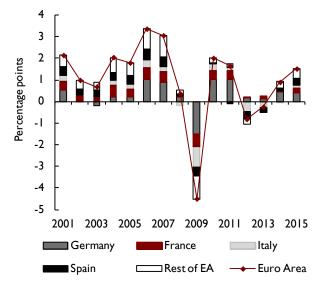
# Prospects for individual economies

### **Euro Area**

Modest economic growth has continued, at an annual rate of about 1½ per cent, contributing to a further decline in unemployment. With consumer price inflation remaining well below its medium-term objective of 'below, but close to, 2 per cent', the ECB announced in early December that it was taking further action to increase the degree of monetary accommodation. The measures announced fell short of expectations, so that both market interest rates and the euro's exchange value rose after the announcement. Subsequently, ECB officials emphasised their readiness to take further easing action, if necessary. Our forecast of GDP growth has been revised down slightly for 2016, to 1.5 per cent, but is unchanged for 2017 at 1.9 per cent. The projected strengthening of the expansion is based on the easy stance of monetary policy, the depreciation of the euro since 2013, and the boost to demand from lower oil prices.

GDP rose by 0.3 per cent in the third quarter, to a level 1.6 per cent higher than a year earlier. Growth in the third quarter continued to diverge widely among member countries, with output declining in Greece (by 0.9 per cent) and Finland (by 0.5 per cent) but continuing to increase rapidly in Spain (by 0.8 per cent); growth was

Figure 5. Euro Area: contributions to annual GDP growth



Source: NiGEM database and NIESR forecast. Note: 2015 includes forecast.

close to the Area's average rate in France, Germany (both 0.3 per cent) and Italy (0.2 per cent). Growth in the Area as a whole in the third quarter was driven by household and government consumption, and by inventory accumulation; fixed investment was flat and net exports were contractionary. GDP growth in the third quarter was the slowest in a year. Among more recent indicators, some have been weak – including industrial production, stagnant since early 2015, and retail sales – but PMIs suggest a pick-up in the final months of the year.

Employment, like GDP, rose by 0.3 per cent in the third quarter. Unemployment fell to 10.5 per cent in November, the lowest since October 2011 but still well above its pre-crisis levels of below 8 per cent. The diversity of employment gaps among member countries is indicated by the range of unemployment rates in November: from 4.5 per cent in Germany to 10.1 per cent in France, 11.3 per cent in Italy, and 21.4 per cent in Spain; the most recent data for Greece show unemployment at 24.5 per cent in October.

Consumer price inflation, on a 12-month basis, has languished just above zero since mid-2015: in November and December it stood at 0.1 and 0.2 per cent. The core rate, meanwhile, has stabilised just below 1 per cent: in November and December it was 0.9 per cent. The increase in 12-month inflation seen in the early part of 2015 – from a low of –0.6 per cent in January to 0.3 per cent in May, in terms of the all-items index – has thus petered out in recent months, despite the euro's depreciation since early 2014, by about 12 per cent in trade-weighted terms. This appears to reflect renewed weakness in global commodity prices as well as weak domestic demand. Wage inflation has remained subdued: wage costs in the Area rose by 1.1 per cent in the year to the third quarter of 2015, with divergences among member countries broadly consistent with adjustment needs: in particular, wage costs rose by more than the average rate in Germany and by less than the average rate in such countries as Italy and Spain.

On 3 December, the ECB announced that after an assessment of the factors slowing the return of inflation to its target, it was making four adjustments to its monetary instruments. First, it lowered the interest rate on its deposit facility (negative since June 2014) by 10 basis points to -0.30 per cent. Second, it extended its

asset purchase programme (APP): its monthly purchases of €60 billion a month, previously intended to run until September 2016, or beyond, if necessary, will now run "until end-March 2017, or beyond, if necessary, and in any case until the Governing Council sees a sustained adjustment in the path of inflation consistent with its aim of achieving inflation rates below, but close to, 2 per cent over the medium term". If purchases end in March 2017, the programme, which began in March 2015, will have involved asset purchases totalling €1.50 trillion, compared with €1.14 trillion if the purchases had ended next September. Third, the list of assets eligible for purchase by national central banks was extended to euro-denominated debt issued by regional and local governments located in the Euro Area (in addition to central governments, public agencies and certain supranational organisations). This addition of municipal debt will relieve to some extent the constraints on the ECB's ability to expand its asset purchases (see National Institute Economic Review, November 2015, F14). Fourth, the ECB will reinvest the principal payments on the securities purchased under the APP as they mature, for as long as necessary, including after March 2017, thus ensuring, in President Draghi's words, "abundant liquidity...for a longer horizon than we've been saying so far". 1 President Draghi estimated that the extension of net purchases to March 2017, together with the re-investment of principal payments, would add €680 billion in liquidity to the system by 2019, relative to the situation that would have prevailed without the measures - an amount equivalent to about 6.5 per cent of Euro Area GDP.2

President Draghi stated that the ECB was confident that these measures, which had been agreed not unanimously but by a "very large majority" of the Governing Council (there were subsequent reports of five dissenting votes out of 25), were "adequate to achieve its objectives", although they "might need time to be fully appreciated" by markets. Market disappointment – particularly with the small interest rate cut and the unchanged level of monthly asset purchases - was indicated by an increase in market interest rates in the Euro Area immediately following the announcement (the German 10-year government bond yield increased by 15–20 basis points to about 0.65 per cent), a corresponding narrowing of Euro Area-US interest differentials, and by an appreciation of the euro against the US dollar of close to 3 per cent. Following the announcement, President Draghi emphasised that if economic and financial conditions were to "change in directions that make it necessary to respond again, we are of course ready at any time to adjust [the ECB's] array of tools to secure the return of inflation to our objective without delay".

A new step was taken in the development of the Area's banking union on 1 January when the Single Resolution Mechanism came into effect and the Single Resolution Board (SRB) was established. The SRB has the power to decide when a bank has failed and which steps should then be taken to ensure a safe wind-down. With regard to the EU's plan for completing economic and monetary union by 2025 (see National Institute Economic Review, August 2015, F17), the European Commission published in late November proposals for a €45 billion bank depositguarantee scheme, under which funds would be levied on all Euro Area deposit-taking institutions to insure bank deposits valued up to €100,000. A reinsurance scheme would back up national schemes until 2020, followed by a gradual process of mutualisation between 2020 and 2024. The proposal was discussed by EU finance ministers in early December, when it was rejected by the German finance minister on the grounds that such a pooling of risks should not occur until more measures are in place to curb risk-taking in the financial system. In mid-December, Chancellor Merkel told the German parliament that "a mutualisation of European deposit insurance would not reduce risks in the financial sector, including those tied to government, but instead have the opposite effect".

Also in November, the ECB unveiled proposals for the harmonisation of banking regulations across the Euro Area's members. This is intended to promote cross-border lending, reduce financial fragmentation, and facilitate ECB supervision. Following a consultation process, the ECB plans to put the rules into place by April 2016.

