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# Situation of and outlook for the world economy at the start of 2017

Associate Directorate General International Affairs

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Global growth in 2016 disappointed analysts once again. Moreover, three far-reaching events occurred which, nevertheless, did not have an immediate major impact.

At the start of the year, the Chinese financial markets experienced turbulence relating to the challenges the Chinese authorities face in implementing their structural reform programme.

In June, the United Kingdom voted in favour of leaving the European Union, which means the loss of an influential partner in the process of European construction.

Lastly, in November, the Republican candidate Donald Trump won the US presidential elections. This might entail a change in macroeconomic policies and check the process of globalisation. These events reveal a global economic setting shrouded in great uncertainty for the future.

# SITUATION OF AND OUTLOOK FOR THE WORLD ECONOMY AT THE START OF 2017

This article has been prepared by the Associate Directorate General International Affairs

## Introduction

In many respects the year 2016 was a continuation of the seven years following the global financial crisis. As the second section of this article highlights, the global economy slowed again last year, global growth and growth in the main areas again fell short of the expectations prevailing at the start of the year, and certain imbalances continue to build up, albeit moderately. Nonetheless, 2016 could also be viewed as marking a sea change in the global economic future.

There were three profound and far-reaching events in 2016 which, contrary to expectations, had a scant economic impact in the short term, due in part to the authorities' reaction. At the start of the year, there was fresh turbulence on the Chinese financial markets, which fed through to the global level, against a background of doubts over the Chinese authorities' ability to control the ongoing reforms aimed at opening the economy up financially and changing China's exhausted growth model. In June, the British electorate voted to take the United Kingdom out of the European Union (EU), entailing the loss of an important and influential partner in the European construction process. Finally, in November, confounding expectations, the US presidential elections ushered in the Republican candidate Donald Trump, an advocate of certain economic policy avenues that involve a clear break from those that have governed global economic development since the second half of the 20th century. These unexpected results have been interpreted as the reaction by certain sectors of the advanced economies to the consequences of secular trends, such as globalisation and technological progress, which, although they have underpinned global economic development in recent decades, have not benefited everybody equally. From another standpoint, the three events in question are very different expressions of the frictions that global economic and financial integration processes may generate.

The third section of the article reviews the economic implications of these events from different standpoints. Firstly, the repercussions of a new US macroeconomic policy mix are analysed, with a more expansionary fiscal policy and a swifter normalisation of monetary policy, both in terms of growth and of domestic and external imbalances. The second section reviews the positive and negative aspects of greater global economic integration, in terms of trade, immigration and financial flows; the evidence suggests that the benefits exceed the costs at the aggregate level, although some groups may have been adversely affected. Finally, the third section looks at the major challenges facing the Chinese authorities in implementing their ambitious structural reform programme, against a background of high debt and an external environment less favourable than in the past.

The events of 2016 reveal a global economic context of greater uncertainty for the coming years, as is detailed in the final section. Some of the risks that were prominent in recent years, such as the risk of deflation, have faded. But as global growth takes root in the short term, the change in the political setting under way in some developed economies poses fresh questions harbouring longer-dated consequences.

## The world economy in 2016

### GLOBAL ECONOMIC DEVELOPMENTS

In 2016 the world economy grew 3.1%, 0.1 pp less than in 2015 (see Table 1) and 0.3 pp less than expected at the start of the year by the IMF. This was due to the slowdown in activity in the developed economies, whose growth fell by almost 0.5 pp (from 2.1% to 1.7%), when stabilisation had been expected. Influential in this result was the slump in

## MAIN MACROECONOMIC INDICATORS (a)

TABLE 1

| | 2013 | 2014 | 2015 | 2016 | 2015 | | | | 2016 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| United States | | | | | | | | | | | | |
| Gross domestic product | 1.7 | 2.4 | 2.6 | 1.6 | 3.3 | 3.0 | 2.2 | 1.9 | 1.6 | 1.3 | 1.7 | 1.9 |
| Consumer price index (b) | 1.5 | 1.6 | 0.1 | 1.3 | -0.1 | 0.0 | 0.1 | 0.5 | 1.1 | 1.0 | 1.1 | 1.8 |
| Current account balance | -2.2 | -2.3 | -2.6 | — | -2.6 | -2.5 | -2.7 | -2.5 | -2.9 | -2.6 | -2.4 | — |
| General government balance | -5.0 | -4.5 | -4.1 | — | -3.9 | -4.3 | -4.5 | -3.6 | -4.6 | -4.6 | -4.5 | — |
| Gross public debt (c) | 125.4 | 125.0 | 127.4 | — | 125.5 | 124.8 | 126.2 | 127.4 | 128.9 | 128.1 | 127.8 | — |
| Unemployment rate | 6.7 | 5.6 | 5.0 | 4.7 | 5.4 | 5.3 | 5.0 | 5.0 | 5.0 | 4.9 | 4.9 | 4.7 |
| Euro area | | | | | | | | | | | | |
| Gross domestic product | -0.2 | 1.2 | 1.9 | 1.7 | 1.8 | 2.0 | 1.9 | 2.0 | 1.7 | 1.6 | 1.8 | 1.7 |
| Consumer price index (b) | 1.4 | 0.4 | 0.0 | 0.2 | -0.3 | 0.2 | 0.1 | 0.2 | 0.0 | -0.1 | 0.3 | 0.7 |
| Current account balance | 2.3 | 2.5 | 3.2 | 3.6 | 2.2 | 2.7 | 3.8 | 4.1 | 2.4 | 3.5 | 3.7 | 4.8 |
| General government balance | -3.1 | -2.7 | -2.2 | — | | | | | | | | |
| Gross public debt | 93.3 | 94.3 | 92.5 | 91.7 | | | | | | | | |
| Unemployment rate | 11.9 | 11.3 | 10.4 | 9.6 | 11.2 | 11.0 | 10.6 | 10.4 | 10.2 | 10.1 | 9.9 | 9.6 |
| United Kingdom | | | | | | | | | | | | |
| Gross domestic product | 1.9 | 3.1 | 2.2 | 1.8 | 2.9 | 2.4 | 1.9 | 1.7 | 1.6 | 1.7 | 2.0 | 2.0 |
| Consumer price index (b) | 2.6 | 1.5 | 0.0 | 0.7 | 0.1 | 0.0 | 0.0 | 0.1 | 0.4 | 0.4 | 0.7 | 1.2 |
| Current account balance | -4.4 | -4.7 | -4.3 | — | -4.6 | -3.6 | -3.4 | -5.5 | -5.0 | -4.6 | -5.2 | — |
| General government balance | -5.6 | -5.7 | -4.4 | -3.1 | -5.1 | -4.8 | -4.6 | -4.3 | -4.0 | -3.7 | -3.5 | -3.0 |
| Gross public debt | 95.1 | 92.4 | 102.0 | 102.9 | 87.2 | 88.6 | 88.1 | 89.0 | 87.6 | 89.0 | 88.2 | 89.2 |
| Unemployment rate | 7.2 | 5.7 | 5.1 | 4.8 | 5.6 | 5.6 | 5.3 | 5.1 | 5.1 | 4.9 | 4.8 | 4.8 |
| Japan | | | | | | | | | | | | |
| Gross domestic product | 2.0 | 0.3 | 1.2 | 1.0 | -0.1 | 1.8 | 2.1 | 1.1 | 0.4 | 0.9 | 1.1 | 1.6 |
| Consumer price index (b) | 0.3 | 2.8 | 0.8 | -0.1 | 2.3 | 0.5 | 0.1 | 0.2 | 0.0 | -0.3 | -0.5 | 0.3 |
| Current account balance | 0.9 | 0.8 | 3.1 | 3.8 | 1.7 | 2.2 | 2.7 | 3.1 | 3.3 | 3.5 | 3.7 | 3.7 |
| General government balance | -7.9 | -4.2 | -3.3 | — | -4.7 | -3.9 | -3.6 | -3.3 | -2.9 | -2.7 | -2.3 | — |
| Gross public debt | 221.5 | 227.7 | 229.9 | 233.7 | 228.3 | 229.0 | 229.3 | 229.9 | 230.9 | 231.8 | 232.8 | 233.7 |
| Unemployment rate | 3.7 | 3.4 | 3.3 | 3.1 | 3.4 | 3.4 | 3.4 | 3.3 | 3.2 | 3.1 | 3.0 | 3.1 |
| China | | | | | | | | | | | | |
| Gross domestic product | 7.8 | 7.3 | 6.9 | 6.7 | 7.0 | 7.0 | 6.9 | 6.8 | 6.7 | 6.7 | 6.7 | 6.8 |
| Consumer price index (b) | 2.6 | 2.0 | 1.4 | 2.0 | 1.2 | 1.4 | 1.7 | 1.5 | 2.1 | 2.1 | 1.7 | 2.2 |
| Current account balance | 1.5 | 2.7 | 3.0 | 1.9 | 3.3 | 3.2 | 3.0 | 3.0 | 2.6 | 2.4 | 2.4 | 1.9 |
| General government balance | -1.8 | -1.8 | -3.4 | -3.8 | -1.9 | -2.2 | -3.0 | -3.4 | -3.7 | -4.1 | -4.4 | -3.8 |
| Gross public debt | 36.9 | 39.8 | 42.9 | 46.3 | | | | | | | | |
| Emerging Asia (excluding China) (d) | | | | | | | | | | | | |
| Gross domestic product | 5.3 | 5.4 | 5.6 | 5.6 | 5.0 | 5.8 | 6.2 | 5.5 | 6.1 | 5.6 | 5.3 | 5.3 |
| Consumer price index (b) | 7.2 | 5.2 | 3.8 | 3.4 | 4.1 | 4.0 | 3.4 | 3.8 | 3.7 | 3.8 | 3.4 | 2.9 |
| Current account balance | -0.4 | 0.6 | 1.3 | — | 0.8 | 1.0 | 1.2 | 1.3 | 1.5 | 1.6 | 1.7 | — |
| General government balance | -3.2 | -2.6 | -2.3 | — | -2.3 | -2.3 | -2.1 | -2.3 | -2.7 | -2.8 | -2.6 | — |
| Gross public debt | 51.7 | 52.1 | 53.5 | 53.6 | | | | | | | | |
| Latin America (e) | | | | | | | | | | | | |
| Gross domestic product | 2.8 | 1.2 | 0.1 | -0.7 | 0.6 | 0.5 | 0.0 | -0.6 | -0.9 | -0.6 | -0.5 | — |
| Consumer price index (b) | 4.5 | 4.9 | 5.9 | 6.0 | 5.3 | 5.7 | 6.1 | 6.5 | 6.8 | 6.2 | 6.0 | 5.2 |
| Current account balance | -2.9 | -3.2 | -3.4 | — | -3.3 | -3.3 | -3.6 | -3.4 | -3.2 | -2.8 | -2.5 | — |
| General government balance | -0.9 | -1.9 | -3.8 | — | -1.4 | -4.8 | -5.1 | -5.6 | -5.4 | -5.1 | -5.1 | — |
| Gross public debt | 50.0 | 51.9 | 57.1 | 58.6 | | | | | | | | |

**MAIN MACROECONOMIC INDICATORS** (a) (cont.) **TABLE 1**

| | 2013 | 2014 | 2015 | 2016 | 2015 | | | | 2016 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 |
| Eastern Europe (f) | | | | | | | | | | | | |
| Gross domestic product | 1.4 | 3.0 | 3.8 | 3.1 | 3.9 | 3.5 | 3.7 | 4.2 | 3.0 | 3.6 | 2.7 | 2.9 |
| Consumer price index (b) | 1.5 | 0.3 | -0.4 | -0.2 | -0.6 | -0.1 | -0.5 | -0.4 | -0.5 | -0.7 | -0.2 | 0.5 |
| Current account balance | -1.1 | -0.6 | 0.4 | — | 0.0 | 0.4 | 0.4 | 0.3 | 0.0 | 0.3 | 0.5 | — |
| General government balance | -2.9 | -2.8 | -1.8 | — | | | | | | | | |
| Gross public debt | 52.4 | 50.5 | 50.3 | 50.9 | | | | | | | | |
| Memorandum item: GDP growth (a) (g) | | | | | | | | | | | | |
| World | 3.3 | 3.4 | 3.2 | 3.1 | 3.5 | 3.5 | 3.4 | 3.1 | 3.1 | 3.1 | 3.1 | — |
| Advanced economies | 1.2 | 1.9 | 2.1 | 1.7 | 2.4 | 2.3 | 2.0 | 1.8 | 1.5 | 1.5 | 1.7 | — |
| Emerging economies | 5.0 | 4.6 | 4.1 | 4.2 | 4.5 | 4.6 | 4.6 | 4.4 | 4.7 | 4.6 | 4.4 | — |
| Memorandum item: inflation (a) (g) | | | | | | | | | | | | |
| World | 3.7 | 3.2 | 2.8 | 2.8 | 2.5 | 2.6 | 2.7 | 2.9 | 2.3 | 2.1 | 2.1 | — |
| Advanced economies | 1.4 | 1.4 | 0.3 | 0.7 | 0.2 | 0.2 | 0.2 | 0.4 | 0.6 | 0.5 | 0.7 | 1.2 |
| Emerging economies | 5.5 | 4.7 | 4.7 | 4.2 | 4.6 | 4.8 | 5.0 | 5.3 | 3.8 | 3.6 | 3.4 | — |

SOURCES: IMF, Banco de España, Eurostat and national statistics.

**a** GDP and inflation are expressed as a year-on-year rate of change; the current account balance, the general government balance and gross public debt are shown as a percentage of GDP.
**b** The quarterly CPI corresponds to the average for the quarter.
**c** Federal, regional and local government liabilities including pension payment commitments to public-sector employees. Obtained from the financial accounts published by the Federal Reserve.
**d** Emerging Asia: China, India, South Korea, Indonesia, Thailand, Malaysia, Philippines, Hong Kong and Singapore.
**e** Latin America: Brazil, Mexico, Argentina, Colombia, Venezuela, Peru and Chile. Argentina and Venezuela are excluded for the CPI aggregate, as is Venezuela for the GDP, current account balance and general government balance aggregates. The GDP for 2016 is the IMF forecast.
**f** Eastern Europe: Poland, Czech Republic, Romania, Hungary, Bulgaria and Croatia.
**g** The annual data reflect the latest publicly available IMF forecasts at the cut-off date for this report. The quarterly data are calculated on the basis of a sample of 41 economies (17 advanced and 24 emerging) representing almost 90 % of world GDP, weighted according to their weight in purchasing power parity terms. All the economies to which footnotes d), e) and f) refer are included in the sample.

