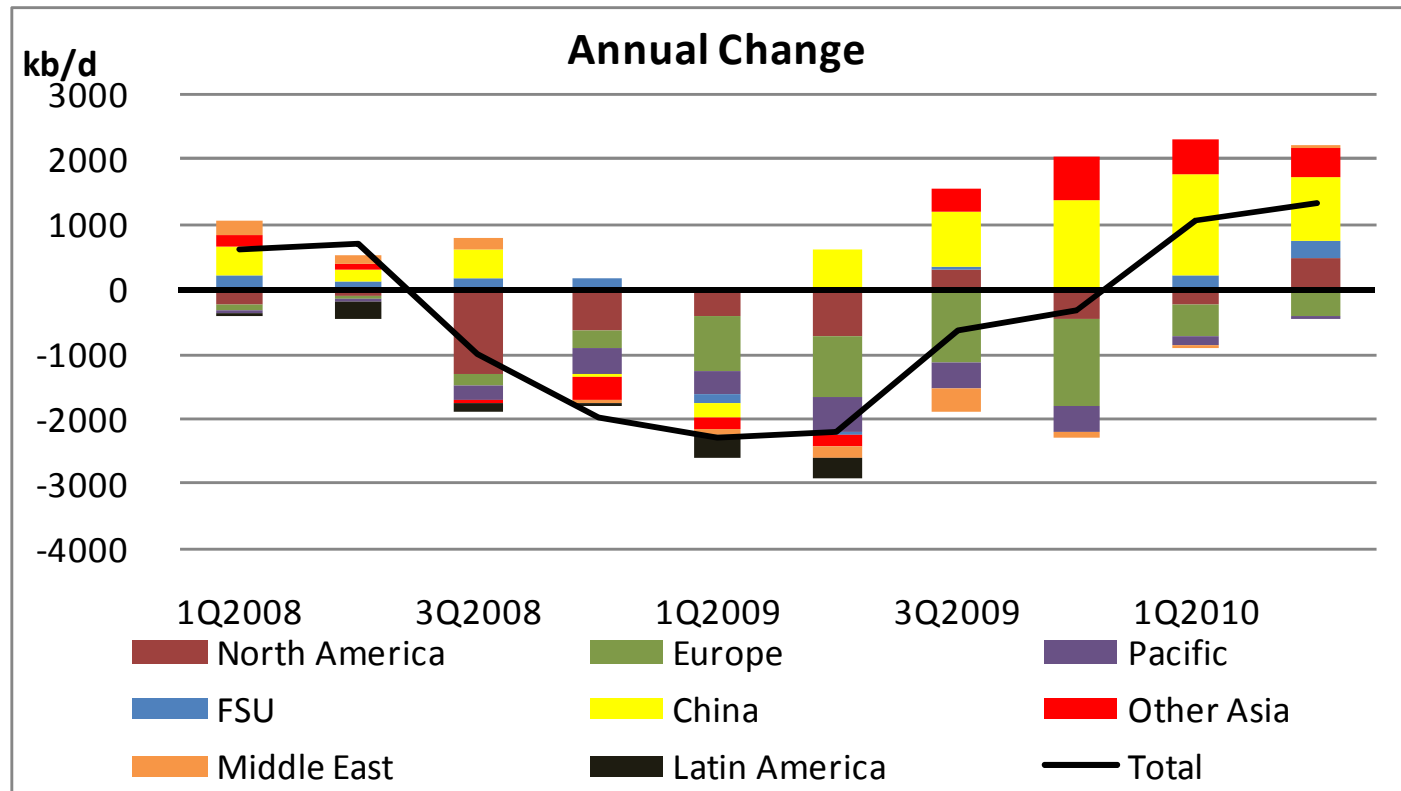
Global Crude Refinery Throughputs Higher on improved margins and increased capacity