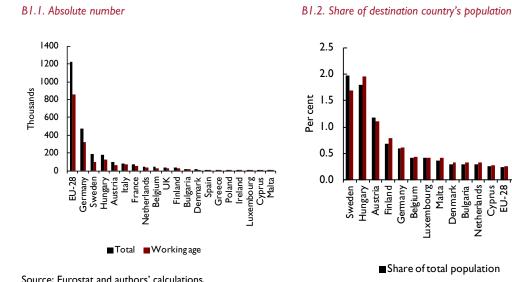
### **Germany**

The economy grew by 1.5 per cent in 2015, implying GDP growth in the fourth quarter (data for which have not yet been released) of 0.3 per cent, marginally weaker than in the third. The largest contributor to growth last year was household consumption, which accounted for around 1 percentage point of the rise in GDP: see figure 5. Government consumption and private sector investment also contributed positively to growth in 2015, by about 0.5 and 0.3 percentage points respectively, the latter notably being half of investment's contribution to growth in 2014. Export growth seems to have slowed markedly in the second half of the year, most likely reflecting weaker demand growth globally, including from China. With domestic demand supporting imports,

## Box B. Simulating the effects of refugee influx on the European Union macroeconomy by Jessica Baker, Simon Kirby, Iana Liadze and Rebecca Piggott

Civil war in Syria, in addition to conflicts and political instability elsewhere in the Middle East and some parts of Africa, has led to a significant increase in the number of refugees globally. The number of people forcibly displaced at the end of 2014 was 59.5m, the highest ever recorded (UNHCR, 2015). The member states of the European Union (EU) have seen a dramatic increase in the number of people arriving and claiming asylum. In 2015 the EU countries received 1.2 million asylum applications, compared to 430,000 and 630,000 in 2013 and 2014 respectively. Figure B1.1 illustrates the number of asylum applications (both total and of working age) by destination country. Germany received the largest number of applicants, followed by Sweden, Hungary (in part owing to geographic location) and Austria.

Figure B1. Asylum applications to the European Union member countries, 2015



On average across the EU, 29 per cent of asylum applicants were 17 years of age or younger, 70 per cent were between 18 and 64, and less than I per cent were 65 years of age or older. However, these averages conceal wide variation among member countries in the proportion of applicants who are aged between 18 and 64, ranging from 54 percent in Sweden to 91 per cent in Italy. In Sweden almost half of applicants are less than 18.

■Share of working age population

While the surge in asylum applications has been considerable, it amounts to only 0.24 per cent of the EU population. By contrast, the share of Syrian refugees in the populations of Lebanon and Jordan is estimated to be about 18.3 per cent and 8.4 per cent respectively.1

The distribution of asylum applications, relative to the populations of EU destination countries, has not been uniform either. Figure B1.2 illustrates the wide variation.<sup>2</sup> While Germany received the largest number of applications in 2015, relative to its population (around 1/2 per cent), its applications were only the fifth largest in the EU (figure B1.2) behind Sweden (at just under 2 per cent), Hungary,3 Austria and Finland.

Most applications for asylum last year came from Syrians, amounting to about 29 per cent of the total, followed by Afghans (13 per cent) and Iranians (9 per cent). Overall, about 60 per cent of asylum applications to the EU in 2015 came from citizens of countries in the Middle East, North Africa, Afghanistan and Pakistan.4

The increasingly high proportion of applicants from Syria has been reflected in a rise in the average recognition rate of asylum seekers in the EU from 32 per cent in 2012 to 57 per cent in 2015,5 with the recognition rate of Syrian nationals in 2015 around 98 per cent. There is some variation in the recognition rates across EU member countries. In 2014, the rate was 22 per cent in France compared to 77 per cent in Sweden, with an average of 47 per cent. However this disparity may be reduced somewhat as the proportion of asylum seekers originating from Syria, who have a recognition rate of close to 100 per cent, rises or at least remains high through 2016 and 2017.

### **Box B.** (continued)

#### Simulating the effects on the EU macroeconomy: assumptions

Immigration is a complex issue, and we use a stylised approach to illustrate the impact of the increased inflow of asylum seekers on EU member country economies, by running a simulation using our global econometric model, NiGEM. In order to capture the effects of the increased number of asylum seekers on recipient countries and their labour forces, shocks are applied to both country populations and labour force participation rates. Both monetary and fiscal policy makers are assumed not to respond by changing in monetary or fiscal targets for at least the first three years of the shocks. The removal of fiscal target allows for a fiscal expansion - fiscal authorities do not apply a balanced budget approach to increases in welfare and government consumption spending in our simulation.

Changes to the population projections are calibrated by using asylum application data from Eurostat for 2015 and the European Commission's assumptions for the total number of asylum applications to the EU in 2016 and 2017, i.e. 1.22, 1.5 and 0.5 million in each year respectively.6 The distribution of applications in 2016 and 2017 by destination country and age group is assumed to be the same as that in 2015.7 It is assumed that 92 per cent of asylum seekers who arrived in the EU have left the Middle East, with the remaining 8 per cent coming from Africa.

New arrivals are assumed to enter the labour force after they have been in a country for one year, which we treat as a comparatively quick integration scenario, given how long, on average, it takes to process asylum applications. We assume that the labour force participation rate of working age migrants who have been in the country for at least one year is 80 per cent of the average participation rate in that country in 2015. This is in line with the reduced participation rate of new arrivals compared to the existing working age population as discussed in Aiyar et al. (2016). Data on the movements of failed asylum applicants is sparse, at best. For simplicity, we assume that they remain in the host country but are unable to enter the labour force.

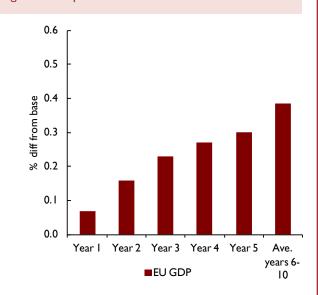
NiGEM is a large estimated quarterly model of the world economy, which uses a 'New-Keynesian' framework in that agents are assumed to be forward-looking but nominal rigidities slow the process of adjustment to the long-run equilibrium. In the long term, output is determined by a CES production function with labour-augmenting technical progress. The labour market embodies an equilibrium level of employment. We assume that employers have the right to manage, and hence the bargain in the labour market is over the real wage. Real wages, therefore, depend on the level of trend labour productivity as well as the rate of unemployment. The labour force is assumed to grow in line with the population of working age and any exogenous changes in the participation rate. The model does not differentiate between different types of labour and the relative productivity of migrants is unknown, so we assume that the representative working age migrant is identical to the representative member of the working age population of the recipient country.9

#### Simulation results

The overall impact on country GDP is largely determined by the number of working age applicants received, combined with how many of these people enter the labour market and transition into employment. In the first year it is assumed that there is no impact on the labour supply, and a small positive impact on output is largely demand-driven, as an increase in government spending on the migrants, including transfers, leads to higher private consumption and increased in output. After the first year, successful asylum applicants enter the labour market and supply starts increasing gradually. As a result of the uneven distribution of migrants among EU countries, the impact on output is widely dispersed, with the largest effect in Sweden, closely followed by Austria and Finland. Output (relative to the baseline) is expected to increase by about 0.3-0.8 per cent in Germany, Finland, Austria and Sweden, by the third year of the simulation.

