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Per-Capita Growth Exceeding Pre-Crisis Pace Only in USA

Medium-term Projections for the World Economy until 2018

Among the world's most advanced economic areas, the US economy will enjoy the strongest growth over the forecast period (+2.9 percent per year). Also when adjusted for population change, GDP growth in the USA will exceed that of the UK, the euro area or Japan. Growth in China and Russia is set to abate to an annual 7.4 percent and 3.9 percent, respectively. In India (+6.7 percent) and Brazil (+3.4 percent), growth will match the longer-term average, due to a steadily rising labour force. Looking at GDP per capita, Russia should exploit its catching-up potential towards the advanced economies more fully than India or Brazil. Global GDP growth in a medium-term perspective is projected at an annual 3.2 percent.

For definitions of terms used see "Methodological references and glossary of terms" http://www.wifo.ac.at/wwadocs/form/WIFO-BusinessCycleInformation-Glossary.pdf • The author is thankful to Stefan Ederer for useful and constructive comments. • The data were processed and analysed with the assistance of Maria Riegler and Martha Steiner • **E-mail adresses: Stefan.Schiman@wifo.ac.at, Maria.Riegler@wifo.ac.at, Martha.Steiner@wifo.ac.at**

Among the industrialised countries, the USA will enjoy the strongest economic growth over the next five years, for several reasons: banks have recovered more quickly from the crisis than, for example, in the euro area; private households are reducing their debt levels comparatively quickly; investment is taking advantage of lower commodity prices; increasing supply of shale oil and shale gas will have a major impact on energy markets during the years to come; labour supply is growing swiftly, and fiscal constraints are expected to ease. While fiscal policy is turning less restrictive also in the euro area, the focus of consolidation is on the crisis-ridden economies such as Portugal, Spain and Italy. A paramount challenge for policy in the euro area is the restoration of bank viability. Individual countries are faced with specific problems: Italy with deficiencies in its governance framework, Spain with extraordinarily high unemployment, Germany with its heavy reliance on exports. The UK will have to find compensation for the heavy losses of value added generated by the banking sector after the financial market crisis of 2009; unlike the euro area though, the country can count on a steady increase in labour supply. Monetary policy should remain accommodating over several years. After years of deflation, Japan is about to face price shocks that are bound to weigh on GDP growth: by 2015, the VAT rate is planned to double from 5 percent to 10 percent. Moreover, the commodity price hikes stemming from currency depreciation will be compounded by the lack of domestic energy sources and the implicit need for higher energy imports.

India and Brazil also face exchange-rate-induced inflation risks. In both countries, the negative implications of lack of policy action for growth are masked by continued favourable demographic trends. In China, however, the economically active population will reach a peak in 2016-17. Due to solid wage gains and the real appreciation of the yuan, demand is shifting from exports towards domestic private consumption. The momentum of Chinese growth, driven by imitation of technology, remains nevertheless high, with credit defaults being cushioned by high capital reserves. In Russia, the strong expansion of output is increasingly hitting against capacity limits, but also demand growth is slowed by the oil price rise losing momentum.

While oil prices may head up further in a medium-term perspective, the reference price should remain below $ 120 per barrel, judging from current fundamentals. From today's view, the euro seems slightly over-valued against the dollar, suggesting a gradual decline towards $ 1.25. The loss of sterling against the euro observed in early 2013 should be made up in the medium run. The yen is set to lose further ground vis-à-vis the dollar, while the yuan should move higher. The Indian rupee should stabilise at the current low level to the dollar.

The present projections, covering the period from 2014 to 2018, have been established on the basis of the Oxford Economics global economic model. We will present here the expected trends for the major non-euro-area economies USA, UK, Japan, China, India, Russia and Brazil, as well as for the four largest euro area countries Germany, France, Italy and Spain. These eleven countries together account for around two-thirds of world GDP.

Table 1: International fundamentals

	Ø 1994-2003	Ø 2004-2013	Ø 2014-2018	Trend until 2018
		$ per national currency		
Exchange rates				
Euro	1.10	1.33	1.25	Stable
Pound sterling	1.57	1.72	1.48	Stable
100 yen	0.88	1.01	0.91	Falling
Yuan Renmimbi	0.12	0.14	0.18	Rising
		$ per barrel		
Oil price				
Brent	21.0	79.9	108.8	Rising
	Ø 1993-2003	Ø 2003-2013	Ø 2013-2018	
		Year-to-year percentage changes		
World trade	+ 6.7	+ 5.0	+ 5.7	

Source: Oxford Economic Forecasting, WIFO.