- Global refinery runs seen higher for 2010 since April report, in part due to stronger than expected US and Chinese runs
- Refining margins for complex refiners, drove US runs to 2 year highs in April, while new capacity in Asia continues to drive non-OECD runs higher
- As refiners in Atlantic Basin exit maintenance, runs will continue to rise, offset, in part, by sharp seasonal drop in the Pacific

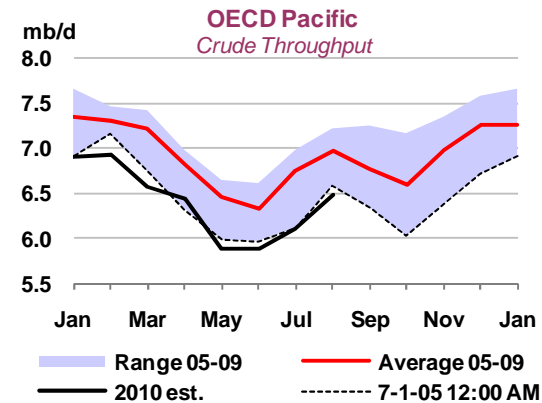
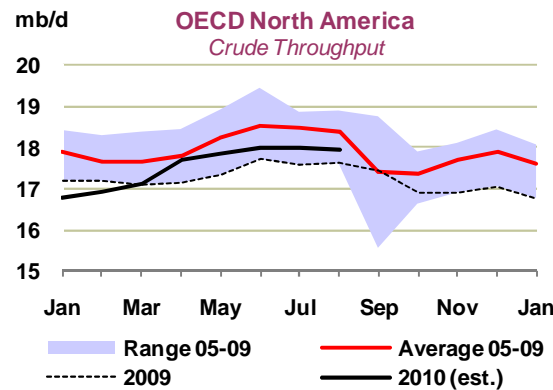
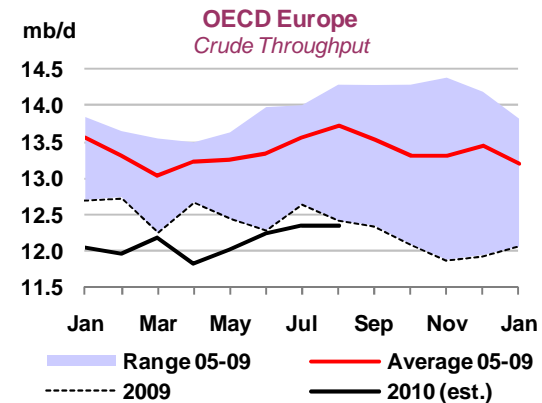
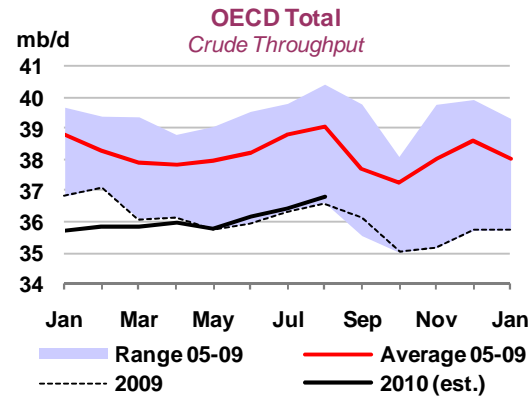


Global refinery crude throughputs – after 6 quarters of contractions, return to annual growth in 1Q10