The impacts on EU GDP and the labour force are illustrated in figure B2. The positive effect on GDP builds over time as more and more refugees are integrated into the labour force. In the medium term the number of employed people is expected to increase by about 0.6 per cent and GDP by

Figure B2. Impact on the level of real GDP in the EU



### **Box B.** (continued)

about 0.4 per cent (compared to baseline). As the increase in employment lags the rise in the labour force, initially, there is an increase in the unemployment rate. However, as we assume that the new labour force does not have an effect on the parameters explaining the functioning of European labour markets, there is no long-run effect on the rate of unemployment. The impact on output will be smaller if immigrants' participation rates are lower than we assume, integration into the labour force takes longer or there are barriers to employment.

#### **NOTES**

- I Source: http://data.unhcr.org/syrianrefugees/regional.php and http://esa.un.org/unpd/wpp/; the number for Lebanon may be even higher, because "as of 6 May 2015, UNHCR Lebanon has temporarily suspended new registration as per Government of Lebanon's instructions. Accordingly, individuals awaiting to be registered are no longer included."
- 2 The first bar displays total asylum applications as a per cent of the total population in the destination country. The second bar shows working age applicants as a per cent of the working age population.
- 3 The high number of asylum seeker applications registered in Hungary partly reflects its geographical location; many of its registered asylum seekers may have subsequently re-applied in another destination country such as Austria, Germany or Sweden.
- 4 Countries grouped in the Middle East and North Africa follow the IMF's country group classification.
- 5 Defined as a percent of asylum decisions which are positive.
- 6 European Commission, European Economic Forecast, Autumn 2015 http://ec.europa.eu/economy finance/publications/eeip/ pdf/ip011 en.pdf.
- 7 The data source for asylum applications is Eurostat. If an asylum seeker makes a repeat application in a different reference period (month) it is re-recorded, so the aggregate figures could overstate the number of people seeking asylum. To put this in context, in the third quarter of 2015 96 per cent of total asylum applications in the EU were first-time applications. Additionally there could be double-counting if an asylum seeker submits an application in more than one country. Missing data observations in 2015 are constructed by utilising the growth rate over the same period of the previous year. Population data are as of the end of 2014.
- 8 Average time to process application in Germany is 5.3 months, while in Sweden is has increased from an average of 4.5 months in 2014 to 7 months 2015 (Aiyar et al., 2016).
- 9 Further details on the NiGEM model are available on http://nimodel.niesr. ac.uk.

#### **REFERENCES**

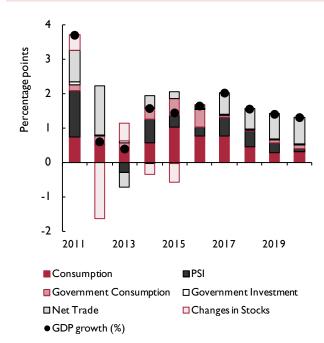
Aiyar, S., Barkbu, B., Batini, N., Berger, H., Detragiache, E., Dizioli, A., Ebeke, C., Lin, H., Kaltani, L., Sosa, S., Spilimbergo, A. and Topalova, P. (2016), 'The refugee surge in Europe: economic challenges', IMF Staff Discussion Notes. UNHCR annual Global Trends Report: World at War, released 18/6/15.

net trade made only a modest contribution to growth in 2015, and is expected to be neutral in 2016 with the external environment remaining difficult.

Growth is projected to pick up marginally in 2016 to 1.6 per cent. Exports should strengthen with the global economy and world trade, and from 2017 net exports will begin to take the place of private consumption as the dominant driver of growth. Our forecast thus shows no adjustment of Germany's current account surplus, which is estimated to have been as large as 8.2 per cent of GDP in 2015: in fact, it is expected to widen slightly, to 8.4 per cent of GDP, in the medium term.

Headline inflation has remained close to zero, with the 12-month increase in the harmonized index of consumer prices (HICP) at 0.2 per cent in December 2015, the same as the Euro Area average. However, domestic inflationary pressure is greater than the headline rate suggests. Thus core inflation has been stable at around 1.2 per cent since May 2014, and the growth of wages has picked up since early 2014: in the year to the third quarter of 2015, labour costs (on Eurostat's index) rose by 2.4 per cent, higher than the Euro Area average of 1.1 per cent, whereas the corresponding data one year earlier show a rise in labour costs in Germany of 1.2

Figure 6. Germany: contributions to annual GDP growth



Source: NIESR forecast.

per cent, lower than the Euro Area average of 1.4 per cent. This reflects the relatively tight labour market in Germany, with unemployment in recent months at 4.5 per cent, less than half the Euro Area average. The stability in recent months of the headline consumer price index, together with recent declines in global commodity prices and the general stability of the euro's exchange rate since last spring, suggest that headline inflation will remain subdued through most of 2016. But underlying inflationary pressures seem likely to start pushing inflation up towards the end of this year, and we are projecting average inflation of 1.6 per cent in 2017, after 0.5 per cent this year, and 1.8 per cent in the medium term.

With the economy virtually at full employment, the growth of employment, 0.8 per cent in 2015, has recently relied on immigration. It may be expected to pick up in the course of this year as more of the roughly one million refugees who have entered Germany since the start of 2015 find their way into the labour force. The unemployment rate is expected to remain broadly flat over our forecast horizon.

The government budget in 2015 is estimated to have been in surplus by around 0.5 per cent of GDP – the largest surplus in fifteen years. We expect the surplus to decline this year as increased spending on recently arrived migrants is funded without significant increases in taxation. However, the budget seems likely to be kept in surplus this year and next, allowing the public debt to be reduced from 70 per cent to under 55 per cent of GDP by the end of 2020. Government investment is expected to grow slightly.

#### **France**

After stagnation in the second quarter of 2015, economic growth appears to have resumed in the second half of the year. GDP increased by 0.3 per cent in the third quarter and we estimate that it rose marginally less in the final quarter of the year, leaving annual growth at 1.1 per cent, as in our November forecast. Albeit modest, this would be the strongest annual expansion since 2011. PMIs and other data indicate that growth in the fourth quarter shifted towards manufacturing away from services and retail trade. Thus the PMI for manufacturing in December indicated the strongest growth since early 2014, while PMIs for both services and retail trade indicated the sharpest contractions since early 2015. These developments seem partly to reflect the terrorist attack in Paris in mid-November, which is likely to have damaged tourism in particular.

since 2012, by 1.8 per cent in 2017.

Unemployment declined significantly late last year, from a peak of 10.6 per cent in August to 10.1 per cent in November, its lowest level since May 2014. But this is still high, and a matter of political concern. On 18 January, President Hollande referred to it as "an economic and social emergency" and announced measures involving the creation of half a million vocational training schemes, additional subsidies for small companies' recruitment of young or unemployed people, and a programme to boost apprenticeships. The two-year plan will cost €2 billion, to be financed by spending cuts elsewhere. We do not expect these measures to have a substantial effect on the overall unemployment level, which we expect to remain around 10 per cent this year and next.

Twelve-month consumer price inflation, in terms of the HICP, picked up slightly to 0.3 per cent in December. Core inflation was 0.8 per cent in December, little changed from the previous seven months. With wage costs subdued – as in the Euro Area as a whole, they rose by 1.1 per cent in the year to the third quarter – we expect average inflation to rise from zero in 2015 to 0.4 per cent this year and 1.1 per cent in 2017.