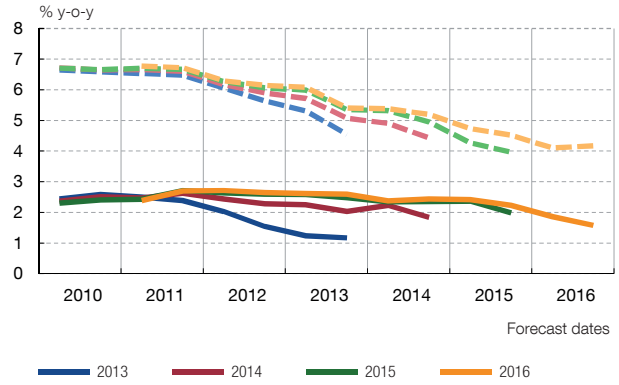
growth during the opening months of the year, chiefly associated with temporary factors. By contrast, certain political events, such as the triumph of the "yes" vote in the referendum on the United Kingdom leaving the EU, and the victory of the Republican candidate, Donald Trump, in the US presidential elections in November (see the first two sub-sections of "Determinants of the global economic outlook"), with potentially very substantial repercussions in the medium and long run, had little immediate impact on economic activity. The financial markets were also notably resilient to these events, as was previously the case in the response to the turbulence at the start of the year, associated with the corrections on the Chinese stock markets and the depreciation of its currency. The swift response of the economic authorities, who took measures to smooth market workings and adjusted their monetary policy stance to take into account the emerging risks, no doubt contributed to softening the short-term impact. In any event, the economic policy stance in the developed economies remained expansionary. The emerging economies, for their part, posted a similar growth rate to that of 2015 (4.2%, when 4.3% was expected), meaning that their growth differential with the advanced countries widened after several years of narrowing (see Chart 1).

As regards prices (see Chart 1), inflation in the advanced economies rose very gradually throughout the year as the effect of the 2014-2015 fall in oil prices progressively tailed off. Inflation stood at 0.7% for the year on average, 0.4 pp more than in 2015. Inflation in the emerging economies declined by 0.5 pp to 4.2%, an average that masks sizeable differences across countries and regions. Commodities prices turned around in 2016 (see Chart 2), posting an increase of 13%, which was led by oil (55%). Metals prices also increased significantly (21%), while food prices evidenced greater stability. Crude oil

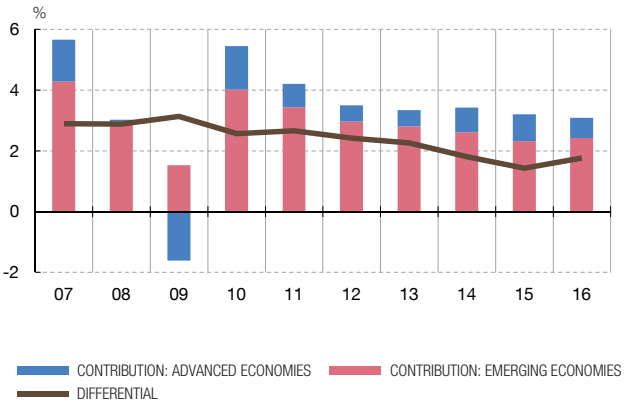
## THE WORLD ECONOMY IN 2016

CHART 1

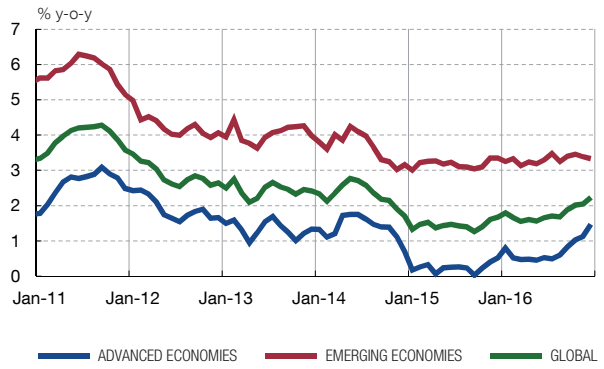
1 GDP GROWTH FORECASTS (a)



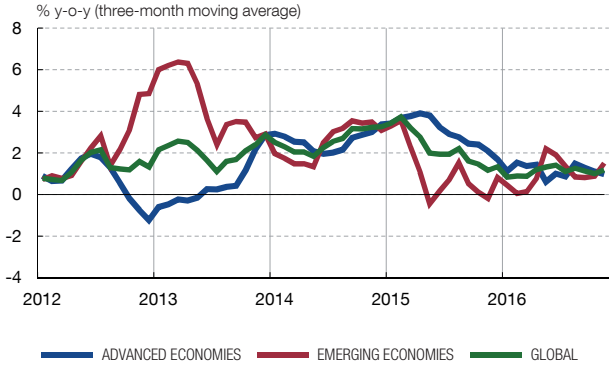

1 ADVANCED AND EMERGING ECONOMIES' CONTRIBUTIONS TO WORLD GDP GROWTH AND DIFFERENTIAL




3 OVERALL CPI




4 VOLUME OF GOODS TRADE (b)



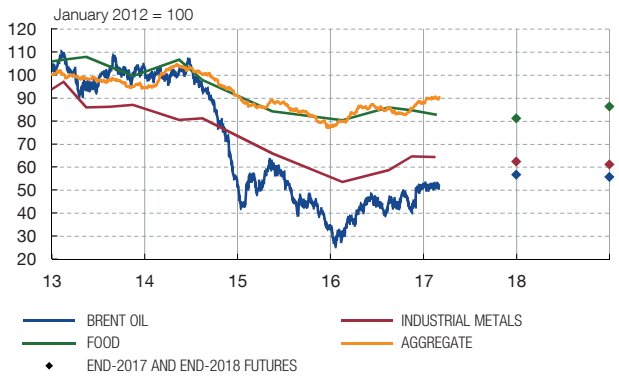

SOURCES: IMF and Datastream.

**a** Solid lines: advanced economies. Broken lines: emerging economies.
**b** Exports and imports: average.

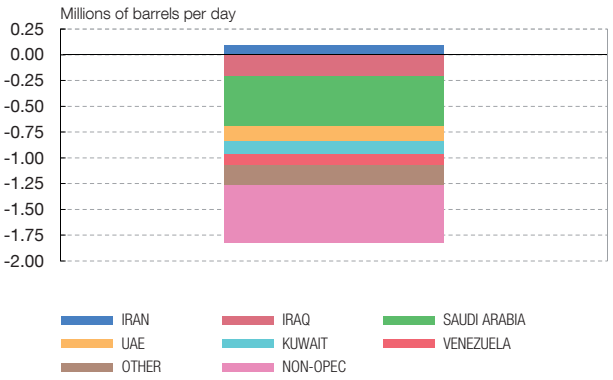
## OIL AND COMMODITIES

CHART 2

1 COMMODITY PRICES

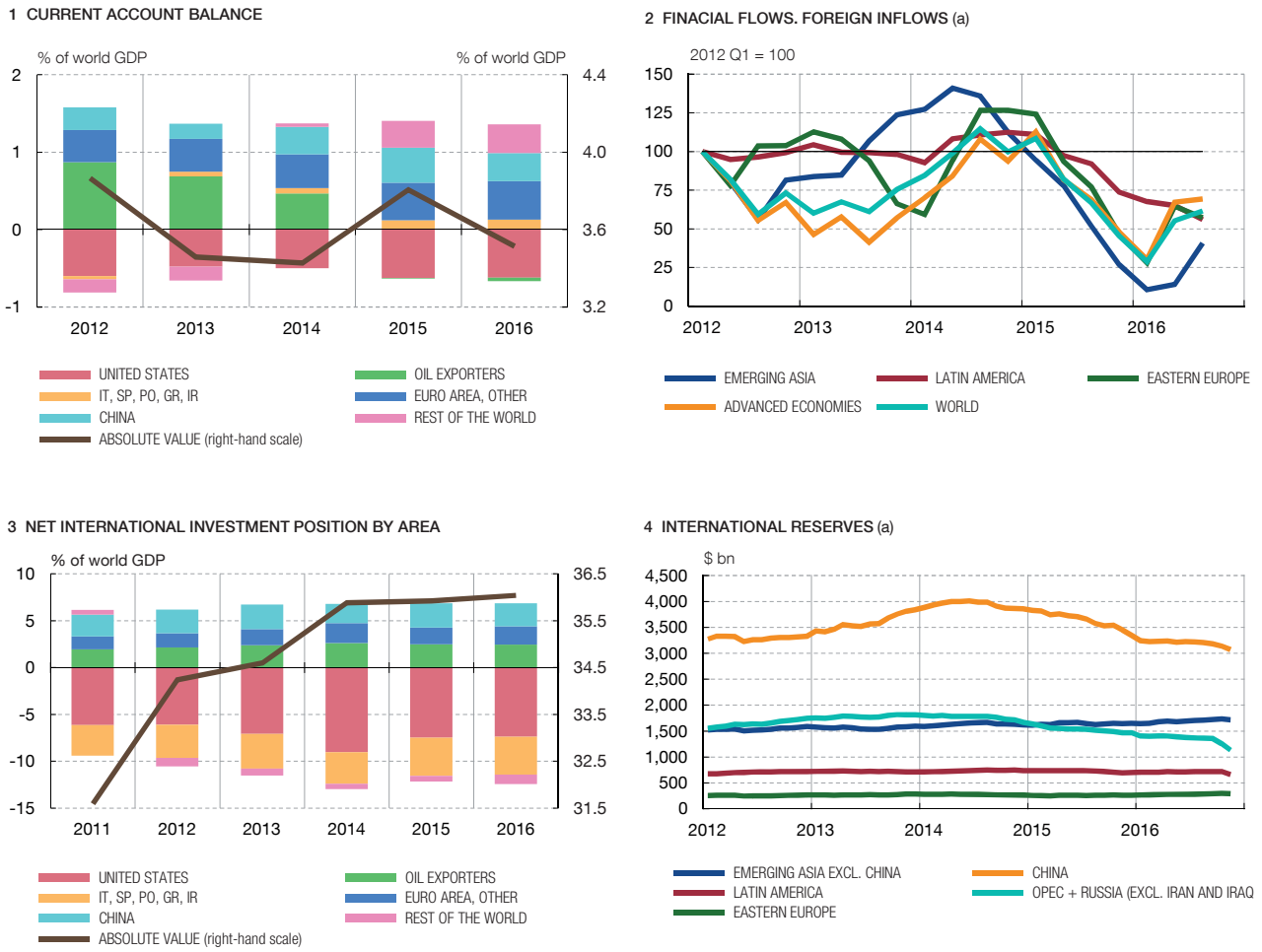



2 OPEC PRODUCTION CUTS




SOURCES: Datastream and OPEC.

GLOBAL IMBALANCES AND CAPITAL FLOWS CHART 3



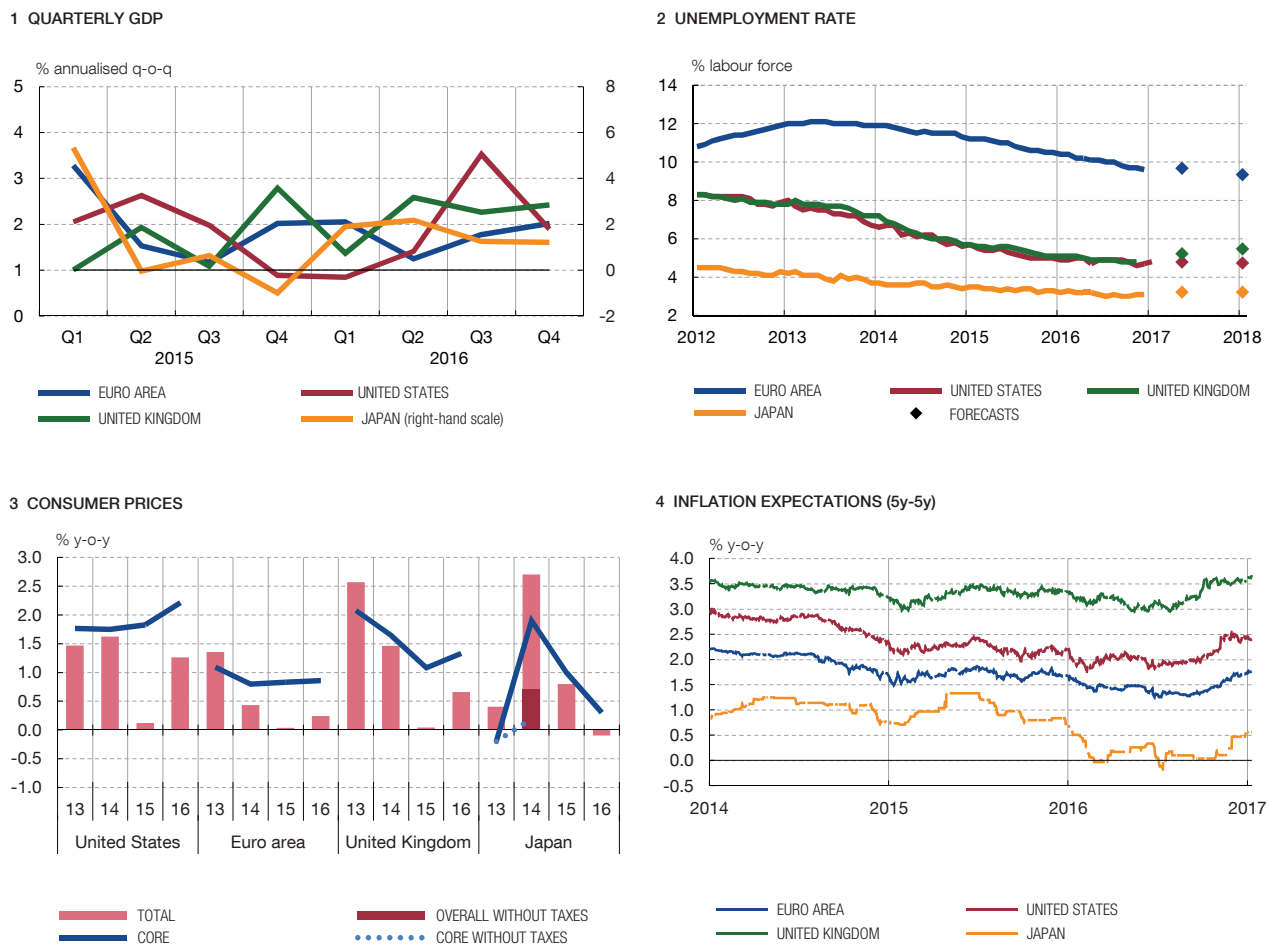

SOURCES: IMF, World Bank, national statistics, EPFR Global, Bloomberg and Datastream-Thomson Reuters.

**a** For the composition of the coUntry aggregates, see footnotes to Table 1.

prices rose to stand in a range of $40-50, after recording a 10-year low at the start of the year. In December, OPEC members reached an agreement – to which a number of other producer countries adhered – to cut their output, prompting a fresh increase in oil prices to around $55.

Global trade slowed over the year as a whole, increasing by only 1.9%, 0.8 pp down on 2015, although it rose timidly in the final stretch of the year. Despite this, its apparent elasticity with respect to global GDP fell once more. Several causes lie behind this reduction, linked essentially to date to the nature of the economic recovery – the weakness of the more demand-intensive components in imports, changes in the geographical composition of trade, the decline in global value chains and tighter financial conditions – and not so much to greater protectionism. But the latter could become more important in the future, which would adversely affect the global allocation of resources (see the second sub-section of "Determinants of the global economic outlook"). In 2016, current account imbalances lessened slightly (see Chart 3), against a background of smaller surpluses in China and in certain European countries, and of deficits in the oil-exporting countries. Conversely, imbalances measured through the net international investment position, i.e. in terms of stocks, continued to increase owing to valuation and foreign exchange effects, among other factors.

