THE WORLD ECONOMY

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World Overview

Recent developments and the baseline forecast

The renewed decline in global oil prices in the past three months, to levels not seen for twelve years, accompanied by sharp falls in equity prices worldwide, have increased uncertainty about the global economic outlook. The decline in oil prices seems mainly attributable to supply factors (as discussed below) and would therefore normally be viewed as a positive development for global demand and activity. But its recent apparent correlation with falls in equity markets raises questions about whether there are fears in the markets that cheaper energy mainly signals weaker demand – perhaps particularly in China – or fears that it may increase the threat of deflation, in

Table 1. Forecast summary *Percentage change*

	Real GDP(a)												World trade(b)
	World	OECD	China	EU–27	Euro Area	USA	Japan	Germany	France	Italy	UK	Canada	
2012	3.4	1.3	7.7	–0.4	–0.8	2.2	1.7	0.6	0.2	–2.9	1.2	1.7	2.7
2013	3.3	1.2	7.7	0.3	–0.3	1.5	1.4	0.4	0.7	–1.8	2.2	2.2	2.9
2014	3.4	1.8	7.3	1.4	0.9	2.4	–0.1	1.6	0.2	–0.4	2.9	2.5	3.2
2015	3.0	2.1	6.9	1.8	1.5	2.4	0.7	1.5	1.1	0.7	2.2	1.3	3.4
2016	3.2	2.1	6.5	1.7	1.5	2.5	1.0	1.6	1.3	0.9	2.3	1.8	5.3
2017	3.8	2.5	6.3	2.2	1.9	2.7	1.2	2.0	1.8	1.3	2.7	2.4	6.3
2006–2011	4.0	1.3	11.0	1.1	1.0	0.9	0.3	1.7	1.0	–0.1	0.7	1.5	4.7
2018–2022	3.8	2.3	6.0	1.8	1.6	2.6	0.7	1.3	1.3	1.7	2.4	1.9	4.5

	Private consumption deflator								Interest rates(c)			Oil ($ per barrel)(d)
	OECD	Euro Area	USA	Japan	Germany	France	Italy	UK	Canada	USA	Japan	Euro Area	
2012	1.9	1.9	1.9	–0.9	1.6	1.4	2.7	1.8	1.3	0.3	0.1	0.9	110.4
2013	1.5	1.1	1.4	–0.2	1.3	0.8	1.2	2.3	1.4	0.3	0.1	0.6	107.1
2014	1.6	0.5	1.4	2.0	0.9	0.0	0.3	1.7	1.9	0.3	0.1	0.2	97.8
2015	0.7	0.2	0.3	0.3	0.7	0.0	0.0	0.2	1.2	0.3	0.1	0.1	51.8
2016	1.0	0.3	0.7	0.0	0.5	0.4	0.0	0.6	1.8	0.7	0.1	0.1	36.8
2017	1.8	1.5	1.7	0.7	1.6	1.1	1.9	1.3	2.4	1.7	0.1	0.1	45.8
2006–2011	2.0	1.8	2.0	–1.0	1.3	1.4	2.0	3.3	1.3	2.1	0.2	2.3	79.8
2018–2022	2.1	1.7	2.0	0.6	1.8	1.4	2.0	2.1	1.6	3.3	0.6	1.4	54.8

Notes: Forecast produced using the NiGEM model. (a) GDP growth at market prices. Regional aggregates are based on PPP shares, 2011 reference year. (b) Trade in goods and services. (c) Central bank intervention rate, period average. (d) Average of Dubai and Brent spot prices.

*All questions and comments related to the forecast and its underlying assumptions should be addressed to Simon Kirby (s.kirby@niesr.ac.uk). We would like to thank Jonathan Portes for helpful comments and discussion. The forecast was completed on 28 January, 2016. Exchange rate, interest rates and equity price assumptions are based on information available to 13 January 2016. Unless otherwise specified, the source of all data reported in tables and figures is the NiGEM database and NIESR forecast baseline.