In November the European Commission expressed scepticism about the government's ability to meet its fiscal deficit target for 2017 of less than 3 per cent of GDP. Our current baseline forecast is that the deficit will reach 2.9 per cent of GDP in 2017, meeting the target by the finest of margins. As indicated in previous issues of this *Review*, however, such fine margins leave the attainment of the target highly vulnerable to shocks, and there remains a significant probability that the target will not be met.

### **Italy**

Modest economic growth, generated mainly by consumer spending, has been sustained since the recovery resumed in early 2015. GDP growth eased off in the second and third quarters of last year, to 0.3 per cent and 0.2 per cent respectively, from 0.4 per cent in the first, mainly on account of two factors: a downturn in fixed investment

after the first quarter – when there was a one-off jump in spending on transport equipment equivalent to more than half that quarter's rise in GDP – and a downturn in exports in the third quarter. More recent indicators, including PMIs for both manufacturing and services, suggest that modest growth has continued.

Private consumption has been sustained by subdued consumer price inflation, related partly to the decline in global oil prices; more favourable credit conditions; and increased consumer confidence. We view the contraction of exports in the third quarter of 2015 as an aberration and expect export growth to resume in the near term as Italy benefits from the depreciation of the euro over the past two years, the economic recovery among its Euro Area partners, and competitiveness gains within the Euro Area arising from Italy's relatively low wage inflation: in fact, in the year to the third quarter, wage costs in Italy declined by 0.4 per cent, compared with the average increase of 1.1 per cent in the Area as a whole. Consumer price inflation has also been below the Euro Area average, albeit slightly: in the year to December, it was 0.1 per cent, with the core rate at 0.6 per cent. We expect inflation to remain subdued in 2016, especially given the recent renewed fall in oil prices.

The weakness of fixed investment remains a significant concern as growth has still failed to materialise after a decline of more than 20 per cent since 2008. To spur investment, the government has introduced various measures, including tax deductions on investment in machinery and equipment ('super ammortamento') and the opening of new lines of credit at favourable rates for small and medium-sized enterprises from its own national promotional bank (Cassa Depositi e Prestiti).

The labour market is another cause of concern. Robust job creation remains elusive despite a number of measures that the current government has implemented (Job Acts, tax deductions when hiring, and more). Unemployment has fallen quite rapidly from its peak of 13.1 per cent, in November 2014, to 11.3 per cent in November 2015, but the increase in employment in this period accounts for less than half of the decline in numbers unemployed, indicating that most of the decline is attributable to a fall in labour force participation.

The draft budget for 2016, released in November, sets a deficit target of 2.2 per cent of GDP, larger than the 1.8 per cent target set last April. The target will be raised to 2.4 per cent if the European Commission approves Italy's request for additional leeway to compensate for

the costs of increased immigration. The target date for budget balance has been postponed to 2018 from 2017. The draft budget is being assessed by the European Commission. We estimate that the government deficit in 2015 was 2.6 per cent of GDP, and project that it will narrow to 2.2 per cent in 2016.

Our estimate of GDP growth in 2015 and our forecast for 2016 are unchanged from the November *Review*, at 0.7 and 0.9 per cent, respectively. Our projection for growth in 2017 has been lowered to 1.3 per cent.

### **Spain**

The solid economic recovery – one of the strongest recent growth performances in the Euro Area – has maintained its momentum. In the third quarter of 2015, GDP grew by 0.8 per cent, to a level 3.4 per cent higher than a year earlier, and the Bank of Spain expects the same rate of expansion in the last quarter of the year. We have raised our estimate of growth in 2015 as a whole marginally to 3.2 per cent, and while our projection for growth in 2016 is unchanged, at 2.6 per cent, our forecast for 2017 has been raised slightly, to 2.8 per cent.

As has generally been the case since early 2014, output growth in the third quarter was generated by domestic demand, with both private consumption and fixed investment rising by about 1 per cent. Easing credit conditions, the resumption of house price inflation, strong employment growth, reduced oil prices and the reintroduction of bonus pay for civil servants, which the government had suspended in 2012, have all helped to spur private consumption. We expect this trend to persist in 2016, particularly given the recent fall in oil prices.

Net trade, which has not contributed positively to growth in most of the period since 2013, subtracted 0.3 percentage points in the third quarter after a neutral contribution in the second. Exports have been growing strongly – by 2.8 per cent in the third quarter alone – benefitting from the depreciation of the euro as well from the competitive gains that come from wage moderation and Spain's favourable inflation differential with the Euro Area. However, the strong expansion of domestic demand has pulled in imports at a generally faster rate.

Unemployment remains extremely high, but it has been falling quickly. In November 2015 it stood at 21.4 per cent, almost 5 percentage points below the peak of 26.3 per cent reached in early 2013, but still well above both the current Euro Area average of 10.5 per

cent and the pre-crisis level in Spain of about 8 per cent. Almost 200,000 people, out of around 5 million people unemployed, found a job in Spain in the third quarter of 2015.

Consumer price inflation, on a 12-month basis, has been predominantly negative since mid-2014, but in recent months the rate of deflation has waned, to 0.1 per cent in November (in terms of the HICP). Core inflation rate has gradually risen from negative levels in late 2014 to about 1 per cent late last year.

The government seems likely to have reached the target budget deficit of 4.2 per cent of GDP required by the European Commission for 2015, but fiscal prospects are currently uncertain. The general election on 20 December produced a hung parliament, with no resolution a month later. The incumbent government remains in office for the time being, but another election may have to be called, and this could produce a similar result. In these circumstances, the reform agenda may stall and we are sceptical as to whether the government will deliver a deficit of 2.8 per cent of GDP for 2016, as the Commission expects. The current political uncertainty, which has been exacerbated by moves for independence in Catalonia, may, if prolonged, also cause significant damage to confidence and the pace of economic recovery.

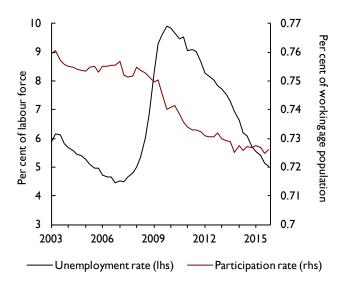
#### **United States**

The growth of demand and output has continued at a broadly moderate pace, weakening somewhat in late 2015. Meanwhile, unemployment has fallen further, to 5.0 per cent throughout the fourth quarter, its lowest level since April 2008; this is the upper end of the Federal Reserve's newly revised range estimate of 4.8-5.0 per cent for the longer-run, normal unemployment level. Inflation has remained well below the Fed's medium-term objective of 2 per cent, partly reflecting the weakness of global prices of energy and other commodities and the strength of the dollar, but there have been tentative signs of a slight pick-up in wage as well as price increases. Against this background, as we assumed in the November Review, the Fed on 16 December raised the target range for the federal funds rate by 25 basis points to 0.25–0.50 per cent. This action, agreed unanimously by the Federal Open Market Committee, was taken seven years after the target range had been lowered close to zero, and six and a half years after the end of the recession of December 2007–June 2009. Partly reflecting relatively weak data for demand and activity in late 2015, as well as the further appreciation of the dollar, we have revised down slightly our estimate for GDP growth last year, to 2.4 per cent, and also our forecast for growth in 2016 and 2017, to 2.5 and 2.7 per cent respectively.