MACROECONOMIC DEVELOPMENTS IN THE ADVANCED ECONOMIES CHART 4



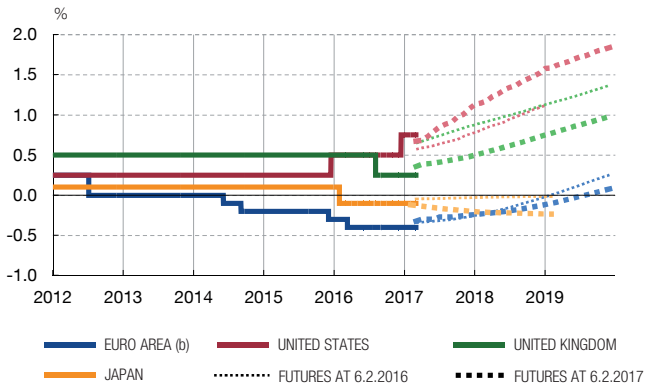

SOURCES: IMF, national statistics, Consensus Forecast, Barclays Live and Datastream-Thomson Reuters.

ECONOMIC DEVELOPMENTS IN THE ADVANCED ECONOMIES

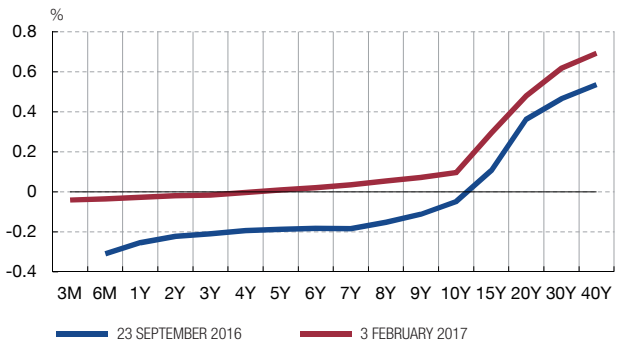
As mentioned above, growth in the advanced economies in 2016 was below expectations (see Chart 4). Household expenditure, underpinned by the improvement in labour markets and by low energy prices, was the main prop to growth, while investment remained weak. Country by country, the United States posted the biggest slowdown. It grew by 1.6%, 1 pp down on the previous year, as a result of the sluggishness in the first half of the year when investment was very slack. In the United Kingdom, activity slowed by 0.2 pp to 1.8%, but the keynote development was the resilience shown after the EU exit referendum (see Box 1). In the euro area, growth fell from 1.9% to 1.7%, and in Japan from 1.2% to 1.0%, owing to the slackness of domestic demand.

Inflation in these countries (see Chart 4) rose gradually in the second half of the year, owing especially to the energy component, although there was some heterogeneity across the different countries: in the United States, the year-on-year rate in December stood at 2.1%, in the United Kingdom at 1.6%, in the euro area at 1.1% and in Japan at only 0.3%. Core inflation rates increased less, remaining at some distance from central bank targets, except in the United States. These price developments came about against the backdrop of the progressive closing of output gaps, although the attendant figures are still negative, and a muted rise in wages. US and UK unit labour costs increased owing to the smaller rise in labour productivity, but they were offset by the squeeze on business margins. Measures of medium and long-term inflation expectations obtained on the basis of market variables rose during the second half of the year, and more markedly so following the US election results, signalling a decline in the risk of deflation.

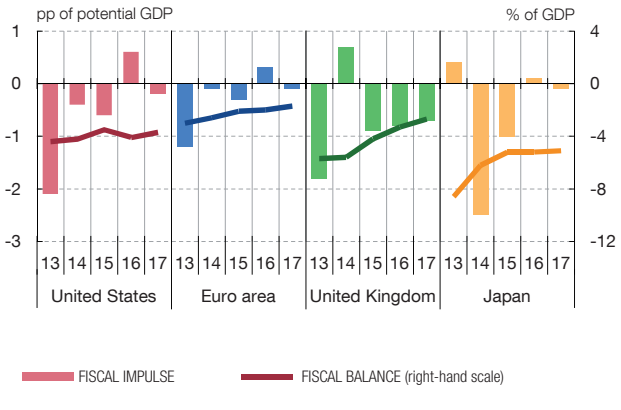
1 BENCHMARK INTEREST RATES AND EXPECTATIONS



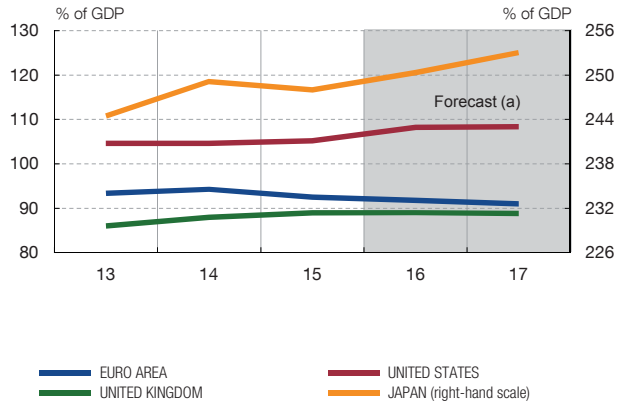

2 JAPANESE BOND YIELD CURVE




3 FISCAL BALANCE AND FISCAL IMPULSE (2013-2017)




4 PUBLIC DEBT




SOURCES: Federal Reserve, ECB, Bank of England, Bank of Japan, Datastream-Thomson Reuters and IMF.

**a** The forecasts for Japan begin in 2015.
**b** Deposit rate.

Against this backdrop, the monetary policy stance continued to be strongly expansionary (see Chart 5). In the United States, poor growth figures and the volatility on international financial markets in the first half of the year led the Federal Reserve to delay its decision to raise the federal funds rate; indeed, there was only one rise – of 25 bp, to a range of 0.50% - 0.75% – in December, when at the start of 2016 the members of the FOMC had projected four increases in the course of the year. The FOMC is now projecting three rises during 2017, a pace that the markets also consider feasible. In the United Kingdom, the Bank of England's Monetary Policy Committee lowered Bank Rate by 0.25% after the referendum in late June, and announced a package of additional measures, which included a term funding scheme and purchases of public and private-sector assets. Along these same lines, in July the Financial Policy Committee reversed the increase in the countercyclical capital buffer, from 0.5% to 0%, which it had previously programmed but which had not yet been implemented. In the euro area, the ECB adopted various measures during the year to raise inflation towards target. These included the decision in March to reduce the official rate to 0% and the deposit facility rate to -0.40%, and it extended the monthly volume of purchases of public and private assets; in December it extended this programme by a further nine months, to December 2017, albeit lessening the monthly pace of purchases. The Bank of Japan maintained its policy of quantitative and qualitative easing, adding negative deposit rates into the mix for a portion of bank reserves in February. In September, it modified its strategy so it could control the long-term yield curve, adjusting

its asset purchases to place the 10-year rate at around 0%; it further made the commitment to place inflation above the target of 2% in a sustained fashion. In other advanced economies, the central banks of Sweden, Australia, Norway and New Zealand cut policy rates and, in some cases, held them in negative territory, as in Sweden, Denmark and Switzerland.

In these circumstances, changes in financial indicators in the advanced economies were broadly consistent with an environment of appetite for risk, a squeezing of risk premia, a more or less marked uptrend in stock market indices and a reduction in long-term government debt yields (see Chart 6). Oscillations were observed on the foreign exchange markets and, in the wake of the UK referendum, there was an across-the-board depreciation of sterling and a rise in foreign exchange volatility. Following the US presidential election result, the tone on markets shifted, with investors building the effects of the fiscal impulse and deregulation announced by the new administration into their expectations. This brought about an increase in long-term interest rates (more sharply so in the United States), an appreciation of the dollar against most currencies, a stock market surge and a further narrowing of credit risk spreads. As mentioned above, and as in the case of the UK referendum, the result of the US elections caused only slight signs of risk aversion or flight to quality, despite adding substantial political uncertainty in the medium term. Financial conditions remained very relaxed, since the increase in long-term interest rates was partly offset by a reduction in credit risk premia and by the rise in stock market prices. Against that background, private-sector lending increased in most countries in the area, both that routed through capital markets and that through credit institutions.

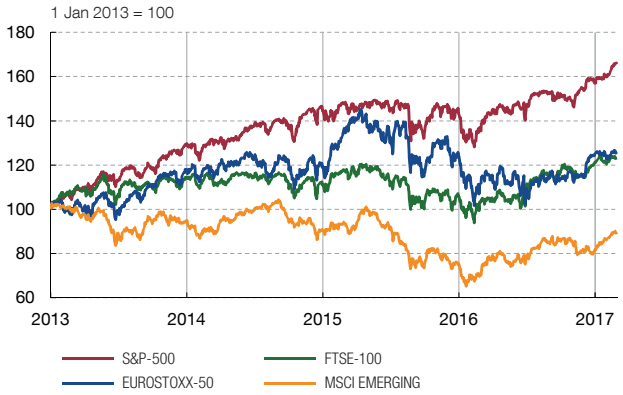
Fiscal policies in the advanced economies turned slightly expansionary during 2016, following six consecutive years of adjustment. This change in stance was assisted by favourable public-sector financing conditions. However, a degree of heterogeneity remained in place: the impulse was positive in the United States, the euro area and Japan, but was still negative in the United Kingdom. As a result, the average budget deficit increased by 0.2 pp to 3% of GDP and the public debt ratio rose by 3 pp to 108.6% of GDP (see Chart 5).

THE PERFORMANCE OF THE EMERGING ECONOMIES

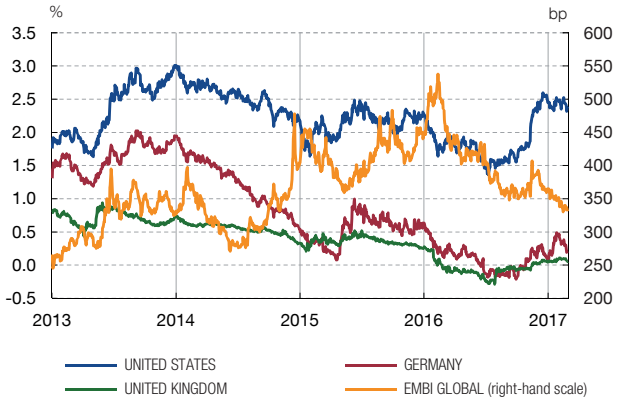
After five consecutive years of decline, the pace of growth in the emerging economies stabilised in 2016, standing at 4.2% (see Table 1 and Chart 7), 0.2 pp below the projection made at the start of the year. However, marked heterogeneity from region to region remained the case, owing to the differing sensitivity of each area to the developments that characterised the global environment: the sluggishness of international trade, the upturn in commodities prices and the continuation of benign financial conditions, with a degree of tightening in the final stretch of the year. Indeed, the financial markets in the emerging economies performed favourably, on a par with the advanced economies, although the bouts of instability during the year affected more acutely – albeit temporarily – those countries more dependent on external funding in particular. In parallel, there was a discernible reduction in divergences in inflation rates, which rose from very low levels in commodities-importing economies (including those of emerging Asia), while they fell in commodities-exporting countries (most notably those of Latin America), as their currencies ceased to depreciate.

The Chinese economy continued to move on a slower path, posting growth of 6.7% in 2016, somewhat higher than anticipated at the start of the year. The ongoing re-balancing of the economy continued, although the impulse provided by the authorities to public investment, to sustain growth in the second half of the year, restricted its scope (see the third sub-section of “Determinants of the global economic outlook”). Moreover, the pace

