

Box I

RECENT DEVELOPMENTS IN OIL PRICES

Brent crude oil prices fell from above USD 125 per barrel in mid-March to a low of USD 90 at the end of June. Developments in the supply/demand balance in the first half of the year shed some light on this decline. In particular, the combination of declining demand and growing supply exerted downward pressure on prices over this period.

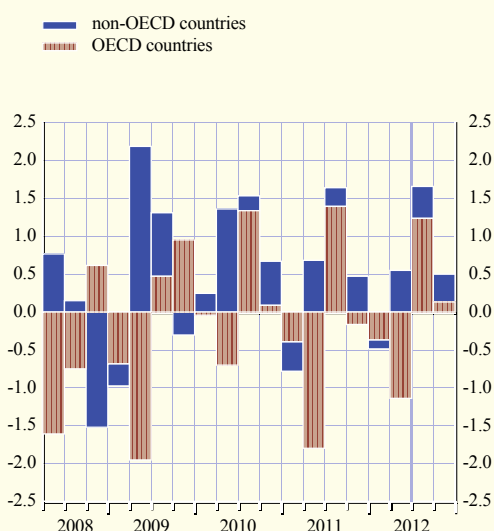
Oil market fundamentals

Oil demand fell during the first half of 2012 (see Chart A). This decrease was, particularly in the second quarter, due to the moderation in global growth momentum and to seasonal factors, as the oil demand of OECD economies typically declines in the second quarter of the year. Looking ahead, the International Energy Agency (IEA) expects an increase in oil demand in the third quarter of 2012.

As regards oil supply, Chart B displays oil production by OPEC and non-OPEC countries. OPEC production declined sharply after mid-2008 in the wake of the financial crisis and failed to recover until the second quarter of 2011. OPEC crude oil supply has risen since then, mainly driven by Saudi Arabia's decision to increase production in view of the political turmoil in Libya. Saudi Arabia is currently producing at a 30-year high, partly to offset the potential loss

Chart A Changes in global oil demand

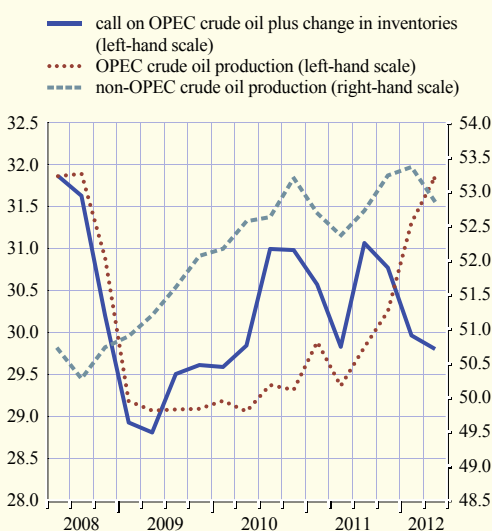
(millions of barrels per day; quarterly changes)



Source: IEA.  
Notes: The latest observation refers to May 2012. IEA projections are for the remaining months of 2012.

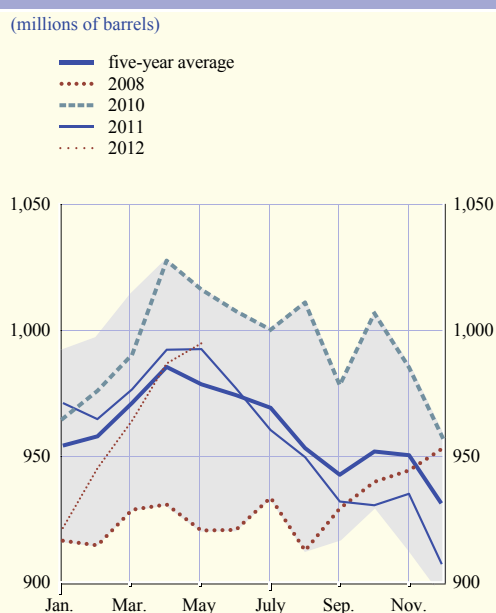
Chart B Measures of supply and demand for oil