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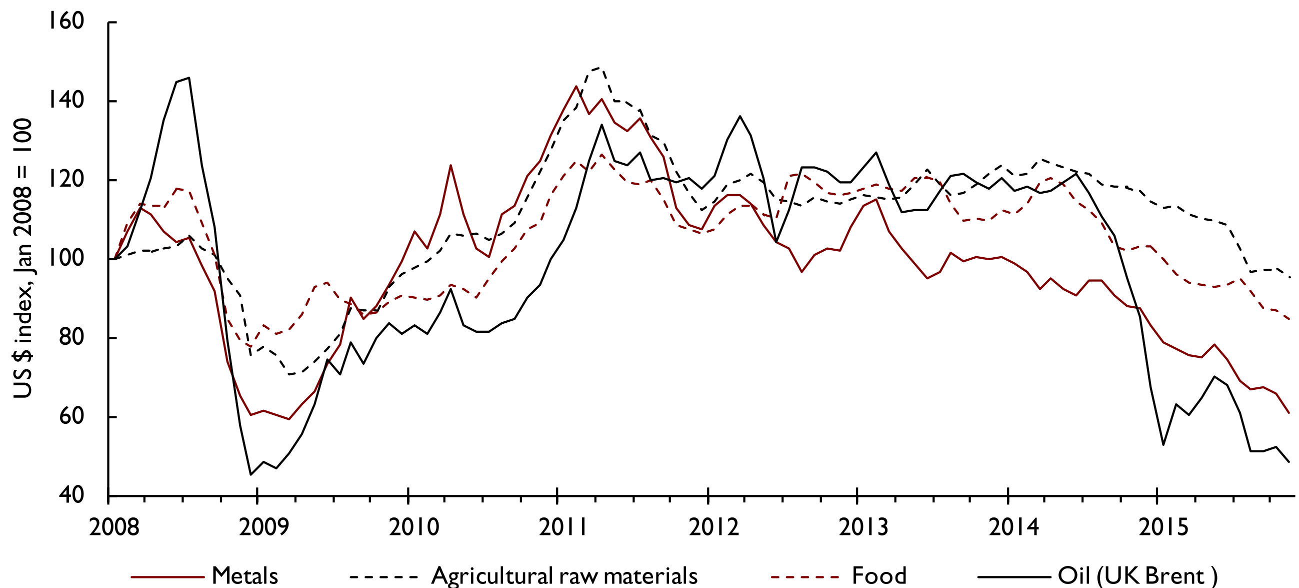
Figure 1. Commodity prices in US dollars



Source: Datastream

a situation where inflation in the advanced economies is well below targets and the scope for further monetary easing is limited. Or it may indicate that the market has been focusing on the effects of cheaper oil on oil-producing countries and companies, including reduced investment spending in the energy sector, increased fiscal restraint in oil-producing countries, and sales of equities by oil producers' diminishing sovereign wealth funds.

The interpretation of equity price movements is never straightforward, and their recent decline could be due not to falling oil prices but, for example, to the correction of an overvaluation of equities by historical standards (for which there has been evidence for some time in price–earnings ratios) combined with increased risk aversion or reduced confidence in prospects for a normalisation of growth, inflation, and monetary policy after seven years of lacklustre recovery, or reduced confidence in policymaking, for instance in China following recent questionable management of the equity and currency markets. Or the decline may partly represent over-reaction to developments, and there seem to have been several instances of this in recent months following movements in economic data of questionable significance, especially for China, and statements by policymakers that are no different substantively from what has been said before. (As with the bout of global market turmoil last August, the recent instability seems to have begun with a steep drop in Chinese equity markets at the beginning of January, apparently in response to disappointing PMI data and exacerbated by newly introduced, poorly designed, and subsequently removed market circuit-breakers and speculation about the status of controls on the selling of shares.)

In any event, the declines in equity prices may be expected to reduce demand and activity in the short term, through wealth effects on spending and higher costs of equity finance, while the fall in oil prices should have the opposite effect, while also lowering inflation. Our revised forecast reflects these implications of developments up to mid-January. It also reflects recent economic data, which have been somewhat less favourable than we assumed in the November *Review*. Growth seems to have slowed unexpectedly in the fourth quarter in the United States and also in Germany and France. Among emerging market economies, the economic slowdown in China seems to have proceeded in late 2015 broadly in line with the government's plan and our November forecast, but in Brazil economic conditions broadly have worsened further, while signs of economic stabilisation in Russia late last year have since been overshadowed by the effects and implications of the renewed weakness in oil prices.