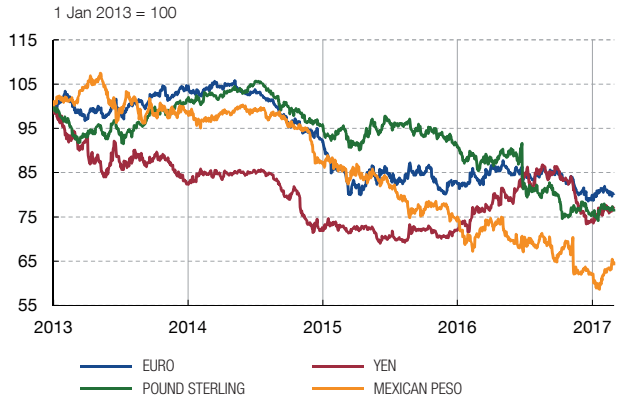
1 STOCK MARKET INDICES



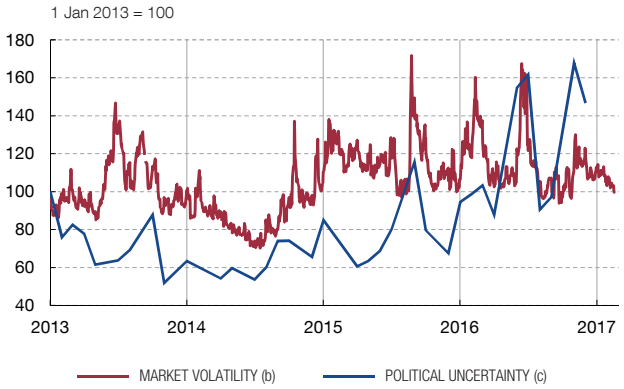

2 TEN-YEAR INTEREST RATES




3 EXCHANGE RATES AGAINST THE DOLLAR (a)

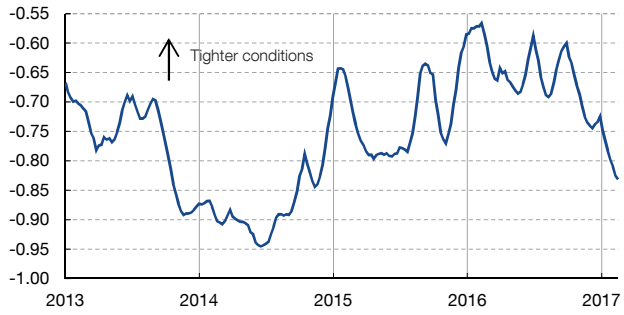



4 MARKET VOLATILITY AND POLITICAL UNCERTAINTY




5 UNITED STATES AND EMERGING ECONOMIES: CORPORATE BOND SPREADS AND EMBI GLOBAL

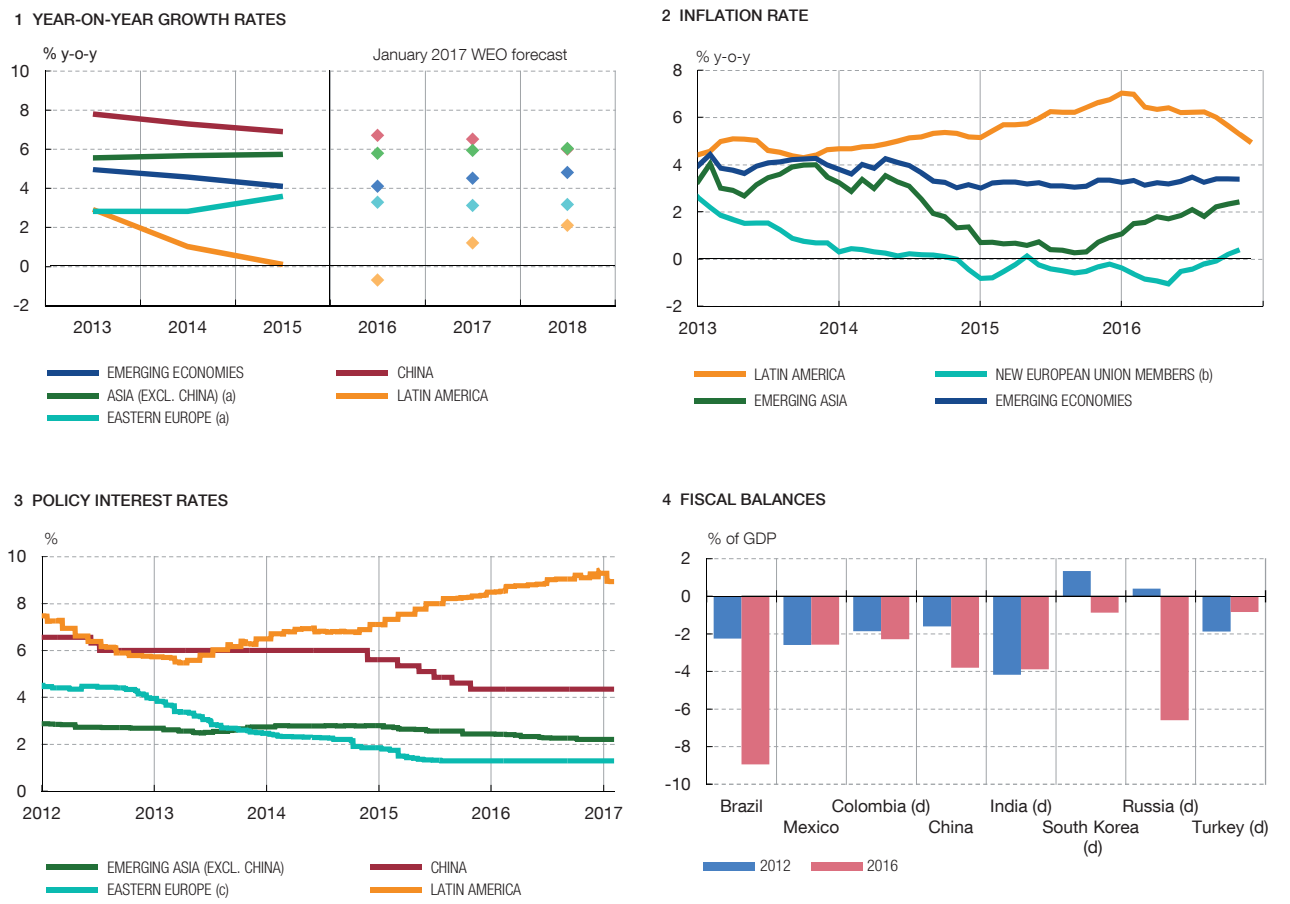

6 CHICAGO FRB FINANCIAL CONDITIONS INDEX (NFCI)




SOURCES: Datastream, Economic Policy Uncertainty and Federal Research Bank (FRB) of Chicago.

**a** An increase (decrease) denotes an appreciation (depreciation) of the currency against the dollar.
**b** Average volatility of bond markets (MOVE), stock markets (VIX) and euro, yen and pound sterling exchange rates against the dollar.
**c** Global Politicial Uncertainty Index (Global EPU Index).

MACROECONOMIC DEVELOPMENTS IN THE EMERGING ECONOMIES CHART 7




SOURCES: IMF, Datastream-Thomson Reuters, Bloomberg and national statistics.

**a** October 2016 WEO forecast.
**b** Aggregate of Bulgaria, Estonia, Hungary, Latvia, Lithuania, Poland, Czech Republic and Romania.
**c** Aggregate of Hungary, Poland, Czech Republic and Romania.
**d** Data to 2016 Q3.

of growth in lending was similar to that recorded in 2015, following the moderation seen in the 2013-14 period, and house prices in the main cities reached new heights, necessitating the introduction of restrictive administrative measures by the local authorities, which are so far proving effective. Regarding goods and services prices, it is worth highlighting the resumption of positive year-on-year rates of change by producer prices, boosted by dearer energy products, the lesser capacity in the intermediate goods sectors and tighter financing conditions for the more indebted corporations in these sectors. However, consumer price growth fell below the central bank target (3%).

The year saw capital outflows, of varying intensity, from China and reductions in currency reserves (which have fallen by 25%, from their mid-2014 peak, to below $3 trillion), against a background of expectations of a depreciation of the renminbi. The Chinese authorities reacted with administrative measures to check the capital outflows, suggesting a possible slowdown in the ongoing liberalisation of the capital account. All these developments marked a year in which the renminbi joined the SDR basket, something tenaciously sought by the authorities so as to seal their capital account-liberalising reforms.

In the rest of emerging Asia, growth was slightly lower than in 2015. Inflation rose appreciably during the year as a result of the pick-up in energy prices, but remained at

low levels, which has provided leeway to ease the monetary policy stance in some cases (see Chart 7).

GDP in Latin America contracted in 2016 (by around 0.7%), making for six consecutive years of slowing activity. In fact, four economies in the region were in recession: Brazil (-3.6%), Argentina and Ecuador (with a decline foreseeably greater than 2%) and Venezuela (where the GDP figure for 2016 is not available, although the decline will most likely be in excess of double digits). In Brazil, the adjustment launched by the new government, appointed in May 2016 amid a serious fiscal and institutional crisis, is proving slow. So too in Argentina, where the rise in activity associated with the change in the economic policy framework made by the new government, in late 2015, is taking longer to materialise than foreseen. Elsewhere, growth in Mexico was at around 2%, below expectations, having been affected by weak US growth in the first half of the year. Inflation began 2016 at high levels, as a result of the delayed impact of the depreciation and of the rise in the prices of certain foods. Since then it has moved on a downward trend, as the impact of the depreciations abated in line with the sluggishness of activity, down to below 5% in December in the group of five countries with inflation targets, 2 pp down on the start of the year. Against this backdrop, in the final quarter of 2016 and in 2017 to date, the central banks of Brazil, Colombia and Chile cut their policy interest rates. Mexico was an exception in terms of these trends. The Mexican central bank initiated a cycle of monetary policy tightening in July in response to the sharp depreciation of the Mexican peso and to the worsening economic outlook, which in the final stretch of the year became more acute owing to the change in tack of the trade and migration policies announced by the new US administration. In the fiscal policy realm, low commodities prices and the weakness of activity continued to exert high pressure on public finances across the entire region.

In the Eastern European economies growth fell to some extent, although the notable resilience of consumption and the increased contribution by the external sector enabled growth to hold at around 3%. Inflation returned to positive territory, as the impact of the fall in oil prices progressively diminished. Following the severe recession since late 2014, the Russian economy has begun to grow, assisted by the recovery in oil prices. Finally, after the failed coup d'état in July, the authorities' reaction and the heightened terrorist threat, the Turkish economy faces a delicate situation. Despite the severe slowdown in activity, given Turkey's heavy reliance on external funding, the central bank had to raise its policy rate in November to uphold the currency, to enhance the situation on financial markets and to sustain capital inflows. The economic policy leeway available is scant.

## Determinants of the global economic outlook

### THE CHANGE IN MACROECONOMIC POLICY STANCE IN THE UNITED STATES

The recovery in the US economy following the global financial crisis is now almost six years old.[1] However, the growth rates achieved have been lower than in previous recoveries and the consensus view is that the potential growth rate has fallen, due to lacklustre productivity growth and population ageing. The historically low nominal and real interest rates have not been sufficient to stimulate demand, raising the possibility that the economy is in a secular stagnation. If that is the case then fiscal stimulus (in the form of increased infrastructure investment, for example) would be a more effective way of boosting growth than an ultra-expansionary monetary policy. Another aspect of the US economic situation is the rise in inequality, related, inter alia, to a loss of semi-skilled jobs in manufacturing, owing to technological progress and, to a lesser extent, globalisation.

1 The output gap, although still negative, has almost closed; the rate of unemployment is at levels compatible with full employment and inflation is approaching, albeit slowly, the Federal Reserve System's target rate of 2%.

Last November, against this complex background, Donald Trump won the US presidential election. The policies announced by the new president would involve a change in the current macroeconomic policy mix, with a significant short-run fiscal stimulus and a more rapid normalisation of the monetary policy stance (the FOMC is currently planning to raise interest rates by 25 bp three times in 2017). The fiscal package is ambitious and includes: (i) a radical reform of corporate income tax, with a drastic reduction in the tax rate from 35% to 15%, full and immediate deductibility for capital investment expenditure, an end to interest expense deductibility, the elimination of exemptions and incentives for the repatriation of profits; (ii) a reduction in personal income tax, especially at the highest levels of income; (iii) an unspecified infrastructure spending plan, possibly with some public financing and incentives for private financing; and (iv) an increase in the defence budget, accompanied by offsetting cuts in other spending items.

This fiscal stimulus would have a positive impact on short-term demand, the magnitude of which would depend on its size and composition, as well as the monetary policy reaction to the increase in activity and inflation. In addition, some of the proposed measures (in particular the higher infrastructure spending and certain aspects of the corporate income tax reform) could raise productivity and the potential growth rate of the economy and, as a result, the real equilibrium interest rates, providing greater scope for monetary policy. By contrast, a reduction in personal income tax such as that proposed and other announced measures, such as the reversal of the health reform enacted by the last president (the Affordable Care Act), would increase inequality, one of the factors responsible for the lack of demand in the economy. In any event, in a situation characterised by a budget deficit of close to 5% of GDP and government debt of over 100%, these fiscal measures would jeopardise fiscal sustainability,[2] and might possibly lead to a more rapid normalisation of the term premium, which is currently below its historical average.

The US economy has in the past faced changes in macroeconomic policy similar to those which may take place now. Two relatively recent examples are the tax cuts implemented under Ronald Reagan, in the early 1980s,[3] and under George W. Bush, at the beginning of the 2000s.[4] These episodes are not strictly comparable, either to each other or to the current situation, among other reasons because of the different cyclical position of the economy (there was a negative output gap at the beginning of the Reagan mandate and a positive one under Bush) and because of the lower levels of government debt (around 30% of GDP at the beginning of the 1980s and around 55% in the 2000s), but they illustrate how the effects of a fiscal stimulus depend on the economic context in which it is implemented. The most notable differences between these two episodes were basically due to the different starting inflation rates and monetary policy response. In the Reagan era the starting situation was one of stagflation, with inflation rates as high as 15%, which caused the Federal Reserve System to implement a very restrictive monetary policy. This led to a crisis in 1982 from which the United States recovered over the subsequent years thanks to the fiscal stimulus and a gradual decline in interest rates, as inflation fell. By contrast, in 2001-03 the inflation rate in the United States was much lower, so that the

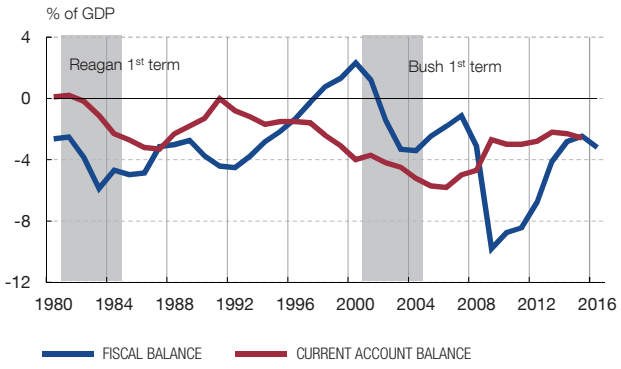
2 It should not be forgotten that a very significant increase in federal spending programmes associated with population ageing is also projected in the medium term.

3 Reagan's fiscal programme focused on reducing income tax rates, especially the top rates, and cutting corporate income tax and taxes on capital. Some of the measures had to be reversed owing to their significant impact on revenues. For a detailed analysis, see, for example, Institute for Research on the Economics of Taxation (2011).

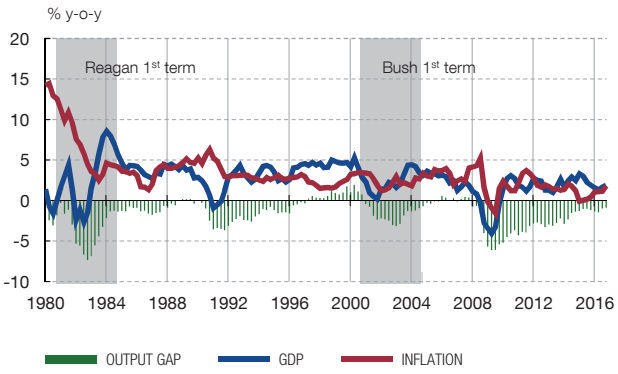
4 The Bush tax cuts were implemented between 2001 and 2003 (temporarily, for ten years). The top marginal rates of income tax were reduced and the rates on dividends and capital gains were cut gradually. See Tempalski (2006).

FISCAL EXPANSION IN THE UNITED STATES CHART 8

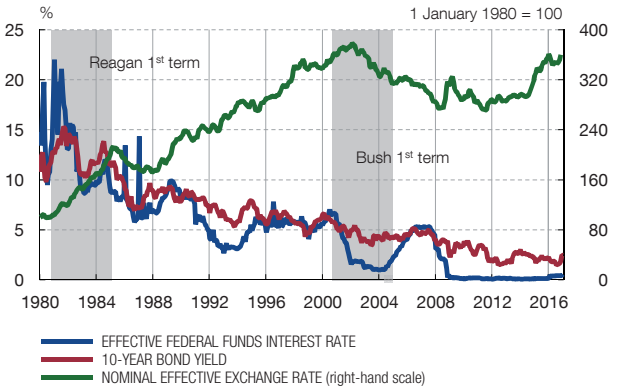
1 FISCAL AND CURRENT ACCOUNT BALANCES



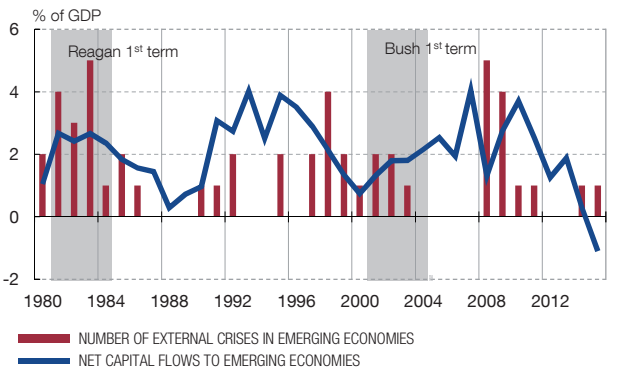

2 GDP GROWTH, INFLATION AND OUTPUT GAP




3 EFFECTIVE INTEREST RATE, 10-YEAR BOND YIELDS AND NOMINAL EFFECTIVE EXCHANGE RATE




4 CAPITAL FLOWS TO EMERGING ECONOMIES (a)




SOURCES: Bureau of Economic Analysis, Congressional Budget Office, Bureau of Labor Statistics, Federal Reserve, Federal Reserve of St. Louis, IMF and Datastream.

a Calculations are based on a sample of 45 emerging economies. The figure for 2015 refers to the first three quarters of the year. The figure for the number of crises refers to the Catão and Milesi-Ferretti (2014) external crises variable, updated to 2015 Q3.

