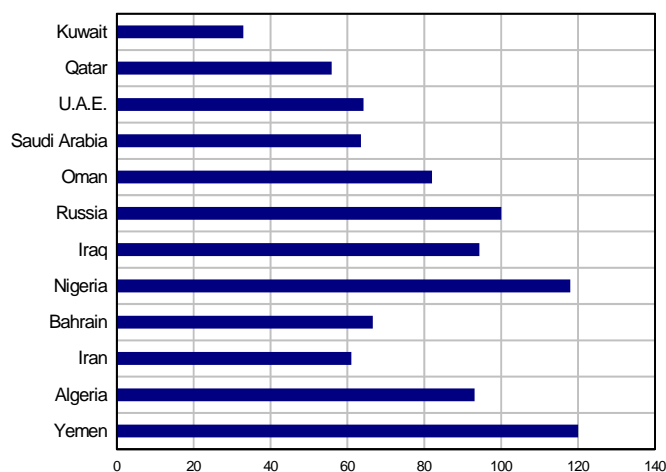


Impact of falling oil prices on the major emerging economies

- The decline in oil prices affects emerging economies in different ways, having an adverse impact on oil-exporting countries and a favourable impact on oil importers.
- For oil exporters, lower oil prices mean lower exports in value terms. The loss of oil revenue has an adverse impact on the fiscal balance and, more broadly, on domestic demand as a whole. Depending on the budgetary and monetary policy space that is available, governments can offer varying degrees of support to their economies to soften this negative shock.
- In contrast, oil importers reap the benefits of lower energy costs, which translate to purchasing power gains for households and lower production costs for firms. Moreover, lower inflation rates can lead central banks to ease monetary policy. And falling oil prices lead automatically to a dip in energy subsidies while creating an opportunity to reduce them even further.
- The difficulties encountered by oil exporting countries can have a negative impact on their trading partners and on the countries that are most reliant on the financing they provide. Exporting countries ran a current account surplus equivalent to 7% of GDP in 2013, which the IMF says will turn into a deficit of 1.6% of GDP by 2016. Oil exporters reinject some of their revenue into the global economy, via investments in sovereign funds for example. As a result, the drop in oil prices can lead to a reduction in capital inflows and tighter financial conditions in the oil-importing countries that typically benefited from such investments.

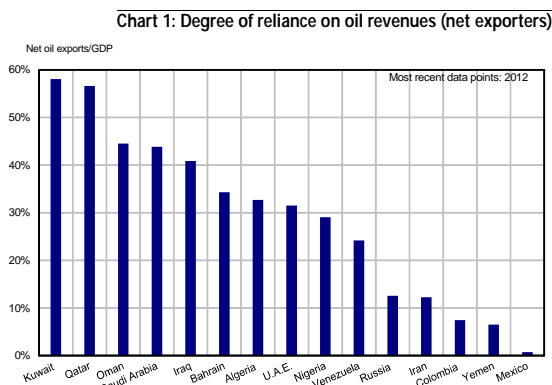
Oil price (in USD per barrel) allowing a balanced budget in 2014



Sources: IMF, national sources for Russia.

1. Oil-exporting emerging economies hit hard by the oil price decline

1.1 Economic activity bearing the brunt of the impact
Saudi Arabia and Russia are the world's two largest oil exporters, with output of more than 7,000 and 8,000 million barrels per day (MMboed) respectively. The United Arab Emirates and Venezuela, which export less than one-third of those volumes, are also highly reliant on oil: net oil exports as a share of GDP amount to 28% in the U.A.E. and 21% in Venezuela -well below the 48% share of GDP in Saudi Arabia, but also well above Mexico's 1%.



Source: IMF (WEO april 2013).

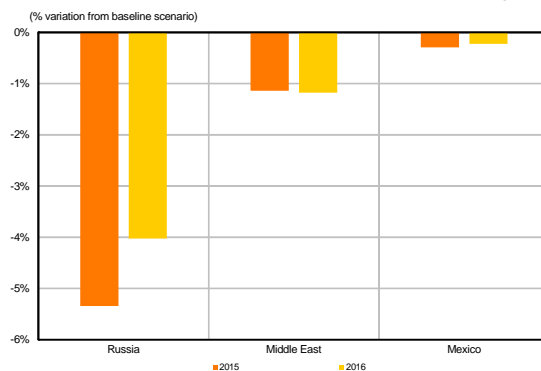
Given the importance of oil in these economies, the price slide in the second half of 2014 had a significant negative impact on their growth outlook, at least in the short term. First, lower oil prices result in a decrease in foreign currency export revenues, which in turn can trigger a downturn in investments and salaries, particularly in the extractive industries and related sectors. Weaker domestic demand causes imports to contract, and this tends to buffer the deterioration in the balance of trade. On the whole, the fall in oil prices leads to an economic slowdown and disinflation in most oil exporting countries.