Taking these developments into account, our forecast of global GDP growth has been revised down by 0.2 percentage points for 2016, to 3.2 per cent, and by 0.3 percentage point for 2017, to 3.8 per cent. Our estimate of global growth in 2015 is unchanged from November,

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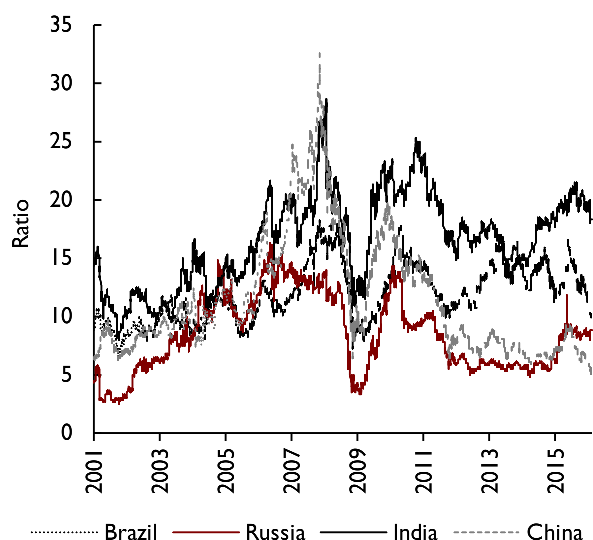
Figure 2. Price to earnings ratios for selected emerging market economies



Source: Datastream.

at 3.0 per cent. This was the slowest annual growth since the crisis, and growth this year is now expected to be only slightly faster. In the advanced economies, the modest and uneven recovery is expected to continue. Among the major emerging market economies, in China the gradual slowing of growth and rebalancing of the economy towards consumption and services, and away from investment and manufacturing, is projected to continue. Brazil, Russia and South Africa are examples of countries facing significant economic challenges partly owing to recent declines in commodity export prices; they are projected to recover gradually in the forecast period. India, now the fastest growing major economy, is benefiting particularly from the decline in oil prices.

Inflation in the advanced economies generally remains well below targets, although in some cases, including the United States and Japan, but not the Euro Area, there have been tentative signs of inflation picking up from close to zero. The recent renewed declines in oil and other global commodity prices are likely to lower inflation – especially headline rates – again in the short term. In our forecast, average annual inflation reaches 2 per cent in the medium term in the United States, but remains below targets in the Euro Area and Japan. In the emerging market economies, consumer price inflation in China in 2015, at 1.5 per cent, was also below target, but in other cases, including Brazil and Russia, it is significantly higher than official objectives, partly reflecting currency depreciations related partly to commodity price declines.

In December, both the European Central Bank (ECB) and the US Federal Reserve took action to adjust monetary conditions, in opposite directions. The ECB lowered its deposit rate by 10 basis points to –0.3 per cent and announced a six-month extension of its asset purchase programme. These measures fell short of market expectations, so that market interest rates in the Euro Area and the exchange value of the euro subsequently rose. The Federal Reserve raised its target range for the federal funds rate by 25 basis points from the near-zero level that had prevailed for seven years. This action had been widely anticipated, including by increases in longer-term interest rates, and the immediate market reaction was generally limited and benign, including rises in equity markets.

Bond markets globally, like equity markets, turned around at the beginning of January, indicating increased risk aversion. Ten-year sovereign yields, which had risen by about 20 basis points in the previous two months in the United States and the Euro Area, partly in anticipation of the hike in rates by the Fed and on disappointment with the ECB's action, subsequently fell back to around their end-October levels by late January. Government bond yields in Japan also eased in January, after being stable in the previous two months. By contrast, government bond yields in Russia, which had eased by about 50 basis points in November and December, rose by about 130 basis points in January, and corresponding yields in Brazil, which had been stable late last year, rose by about 80 basis points in January.