In the third quarter of 2015, GDP grew by 2.0 per cent at an annual rate, with robust growth in consumer spending (3.0 per cent) and private fixed investment (3.7 per cent) partly offset by negative contributions from stockbuilding and net exports. GDP in the first three quarters of last year was 2.6 per cent higher than in the corresponding period of 2014, compared with 2.4 per cent growth in 2014 as a whole. In the fourth quarter of 2015, GDP growth seems likely to have weakened, partly on account of slower growth in consumer spending reflecting increased saving. Among the production sectors, output contracted in the course of 2015 in both mining (-11.2 per cent in the year to December) and utilities (-6.9 per cent), and expanded only weakly in manufacturing (0.8 per cent), so that industrial production declined by 1.8 per cent. The recession in industry accelerated in the fourth quarter, with a decline in production of 0.9 per cent from the preceding three months.

The growth of employment slowed somewhat in 2015, although it picked up in the last quarter. In the year as a whole, non-farm payrolls increased by 2.65 million, compared with 3.12 million in 2014. In terms of 12-month percentage changes, the growth of non-

Figure 7. US: unemployment and labour force participation rate



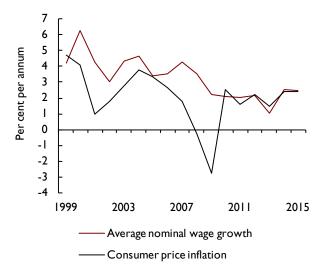
Source: NiGEM database and NIESR forecast.

farm jobs peaked at 2.3 per cent between December 2014 and March 2015 – the fastest annual growth in employment since 2000 – and subsequently moderated to 1.9 per cent by December. Unemployment fell further to 5.0 per cent in October–December, half its peak level of October 2009 and the lowest since April 2008. In December, the Fed lowered its range estimate of longerrun normal unemployment further to 4.8–5.0 per cent from 4.9–5.2 per cent. One indication of continuing slack in the labour market remains the labour force participation rate; it rose marginally to 62.6 per cent in December from the 38-year low of 62.4 per cent reached in September, but it remained lower than in any other month between November 1977 and May 2015, albeit partly because of demographic shifts.

Another indicator of labour market slack is the continuing subdued growth of wages. There have, however, been tentative signs recently of a modest pick-up in wage growth. Thus the 12-month growth rate of average hourly earnings was 2.5 per cent in October and December 2015 – the strongest annual growth in more than five years, though still significantly lower than rates compatible with the Fed's objective for price inflation. The employment cost index, which takes into account benefits as well as pay, also showed a pick-up in the third quarter.

Consumer price inflation has also remained subdued. Thus the 12-month increase in the price index for

Figure 8. US: GDP and nominal wage growth



Source: NiGEM database and NIESR forecast.

personal consumption expenditures – the Fed's preferred index – was 0.4 per in the twelve months to November, slightly higher than earlier in 2015, while the corresponding core inflation rate was unchanged at 1.3 per cent. Measured by the narrower consumer price index, however, 12-month inflation rose to 0.7 per cent in December – the highest rate in a year – while the corresponding core rate was 2.1 per cent, the highest since July 2012.

In announcing the increase in its target range for the federal funds rate, the Fed referred to the two conditions it had earlier laid out for such action, and explained that it now both judged that there had been considerable improvement in labour market conditions and was reasonably confident that inflation would rise, over the medium term, to its 2 per cent objective, as the transitory effects of declines in energy and import prices dissipated and the labour market strengthened further. It also emphasised that monetary conditions remained accommodative after the increase, that the timing and size of future adjustments would depend on its assessment of actual and expected economic conditions relative to its objectives, and that it expected that only gradual increases in the rate would be warranted. The median expectation of the participants in the Fed meeting was that the appropriate increases in the target federal funds rate will be 1.0 percentage point in both 2016 and 2017, 0.875 percentage point in 2018, and a further 0.25 percentage point in the longer run, taking the rate to 3.5 per cent.

Developments since the Fed's mid-December interest rate hike – including the further weakening in the global prices of oil and other primary commodities, the declines in global equity prices, broader financial market turbulence, the continuing strength of the dollar, and relatively weak data for the US economy – have reduced the likelihood of a second increase in rates before June. Particularly notable is the fact that medium-term market-based inflation expectations remain well below the Fed's objective: for instance, the five-year breakeven inflation rate was 1.1 per cent in late January.

#### Canada

The economy emerged from a mild, six-month recession with GDP growth of 0.6 per cent in the third quarter of 2015, but this expansion seems to have been shortlived. More recent data indicate that the economy stalled in the fourth quarter. Thus monthly GDP was unchanged in October, after falling by 0.5 per cent in September, and manufacturing PMIs in recent months

have indicated declining activity. Unemployment late last year was 7.1 per cent, up from 6.6 per cent at the start of 2015. Falling oil prices have been weighing heavily on exports and business investment, while recent declines in commodity prices have reduced average annual incomes in Canada by C\$1500, according to estimates recently cited by Bank of Canada Governor Poloz.

Business investment fell by 1.5 per cent in the third quarter, following falls of 4.7 and 3.0 per cent in the previous two quarters. The Bank of Canada's Business Outlook Survey indicates that business sentiment has deteriorated significantly, with the negative effects of the commodity price shock extending beyond the resource sector. Investment and hiring intentions have fallen to their lowest levels since 2009. We expect business investment to continue to decline in 2016, before picking up in 2017.

On a more positive note, firms report that they are benefiting from strengthening foreign demand, with non-commodity exporters expecting strong sales growth. An important factor boosting non-commodity exports, and also restraining imports, is the recent marked depreciation of the Canadian dollar, to levels in late January that were about 10 per cent lower than three months earlier, and about 20 per cent lower than at the end of 2014, in both US dollar and trade-weighted terms. In terms of the US dollar, the Canadian currency has recently been at 12-year lows.

Consumer price inflation was 1.4 per cent in the year to November, the highest 12-month rise in prices for more than a year, pushed up particularly by the rising cost of food items but also reflecting the depreciation of the currency, which will continue to put upward pressure on prices in the months ahead. On the other hand, weak domestic demand will dampen price growth. Our forecast is for inflation to average 1.8 per cent in 2016, before rising to 2.4 per cent in 2017 and stabilising at 1.6 per cent in 2018–22.

On 20 January, the Bank of Canada decided to keep its benchmark interest rate at 0.5 per cent, the level to which it was reduced last July. The Governor indicated that the decision not to lower the rate further was related partly to the government's intention to introduce fiscal measures (not yet specified) to stimulate the economy, and partly to the boost to activity and inflation provided by the depreciation of the currency. Our forecast assumes a rate cut of 25 basis points in May. We are forecasting modest growth of 1.8 per cent in 2016, accelerating to 2.4 per cent in 2017. We expect unemployment to average 7.1 per cent in 2016 before falling slightly to 7.0 per cent in the medium term.