According to the IMF, the decline in oil prices could push the average annual growth rate of net commodity exporters down by about one percentage point between 2015 and 2017, while energy exporters could suffer an even greater drop of about 2.25 percentage points on average. Lower oil prices also stifle growth potential by limiting investments, technology transfers and research

and development (R&D) spending. The IMF believes that the growth potential of net commodity-exporting countries could decline by about one-third of a percentage point between 2015 and 2017, while for net fossil energy exporters, potential growth could slip by about two-thirds of a point. For countries with flexible exchange rate regimes, disinflation may be offset by depreciating currency values and a rise in imported inflation.

A simulation using the NiGEM model points to a particularly strong impact on Russia's economic activity¹. Based on this simulation, a USD 50² decrease in the price of oil per barrel would reduce GDP by 5.3% in Russia and by 1.1% in the Middle East after one year. Venezuela ranks among the countries most affected by declining oil prices as illustrated by the country's economic recession in 2014 (-4%), which persisted in 2015. In Mexico, which is less reliant on oil revenue, the impact would be smaller.

Chart 2: Impact of a USD 50 drop in oil prices on the GDP of net oil exporters



Source: DG Trésor, NiGEM.

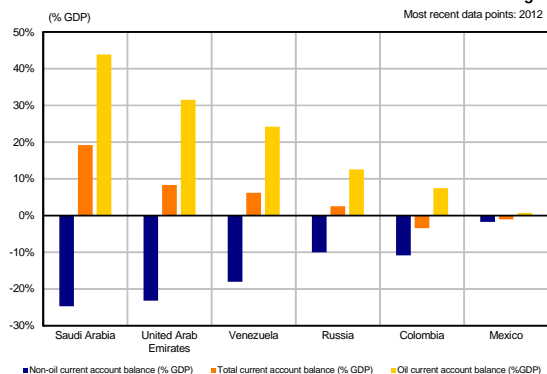
1.2 Lower oil prices leading to weaker external positions

1.2.1 Smaller current account surplus or capital outflows

Lower oil exports automatically reduce the current account surplus. Saudi Arabia, the United Arab Emirates and Venezuela in particular have seen their current account surpluses dwindle rapidly because their economies are relatively undiversified: their current account balances excluding oil are running large deficits ranging from -10% to -24% of GDP.

- (1) In this simulation, the pass-through of import prices to the import volume is neutralised for the first year after the start of the shock, because NiGEM is liable to over-value the reaction of aggregate imports to a drop in oil prices. Indeed, oil imports alone are likely to show a short-term and relatively weak response (oil demand has very low short-term price inelasticity) but the import volume equation considers only a composite import basket, which therefore responds more sharply to price variations than oil alone.
- (2) Based on a price of USD 96 per barrel in Q1-2015.

Chart 3: Net oil exporters: total current account balances including and excluding oil



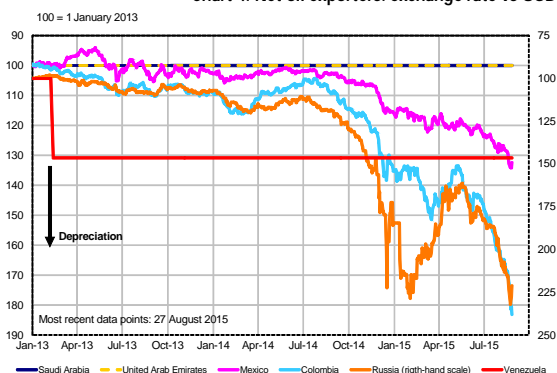
Source: IMF (WEO april 2013).

Moreover, the weakened growth outlook in exporting countries makes them less attractive to foreign investors and contributes to reduced inflows (or outflows) of capital. Net capital outflows have been recorded since September-December 2014, mainly in Russia (due to the Ukrainian crisis and significant external debt service payments).