In foreign exchange markets, the US dollar has appreciated against most other major currencies since late October – by about 2 per cent against the euro; 4 per cent against the Chinese renminbi and Indian rupee; 8–9 per cent against sterling, the Canadian dollar, and Brazilian real; and by 32 per cent against the Russian rouble. The strongest currency in the past three months has been the Japanese yen, which has appreciated by about 3 per cent in terms of the US dollar, apparently reflecting its role as a safe-haven currency in Asia. The US dollar's trade-weighted value in late January was about 3 per cent higher than in late October, 1 per cent higher than the peak reached last March, and about 24 per cent above its low of May 2014. The Chinese currency has depreciated by about 6 per cent in terms of the US dollar since the authorities announced last August a change in the exchange rate arrangement to allow greater flexibility. In December, they further announced that they would henceforth pay more attention to the renminbi's value in terms of a 13-currency basket, and in trade-weighted terms the currency's value has been

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broadly stable over the past year. As discussed below in the section on China, this stability has been maintained partly through substantial official intervention in support of the renminbi in the foreign exchange market which, given China's current account surplus, indicates large-scale capital outflows. China's foreign exchange reserves at the end of 2015 were 17 per cent smaller than the peak reached in mid-2014.

The recent appreciation of the US dollar can account for only a small part of the recent decline in the dollar-denominated prices of energy. Oil prices in late January, at just below $30 a barrel, were about 33 per cent lower than in late October, and close to their lowest levels since 2003. The renewed decline in prices since early November, which accelerated in January, seems to stem from a number of factors: increased inventories; increased projections of supply, related partly to Iran's return to world markets in January with the end of international sanctions, but also to the unexpected resilience of shale production; OPEC's failure at its December meeting to agree on a production ceiling; and downward revisions of estimates of demand. These factors were all highlighted in mid-January when the International Energy Agency warned that oil markets could "drown in oversupply" this year, with slower demand growth and additional supply from Iran offsetting a decline in non-OPEC production. Other commodity prices have also weakened since late October, but generally by much less than oil prices: the Economist all-items dollar index (which excludes oil and iron ore) in mid-January was 5 per cent lower than in late October – a fall attributable largely to the dollar's strength – while the sub-indices for industrial materials and metals were 7 per cent and 9 per cent lower, respectively. The much larger decline in oil prices is strong evidence that supply factors have been its dominant cause. In particular, the idea that weakening Chinese demand has been the main factor behind cheaper oil is negated by the relatively mild fall in the prices of metals, of which China is a relatively larger consumer.

In Europe, the influx of refugees and other migrants from Syria, Iraq, and other countries in the Middle East and North Africa, has continued in recent months. Its economic implications are examined in Box B.

Risks to the forecast and implications for policy

Recent developments have highlighted several risks to the outlook.

First, the downturn in oil and other commodity prices carries both downside and upside risks. Particularly in the advanced economies, it will directly impede the rise in inflation toward official targets and increase the short-term risk of deflation. This indicates the importance of continuing highly accommodative monetary policies. In the United States, the path of interest rate increases envisaged by the Fed in December now looks too steep. Our forecast assumes that the target federal funds rate will be raised by 50 basis points this year – half the FOMC's median projection in December – and, depending on economic and financial developments, including the economy's response to the dollar's appreciation and the decline in the stock market, even this may be too much. In the Euro Area, the ECB will reconsider in March the adequacy of the adjustments announced in December to its interest rates and asset purchase programme: at present, the need for further action seems clear. The Bank of Japan's inflation objective has lost some credibility as the target date for its achievement has been pushed back, and it too may need to take additional easing action, especially in light of the yen's recent appreciation. Meanwhile, for oil-producing countries, weakness in oil prices will increase imbalances in external payments and fiscal accounts, which may need to be addressed by adjustment policies that damage growth in the short term.

On the other hand, the decline in oil prices may provide a larger boost to global demand and activity than our forecast assumes. The positive demand response to the decline in oil prices since mid-2014 has generally been more muted than might have been expected from past experience. Part of the explanation lies in increased household saving, notably in the United States. With the decline in prices now larger and becoming more prolonged, consumers may become more confident in the durability of their real income gains, and spend accordingly. But while this upside risk should be borne in mind, the larger costs of the materialisation of the downside risk indicates that that should be the dominant consideration.

Second, while recent declines in equity prices may turn out to be temporary market corrections, they may go further, reducing confidence and household wealth and raising the cost of finance. At times in the past, some central banks have given the impression of providing a floor under equity prices – for example, the notion of the 'Greenspan put'. Such a monetary policy response now seems unlikely, and this may make markets less grounded on the downside, especially given the indications of overvaluation.