### Japan

Economic growth resumed in the third quarter of 2015, with a rise in GDP of 0.3 per cent – close to the assumption in our November forecast - following the slight decline of 0.1 per cent in the preceding quarter. Contributions to GDP growth in the third quarter were evenly balanced between domestic and external demand components. Private consumption and investment grew by 0.4 per cent and 0.8 per cent, respectively, while export growth, at 2.7 per cent, outstripped that of imports, at 1.7 per cent. More recent indicators of activity have been mixed, but growth seems likely to have continued at a modest pace in the fourth quarter. Thus PMIs have consistently indicated moderate expansion in both manufacturing and services activity in recent months. Consumer confidence in late 2015 was at its highest level in more than two years, although early indications are that household expenditure and retail sales in the fourth quarter may have been lower than a year earlier. Our estimate of GDP growth in 2015 as a whole is unchanged from November, at 0.7 per cent.

Our growth forecast has been lowered since November for 2016, to 1.0 from 1.4 per cent, but raised slightly for 2017, to 1.2 from 0.9 per cent. There are risks on either side of this forecast. On the downside, a less favourable outturn in China than we are projecting, particularly in terms of economic growth, the exchange rate, or financial turbulence, would be likely to have negative spillovers to the region, and to Japan in particular. On the upside, larger declines in global energy prices than we are assuming could boost growth by leading to a larger than projected improvement in real incomes.

The 12-month 'headline' consumer price inflation rate has generally been positive but close to zero since last April; it was 0.3 per cent in October and November. However, the Bank of Japan's own measure of 'core' inflation, which excludes the prices of energy and fresh food, reached 1.2 per cent in October and November, the highest rate since 2008, suggesting an underlying positive impetus to prices. Recent falls in global energy prices will put downward pressure on the 'all items' index. The core index will not be affected directly by energy prices but it will reflect the effects on import prices of the recent appreciation of the yen, whose trade-weighted value has risen by about 8 per cent since mid-2015.

With regard to inflation expectations, the Bank of Japan's Tankan survey for December showed a decline in the expectations of both households and companies, below the Bank of Japan's objective of a 2 per cent annual rate. This may partly reflect the fact that the Bank in late October pushed back the date by which

it is aiming to meet its objective to "around the second half of fiscal 2016", which ends in March 2017, from "around the first half". An important indication of inflation prospects will emerge from the spring round of wage negotiations. Early indications are that, even with the continued low unemployment rate – below 3.5 per cent since last February, the lowest levels since 1995 – trade unions will be seeking smaller increases in base pay than in the previous two years, while firms remain cautious despite robust corporate profits. On balance wage increases seem unlikely, at least in the near term, to provide the inflationary impetus to create the much vaunted 'virtuous cycle'. Our forecast for average inflation is for zero and 0.7 per cent in 2016 and 2017 respectively.

On 18 December, the Bank of Japan announced the first modification of its programme of quantitative and qualitative easing (QQE) since it expanded purchases in October 2014. It lengthened the average maturity of bonds to be purchased from the beginning of 2016 to 7–12 from 7–10 years;<sup>3</sup> announced increased purchases of Japan real estate investment trusts and also of exchange-traded funds "composed of stocks issued by firms that are proactively making investment in physical and human capital"; and loosened collateral constraints by allowing foreign currency bonds and housing loans to be eligible. Governor Kuroda described these changes as technical rather than constituting additional easing.

On 22 December, the Cabinet approved a ¥96.72 trillion budget for fiscal 2016, beginning in March, largely focused on welfare spending to deal with population aging. An interesting feature is on the revenue side with an expected increase in tax receipts of 5.6 per cent, which in turn implies a fall in debt issuance of 6.6 per cent from fiscal 2015. The government's fiscal projections are based on a forecast of 1.7 per cent GDP growth in fiscal 2016, compared with our 1.2 per cent forecast for fiscal 2016 and well above the potential growth rate of the economy, which the Bank of Japan estimates is around 0.3 per cent, despite already low unemployment. Given the already short supply of publicly available bonds, the government announced that it would bring forward issuance of bonds, in order to avoid disrupting the Bank's QQE programme.

### China

Despite renewed turmoil in financial markets in January, recent data generally indicate that the economy's slowdown has proceeded broadly in line with the

government's plans.<sup>4</sup> GDP growth in the year to the fourth quarter was 6.8 per cent, marginally slower than in the year to the third quarter, and in 2015 as a whole it was 6.9 per cent, in line with both our November forecast and the government's target of "around 7 per cent". There have also been further indications of economic rebalancing, as planned, with output growth in the services sector in the year to the fourth quarter at 8.2 per cent, compared with 6.1 per cent growth in industry and construction. In 2015 as a whole, there were declines in both steel production (by 2.3 per cent) and power generation (by 0.2 per cent), in each case for the first time in 25 years. Meanwhile the growth of retail sales remained solid, at 11.1 per cent in the twelve months to December.

The economy's slowdown has been moderated by monetary easing – including six reductions in the central bank's benchmark interest rates, amounting to 150 basis points, in the year to October 2015 – and also by fiscal support. Announced stimulus measures are expected to continue to support the economy in the short term, while overcapacity in some heavy industries and construction continue to act as a drag on growth. We project a further gradual slowing of growth this year and next, to annual rates of 6.5 and 6.3 per cent, respectively, little changed from our forecast of three months ago.

The Thirteenth Five-Year Plan, setting a development path for the period 2016–20, will be finalised in March. A preliminary summary published last October provides some indications of its directions and goals. Among other things, the Plan calls for average annual GDP growth of at least 6.5 per cent between 2015 and 2020 to meet the objective, set out in the previous Plan in 2010, of doubling GDP by the end of the decade; a rise in the consumption/ GDP ratio; and action to address environmental pollution. The Annual Central Economic Work Conference in December provided clearer indications of policies for 2016, with plans for more "pro-active" and "flexible" fiscal and monetary policies, including property-specific measures aimed at supporting demand while at the same time promoting the reduction of over-capacity; for the acceleration of de-stocking in the property market by helping rural migrant workers to settle in urban areas; and for tax cuts for the corporate sector.

The government continues to face a difficult balancing act as it tries to manage the inevitable slowing of economic growth while promoting the rebalancing of the economy that is needed for sustainable long-term growth. Efforts to support growth in the short run may risk increasing imbalances and thus postpone and complicate the

adjustment process. In the real estate sector, announced supportive measures (like increased loan-to-value ratios and reduction in down-payments for second-home buyers) may support house sales in the short term, but lengthen the price adjustment process. Likewise, stimuli that limit incentives to reduce overcapacity in industry may hamper more productive investment, weigh on already falling corporate profits, reduce companies' ability to service debt obligation, and increase bad loans in banks and risks to the financial system.

Inflation has remained subdued on some measures and negative on others. Consumer price inflation, on a 12-month basis, picked up slightly in late 2015 to reach 1.6 per cent in December, just over half the authorities' 3 per cent target for the year. The core rate in December was 1.5 per cent. The 12-month change in producer prices was stable in the latter part of 2015, at –5.9 per cent. Mild deflationary pressures are also evident in recent GDP data: thus the growth of nominal GDP in the year to the fourth quarter, at 5.8 per cent, was 1 percentage point lower than the growth of real GDP.