The forthcoming increase in the U.S. Federal Reserve's benchmark rates is likely to have contributed to these rising capital outflows.

Pressure on the balance of payments can lead either to currency depreciation in the case of floating exchange rates, or to a slower build-up or reduction in foreign exchange reserves in countries with fixed exchange rates. In the second half of 2014, when oil prices plunged nearly 50%, the currencies of Russia, Colombia and Mexico lost 60%, 27% and 14% of their value against the dollar respectively³. This trend continued into the first half of 2015 as oil prices fell even further. In contrast, the Saudi Arabian Riyal, U.A.E Dirham and Venezuelan Bolivar held firm due to their fixed exchange rate systems⁴. These factors contribute to tighter monetary conditions in exporting countries (through higher benchmark rates or foreign exchange interventions, which shrink reserves and money supply) to stem capital outflows.

Chart 4: Net oil exporters: exchange rate vs USD



Sources: national sources, DataInsight.

1.2.2 Greater external vulnerability

In Russia, external risk has increased considerably as the economic situation has worsened due to falling oil prices compounded with sanctions. Foreign exchange reserves dropped sharply to USD 366bn at end-August 2015, while net capital outflows surged from USD 61bn in 2013 to USD 151bn in 2014. In addition, the rouble's depreciation creates valuation effects that automatically drive up the stock of external debt, which is primarily foreign currency-denominated. External debt stood at USD 600bn at the end of 2014.

In Venezuela, external positions have worsened significantly and foreign exchange reserves are at an all-time low (USD 17bn in August 2015, 70% of which is held in gold). The country is increasingly reliant on Chinese loans repayable in oil to meet its foreign currency requirements. In addition, state-owned oil company PDVSA already liquidated or pledged numerous external assets and receivables in 2015 to obtain the more than USD 7bn in additional cash needed to service its external debt. Oil deliveries under the various energy cooperation agreements fell 18% in 2014 and this trend is likely to persist until end-2015.

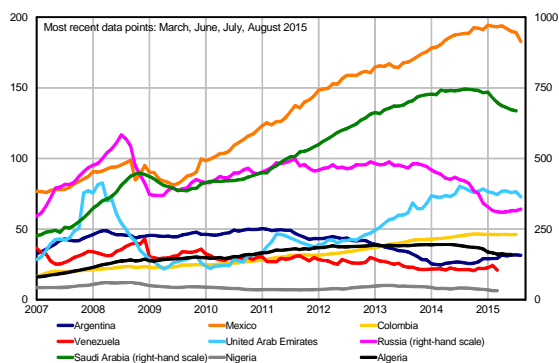
External risk in the Near and Middle East remains limited. The Gulf nations have numerous instruments at their disposal to limit this risk and there is no perceptible pressure on central banks' capacity to keep their currencies pegged to the dollar. Despite a slower build-up of foreign reserves in 2014 (2% in 2014 down from 10% in 2013), Saudi Arabia can draw on its significant foreign exchange reserves to keep the riyal pegged to the dollar. The United Arab Emirates are less vulnerable to oil price volatility than they were 20 or 30 years ago because their economy is now more diversified (oil and oil-related products account for 30% of GDP compared to 70% in the mid-1970s). Reserve accumulation has slowed sharply in the United Arab Emirates (+3% in 2014 down from 39% in 2013) but the level held remains very comfortable. In the Middle East, some countries such as Yemen and to a lesser extent Iran and Iraq have more limited reserves. Moreover, their oil output depends on the geopolitical situation. Iran and Iraq appear to have little room for manoeuvre in terms of economic policy, but both governments could buffer the impact of the crisis by increasing output volumes - especially Iran, now that sanctions are being lifted. Iraq must invest to increase supply, but weak oil prices are not conducive to investment growth.