Federal Reserve System was able to cut policy interest rates in 2003 and, although growth fell in the first year, there was a gradual recovery thereafter. The widening budget deficit was accompanied by an increase in the current account deficit (twin deficits, see Chart 8) in both periods, but the developments in the dollar exchange rate were very different. While in the period 1980-85 the dollar appreciated sharply (leading to the Plaza Accord), in the period 2002-05 the dollar depreciated in nominal effective terms. This played a critical role in the highly uneven capital flows to the emerging economies. The high interest rates and sharp dollar appreciation contributed to a notable slowdown in capital flows to emerging economies from the mid-1980s, as well as an increase in the financial crises in these economies. In the 2000s, in contrast, financial conditions were much more favourable for capital flows to these countries.

In order to obtain a quantitative idea of the possible impacts of an expansionary fiscal policy on the US economy and the rest of the world, a series of simulations have been performed using the NIGEM macroeconomic model, which envisages two possible fiscal scenarios, detailed in Table 2. The "electoral" scenario is in line with Donald Trump's electoral programme and has a greater impact in fiscal terms: (i) the reduction in the corporate income tax rate, with an impact on fiscal revenues of around 1.5% of GDP per

FISCAL SCENARIOS IN THE UNITED STATES (a) TABLE 2

| | Year 1 | Year 2 | Year 3 | Year 4 |
|---|---|---|---|---|
| "Electoral" scenario | | | | |
| Fiscal revenue | -2.5 | -2.4 | -2.4 | -2.4 |
| Households | -1.0 | -1.0 | -1.0 | -1.0 |
| Firms | -1.4 | -1.4 | -1.4 | -1.4 |
| Public spending | 0.5 | 0.5 | 0.5 | 0.5 |
| Investment (infrastructure) | 0.5 | 0.5 | 0.5 | 0.5 |
| Change in fiscal balance | -3.0 | -2.9 | -2.8 | -2.8 |
| "Moderate" scenario | | | | |
| Fiscal revenue | -1.3 | -1.2 | -1.2 | -1.2 |
| Households | -0.5 | -0.5 | -0.5 | -0.5 |
| Firms | -0.8 | -0.7 | -0.7 | -0.7 |
| Public spending | 0.3 | 0.2 | 0.2 | 0.2 |
| Investment (infrastructure) | 0.3 | 0.2 | 0.2 | 0.2 |
| Change in fiscal balance | -1.5 | -1.5 | -1.5 | -1.5 |

SOURCE: Banco de España, using the NIGEM global macroeconomic model.

a Percentage of GDP.

annum;[5] (ii) the reduction in personal income tax, of around 1% of GDP per annum; and (iii) an infrastructure plan with a magnitude of close to 0.5% of GDP per annum. The "moderate" scenario incorporates the fiscal measures considered most likely by analysts, which are approximately half the amounts of the electoral scenario.[6]

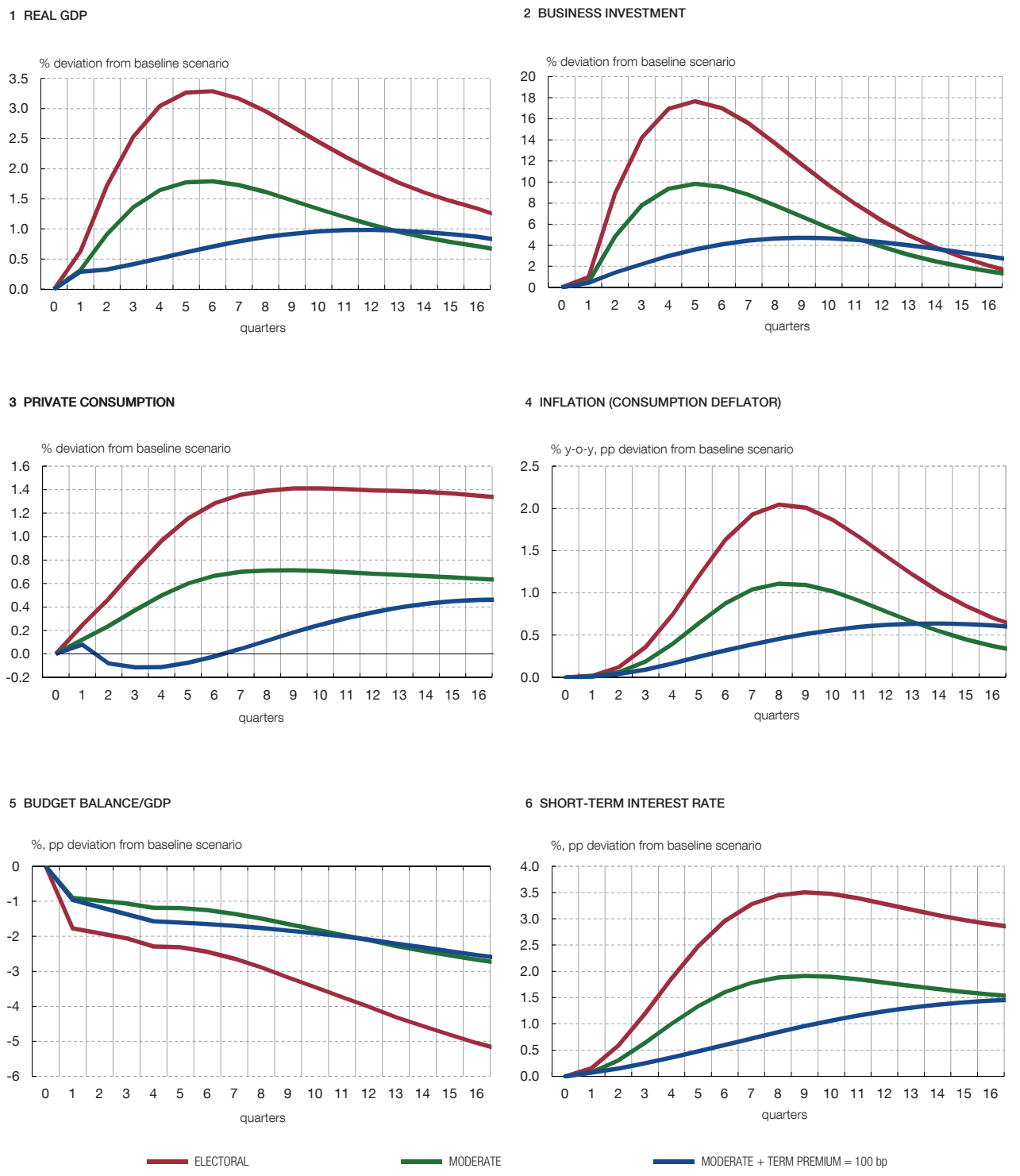
As seen in Chart 9, in both the scenarios considered there is a clear positive effect on the level of activity, of 0.8-1.6 pp of GDP at the end of the simulation horizon (four years). Under the "electoral" scenario the impact on the level of GDP would peak at over 3 pp in the second year and remain robust until the end of the simulation horizon, owing to the strong recovery in business investment and the private consumption stimulus. This would raise the pressure on inflation, which could be some 2 pp above the baseline scenario, despite the aggressive monetary policy reaction, with rate rises of over 3 pp in the second part of the period. There is also a marked deterioration in the budget deficit, of some 5 pp of GDP at the end of the simulation horizon, which has a very significant impact on the already high levels of government debt. The results obtained for the "moderate" scenario reveal a similar dynamic, although the impact would be approximately half, with the impact on GDP peaking at 1.7 pp. As regards the effects on the rest of the world (see Table 3), under the "electoral" scenario the impact on global GDP would be around 0.9 pp in the second year, declining thereafter to 0.4 pp by the end of the simulation horizon, with a somewhat greater impact on the emerging economies than on the other advanced economies. As for the United States itself, the spillovers under the "moderate" scenario would be approximately half, peaking at some 0.5 pp in the second year.

On interpreting the results of these simulation exercises, it should be borne in mind there are factors that might restrict the size of the fiscal multipliers implicit in the model. For example, the high levels of public debt may significantly reduce the effect of a fiscal

5 The deductibility of 100% of investment spending, the non-deductibility of interest payments and the incentives for profit repatriation are not quantified.

6 A similar scenario to the moderate one is analysed by the OECD in its latest Global Economic Outlook (OECD, 2016).

ECONOMIC EFFECT OF FISCAL SCENARIOS IN THE UNITED STATES CHART 9




SOURCE: Banco de España, using the NIGEM global macroeconomic model.

stimulus if they adversely affect agents' confidence and raise risk premia (Nickel and Tudyka, 2014). Another relevant factor is the cyclical position of the economy. Many studies show that fiscal multipliers are bigger in recessionary phases, since in expansions private demand is more likely to be crowded out (Riera-Crichton et al., 2015) and inflation to be higher, which could lead to a tighter monetary policy (Christiano et al., 2011). The composition of the fiscal package is also important, since investment in infrastructure, for

GLOBAL EFFECTS OF THE FISCAL SCENARIOS IN THE UNITED STATES (a) TABLE 3

| Real GDP (b) | Year 1 | Year 2 | Year 3 | Year 4 |
|---|---|---|---|---|
| "Electoral" scenario | | | | |
| World | 0.55 | 0.90 | 0.62 | 0.40 |
| Advanced | 0.90 | 1.35 | 0.82 | 0.42 |
| Emerging | 0.28 | 0.57 | 0.47 | 0.39 |
| United States | 1.99 | 3.17 | 2.33 | 1.55 |
| "Moderate" scenario | | | | |
| World | 0.29 | 0.49 | 0.33 | 0.21 |
| Advanced | 0.48 | 0.74 | 0.44 | 0.22 |
| Emerging | 0.15 | 0.31 | 0.25 | 0.20 |
| United States | 1.06 | 1.73 | 1.27 | 0.83 |
| "Moderate" scenario + term premium 100 bp | | | | |
| World | 0.12 | 0.22 | 0.30 | 0.32 |
| Advanced | 0.17 | 0.33 | 0.41 | 0.36 |
| Emerging | 0.09 | 0.14 | 0.21 | 0.28 |
| United States | 0.39 | 0.75 | 0.96 | 0.93 |

SOURCE: Banco de España, using the NIGEM global macroeconomic model.

**a** The fiscal programme is assumed to exert an influence as from the first quarter of the first year.
**b** Percentage deviation from the baseline scenario.

example, has a higher multiplier than other expenditure or revenue items, as it has a demand effect in the short term and, moreover, raises productive capacity in the long run (Auerbach and Gorodnichenko, 2012a). Likewise, the multiplier of an income tax cut is smaller if it benefits higher-income households to a greater extent, as such households have a lesser marginal propensity to consume (Jappelli and Pistaferri, 2014). To illustrate these mitigating effects of the impact of the fiscal stimulus in United States, a simulation of the moderate scenario has been performed assuming an increase in term premia of 100 bp, which would involve the return to their average for the last 10 years; this increase would feed through in part to the rest of the world, given the United States' central position in the international financial system. As can be seen in Chart 9, the effect on US GDP in the short term would be only 0.5 pp in the second year, and 0.2 pp for the world economy. Likewise, the increase in inflation and the monetary policy reaction would be more moderate, although the deterioration in public finances would be very similar.

In short, the results of these simulation exercises and past experience show that the fiscal stimulus policies that will foreseeably be set in train in the United States may boost economic growth in the short run, but their impact will depend on various factors, including what the monetary policy response may be. In any event, the US economy's domestic and external imbalances will also increase, which may affect agents' confidence and, therefore, their effectiveness.

## THE IMPORTANCE OF GLOBAL ECONOMIC INTEGRATION

World economic integration progressed most in the years preceding the global financial crisis, thanks to the progressive lifting of obstacles to the free movement of goods, people and capital. Underpinning this process was the premise that, by allowing resources to be allocated where they are most productive, world income would increase, promoting the development of all regions. Given that the flip side of the coin of greater integration is a greater exposure of each country to external shocks, the process has been accompanied by mechanisms that allow for greater international cooperation and for the development of

global financial safety networks which provide, albeit unevenly, the necessary resources so that countries may withstand these external shocks.

Nonetheless, within each country there have been groups who may have seen themselves harmed by greater integration and who, depending on the domestic mechanisms in each case, do not feel sufficiently compensated. The fragile recovery following the global financial crisis has exposed an increase in inequality in the developed economies and, in particular, a check on further advances in the well-being of the middle classes. While this development is also – and indeed to a greater extent – in response to other factors, such as technological progress, the cause-effect relationship has progressively become rooted in societies, proving conducive to economic policy stances that may entail reversing the process of globalisation. Thus, the latest US presidential election highlighted a voter preference to set limits on trade and migration movements. Moreover, the UK referendum result on EU membership can be explained, in part, because immigration is perceived as a threat to the native population's well-being.

This section reviews the reasons underpinning the importance of trade, migratory and financial flows as factors of integration that boost growth in the recipient countries of such flows, and the global consequences that may arise from policies geared to curbing integration processes.

## Trade flows

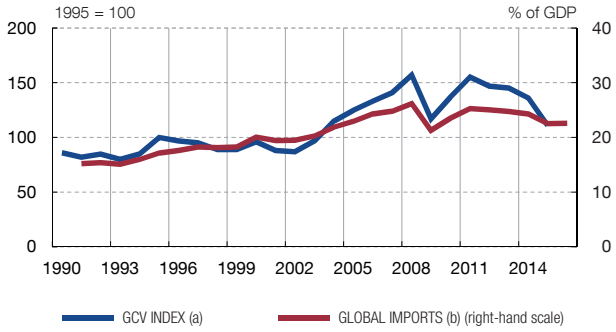
The last five years have seen a marked slowdown in world trade (see Chart 10). Among the factors behind the slowdown are lacklustre investment (a trade-intensive demand component), the growing weight of the emerging economies in trade (the weight of whose domestic demand in activity is, so far, less than that of the advanced economies) and the check – even reversal – on the development of global production chains. The first two factors suggest that it is the composition of activity which has affected trade, and not vice versa; the third factor might be in response to firms' optimal decisions, which, therefore, would increase global economic efficiency. However, to date trade policies do not appear to have played a significant role in the slowdown in international trade. This might change in the future, as the new US administration has announced a policy of greater trade protectionism, which might indeed adversely impact global growth. So far, these intentions have taken the form of the withdrawal from the TPP (the Trans-Pacific Partnership Agreement) and the start of talks with Mexico and Canada on NAFTA (the North American Free Trade Agreement), although this latter agreement remains in force. Other measures announced during the electoral campaign, such as declaring China to be a currency-manipulating country, the setting of tariffs on Chinese and Mexican imports (45% and 35%, respectively), and the possibility that corporate income tax may include an import-penalising, at-border adjustment mechanism, have so far not been implemented.

The economic literature (and past experience with similar episodes) is fairly unanimous in stating that trade protectionism is harmful to global well-being and growth. In the short run, it distorts the allocation of resources, causing losses of efficiency. In the medium and long term it has adverse consequences for growth and productive capacity, as it bears negatively on total factor productivity. This is as a result of the diminished flow of know-how associated with the reduction in trade openness, the slower pace of innovation and adoption of new technologies, and the diminished quality of business management. These effects are amplified in the recipient economies of foreign direct investment (FDI), as trade tends to promote this type of investment. Further, insofar as the jobs lost in past years are due to technological changes, trade protectionism will not provide for a significant recovery in manufacturing jobs [Hicks and Devaraj (2015)].