(millions of barrels per day; quarterly data)



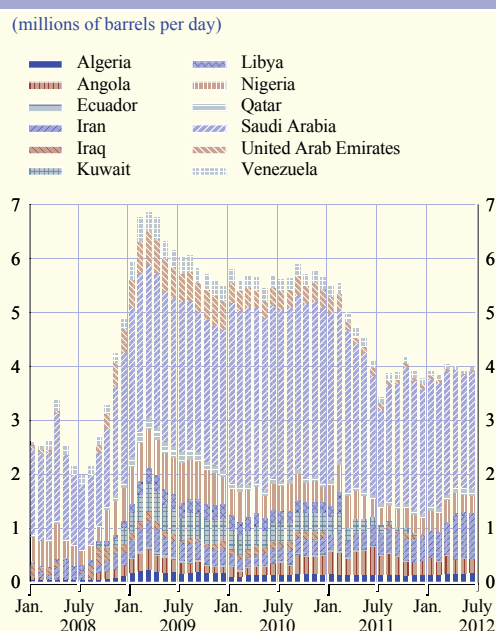
Source: IEA.  
Notes: The latest observation refers to the second quarter of 2012, except for the call on OPEC, for which the latest observation refers to May 2012 (IEA projections are used to compute the average for the second quarter of 2012). The call on OPEC is a measure of the "excess demand" that OPEC countries face. It equals the global oil demand minus both the crude oil production by non-OPEC countries and the production by OPEC countries which are not subject to quota agreements.

**Chart C Crude oil industry inventories in OECD countries**



Source: IEA.  
 Notes: The latest observation refers to May 2012. The grey area indicates the range of inventories from 2008 to 2011.

**Chart D Estimated spare capacity of OPEC producers**



Source: Bloomberg.  
 Note: The latest observation refers to 31 May 2012.

of Iranian oil resulting from the EU sanctions.<sup>1</sup> By contrast, non-OPEC production increased in the first quarter of 2012 and fell in the second, in parallel with oil prices.

Chart B also shows the development in the demand that OPEC countries face, measured by the call on OPEC crude oil plus the change in inventories. The call is the difference between global oil demand and oil supply by non-OPEC members.<sup>2</sup> If the call is larger than OPEC crude oil production, as was the case from mid-2009 to the end of 2011, this means that producers are unable to fully meet the oil demand of the refineries, leading to a decline in crude oil inventories (see Chart C). By contrast, if the OPEC supply is larger than the call, as occurred in the first half of 2012, this means that producers are providing more oil than refineries demand, causing oil inventories to increase. Such a rise in inventories typically generates downward pressures on oil prices, as was the case from March to May 2012.

The large increase in oil supply has inevitably reduced OPEC countries' spare capacity. Current estimates of spare capacity point to a substantial reduction since mid-2011 (see Chart D). Most of this decline is due to the increased production by Saudi Arabia, the "swing producer" of the market. Current spare capacity is still above the pre-crisis level, however.

1 This decision by Saudi Arabia can be rationalised as the profit-maximising response of a monopolist facing changes in its residual demand. See Nakov, A. and Nuño, G., "Saudi Aramco and the Oil Market", *Working Paper Series*, No 1354, ECB, Frankfurt am Main, June 2011.  
 2 To be precise, the call also includes the production of NGLs by OPEC countries. NGLs are natural gas liquids, which are not subject to OPEC quota agreements.

### Oil market outlook and risks

Looking ahead, oil price developments will depend on the evolution of the supply/demand balance. The IEA expects oil demand to rebound in the coming months, thus exceeding the historical barrier of 90 million barrels per day in 2012. This may place upward pressure on prices. Supply is currently sufficient to cope with this potential increase in demand. However, the reduction in spare capacity will also lead to some tightness in the market.

Regarding the balance of risks, the main downside risk to the outlook is a sharper than expected global economic slowdown. The main upside risk is a sudden disruption to supply, e.g. if the tensions surrounding Iran were to intensify. In such a scenario, given the current level of spare capacity, it would be difficult to fully offset the loss of Iran's production.