Third, one of the most striking developments in the global economy in 2015 was the increased outflow of capital from emerging market economies. The Institute of International Finance has estimated that net capital

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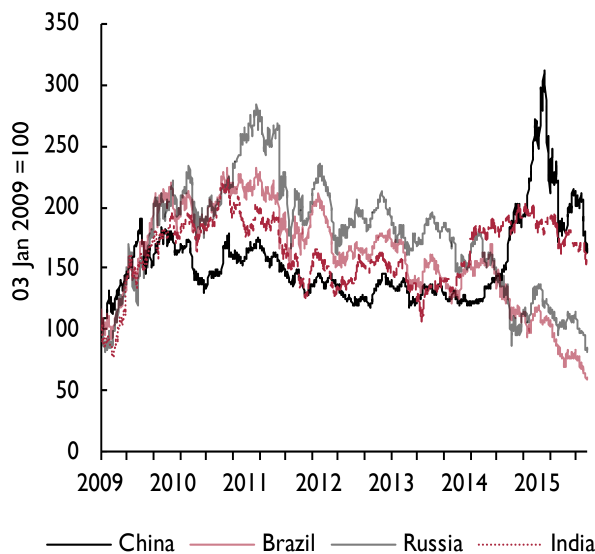
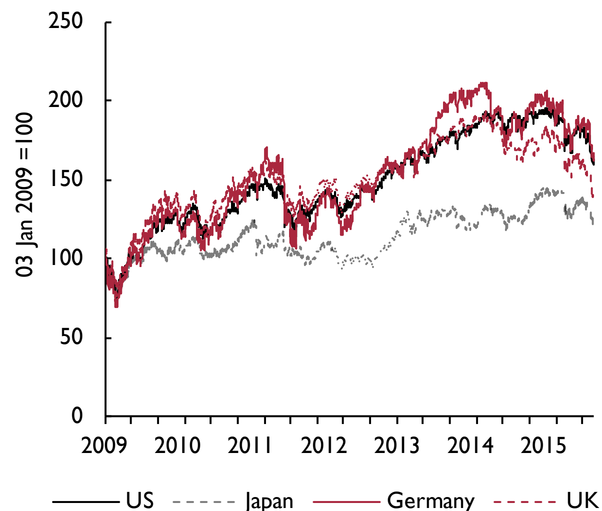
Figure 3. Stock market price indexes for selected emerging market economies (in US$)



Source: Datastream and authors' calculations.

Figure 4. Stock market price indexes for selected advanced economies (in US$)



Source: Datastream and authors' calculations.

outflows from emerging markets last year amounted to $735 billion, up from $111 billion in 2014, with $676 billion accounted for by China. Related to this is the $513 billion decline in China's official foreign exchange reserves in 2015, although this also reflects valuation changes, especially the depreciation of the non-dollar currencies in which some reserves are held. A significant proportion of the capital outflow from China last year is reported to have comprised the repayment of foreign currency debt (including by Chinese banks), and the decline in reserves may be viewed partly as a reduction in the corresponding hedge. This, as well as the natural international diversification of Chinese residents' growing assets, illustrates how capital outflows may, in part, be benign. However, capital outflows from emerging markets have been more widespread than the IIF data suggest, because where exchange rates are flexible, outflows will have been reflected not in reserves changes and measured capital flows but in currency depreciation, which has been the general experience in emerging markets over the past year. Rising interest rates in the United States will tend to increase outflows from emerging markets in the period ahead and exacerbate the policy challenges they face. At the same time, further appreciation of the US dollar will increase the burden of dollar-denominated liabilities to unhedged foreign borrowers.

Fourth, a sharper than projected slowdown in China would be likely to have significant international spillovers. These were discussed in Box B of the August 2015 *Review*.

Fifth, the inflow of refugees and other migrants to Europe has added to the challenges facing the EU. If migrants, who still represent a very small proportion of the EU's population, are distributed reasonably evenly among member countries, and if governments take appropriate action to assist their integration into communities and the labour force, they should benefit economic growth in the medium term without risking social cohesion. The relatively small fiscal expenditures involved should also boost demand and activity in the short term. Without cooperation among member countries, however, the consequences could be serious for the EU's cohesion. With regard to the Euro Area, some progress is being made in reducing high unemployment, and in the adjustment of relative costs among member countries, with wages rising relatively rapidly in Germany, in particular, though by only small margins. This process needs to be speeded up: our forecast shows no decline in Germany's current account surplus, of 8 per cent of GDP. The continuing failure to make significant progress to complete the architecture of economic and monetary union is another factor that leaves the Area vulnerable to financial shocks and political reaction.