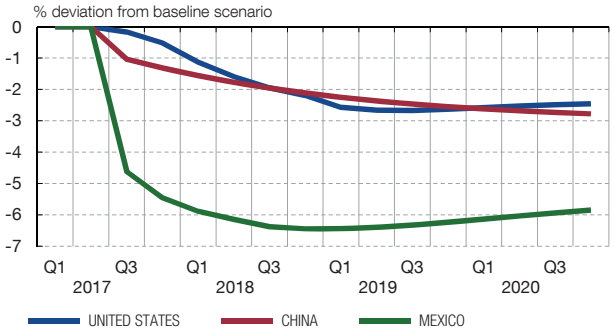
## ECONOMIC AND FINANCIAL GLOBALISATION INDICATORS

CHART 10

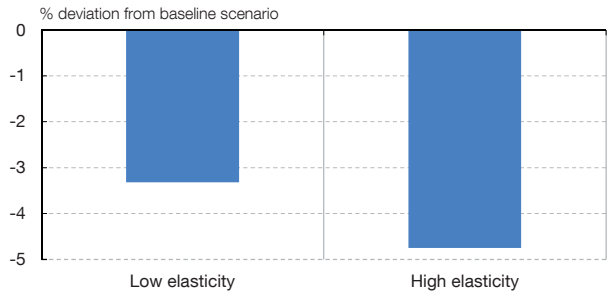
### 1 IMPORTANCE OF GLOBAL VALUE CHAINS



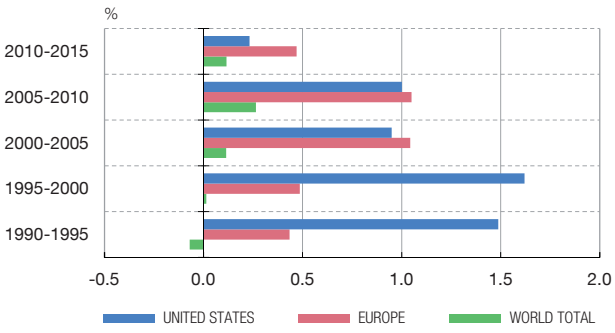

### 2 IMPACT ON GDP OF US PROTECTIONISM AND MEXICAN AND CHINESE RETALIATION



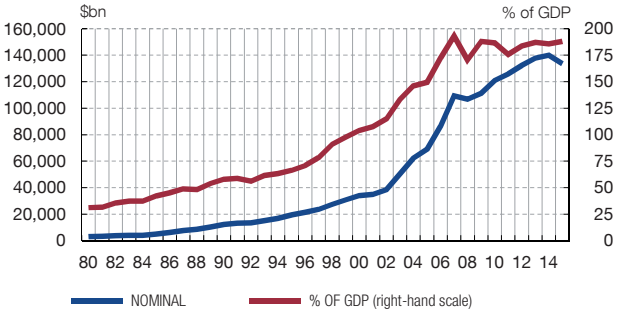

### 3 IMPACT ON GLOBAL GDP IN 2020 OF AN INCREASE IN TARIFFS TO THEIR 1999 LEVEL



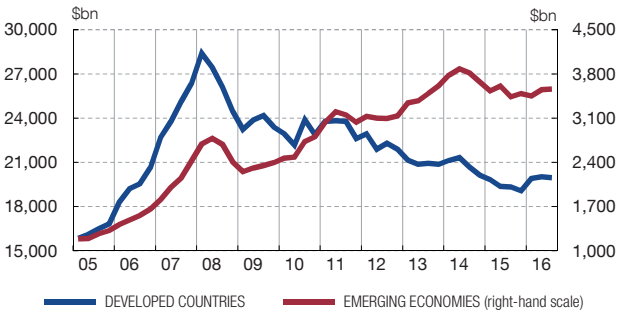

### 4 CHANGE IN IMMIGRANT POPULATION AS A FRACTION OF THE TOTAL POPULATION



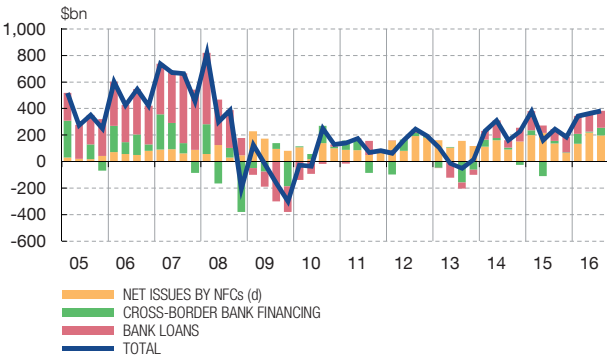

### 5 GLOBAL FINANCIAL ASSETS



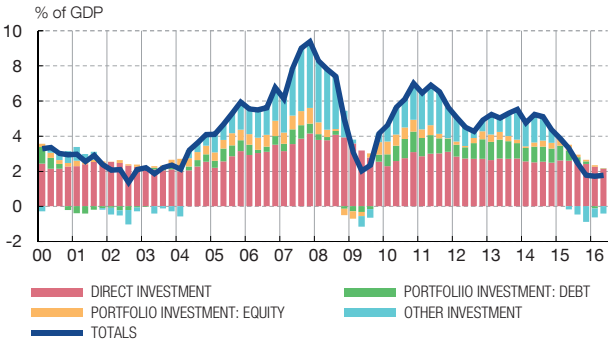

### 6 CROSS-BORDER ASSETS BY COUNTERPARTY RESIDENCE




### 7 NET FINANCING TO NON-FINANCIAL CORPORATIONS BY COMPONENT (c)




### 8 GROSS CAPITAL INFLOWS: EMERGING ECONOMIES (e)




SOURCES: OECD, WTO, Banco de España, using the NIGEM macroeconomic model, Rubini (2011), United Nations, Datastream, Dealogic and BIS.

**a** Calculations based on the five TiVA database global input-output matrices.
**b** Forecast for 2016.
**c** Quarterly flows in billions of dollars. Aggregate data for the United States, the euro area and the United Kingdom.
**d** Issues by non-financial corporations.
**e** Four-quarters moving total.

To quantify the potential impact of greater trade protectionism on the global economy, several simulations have been performed with the NIGEM model, referred to in the previous section. Two alternative scenarios have been considered. The first envisages increases in tariffs on imports from Mexico and China, for similar amounts to those previously mentioned, considering that there will be retaliation on an equivalent scale by these two countries.[7] The second proposes an across-the-board rise in tariffs, placing them at levels comparable with those levied in the 1990s, before the opening up to trade of many emerging economies, especially China.[8] The first scenario considered would give rise to a reduction in US and Chinese GDP of around 2 pp in 2020, while the impact on Mexico would be much more marked, rising to 6 pp in 2020 (see Chart 10); however, a change in the direction of Mexican and Chinese trade towards third markets, and the capacity of other economies to fill the gap left by US exports, inasmuch as the trade retaliation should affect them adversely, would lessen these negative impacts. Under the second scenario of a generalised trade war, the effects on global activity would be very marked, resulting in a reduction in cumulative world growth of around 0.8-1.2 pp in the 2017-20 period, as shown in Chart 10. It should be borne in mind, moreover, that these simulations do not include the negative influence in the medium and long-term of the dismantling of multilateral trade agreements.

Migratory flows

As already mentioned, migratory flows also elicit a degree of rejection among some of the electorate in developed countries, as a result of the potential adverse effects on native workers' labour conditions. Immigration is therefore an additional factor which, alongside technological progress and the automation of routine jobs, is having a real or perceived impact on the labour market.

The evidence suggests immigration has both positive and negative effects on both host and home countries.[9] In host countries, as most migrants are often of working age, immigration expands the workforce and raises the participation rate, not only because of the composition effect but also because migrants take on certain domestic tasks that enable higher labour-market participation among the native population. Moreover, provided migrants are able to access the formal labour market, there is a positive impact on the financing of public health and pension systems. Past evidence indicates that immigration does not have adverse effects on average wages in the economy. However, it can cause changes in relative wage levels between different segments of the native population. For native workers with similar levels of training and work experience to those of immigrants, and consequently in competition with them, the effects on jobs and wages tend to be negative. By contrast, native workers whose training and experience differ from – and therefore complement – those of immigrants tend to benefit [Dustmann et al. (2016)].

Over the long term, immigration is associated with higher per capita incomes in host countries [Ortega and Peri (2014); Jaumotte et al. (2016)] and an increase in innovation rates [Hunt and Gautheir-Loiselle (2010)]. For countries of origin, emigration shrinks the working-age population. Moreover, in the case of emigrants with high relative levels of

7 The scenarios are implemented introducing a rise in import prices and a decline in the volume of exports, calibrated on the basis of bilateral trade exposures and price elasticities of the demand for imports. The range used for the elasticity is of trade to tariffs is from 7 to 11, which matches the range estimated in Rubini (2011).

8 This entails a rise in the effective average (weighted) tariff to 5%. In 2012 (the latest figure available) it was 2.9%, according to the World Bank.

9 It is necessary to distinguish clearly between refugees and economic migrants. Refugees' legal status often bars them from working or they find themselves living in areas that they have not chosen for job prospects. This means their positive effects are difficult to discern, at least in the short term, which could explain why the rejection of immigration has coincided with the arrival of refugees from conflicts in Syria and the Middle East.

training and entrepreneurship, the reduction in native human capital has adverse effects on productivity, causing the phenomenon known as brain drain. However, migrants often send remittances back to their country of origin, which can be a significant source of external funding. This funding is usually less volatile than portfolio investment or foreign direct investment [Buch and Kuckulenz (2010)], although it can push up the exchange rate, hampering exports [López et al. (2007), and Magud and Sosa (2013)], and is usually spent on consumption rather than investment.

Immigration has grown significantly over the past 25 years, although it has slowed somewhat so far this decade (see Chart 10). Looking ahead, changes in the origins and destinations of economic migration will be determined not only by the demographic trends under way, but also by advanced economies' migratory policies, which look likely to take a more restrictive stance. Although restricting immigration may benefit those population segments that compete with immigrants in the short term, its long-term effects tend to be negative, as it reduces productivity growth and, consequently, potential output.

Capital flows

There has been a significant slowing of the rate of global financial integration since the global financial crisis. Thus, external financial assets as a share of global GDP, which doubled in the decade prior to the crisis, have since remained relatively stable (see Chart 10). However, this trend has not been uniform, with marked differences apparent between regions and segments of the financial system, such that it is not strictly correct to talk of there being generalised financial deglobalisation [Caruana (2017)]. The contraction of cross-border flows was most significant in the international activity of advanced-economy banks, particularly European banks [Muñoz de La Peña and Van Rixtel (2015)]. Moreover, the varying intensity of the adjustment in cross-border positions has depended on the differing strategies of internationally active banks [Gambacorta et al. (2017)], and overall it has been observed that exposures maintained through foreign subsidiaries have remained much more stable than direct cross-border exposures, partly as a result of regulatory changes. Conversely, while some advanced-economy banks' international business is contracting, other non-bank financial markets are more buoyant, helping expand the financing options available to a growing number of economic agents.

Nevertheless, since early 2014 there has been a clear downward trend in flows towards emerging markets. This has been in response to a number of factors, such as the downward revision of emerging economies' potential growth, lower commodities prices, and tightening international financial conditions as US monetary policy starts to normalise. The breakdown of flows by type shows FDI to have remained relatively stable over the past few years, although it remains below its pre-crisis levels (see Chart 10). Looking ahead, regulatory changes (or regulatory uncertainty) in systemic economies may have a significant impact on FDI flows towards emerging economies. In this regard, measures to promote "reshoring", i.e. encouraging companies to relocate back to their home country, such as those envisaged by the new US administration, pose a non-trivial risk. The economic literature highlights the clear benefits of FDI in terms of growth and technology transfer, particularly for developing economies. FDI is much more stable than other types of external financing and, as it takes the form of equity instruments, it can help absorb shocks suffered by the recipient economies.

More generally, although there are no real grounds to talk of global financial integration going into reverse, there is some pressure to limit further progress in this area. This may put a brake on financial globalisation's contribution to global productivity gains by limiting the possibilities for the efficient allocation of resources.

CHINA: REFORMS AND DEBT

The Chinese economy showed remarkable resilience during the global financial crisis, supported by a major fiscal stimulus, and loose monetary and fiscal polices to stimulate credit. This enabled the public-investment and export-led pattern of growth to be sustained. However, this stimulus helped allow significant internal and external imbalances to build up. In recent years, aware of the need to redress these imbalances, the Chinese authorities have introduced a wide range of reforms to achieve a new, more sustainable growth model based on consumption and services. On the domestic front, these reforms aim to make progress on deleveraging, adjust excess capacity in certain industries, reduce business costs, and refocus the role of State-owned enterprises (SOEs) in the economy. Externally, the aims are to gradually liberalise the capital account and strengthen the international role of the renminbi.

The application of these policies has meant a significant moderation in growth, which has been less than 7% since 2015 (see Chart 11). Indeed, this reform process was interrupted in 2016 as sustaining short-term economic growth was considered to be a priority [Zhang (2016)]. This meant introducing fresh fiscal stimulus, mainly focused on infrastructure. This fiscal stimulus made it possible to stabilise growth in a context in which there was little monetary policy leeway owing to the pressures on the renminbi caused by the planned normalisation of monetary policy in the United States. However, it meant postponing the correction of the high levels of debt and further exacerbated the vulnerability of the financial system.

Overall, total social financing (TSF)[10] has grown by approximately 100 pp over the past decade, reaching 250% of GDP in 2016. The corporate sector has been the main driver of this trend, as its leverage rose by 70 pp, to 169% of GDP (see Chart 11). The increase in corporate debt was largely due to excessive lending to SOEs and was made possible by the rapid growth of the shadow banking sector, which has doubled in size over the last five years, rising to the equivalent of 70% of GDP or 50% of bank lending. This rapid growth of the sector, spurred by efforts to circumvent the strict regulations on banks, now poses a major financial stability risk, particularly given that the sector concentrates its business primarily in companies operating in markets characterised by excess capacity, the property sector, and local government finance vehicles. Moreover, the greater direct exposure of banks – particularly small and regional banks – to shadow banking activities in recent years has increased the potential for any problems to spread to the formal financial sector. As Chart 11 shows, this exposure has mainly materialised in acquisitions of wealth-management products (WMPs).

Nevertheless, a profound crisis in the financial sector is unlikely in the near term for several reasons. Firstly, because the formal banking sector's position is solid, as reflected in a low NPL ratio (1.8% at year-end 2016), comfortable loan loss provisions (3.1% of bank loans), high capital ratios (13.3% in Q3) and high profit levels (2% of total loans). Secondly, because the central bank has sufficient resources and instruments to avoid a liquidity crunch. Lastly, because the central government has significant bail-out capacity, owing to the moderate public debt-to-GDP ratio (61.5% in 2016 Q3). However, the risks on this front might start to materialise if monetary policy is tightened significantly, leading to liquidity problems in the interbank market and sharp adjustments to financial asset prices.