In Africa, Algeria's (whose exchange rate regime is classified by the IMF under "other managed arrangements") foreign exchange reserves (excluding gold) stood at USD 160bn at end-June 2015, but could continue to erode quickly if oil prices remain low in the

- (3) For Russia, other specific factors (i.e., geopolitical tensions with Ukraine and economic sanctions) also help to explain the depreciation.
- (4) Although official exchange rates remained pegged in Venezuela, the currency lost significant value on parallel markets.

long term. In **Nigeria**, external risk has become significantly greater: the steep drop in foreign exchange inflows (NB: oil and oil-related products account for 87% of exports) has caused foreign exchange reserves to contract sharply - by more than 15% - since January 2015 (from USD 34.5bn to USD 29.2bn in July 2015) with back-to-back currency devaluations (in November 2014, the central parity rate was adjusted from 155 nairas/USD to 168 nairas/USD, then to 197 nairas/USD in February 2015). In **Angola**, foreign currency reserves have shrunk 20% over the last eight months and are now approaching the floor level set by the central bank of USD 20bn (enough to cover about six months of imports). At the same time, after a 6% devaluation in June, the currency has lost 18% of its value against the dollar since January 2015.

Chart 5: Foreign exchange reserves of oil exporters (in USD bn)



Sources: national data, DataInsight.

1.3 Public finances in oil-exporting countries hit by falling oil prices

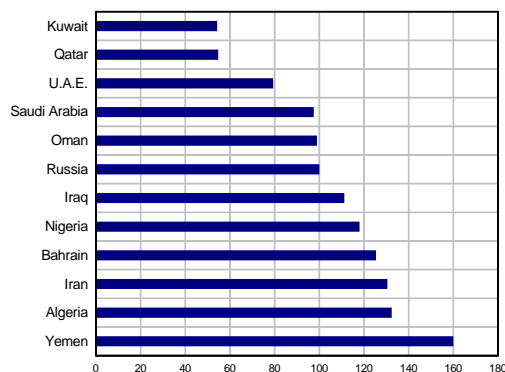
According to the IMF, the revenue loss tied to the oil price decline averages close to four points of GDP in 2015 for net oil-exporters, be they emerging or developing economies⁵; the impact appears to be particularly strong in Russia, Venezuela and Algeria. Fiscal losses can be explained by lower tax receipts on the production, exports and profits of oil companies. However, the losses can be softened by paring and reforming the energy subsidies granted in these countries.

The impact of lower oil prices on the current account balance also depends on exchange rates. The fall in oil prices has the automatic effect of reducing dollar-denominated oil revenues. The impact on the budget balance depends on exchange rate fluctuations against the dollar. For virtually all oil-exporting emerging economies, the current price of oil is insufficient to balance the budget. And the more dependent a country's fiscal revenues are on oil prices (i.e. nearly 50% for Venezuela and 50% for Russia for oil and gas), the greater the gap. Falling oil prices have prompted

Mexico, Venezuela, Ecuador, Colombia, Russia and Angola to adjust their budget forecasts. Furthermore, the budget surplus in the MENAP zone (Middle East, North Africa and Pakistan) has now turned into a deficit (from 4.2% of GDP in 2013 to -0.7% in 2014 then -9.1% in 2015, according to the IMF).

Nevertheless, several states have sovereign funds endowed through compliance with fiscal rules that can be tapped to cope with shocks in the short term. This is particularly true of the United Arab Emirates (sovereign funds totalling USD 950bn) and Saudi Arabia (SAMA, USD 757bn). These funds, coupled with relatively conservative governance in recent years, should enable these countries to pursue countercyclical policies: Saudi Arabia announced an expansionary fiscal strategy despite the budget deficit reported in 2014 (-3.4% of GDP according to the IMF). The budget deficit forecast for 2015 (-20.7% of GDP according to the IMF) would have to be financed by drawing on central bank reserves, sovereign funds and perhaps by issuing debt to maintain growth rates at around 3%. In Algeria, the *Fonds de Régulation des Recettes* (Revenue Regulation Fund), which holds oil taxation surpluses (above the reference price of USD 37 outlined in the Budget Act), is expected to partially offset the drop in oil revenue.

Chart 6: Fiscal break-even price for 2014 in USD per barrel



Sources: IMF, national sources for Russia, Fitch for Venezuela (2013).

Russia's public finances have deteriorated substantially. In 2014, the adverse impact of falling petroleum prices on oil and gas revenues was offset by the rouble's depreciation (50% of fiscal revenues are in foreign currency). Nevertheless, the budget has become increasingly reliant on oil and gas revenues in recent years despite the introduction of a fiscal rule in 2013 requiring that part of the revenues be allocated to the Reserve Fund (USD 71bn at end-August 2015)⁶. The 2015 Budget Act was amended in early 2015 to reflect a projected oil price of USD 50 per barrel (versus USD 96 originally). **The other oil-exporting countries in the Commonwealth of Independent**

(5) IMF, Fiscal Monitor, April 2015. The order of magnitude ranges from 0 to 25% of GDP.