A sixth risk relating to the slowdown of global trade, is discussed in Box A.

Finally, the global economy remains vulnerable to a deterioration in geopolitical tensions, amid current conflicts in the Middle East and elsewhere.

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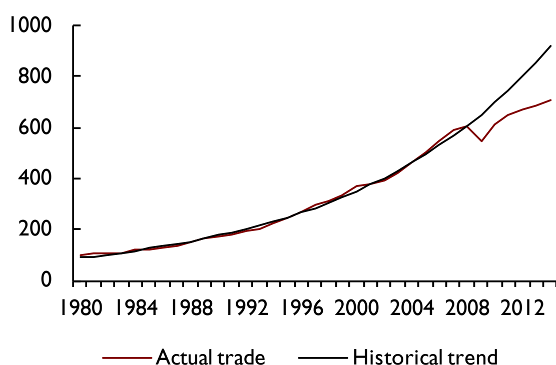
Box A. Is the global trade slowdown a risk to our forecast outlook?
by Oriol Carreras and Simon Kirby

During the Great Recession, the volume of world trade dropped sharply (see figure A1). The resumption of world trade growth did not result in a return to the pre-crisis trajectory. Rather, world trade volumes have continued to deviate from the pre-recession trend and at the end of 2014 trade volumes stood at a level 22½ per cent below that trend. This raises two fundamental questions: to what extent is this moderation in trade growth a structural change in the global economy, and how much does/would a slowdown matter for global growth? This box briefly surveys the main reasons put forward in the literature to explain this phenomenon and discusses the risks to world output growth that come with it.

The weakness in global demand due to the recent crisis, first in advanced economies and more recently in emerging markets and low income economies, may explain some of the relative weakness of world trade growth. If, in light of revised expectations about future income growth or through increased saving in order to improve the position of their balance sheets, economic agents adjust their consumption and investment plans, one would expect imports volumes to adjust accordingly to a period of weaker than expected demand. However, even with the tepid global growth of the post-Great Recession period, the import intensity of global demand has remained subdued (see figure A2).

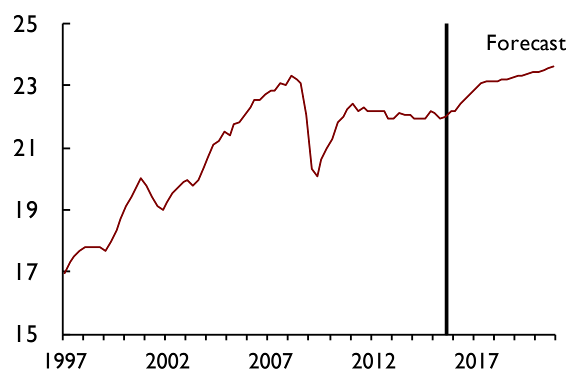
Compositional effects might be behind the story presented in figure A2. If the share of high import-intensive goods and services within global demand has fallen in favour of less import-intensive ones, global demand should become less import intensive and trade growth should slow down. This is the result that Bussière *et al.* (2013) found. In their paper, the authors show that investment is the most import-intensive component of demand, and as investment, within the group of developed economies, is the component of output that declined the most at the onset of the crisis, standard trade equations that account for the

Figure A1. World trade (index 1980=100)



Source: NiGEM database and authors' calculations.
Note: World trade is defined as world exports plus imports of goods and services at 2011 US$ prices. The historical trend has been computed over the 1980-2007 sample period.

Figure A2. World trade to GDP ratio (per cent)



Source: NiGEM database.

differentials in import intensities of each component of output do a good job at accounting for the initial decline in global trade growth. By the same token, as the share of investment to GDP has not recovered pre-crisis levels, it is only normal to expect trade growth to remain subdued. However, Constantinescu *et al.* (2015) have suggested that weak demand alone, even when accounting for compositional effects, cannot explain the totality of the drop in trade growth and the subdued path it has followed afterwards. As figure A3 shows, trade growth has become less sensitive to income growth in recent years, which implies that even if global output growth were to return to pre-crisis levels, trade growth would not.