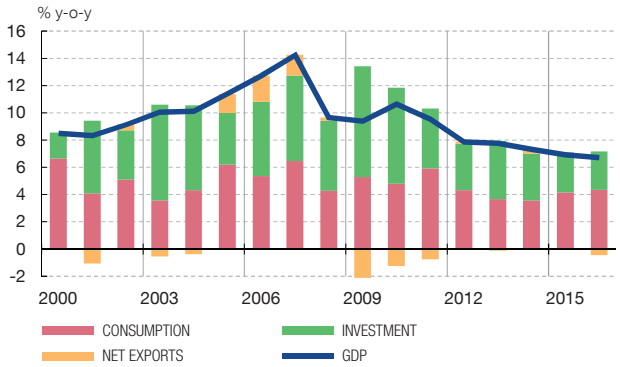
The high level of corporate debt is the key to explaining recent trends in the Chinese economy's financial account. Prior to the devaluation of the renminbi in August 2015 (see

10 TSF is an official measure of broad-based lending by the financial system and, among other instruments, includes official bank loans, basic shadow banking system operations and direct financing (bond and equity issues).

CHINESE ECONOMIC REFORMS

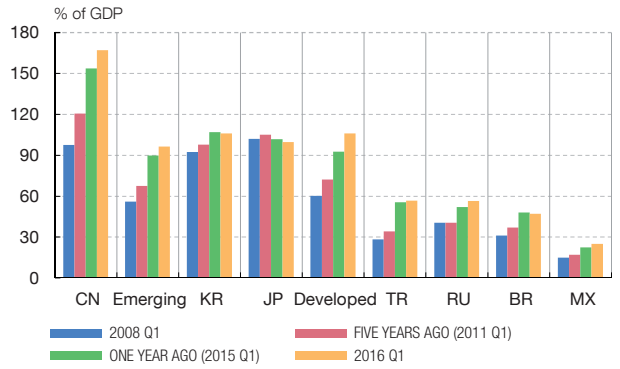
CHART 11

1 GDP BY COMPONENT

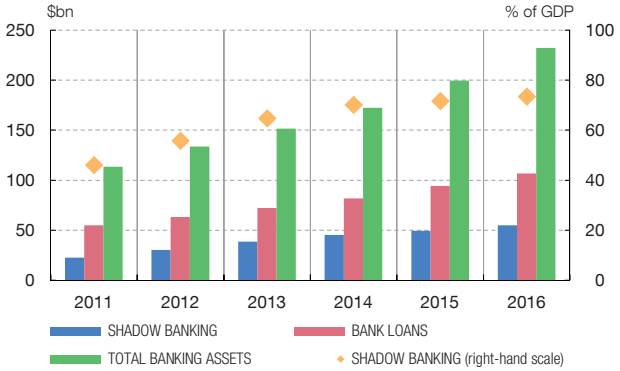



2 INVESTMENT GROWTH

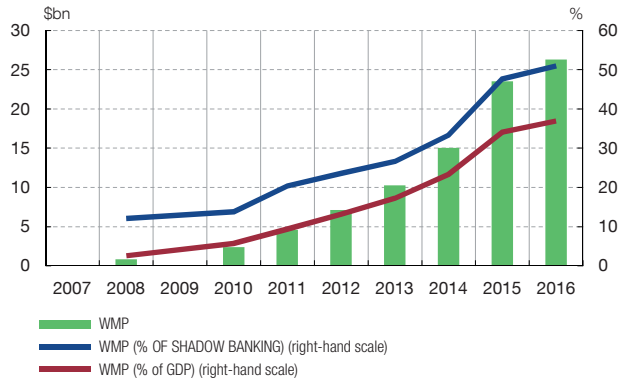

3 CORPORATE DEBT: CREDIT TO THE NON-FINANCIAL SECTOR



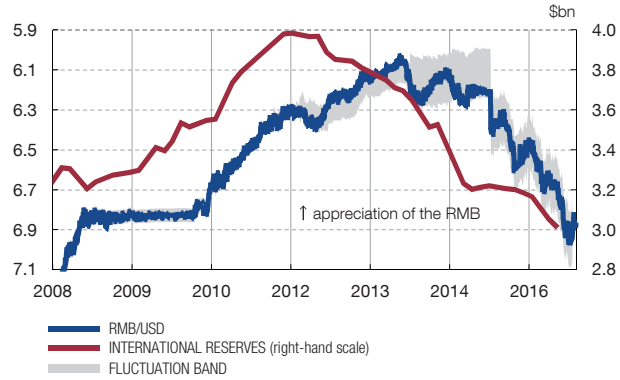

4 SHADOW BANKING




5 WMP




6 EXCHANGE RATE AGAINST THE DOLLAR AND INTERNATIONAL RESERVES




SOURCES: China National Bureau of Statistics, BIS, CEIC and Datastream.

Chart 11), a large share of the debt incurred by Chinese companies was denominated in foreign currency (particularly in dollars) in order to take advantage of de facto arbitrage opportunities.[11] The devaluation, which took the markets by surprise, not only eliminated the possibility of arbitrage but also induced a change of market sentiment. The depreciation of the renminbi, coupled with the anticipated normalisation of US monetary policy, and

11 An opportunity arising from the spread between China's deposit interest rate and the cost of borrowing abroad, in the context of a steadily rising national currency.

falling interest rates in China, forced borrowers exposed to exchange rate fluctuations to divest themselves of their foreign-currency-denominated loans by accelerating their repayment. These capital outflows added to the downward pressure on the renminbi, compounded by the slowdown in the Chinese economy and by the measures taken to correct financial excesses. In response, to stem the capital outflows, the authorities began to apply existing regulations more strictly and to promulgate new measures. In the short term, by giving priority to stabilisation of the currency, this all places a brake on the process of deregulating the financial account and the internationalisation of the renminbi.

Viewed from a different angle, the restrictions on capital outflows pose risks to financial stability, as they may encourage asset bubbles to build up in certain segments, such as the real estate sector, or bond and equities markets, given that the liquidity generated domestically will have to be invested in the domestic market. Moreover, to the extent that this liquidity surplus is channelled through the shadow banking system, the possible repercussions in terms of financial stability will be exacerbated, particularly in a context of the shadow banking system's growing interconnectedness with the formal banking sector.

Therefore, macroeconomic policies need to be focused on a dual objective, requiring a difficult balance to be struck, namely to support growth while correcting the economy's macroeconomic imbalances. In particular, monetary policy faces the dilemma of preserving the stability of the financial system and, at the same time, protecting the exchange rate from an excessive depreciation. Any increase in the Federal Reserve's interest rate – which would intensify the trend towards capital outflows – would force the central bank to take a similar course of action to stabilise the exchange rate and stimulate deleveraging. However, excessively abrupt interest rate rises would compromise the stability of the financial system and the country's growth objectives. In this context, the central bank will possibly adopt a marginally more restrictive monetary policy that does not pose a serious obstacle to credit growth.[12] Containing financial risks will also require more substantial progress in other areas. In particular, this will require reforms to correct the inefficient allocation of resources to low-productivity sectors, the overcapacity and inefficiency of SOEs, and development of capital markets allowing banks' direct exposure to corporate debt to be reduced.

The risks associated with an abrupt correction of China's macroeconomic imbalances are by no means negligible. This correction would have an impact on the global economy through the usual trade and financial channels. To illustrate the importance of trade channels, a global macroeconometric model has been used, allowing exogenous shocks to be introduced.[13] Specifically, a 1% increase in China's inflation rate for a year was simulated. This situation could be associated with the development of bubbles in certain assets or cutting the financial support given to SOEs. The results of the simulation show a moderate reduction in the global GDP growth rate, of approximately 0.07% over the course of 2017, due in particular to the reduction in China's growth rate (-0.22%). Global inflation would rise by 0.12%. This figure is significant bearing in mind the scale of the shock (by way of comparison, note that China's producer price inflation has risen from 1% to almost 8%, year-on-year, over the last five months). Moreover, it should not be forgotten that other channels exist, such as the financial channel, which were not considered in this exercise.

12 The 10 bp increase in the PBoC's interest rate on open market operations (reverse repos), marginal lending facility (MLF) and short-term liquidity facility (SLF) between late January and early February 2017 is a step in this direction.

13 A GVAR model including 26 countries/regions was used. This model includes only the trade channel, leaving out any financial transmission.

In short, the Chinese authorities are leading the economy's transition towards a new, more sustainable growth model, while trying to preserve financial stability and control the gradual slowdown of activity. In this context, the lack of progress on the deleveraging of the corporate sector is the main risk factor, exacerbated by slower economic growth, pressure on the stability of the currency and increased capital outflows. It is therefore essential to fine-tune macroeconomic policies appropriately and develop macroprudential tools that prevent asset bubbles from building up. The re-emergence of inflation and a sudden drop in activity would have very significant global repercussions.

## Outlook for 2017

After the slight improvement in global economic activity in the final months of 2016, for the first time in recent years there were no downward revisions of global GDP growth forecasts at the start of the current year. In addition, financial market volatility and risk aversion are both low. Nevertheless, these forecasts are shrouded in considerable uncertainty. Indeed, the shift in economic policy stance in the United States, with its possible global repercussions, and the question marks hanging over the United Kingdom's departure from the EU, are making themselves felt in a complex global economic landscape, characterised by a weak recovery in the advanced economies, tensions in the process of rebalancing China's economy, recession in other major emerging economies, and sluggish trade growth.

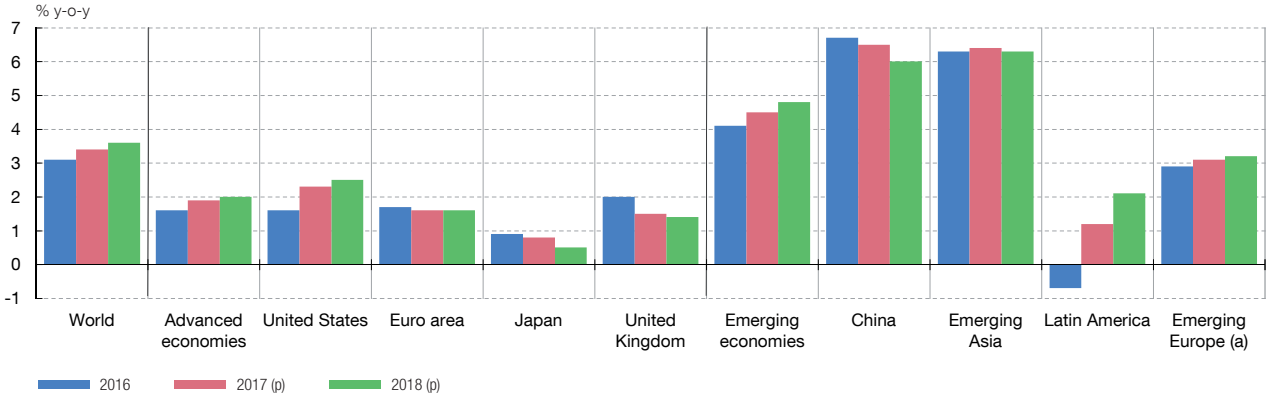
The baseline scenario for 2017 envisages slightly faster global economic growth than that in 2016 (3.1%). This trend would be the outcome of the strengthening of both the advanced economies, whose average growth would be close to 2%, and the emerging economies, with a rate of growth of around 4.5% (see Chart 12). Among the advanced economies, an increase in the US growth rate is anticipated, although the range of uncertainty around the projections for the US economy will remain very wide until the new administration's monetary policy measures are set out. The performance of the emerging economies will be influenced to a greater or lesser extent by the tightening of global financial conditions, in a context of swifter monetary policy normalisation in the United States than anticipated a few months ago, the possible contraction in international trade resulting from the protectionist policies that seem to be gaining momentum, and the continuation of the slowdown in the Chinese economy. The baseline scenario envisages this slowdown remaining a gradual process, supported by a prolongation of fiscal stimulus, although the Chinese authorities continue to face significant economic policy dilemmas. Meanwhile, the outlook is particularly delicate for the Latin American economies, which are especially sensitive to the potential normalisation of global financial conditions.

The upturn in overall inflation rates since mid-2016, as a result of the recovery of oil and other commodities prices, has barely fed through to an uptick in core inflation rates. For the current year, in the absence of sharp fluctuations in commodities prices, the progressive reduction in the degree of slack in the advanced economies and in some emerging economies (such as China, where output prices will conceivably continue to rise in the context of capacity cuts) would suggest that inflation rates will tend to draw closer to central bank targets in these economies. Inflationary pressures are likely to be severe in some of the emerging economies, such as Mexico and Turkey, which have recently experienced significant currency depreciations.

In recent months, the uncertainty over this baseline scenario has increased significantly as a result of envisaged shifts in economic policy stance, particularly in the United States. Although the balance of risks remains tilted to the downside in the medium-to-long term, there are factors that could be conducive to swifter growth in the short term than anticipated in the baseline scenario. In particular, the expected fiscal expansion in the United States

OUTLOOK FOR THE WORLD ECONOMY IN 2016 CHART 12

GDP GROWTH FORECAST




SOURCE: IMF (January 2017 WEO update).

**a** Aggregate of Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Kosovo, FYR Macedonia, Montenegro, Poland, Romania, Serbia and Turkey.

and, to a lesser extent, fiscal measures announced in other countries – especially in China – could have a bigger impact on activity than anticipated, particularly if the shift towards protectionism announced by the US administration is delayed. These effects may bolster confidence and foster a recovery in investment. Nevertheless, the effect of these stimuli on macroeconomic imbalances represents a clear medium-term risk.

The downside risks to the global economy stem from multiple sources and operate on different time frames. In the short term, monetary policy normalisation in the United States, which is likely to be quicker than expected a few months ago, could lead to global financial conditions tightening more than anticipated. The upward trend in the value of the dollar is exacerbating the vulnerability of those economies most exposed to financing in dollars (see Box 2). Likewise, various factors could trigger an increase in risk aversion; that would particularly – but not exclusively – affect the emerging economies, which are more sensitive to shifts in investor confidence. Among these factors, the biggest threats include the political situation in certain countries, geopolitical conflicts and terrorism.

As regards international financial markets, the current situation reflects a certain trade-off between lower volatility and uncertainty, as shown by the financial indicators and the high level of uncertainty over the implementation and effects of various economic policy measures. In this scenario, sharp adjustments to asset prices — potentially affecting agents' decisions and making borrowing more expensive – cannot be ruled out. Moreover, the preponderance of a larger domestic component in regulatory initiatives, in detriment to international coordination, could represent an obstacle to the transformation under way in the financial sector. In this regard, in the wake of the financial crisis, banks have been refocusing their role in a way that has opened up a space for new players to act as intermediaries in new market segments and compete with banks in areas where there is scope for improvement. This process is twin-pronged: technological innovation, and a stable and proportionate regulatory framework. Therefore, any withdrawal from international cooperation and coordination could prevent a new environment of more efficient and diversified financial intermediaries from taking root.

Over the medium term, the risks associated with China's transition to a new economic model stand out. The authorities have introduced stimulus policies to bolster growth and

administrative measures to halt capital outflows, but certain imbalances in the economy have increased, particularly excessive credit growth and the high level of corporate debt, raising the possibilities of a sharp adjustment. Finally, the current shift towards protectionism could translate into restrictions on global trade, migratory flows and capital movements, which could have significant structural impacts and ultimately put a brake on productivity gains and potential growth.

In short, the uncertainty over the nature of future economic policies has risen significantly, with potentially huge implications for international economic and financial relations. Although macroeconomic policies are propping up growth over the short term in many regions, over the longer term a build-up of imbalances in certain systemic economies and the reversal of the processes of economic and financial integration pose significant risks to the global economy.

16.3.2017.