(6) The sovereign funds that accumulate oil and gas revenues (reserve fund and fund for national well-being) represented 6.4% and 6.7% of GDP respectively on 1 September 2015.

States (Kazakhstan, Azerbaijan and Turkmenistan) **are also feeling the impact of the decline** but to a slightly lesser degree because their fiscal break-even price is lower than Russia's and because they have significant sovereign funds (equivalent to 33% of GDP for Kazakhstan and 51% for Azerbaijan). Both countries nevertheless devalued their currencies in response to the drop in oil prices to safeguard their external positions.

Apart from Venezuela, Latin America's other main oil exporters appear to be running a relatively moderate risk of seeing their public finances deteriorate. In **Colombia**, the share of revenue from energy commodities fell to 13.5% in 2014. Lower oil prices could have negative consequences for infrastructure projects. In **Mexico**, oil's share in government revenues slipped from 30.7% in December 2014 to 18.6% in June 2015 as a result of the price decline coupled with shrinking output. Spen-

ding cuts amounting to 0.7% of GDP were implemented in 2015 and additional austerity measures are planned for 2016. In **Venezuela**, the heavily oil-dependent budget (nearly 25% of fiscal revenues in 2015) points to a further deterioration of public finances, with the budget deficit already equivalent to around 17% of GDP in 2014 and government debt amounting to 50% of GDP. Moreover, public spending has not been reined in. It is financed by printing new money, thus fuelling the rise in inflation.

In **Nigeria**, public finances are deteriorating (oil revenues account for 75-80% of fiscal revenues). The Budget Act was originally based on a projected oil price of USD 73 per barrel. This was then revised downward twice and eventually set at USD 53 per barrel, forcing the government to curb spending by 12.5% compared to 2014. In **Angola**, falling oil prices have significantly deepened the fiscal deficit from -6.4% of GDP in 2014 to -7.2% in 2015.

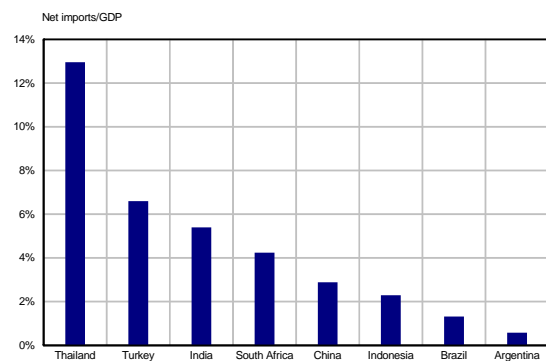
2. Conversely, falling oil prices are a boon to oil-importing emerging economies

2.1 Lower oil prices do not affect all oil importers the same way

Among the main oil-importing emerging economies, Thailand is the most sensitive to oil price volatility, followed by Turkey and India, which appear to be among the countries benefiting most from the oil price drop. Their net imports account for 13%, 7% and 5% of GDP respectively.

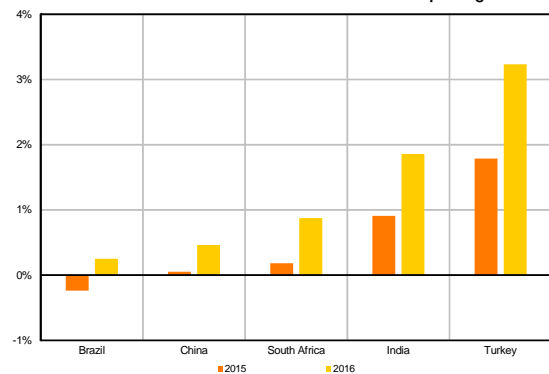
Their gains in economic activity stem from lower energy costs, which boost purchasing power for consumers and reduce input costs for businesses. Simulations have been performed based on a supply shock that results in an oil price decrease of USD 50 per barrel (versus a baseline scenario of USD 96 per barrel)⁷. Simulations using the NiGEM model show substantial gains in Turkey (+1.8 points of GDP after one year) and India (+0.9 points). In China, the estimated gain (+0.5 points after two years) is significantly lower than the IMF estimate⁸. According to the latter, a supply shock of this magnitude would result in a gain of 0.7 to 1.8 points in 2015 and 0.8 to 1.8 points in 2016.