There has been further downward pressure on the renminbi in the past three months. In late January, the currency's value in terms of the US dollar was 3.3 per cent lower than in late October and 5.8 per cent lower than the rate that prevailed before the change to a more flexible exchange rate arrangement last August. In mid-December, the People's Bank signalled that exchange-



Source: Datastream and authors' calculations.

rate policy would henceforth pay more attention to a 13-currency basket of currencies of trading partners than to the US dollar alone, and in trade-weighted terms the renminbi has been broadly stable in recent months: see figure 9. This stability in trade-weighted terms has been supported by further official intervention in the foreign exchange market. In December, China's foreign exchange reserves fell by \$108 billion – the largest ever monthly decline – to \$3.33 trillion, 17 per cent below the peak of \$3.99 trillion reached in mid-2014. Given China's current account surplus, the downward pressure on the renminbi indicates continuing net capital outflows.

The steep decline in equity prices that began last June, following more than a doubling of prices in the previous six months, resumed at the beginning of this year. Disappointing PMI data for December, together with the impending expiration of a six-month official ban on sales of equities by large investors introduced last July, seemed to be the main triggers for the renewed fall, but another contributor was a newly introduced circuit breaker, the design of which appeared to encourage sales in a falling market. This was suspended on 7 January. Nevertheless, and in spite of reported officially encouraged purchases of equities, prices in mid-January were about 19 per cent lower than at the end of 2015, and more than 40 per cent lower than the peaks reached last June, though higher than they had been before December 2014.

On 30 November, the IMF announced that it had decided that, beginning on 1 October, 2016, the renminbi would be included in the currency basket represented in Special Drawing Rights, the reserve currency that the IMF is empowered to create. The renminbi will have a weight of 10.92 per cent in the basket, smaller than the weights of the US dollar (41.73 per cent) and the euro (30.93 per cent), but larger than the weights of the Japanese yen (8.33 per cent) and pound sterling (8.09 per cent). The IMF thereby judged that the renminbi had satisfied two criteria: that China was one of the largest exporting countries in the world, and that the currency was "freely usable" according to the meaning set out in the IMF's Articles of Agreement. The IMF's decision is generally viewed as a vote of confidence by its membership in progress with reform of China's financial and exchange rate systems, as well as recognition of the country's increased economic weight. In fact, with the reform of IMF quotas soon to be implemented, China will become the second largest quota holder in the IMF and the country with the second largest share in the World Bank.

#### India

The robust growth of the economy continued through the third quarter of 2015, with GDP 7.4 per cent higher than a year earlier. Domestic demand remained the main driver of the expansion, with private consumption and fixed investment both growing by 6.8 per cent in this period. The external sector continued to subtract from GDP growth: exports registered their fifth consecutive quarter of contraction on a four-quarter basis, shrinking by 4.7 per cent, although this was partly offset by a 2.8 per cent contraction in imports. There are indications that economic growth slowed in the fourth quarter: industrial production fell by 8.2 per cent in November to a level 3.2 per cent lower than a year earlier, and the manufacturing PMI for December indicated contraction for the first time in more than two years. The composite PMI for December, however, showed continuing growth. We expect that robust domestic demand growth will continue through 2016, supported especially by the improvements in household purchasing power emanating from the further decline in global oil prices. A significant downside risk to both short- and medium-term growth rate remains the poor health of the balance sheets of publicly owned banks, which may depress private sector investment and thus potential as well as actual output. We expect India to remain the fastest growing major economy in the period ahead, with GDP growth of 7.3 and 7.8 per cent projected for 2016 and 2017, respectively.

Consumer price inflation, on a 12-month basis, picked up late last year, from a low of 3.7 per cent in July and August to 5.6 per cent in December. This occurred despite the relative stability of the rupee's exchange rate and the weakness of oil and other global commodity prices. The rise seems to be accounted for largely by a rise in domestic food prices. Wholesale prices, having declined in the second half of 2014, have risen since early last year, and in December stood only 0.7 per cent lower than a year earlier after the 12-month rate of deflation had peaked at 5.1 per cent last August.

The Reserve Bank has kept its benchmark interest rate unchanged since the reduction of 50 basis points, to 6.75 per cent, implemented last September. Some observers have called for a further reduction in the near term, partly to protect the economy from weakening external demand. However, while consumer price inflation has recently been below the Reserve Bank's target of less than 6 per cent for January 2015, it is above the 4 per cent mid-point of the 2–6 per cent target range for the financial year 2016–17 (which begins in April) and beyond. The impact of the fall in

global commodity prices may allow the Bank some space to act if required. However, given our baseline forecast, such a policy action in the near term could risk failure to meet the target. In fact, our forecast of inflation at 4.9 and 5.9 per cent, respectively, for 2016 and 2017 suggests that monetary policy may need to be tightened for the target to be met.

#### **Brazil**

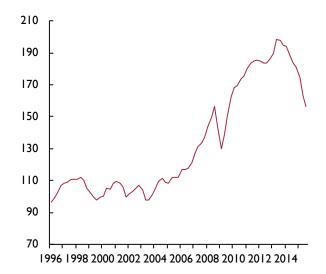
Brazil's economic situation and short-term outlook are bleak. The country faces a wide range of problems including deepening recession and rising unemployment; depressed commodity export prices; steep currency depreciation and increasing inflation, which is well above target; widening budget deficits; and political gridlock amid a major corruption investigation and a move to impeach the President.

GDP contracted by 1.7 per cent in the third quarter of 2015 – the sixth quarterly decline of activity in two years – to a level 4.5 per cent lower than a year earlier. All the main components of domestic demand fell in the third quarter, with fixed investment suffering the largest drop, of 4.0 per cent. Investment has declined by about 25 per cent in the past two years (see figure 10). Net exports have contributed positively to growth in recent quarters, but mainly on account of a steep decline in imports resulting from the weakness of domestic demand. Thus in the year to the third quarter, imports (in real terms) fell by 20 per cent while exports rose by only 1 per cent.

Unemployment rose steeply in 2015, to 7.9 per cent in October and 7.5 per cent in November, from a low of 4.3 per cent at the end of 2014; the October unemployment rate was the highest since 2009.

The government's primary deficit widened to 0.9 per cent of GDP in the twelve months to November 2015 from 0.6 per cent in the year to August. Including interest payments, the overall deficit in the year to November was 9.3 per cent of GDP, while the ratio of gross government debt to GDP at the end of November was 65.1 per cent, up from 57.2 per cent at the end of 2014. The government that entered into office in January 2015 initially committed itself to primary surpluses of 1.2 and 2.0 per cent, respectively, for 2015 and 2016, but in spite of substantial cuts in discretionary spending these targets have been lowered a number of times, and in early December the government obtained congressional approval for a primary deficit in 2015 of up to 2 per cent of GDP. Political gridlock has prevented

Figure 10. Brazil: Gross fixed capital formation (1995=100)



Source: Instituto Brasileiro de Geografia e Estatística.

the government from passing the reforms needed to reduce the deficit, including pension reforms that require constitutional amendment. A new finance minister was appointed in December. Partly reflecting these fiscal difficulties, the country has suffered downgrades by credit rating agencies, and 10-year government bond yields, which were below 13 per cent at the end of 2014, have recently risen above 16 per cent. The government's interest payments currently amount to 6.7 per cent of GDP. Reversing the deterioration in the fiscal position will require substantial reforms that will take time and drag on domestic demand.