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In the months following the referendum on continued membership of the European Union held in June, the British economy has performed better than expected, once the initial adverse reaction on the financial markets abated. Admittedly, some consumer and business confidence indicators have been affected, but activity has been maintained, with the backing of the economic authorities who were quick to respond to prevent a funding squeeze, sustaining the momentum of private consumption and growth in business services. This performance is even more surprising given the uncertainty surrounding not only the type of relationship sought by the British government with the European Union post-Brexit, but also the negotiation process itself.

Under the European Union treaties, the procedure for withdrawal by a Member State is regulated in Article 50, included in the Treaty of Lisbon. This article lays down basic procedural aspects – such as the obligation to notify the decision to the European Council – and also the date when the withdrawal will be effective (no later than two years from the notification date) unless there is unanimous agreement to prolong the process. It also establishes that the agreement to leave the European Union will take into account the framework for the future relationship between the EU and the withdrawing State, and that the agreement will have to be approved by the Council, by a qualified majority,[1] after obtaining the consent of the European Parliament. The United Kingdom is expected to trigger Article 50 before the end of March 2017. Thereafter, it will have to negotiate with the European Union not only the conditions of withdrawal (including such important issues as the treatment of Europeans working in the United Kingdom and of Britons working in the rest of Europe, and payment of Britain's outstanding commitments to the European budget), but also the new framework of relations with the European Union.

In early 2017, Theresa May, the British Prime Minister, announced some details of her plans for withdrawal and of the new framework of relations that she seeks to establish with the European Union in two years' time, although she indicated that it was her intention to negotiate a transition period to smooth the transition to the new system. She also committed to the agreement being approved by both houses of the British Parliament. The Prime Minister made it clear that her priorities are to control the inflow of immigrants from the European Union and to remove British justice from the jurisdiction of the European Court of Justice in Luxembourg. Acknowledging that these aims are incompatible with access to the Single Market, Theresa May announced that Britain would be leaving the Single Market and would be seeking a free trade deal with the European Union, to be negotiated by both parties. The British government also intends to enter into trade agreements with non-EU third countries and does not wish to be bound by the common external tariff of the Customs Union.

In principle, once the United Kingdom loses access to the Single Market: a) the cost of trade (tariffs and other non-tariff barriers) between Europe and the United Kingdom will rise; b) foreign investment flows between the two regions will become less attractive; c) it will be more difficult to provide cross-border services; and d) firms located solely in the United Kingdom will no longer be able to provide financial services in the European Union (that is to say, they will lose their European financial passport). In addition, the British economy would no longer enjoy the benefits

1 This requires the support of 72% of the members of the Council (not including the withdrawing State), representing 65% of the population of the EU without that State.

Chart
LONG-RUN IMPACT ON UNITED KINGDOM GDP (a)

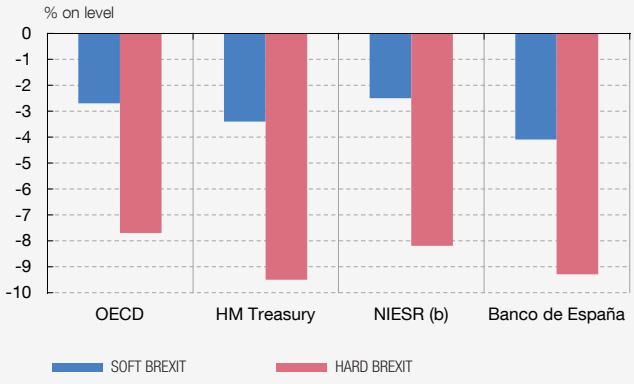



Table
ALTERNATIVES FOR FUTURE EU/UK TRADE RELATIONS

| | Possible options | | |
|---|---|---|---|
| | FTA like Canada | EFTA and sectoral agreements | WTO |
| Free trade (non-agricultural goods) | X | X | — |
| Most favoured nation tariff | — | — | X |
| Agreements in some services | X | X | — |
| Free movement of persons | (c) | X | — |
| Financial contribution to EU programmes | — | (d) | — |
| Agreements with third countries | X | X | X |

FTA: Free trade agreement

SOURCES: OECD, NIESR, HM Treasury and Banco de España.

a In the case of studies that offer a range of estimates, the chart shows the lowest impact in the range for the soft Brexit scenario and the most unfavourable impact for the hard Brexit scenario.
b National Institute of Economic and Social Research (NIESR), "Weighing EU exit using gross value-added trade", in *Prospects for the UK economy,* National Institute Economic Review, August 2016.
c The agreement with Canada allows a certain degree of movement for highly-skilled persons.
d In the case of Switzerland, it contributes to specific programmes.

of the existing trade agreements between the European Union and third countries, at least not until new treaties with those countries were signed. As regards budget matters, withdrawal from the European Union will mean lower contributions to the EU, but also the loss of European funding for numerous research and development programmes in the United Kingdom, and of the European subsidies currently received by British farmers. In addition, the United Kingdom will still be obliged to meet its outstanding commitments with the European Union.

Accordingly, even though the United Kingdom will seek to strengthen its trade links with other areas, in the short term the degree of openness of the British economy to foreign trade will foreseeably shrink as a consequence of its looser ties with the European Union (less movement of goods, services, capital and people). Many studies have forecast that this will have long-lasting effects on innovation, the rate of adoption of technologies and growth, and the skills level of the labour supply, with implications for productivity and, very possibly, for investment and capital accumulation. In turn, the United Kingdom's European partners, many of which run a trade surplus with the UK, will be adversely affected by the lower level of activity, although some may benefit from activities being outsourced away from the UK. This could occur in the London-based finance industry, where institutions that may be affected by the loss of European passporting rights are preparing contingency plans for a range of scenarios, according to the specific business they pursue in Europe and whether or not it will be possible to pursue that business in a system of regulatory equivalence.

The level of importance of these implications will depend on whether or not the European Union and the United Kingdom reach an agreement on a free trade treaty, and on the scope of such a treaty. So far, the British government has ruled out membership of the Single Market and the European Economic Area (Norway and Iceland are both members) and it appears to reject participation in the Customs Union in its current format. Therefore, the possible alternatives (see accompanying table) would be: 1) a free trade treaty with the European Union that, as sought by the British government, provides maximum economic integration (the treaty with Canada, which eliminates tariffs on non-agricultural goods and includes agreements on some services, may serve as a guideline); 2) participation in the European Free Trade Association (EFTA) and bilateral agreements with EU countries in certain sectors (the case of Switzerland); or 3) adoption of the rules of the World Trade Organization (WTO) (i.e. establishment of tariffs, with "most favoured nation"[2] status, although the WTO excludes financial services) if no agreement is reached with the European Union.

The effects on the United Kingdom's productive capacity were analysed in a number of studies published before the referendum, envisaging several scenarios for future economic relations between Europe and the United Kingdom. The soft Brexit scenarios conserved most of the existing trade relations, while in the hard Brexit scenarios the United Kingdom became subject to WTO rules. These studies estimated that the long-term impact of Brexit would be a diminished level of GDP for the British economy, ranging from just under 3% lower in a limited impact scenario to almost 10% lower in the scenario envisaged by the Treasury (see chart), chiefly as a result of the negative impact on productivity. Other studies published after the referendum have analysed the potential gains for the United Kingdom from new trade agreements with third countries (Australia, some Asian countries and, especially, the United States). Drawing on past experience provided by world trade agreements, these studies (Ebell, 2016) find that although trade in goods increases with such agreements (the impact on trade in services is limited), they would not be sufficient to offset the trade flows that would most likely be forgone as a result of the change in relationship with the European Union.

2 This derives from the non-discrimination principle whereby WTO members cannot grant favourable treatment (apply lower tariffs) to some nations and not others. Preferential treatment is only allowed within free-trade areas and customs unions.

In recent years, firms in emerging economies have issued a significant volume of bonds on international markets, in a setting marked by dollar weakness and an appetite for risk, conditioned by strong monetary expansion in the advanced economies. More recently, however, the prospect of rate increases by the Federal Reserve and dollar appreciation point to a tightening of global financial conditions in 2017. This could have a negative impact on the income statements, financial position and activity of many firms in emerging economies that have high foreign currency debt. This box analyses the possible impact, drawing on a database of emerging market firms.[1]

Emerging market firms with a high volume of foreign currency debt are more financially vulnerable to the possible tightening of global financial conditions, which is generally accompanied by currency depreciation in emerging economies. If there are no real or financial hedges, this currency depreciation will have a negative effect on the net equity of emerging market firms and on their income statements (and profitability ratios), as coupon payments must be made in foreign currency. All of which may make it more difficult for them to obtain funding and may prompt a widespread contraction in investment in capital goods, with the resultant adverse effect on the economic activity of the country (Céspedes et al., 2004). Moreover, faced with closure of the global markets, large corporations, which are the main issuers on the international markets, may be obliged to turn back to their local markets for funding, thus crowding out the smaller firms. However, currency depreciation may also have positive effects, especially for exporting firms, making domestic production more competitive. This box does not enter into analysis of this general equilibrium effect; nevertheless, the reluctance of many emerging economies

1 The database includes financial and non-financial information for the top 10,000 listed non-financial corporations worldwide. The analysis is confined to the 1,990 firms whose parent companies are based in an emerging economy (excluding China, Hong Kong and other financial centres). To study the impact of exchange rate fluctuations, measures of the volume of debt in bonds at end-2015 have been constructed, along with a breakdown by currency.

**Table 1**
**FINANCIAL RATIOS BY FIRM TYPE**

| | Foreign currency bonds | | |
|---|---|---|---|
| | No | Yes | All |
| Liquidity ratio | 1.5 | 1.4 | 1.5 |
| Asset volume | 7.1 | 9.1 | 7.3 |
| ROA | 7.2 | 4.6 | 6.9 |
| ROE | 15.7 | 11.6 | 15.3 |
| Fixed asset ratio | 59.3 | 76.2 | 60.8 |
| Debt / capital ratio | 57.7 | 55.4 | 57.7 |

SOURCE: Banco de España.

**Table 2**
**FINANCIAL RATIOS BY SECTOR, FOR FIRMS WITH FOREIGN CURRENCY BONDS** (a)

| | Liquidity ratio | Asset volume (b) | ROA | ROE | Fixed asset ratio | Debt / capital | Foreign currency bonds / assets | Domestic currency bonds / assets | Total bonds / assets |
|---|---|---|---|---|---|---|---|---|---|
| Materials | 1.9 | 8.9 | 4.6 | 11.7 | 90.5 | 52.0 | 15.5 | 0.0 | 17.4 |
| Communications | 1.1 | 9.2 | 4.9 | 11.4 | 81.3 | 85.1 | 14.0 | 4.0 | 25.3 |
| Discretionary goods | 1.2 | 8.7 | 5.4 | 14.8 | 58.7 | 59.1 | 6.9 | 3.1 | 11.5 |
| Staple goods | 1.6 | 8.1 | 4.4 | 9.4 | 70.9 | 57.7 | 12.7 | 3.2 | 18.2 |
| Energy | 1.5 | 9.8 | 5.3 | 13.8 | 78.4 | 34.2 | 8.5 | 1.9 | 14.3 |
| Industrials | 1.3 | 8.9 | 3.2 | 15.7 | 40.0 | 55.4 | 7.9 | 0.7 | 20.7 |
| Technology | 1.4 | 9.9 | 5.7 | 20.3 | 49.4 | 35.6 | 2.2 | 4.9 | 10.9 |
| Utilities | 1.2 | 8.8 | 3.7 | 8.5 | 101.2 | 117.0 | 7.3 | 0.5 | 18.6 |
| **TOTAL** | **1.4** | **9.0** | **4.6** | **11.6** | **81.8** | **55.4** | **10.5** | **1.3** | **16.5** |

SOURCE: Banco de España.

**a** MSCI-GICS sectorial classification.
**b** Billions of US dollars.

to let their currencies depreciate significantly suggests that the risks of depreciation may outweigh the advantages.

In the database used the overall volume of foreign currency bonds amounts to more than $600 billion[2] (see Table 1). However, this high debt volume is concentrated among a small group of corporations (less than 15% of the sample). In principle, the corporations in this group are not more financially vulnerable than those that do not have foreign currency debt, although there are some features that set them apart: they are larger, they have lower profitability and higher fixed asset ratios, and they are more export-oriented. The corporations with foreign currency debt include a larger proportion of firms in the materials and energy sectors, although there are firms in all sectors of activity except technology (see Chart 1).

Focusing on these firms, Table 2 shows that the volume of foreign currency debt amounts to more than 10% of total assets. Accordingly, if there are no real or financial hedges, currency depreciation would increase their net leverage, which, depending on the intensity of the depreciation, could rise by more than 5 pp (see Chart 2), with an adverse effect on their funding costs. In addition, the simulations show that, in such circumstances, a 25% depreciation could reduce the return on assets (ROA) ratio by some 50% and, in the event of more severe depreciation, the ratio could even turn negative at some firms. These results should, however, be treated with caution. First, because any real or financial hedges in place would offset to some extent the direct impact on profitability and leverage, although clearly they would also increase costs; in addition, asset value would increase in the event of currency depreciation if some of the assets were also denominated in foreign currency. And second, because the exercise only takes into account debt in the form of bonds but not loans, which in some countries may make a significant difference (see McCauley et al., 2015). In any event, anecdotal evidence shows that even at energy sector corporations, which have natural hedges owing to the products they sell, profits have fallen significantly as a result of currency depreciation.

In sum, after several years tapping the global funding markets, a significant proportion of non-financial corporations in emerging economies have built up a high volume of foreign currency debt. Although these corporations are not showing signs of severe financial fragility, a tightening of global financial conditions and, especially, severe depreciation of their domestic currencies, could have a substantial impact on their profitability ratios. Also, medium-sized firms could find that their access to funding becomes more complicated if these (larger) corporations turn back to their local markets for funding.

2 Of these bonds, 70% have been issued since 2000.

Chart 1
COMPOSITION BY SECTOR OF FIRMS WITH FOREIGN CURRENCY BONDS

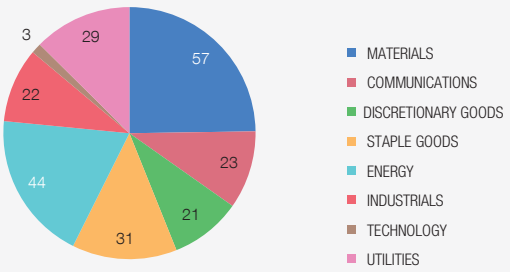
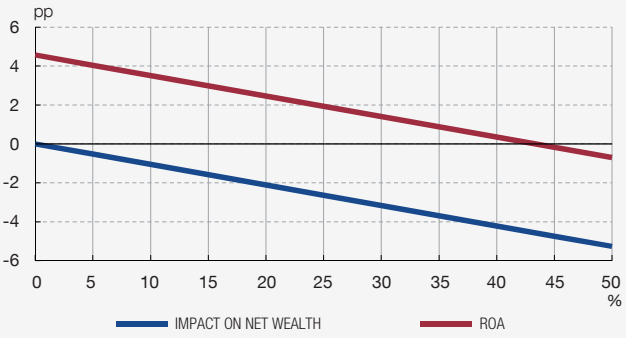



Chart 2
IMPACT OF CURRENCY DEPRECIATION ON NET WEALTH AND ROA




SOURCE: Banco de España.