Chart 7: Degree of dependence on oil spending



Source: IMF (2013).

Chart 8: Impact of a USD 50 decrease in oil prices on GDP in net oil-importing countries



Sources: DG Trésor, NiGEM.

(7) The oil price decline is probably the simultaneous result of a supply shock and a demand shock. However, it is difficult to model a demand shock using NiGEM because the price of oil is relatively unresponsive to changes in oil demand.
 (8) World Economic Outlook, April 2015.

In oil-importing countries, GDP gains can be partially explained by the fact that disinflation allows central banks to lower their key interest rates. Disinflation can be explained by the combination of lower energy prices and, in certain cases, the pass-through of those savings to the price of other consumer goods. Some central banks have responded to the easing of inflation by lowering their key interest rates.

The disinflationary effects were particularly visible in India. The inflation rate tumbled from 11.2% in November 2013 to 3.3% a year later before a slight upturn in 2015 (the average inflation rate was below 5% from January through July 2015). The Reserve Bank of India estimates that a 10% decrease in the oil price lowers inflation by 20 to 25 basis points below the baseline (bps)⁹. The target of containing inflation below 8% in January 2015 was easily met, and the same is likely to be true of the 6% target for January 2016. India's central bank has therefore been able to lower its key interest rate by 125 bps since the start of 2015.

In China, the impact of lower oil prices is not negligible, but it is far less significant than the impact of food prices. Although energy as a whole is deemed to account for about 6.5% of the CPI basket, motor fuel accounts for a mere 2%. Moreover, the impact of the slide in oil prices was softened by the decision to increase taxes on the sale of petroleum products to encourage the fight against pollution and promote the use of renewables. Nevertheless, the easing of inflation creates monetary policy space, as illustrated by the successive decreases in the benchmark interest rates during the first half of 2015¹⁰ and the reduction of the mandatory reserve ratio since the end of 2014¹¹, against a backdrop of decelerating economic growth.

On the whole, the oil price decline has resulted in an easing of inflation across the ASEAN zone except in Indonesia and to a lesser extent in Malaysia, both of which have taken steps to sharply curb or eliminate energy subsidies. The slowing of inflation was especially marked in countries where the consumer price index (CPI) contains a large "transportation-electricity-energy" component, such as **Thailand** (30.3%). In **South Korea**, the central bank is expecting inflation to be around 0.9% for 2015, which would be below its target range of 2.5-3.5%.

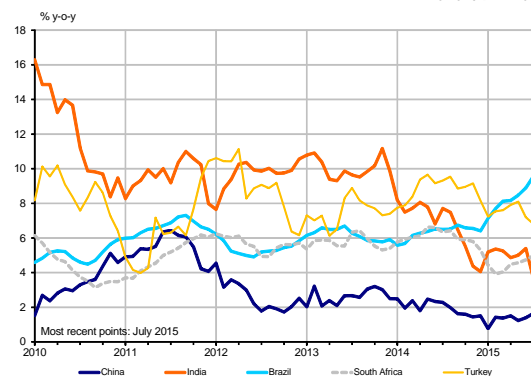
The drop in commodity prices is also likely to have significant implications for Latin American

markets, particularly Chile, but also Colombia, Peru and Brazil.

The inflation rate also fell to an all-time low in **Mexico** (2.6% in August), but inflationary pressures could rise in the months ahead due to currency depreciation and the large share of imported consumer goods. In **Brazil**, motor fuel derivatives account for about 4.9% of the basket of goods used to calculate the extended consumer price index (IPCA) (23% of administered prices). More broadly, commodities could directly or indirectly explain 60% of the volatility of the non-administered prices of the IPCA. In any case, the decline in commodity prices has been counterbalanced by the inflationary pressures driven by the depreciation of the real.

In **Turkey**, inflation has slowed considerably since mid-2014, falling from 9.3% in July 2014 to 7.1% year on year (the "housing, water, electricity and motor fuel" component accounts for 16% of the basket underlying the CPI). However, the decrease in the central bank's key rate (from 7.75% to 7.25% in August) was limited, given that the decline in imported energy prices was offset by the depreciation of the Turkish Lira. A similar disinflation phenomenon can be seen in **South Africa**, where the inflation rate fell from 6.3% in July 2014 to 3.9% in February 2015, although it then ticked upward again.