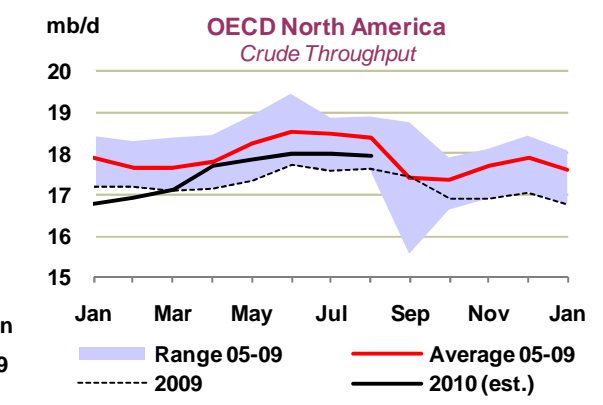
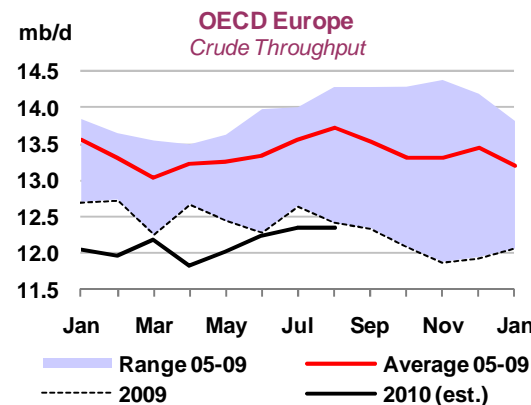
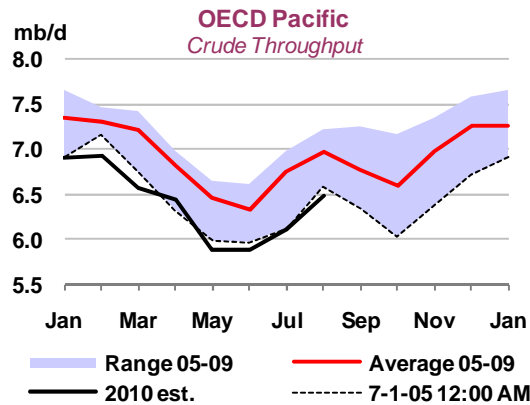
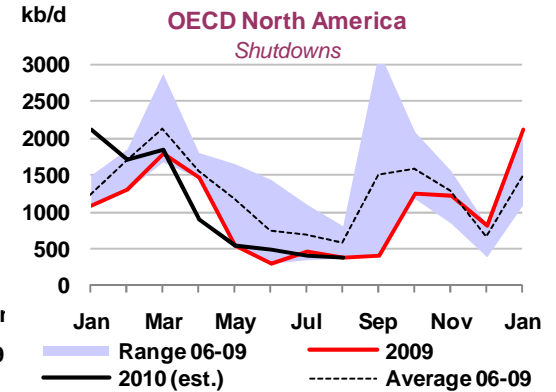
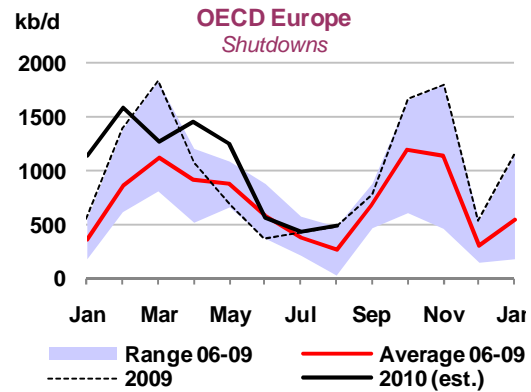
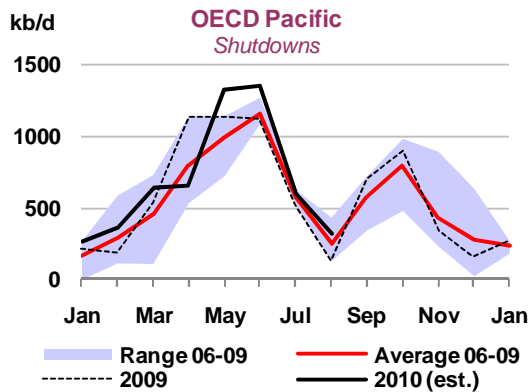


- 1Q10 gains in non-OECD runs outpace OECD contractions for first time since 2Q08
- 2Q10 runs see further North American recovery from recessionary lows