Consumer price inflation, on a 12-month basis, rose to 10.7 per cent in December 2015, far above the Central Bank's target of 4.5 per cent and the highest inflation recorded since 2002. Inflation may ease somewhat in the near term as the removal in late 2014 of a cap on administered prices drops out of the 12-month comparison. But underlying inflationary pressures are significant, as shown by the 7.7 per cent rise in unregulated prices in the year to November, and also by the continued depreciation of the real - by about 35 per cent against the US dollar in the year to January – which will put significant upward pressure on import prices. The Central Bank has kept the Selic rate unchanged at 14.25 per cent since July last year, but the recent increase in inflation and weakness of the real seem to point to a need for further action. One concern in this context is 'fiscal dominance' - that the implications for debt service costs and the fiscal deficit of a rise in interest rates will deter a rise in rates that may be needed for the containment of inflation.

In light of recent developments, we have lowered our growth forecast. We now estimate that output contracted by 3.8 per cent in 2015 and project a further contraction of 2.5 per cent this year before a moderate recovery starts in 2017 with growth of 1.5 per cent.

### Russia

The economy remains in recession. There were some tentative signs of economic stabilisation late last year but these have since been overshadowed by the renewed decline in global oil prices and its repercussions. GDP contracted by 0.6 per cent in the third quarter of 2015. This was the fifth consecutive quarterly decline in GDP, but the smallest of them. Russia relies on energy for about half its budget revenues and 40 per cent of its exports and thus has been hit hard by the collapse in oil prices since mid-2014. The renewed weakness in oil prices in recent months prompted the government to announce in January expenditure cuts of 10 per cent relative to the budget for 2016 adopted by the parliament in December, which had assumed an average oil price of \$50 a barrel. The revised expenditure plans assume a price of \$37 a barrel. Given the additional fall in oil prices in January, they may need to be reduced further if the 3 per cent deficit target is to be met.

The recession has been reflected in a rise in unemployment in recent months, to 5.8 per cent in November from 5.2 per cent in September, and by falling real wages, which were 9 per cent lower in November than a year earlier – the thirteenth consecutive 12-month decline. Falling real household incomes will continue to restrain consumer spending in the coming months. Investment activity is also likely to remain weak due to continued economic uncertainty and unaccommodating financial conditions, partly reflecting continuing international sanctions.

Export revenues (in US dollar terms) are expected to fall given current conditions in commodity markets, but weak domestic demand will likely lead to a similar decline in imports, resulting in a negligible contribution from net exports to output growth in 2016, in spite of the steep depreciation of the rouble since mid-2014. By late January 2016, the rouble's value in terms of the US dollar was 56 per cent lower than in mid-2014, and 17 per cent lower than at the time of our November 2015 forecast. (The trade-weighted exchange rate index estimated by the Bank for International Settlements was 42 per cent lower in December 2015 than in

June 2014.) There seems to have been little official intervention in the foreign exchange market in the past year: official reserves at the end of December were broadly unchanged from February 2015.

Consumer price inflation, on a 12-month basis, reached its lowest rate in a year in December 2015, at 12.9 per cent, down from 15.0 per cent in November. The recent further depreciation of the rouble seems likely to cause inflation to rise again in the short term, constraining the Central Bank's ability to ease monetary policy further: its benchmark interest rate has been 11.0 per cent since last August. However, given the weak economy we expect inflation to average 9.1 per cent this year, before falling further towards the central bank's 4 per cent target for 2017.

On 1 January, Russia imposed sanctions against Turkey, including restricting imports of goods, economic activities of Turkish companies in Russia and the suspension of a visa-free regime with Turkey. Since Turkish products comprise 15–20 per cent of Russian fruit and vegetable imports, sanctions will add upward pressure to already high rates of food price inflation. Additionally they will add to the uncertainty of doing business in Russia.

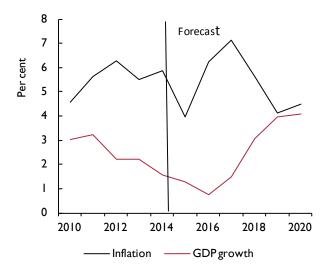
We estimate that output fell by 3.4 per cent in 2015 and are expecting a further fall of 1.1 per cent in 2016 before growth of 2.5 per cent in 2017 as commodity markets pick up.

### South Africa

On 9 December, President Zuma surprised financial markets by replacing Finance Minister Nene with a little known parliamentarian, David van Rooyen. This led to a sharp depreciation of the rand, of 9.3 per cent against the US dollar, in the next three days, while 10-year bond yields jumped from 8.3 to 9.9 per cent. The subsequent replacement of van Rooyen with former finance minister Gordhan quickly helped to stabilise bond yields and the exchange rate, but an elevated risk premium appears to have remained, with average bond yields still at about 9.6 per cent in late January.

Over the past two years the economy has remained weak, with both internal factors, including the five-month miners' strike in 2014, and external factors, such as the fall in global commodity prices, subduing growth. The economy grew by 1.5 per cent in 2014 and, by our estimate, 1.3 per cent in 2015, compared with average annual growth of 3.1 per cent between

Figure 11. South Africa: annual GDP growth and Inflation



Source: NiGEM database and NIESR forecast.

1998 and 2013. The recent increase in risk premia is likely to depress domestic demand while putting upward pressure on inflation through the currency depreciation. Consumer price inflation – 4.8 per cent in the year to November – has recently been slightly above the mid-point of the Reserve Bank's target range of 3–6 per cent.

This situation is likely to present the Reserve Bank with a difficult choice in the period ahead – whether or not to support demand and output growth at the expense of its inflation target. In the short term we expect that the fall in global energy prices will offset some of both the inflationary pressure and the domestic demand impact

of the recent shock. However, as noted by Kirby and Meaning (2014), movements in exchange rates take, on average, around a year and a half to fully pass through to the economy.

Taking these considerations into account, we forecast GDP growth of 0.8 and 1.5 per cent in 2016 and 2017, with inflation increasing to 6.2 per cent in 2016 and 7.1 per cent in 2017 before returning to the target range by 2019.

### **NOTES**

- This is similar to the Fed's policy of reinvesting principal payments from its holdings of securities 'until normalization of the federal funds rate is well under way', reaffirmed in December. (Federal Reserve Monetary Policy Press Release, December 16, 2015, http://www.federalreserve.gov/newsevents/press/ monetary/20151216a.htm)
- Mario Draghi, 'Global and domestic inflation', speech delivered in New York, December 4, 2015, https://www.ecb.europa.eu/ press/key/date/2015/html/sp151204.en.html.
- 3 Potential problems for the timing of the fiscal burden as a result of increasing the average maturity are discussed in Kirby and Meaning (2015).
- 4 Questions have been raised about the reliability of China's GDP data: these were discussed in Box B in the November 2015 Review.

### **REFERENCE**

- Kirby, S. and Meaning, J. (2014), 'Exchange rate pass-through: a view from a global structural model', National Institute Economic Review, 230, F59–F64.
- —(2015), 'The impacts of the bank of England's Asset purchases on the public finances', National Institute Economic Review, 232, F73–8.
- Poloz, S. (2016), 'Life after liftoff: divergence and US monetary policy normalization', speech given in Ottawa. Available at http://www.bankofcanada.ca/2016/01/life-after-liftoff-divergence-us-monetary/.