Chart 9: Inflation



Source: national data.

2.2 Commodity-importing countries also buoyed by the improvement in their current account balance

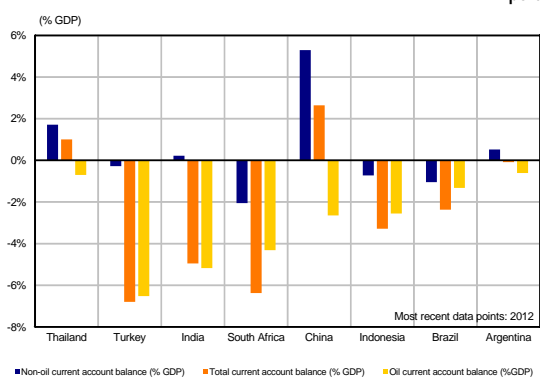
The current account balance is improving as energy prices slide in oil-importing economies. This is notably the case in countries that have a high current account deficit, such as Turkey, India and South Africa, where a large share of the deficit is due to the energy bill. Both India and Turkey post current account surpluses for non-oil imports.

(9) Reserve Bank of India, Monetary policy report, April 2015.

(10) At the end of February, the People's Bank of China (PBoC) lowered its base 1-year lending rate by 25 bps to 5.35% and its base 1-year deposit rate to 2.5%. In April, the statutory mandatory ratio was again lowered (-100 bps to 18.5%).

(11) Since the end of 2014, the PBoC has lowered benchmark rates three times and mandatory reserve ratios three times across the board.

Chart 10: Net oil importers: current account balances, total and non-oil imports

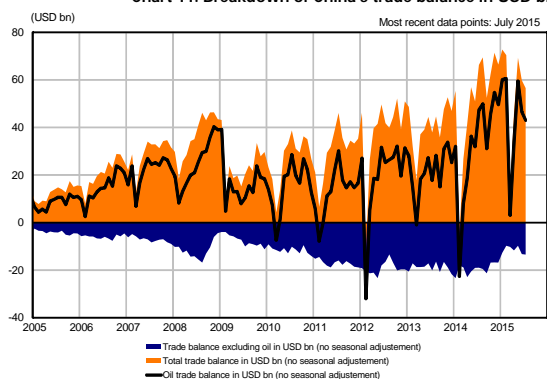


Source: IMF (April 2013).

As the world's fourth largest oil importer, **India has been a major beneficiary of the oil price decline.** The country's oil imports, representing 3% of aggregate imports in 2014-2015, have increased eight-fold in the past decade, and are expected to rise further given the forecast doubling of energy demand by 2035. The lower oil prices contributed to the sharp narrowing of the trade deficit (USD -138 bn in 2014/15 versus USD -190 bn two years earlier).

For China, the world's largest oil importer, savings on its energy bill recently contributed to the widening of its trade surplus. Crude oil imports accounted for 8.6% of total imports from January to July 2015, versus 11.6% in 2014. The oil deficit stood at USD 10.6 bn in August 2015 (down from USD 19 bn a year earlier), while the trade surplus totalled USD 60 bn. That being said, China remains comparatively less dependent on oil (18%) than on coal (66%) in terms of its energy basket. Accordingly, gains may be more limited in China than in other countries that appear to be more dependent on oil.

Chart 11: Breakdown of China's trade balance in USD bn



Sources: national data, DG Trésor calculations.

ASEAN, a net importer since 1995, is also sensitive to oil price volatility. Net importers such as Thailand and the Philippines should greatly benefit from falling oil prices. For Singapore or Indonesia

however, the effect of the oil price decline on imports could be counterbalanced by a contraction of export volumes linked to decelerating global demand and low commodity prices.

Brazil is also expected to benefit from the reduction in its energy bill (USD 23 bn in 2013 or 1% of GDP) but it is suffering due to the decline in other commodity prices. The trade deficit on petroleum products shrank to USD 16 bn (-17%) from 2013 to 2014 but gains in domestic currency terms were partially cancelled out by the 14% depreciation of the real in 2014. Moreover, the country is penalised significantly by the falling prices of iron ore and soy (which account for 27% of its exports), tied to its increasing dependency on commodity prices. Commodities (agricultural, mining and oil) account for half of the country's exports in value terms, compared to less than one-third in 2006. Ultimately, the effect of the oil price decline is likely to be negative, as the country gears up to become a net exporter of petroleum products in 2020.