March OECD throughputs averaged 35.86 mb/d -240 kb/d lower than March -09's depressed levels

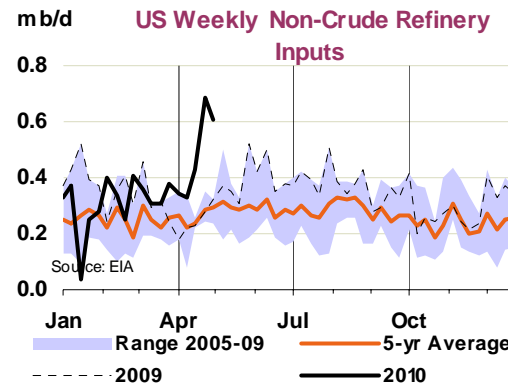
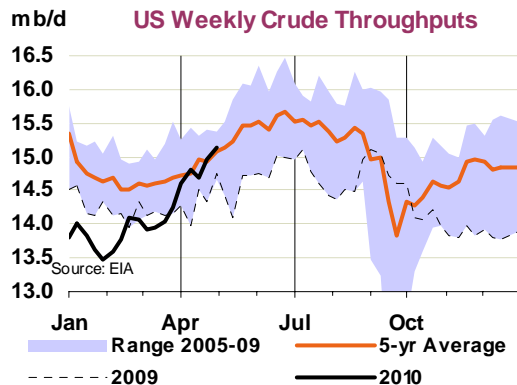
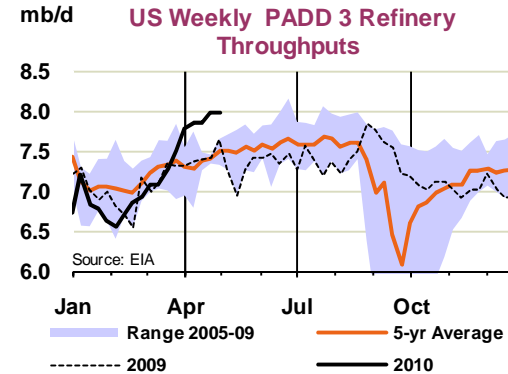
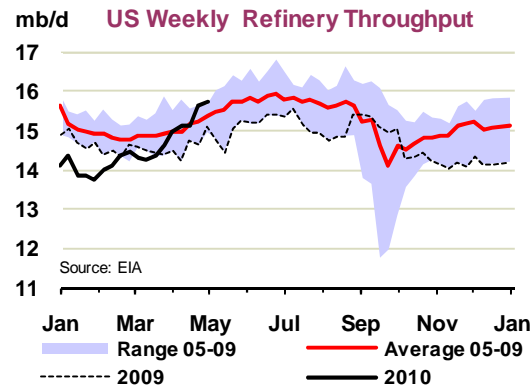