One reason that has been proposed to explain figure 3 relates to the reintegration into the global economy of China and Eastern Europe (see for instance Gaulier *et al.*, 2015). As these regions opened up to the rest of the world, trade increased spectacularly. However, as the integration process finalises, trade growth should be expected to be at a more subdued pace.

Another explanation that has been explored relates to the role of global value chains (GVC). If a firm reallocates some stages of its own production process to different countries, trade will increase, as it is calculated on a gross value basis, i.e. it includes the value of the intermediates that have been imported to produce a final good or service. After several years in the 1990s of intense growth of GVCs, firms may have already exploited all the benefits derived from it. If so, we should expect trade to grow at a more moderate pace (see for instance Crozet *et al.*, 2015).

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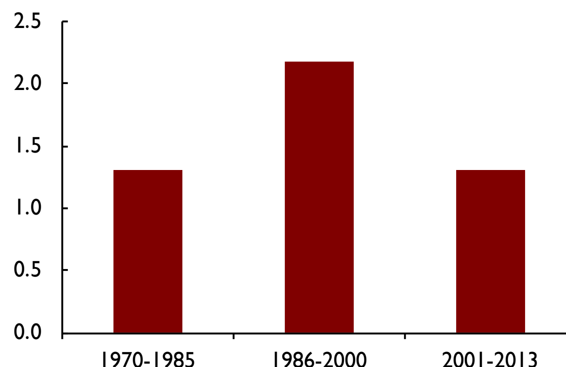
Box A. (*continued*)

China's government's desire to see the economy transition to one where domestic consumption is the key driver of growth as well as the recent policy shift to increase the share of domestic value added in its own exports, implying a defragmenting of some global supply chains, may thus be reducing the volume of imports into the economy, all else equal, potentially reducing the import intensity of global demand.

Protectionism has also been put forward as another explanation for the lower sensitivity of world trade to income growth. Since the beginning of the crisis, there have been a number of trade-restrictive measures, such as tariffs, that were meant to be temporary but have not been removed yet (see World Trade Organization, 2014). However, these measures affect only a very small proportion of total trade (below 5 per cent), implying, at most, a very modest contribution to the moderation in global growth rates.

Figure A3. Long-run world trade to income growth elasticity



Source: Constantinescu *et al.* (2015)

Trade is of relevance as it is a source of growth: it constitutes demand for goods and services, provides a means of growth for crisis-hit economies, helps the diffusion of knowledge and may induce product specialisation (Hoekman, 2015). While trade can clearly have welfare enhancing properties, in the context of global GDP growth forecasts, how much of a risk does a slowdown in trade volumes growth pose?

At the global level, concerns do appear to be overstated. Weakness in global demand was accompanied by a slump in global trade, but the slowdown in trade growth does not appear to be the cause of the global crisis. It is also not a reason for concern that the re-integration of China and Eastern Europe to the world is finalising. Rather, we should have always expected that trade flows owing to this convergence process would not last. Instead, we do believe that the slowdown in trade may pose a risk to certain countries. For instance, certain firms may decide to re-shore their production processes which could harm the economic prospects of the countries that hosted that particular stage of production. However, this process, while harmful for that one country in particular, just reflects the re-optimization of production processes of firms that operate globally.

Is the recent slowdown in trade growth here to stay? While some of the arguments covered in this box suggest that trade is not likely to regain pre-crisis rates of growth, there are still several areas left to explore that could reignite trade growth. Firstly, the finalisation of the reintegration to the world economy of China and Eastern Europe reminds us that other areas of the world, such as Africa, hold a lot of potential for trade expansion. Secondly, while successive trade liberalisation agreements have removed the bulk of trade barriers in goods, there are still many barriers in place that prevent trade in services. Recent trade agreements such as the Trans-Pacific Partnership walk in the right direction. The World Bank (2016) estimates that trade within the members of the agreement could increase by 11 per cent by 2030. Last but not least, technological progress has the potential to bring international trade, an area of business so far exclusive to large firms due to the large costs of engaging in international trade, within the reach of small and medium firms (see Ahmed *et al*., 2015), opening new possibilities for trade expansion.

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