2.3 Lower oil prices can also help improve public finances through a reduction in subsidies

The drop in oil prices automatically drives down energy subsidies and creates scope for reducing them further. The IMF estimates that oil-importing countries where subsidies are in place can expect to reap fiscal savings averaging about 1% of GDP as a result of lower oil prices¹². Gains would be highest in Latin America, the Middle East and North Africa.

At this stage, some countries have already seized the opportunity of falling oil prices to reduce energy subsidies or increase energy taxation¹³. In **India** for example, the government put an end to subsidies for diesel motor fuel (USD 23 bn in motor fuel subsidies in fiscal year 2013/2014, or 8% of total spending with half going to diesel fuel subsidies). In **Malaysia**, the government eliminated subsidies on motor fuel effective 1st December and increased natural gas tariffs to industry by 10%. In **Indonesia**, which ran a fiscal deficit of 2.2% of GDP in 2014, the government implemented successive reforms in late 2014 and early 2015 to remove subsidies on petrol and introduce a fixed subsidy on diesel fuel. Following the first reform, the price of subsidised motor fuel rose more than 30%, causing inflation to spike at 8.4% in December 2014. In **Brazil**, the decline in oil prices has had the automatic effect of reducing the subsidies granted and raising taxes on motor fuel. However, the current Petrobras crisis could partially cancel out the benefits to public finances (the company's dividends make up more than 10% of fiscal revenues). In **Mexico**, petrol subsidies at the pump turned into a tax from 1 January 2015, which has partially offset the decline in oil revenues. In

(12) IMF, Fiscal Monitor, April 2015. The order of magnitude ranges from 0 to 5% of GDP.

(13) More than 20 countries are estimated to have already taken steps to decrease or eliminate energy subsidies. See details on the countries and the reforms in the IMF Fiscal Monitor, April 2015.

Angola, the government launched a programme at end-December 2014 to phase out motor fuel subsidies.

In China, the decrease in oil prices has a very limited fiscal impact but affords an opportunity for the country to accumulate strategic reserves.

The government has made several moves to raise the consumption tax on petroleum products, increasing it to CNY1.52 (about USD 0.24) per litre for diesel fuel and CNY1.2 (USD 0.19) per litre for petrol. The low level of subsidies on petrol (0.1% of GDP) also limits

the fiscal gains that can be expected as a result of falling oil prices. However, the government has taken advantage of the oil price decline to shore up the country's strategic reserves. According to estimates by the International Energy Agency, China accumulated some 150 million barrels of strategic reserves in 2014 - the largest volume in the world - and the trend is set to continue through 2015 with the opening of new storage capacities.

Marie ALBERT, Thomas GILLET*

**This work has been realized in cooperation with the Economic Services.*

Publisher:

Ministère des Finances et
des Comptes Publics
Ministère de l'Économie
de l'Industrie et du Numérique

Direction Générale du Trésor
139, rue de Bercy
75575 Paris CEDEX 12

Publication manager:

Michel Houdebine

Editor in chief:

Jean-Philippe Vincent
+33 (0)1 44 87 18 51
tresor-eco@dgtresor.gouv.fr

English translation:

Centre de traduction des
ministères économique
et financier

Layout:

Maryse Dos Santos

ISSN 1962-400X
eISSN 2417-9698

Recent Issues in English

October 2015

No. 156. Deepening the European internal market today: how and why
Yves-Emmanuel Bara, Brendan Garrec, Anne Jaubertie, Sandro Martin, Arthur Sode

No. 155. Rebalancing and potential growth in China
Marie Albert, Cristina Jude, Cyril Rebillard

No. 154. An economic approach to local government reform
Sandro Martin, Arthur Souletie, Sébastien Turban

September 2015

No. 153. The world economy in the summer of 2015: emerging economies expected to slow global growth in 2015
Laetitia François, Boris Guannel, Thomas Gillet, Julien Lecumberry, Ysaline Padieu, Alexandre Tavin

<http://www.tresor.economie.gouv.fr/tresor-economics>

This study was prepared under the authority of the Directorate General of the Treasury (DG Trésor) and does not necessarily reflect the position of the Ministry for Finance and Public Accounts and Ministry for the Economy, the Industry and Digital Affairs.