Maintenance and closures drive OECD run forecast



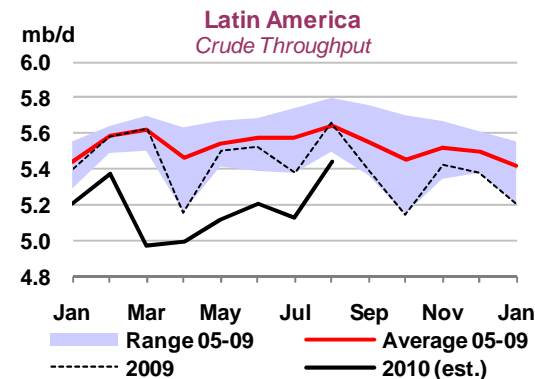
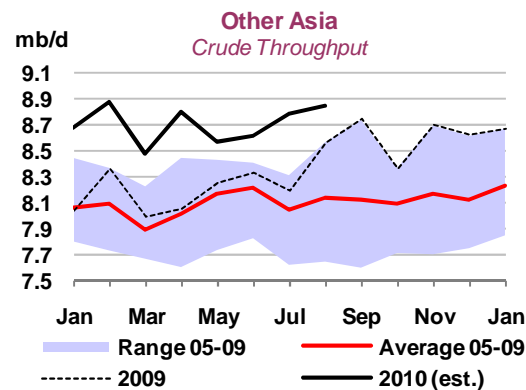
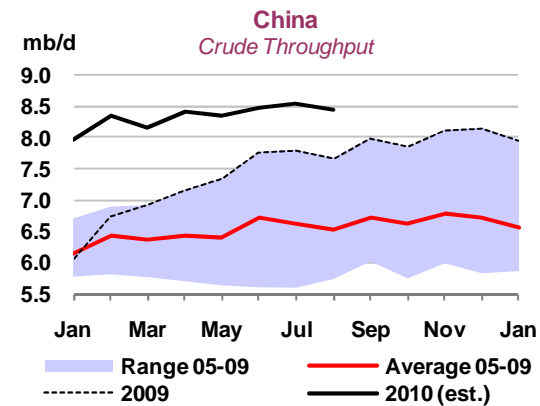
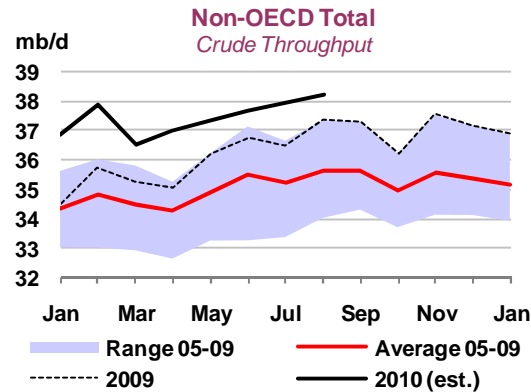
As Atlantic Basin refiners come out of a heavy turnaround period – Pacific runs slide as maintenance peak in May/June at 1.3 mb/d

US Refinery Runs Rebound Sharply in April



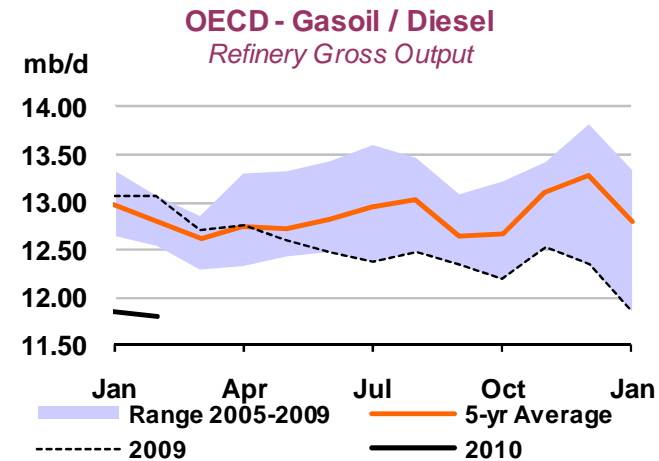
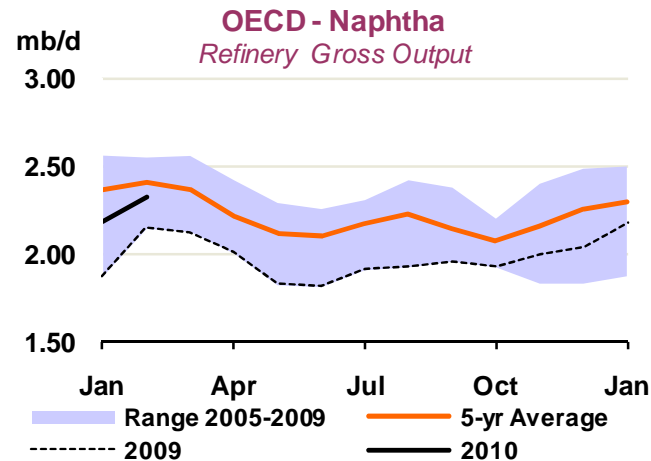
- **Supported by strong margins for complex refineries**, US refiners made a quick exit from turnarounds and increased total throughputs by more than 900 kb/d from March
- **Utilisation rates of 90% in the last week of April** were highest since January 2008 (exaggerated by lower operable capacity estimates)
- In addition to strong crude runs, non-crude inputs (blending components and NGLs) reached highest level on record

Non-OECD down from Record Highs in March but trend high over 2009 levels



- Non-OECD runs fell by from February's highs, but trend high over 2009 levels.
- Maintenance cut runs in China, India, Taiwan in particular, while unscheduled outages in Latin America (Chile, Netherlands Antilles) peak. A 2Q rebound is expected, with non-OECD runs averaging 37.3 mb/d, compared with 37.1 in 1Q.

Naphtha gross output proves resilient



- February OECD total product gross output was 4.0% below year ago levels at 41.9 mb/d. European output contracted by 6.4%, while in North America and the Pacific output fell by 2.8% and 2.7%, respectively.
- Naphtha output increased by 8.1% y-o-y, whereas gasoil/diesel and fuel oil output shrank by 9.7% and 8.6%. Gasoline and jet/fuel output contracted 2.1% and 2.4%, respectively. Only naphtha and 'other products' gross output hovers within the five-year range level. Naphtha net imports are above their five-year range, the result of higher petrochemical feedstock imports in the Pacific.
- Gasoil/diesel yields fell and approached the bottom end of the five-year range. Yields fell strongly in Europe, but remained above the five-year avg., while in North America were unchanged, below their five-year avg. Both regions' output remained well below seasonal norms, with European output at 5.1 mb/d (-518 kb/d y-o-y) and North American output at 4.7 mb/d (-677 kb/d y-o-y).
- OECD gasoline yields fell slightly, in line with seasonal patterns. Yields in North America and the Pacific rose and continued above their five-year range. European yields continued restrained, with gross output 325 kb/d below its 2009 level (-10.2%) and 522 kb/d (-15.5%) below the 5-year avg.

Summary

- **Crude prices fell by over \$10/bbl in early-May, the biggest weekly decline in 18 months** amid an evolving Eurozone debt crisis and sell-off in global equity markets.
- **Subsequent partial recovery**, with WTI futures recently trading at \$76/bbl and ICE Brent at \$79.50/bbl, after moves by EU finance ministers to guarantee liquidity for vulnerable economies
- **Baseline revisions to non-OECD demand**; slightly higher GDP prognoses from the IMF largely counterbalanced by a higher price assumption; uncertainty over European prospects
- **Global demand** is now estimated at **84.8 mb/d in 2009** and **86.4 mb/d in 2010**, with year-on-year growth of -1.4 mb/d and +1.6 mb/d, respectively
- **Global oil supply was unchanged at 86.6 mb/d in April**, as lower non-OPEC output was offset by a rise in OPEC NGLs and crude. Year-on-year, total supply was up by 2.6 mb/d
- **OPEC crude output rose by 40 kb/d in April, to 29.03 mb/d**, sustaining a trend of largely stable supply since mid-2009.
- **Non-OPEC supply dipped 175 kb/d to 52.4 mb/d in April** as seasonal factors curbed output in the North Sea and Canada. 2010 forecast is revised up by 0.2 mb/d to 52.3 mb/d.
- **The blowout of the *Deepwater Horizon* drilling rig in the US GoM** has so far not materially impacted production, but could hike operational costs and further impede offshore access
- **OECD industry stocks rose in March** and April, with preliminary data showing a sharp build in onshore stocks and higher floating storage. End-March days of forward cover was at 60.5 days.
- **1Q10 refinery throughput** is estimated at 72.9 mb/d. Global runs should seasonally rise to 73.3 mb/d in 2Q10 on sharply higher US crude runs in April, combined with stronger expectations for Chinese throughputs.