Real GDP and real GDP per capita in a cross-country comparison

Real GDP at purchasing power parities measures the size of an economy in an international comparison, whereas real GDP per capita is an indicator of a country's level of development. Figure 1 presents different dimensions of these key macroeconomic variables: the relation vis-à-vis other countries in the base year 2013 (size of the balloon), the medium-term growth rate (x-axis) and the change in the country ranking over the projection period (y-axis).

On the measure of real GDP, China stands out: the economy grows swiftly, gaining global market shares and reaching about the same size as the US economy (around 18 percent of world GDP) by the forecast horizon. While growth in the USA exceeds that of other industrialised countries, it does not suffice in order to maintain the US economy's global market share. Japan and the euro area also see their shares in world GDP declining. The UK, Brazil and Russia, economies of similar size, will at best maintain their world market shares. Apart from China, only India can raise its share in global GDP, thanks to dynamic output growth.

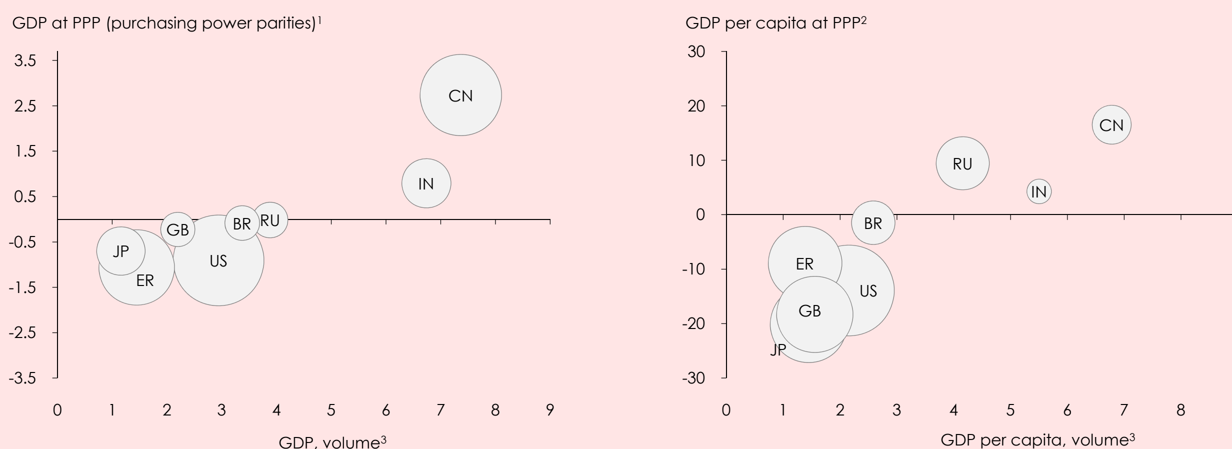
As the Chinese example shows, large economies will not necessarily grow more slowly than small ones. Yet, a comparison of GDP per capita that confirms China's status as emerging economy does reveal such a pattern of convergence. GDP per capita of the rich industrialised countries is significantly higher and hence grows more slowly than that of the emerging market economies. Compared with the level of development of the industrialised countries on the one hand and of China on the other, Brazil's momentum of growth is relatively weak. India should also achieve stronger gains, given its huge catching-up potential. Prospects for the Russian economy, for their part, fit rather well into the convergence pattern exhibited by the industrialised countries vs. China (in the trend of Russian GDP, solid growth of per-capita income supersedes the decline of its population). Among the highly developed regions, the USA enjoys above-average per-capita GDP growth.

Table 2: Growth of real GDP by country groups

	Ø 1993-2003	Ø 2003-2013	Ø 2013-2018
	Year-to-year percentage changes		
World output (GDP)	+ 3.0	+ 2.6	+ 3.2
Industrialised countries[1]	+ 2.7	+ 1.5	+ 2.3
USA	+ 3.4	+ 1.7	+ 2.9
Japan	+ 1.0	+ 0.9	+ 1.2
EU 28	+ 2.6	+ 1.0	+ 1.7
Euro area	+ 2.2	+ 0.8	+ 1.4
Germany	+ 1.5	+ 1.3	+ 1.6
France	+ 2.2	+ 1.0	+ 1.2
Italy	+ 1.7	– 0.3	+ 1.1
Spain	+ 3.5	+ 0.8	+ 1.5
UK	+ 3.6	+ 1.1	+ 2.2
Poland	+ 4.6	+ 4.0	+ 3.3
Hungary	+ 3.1	+ 0.8	+ 2.0
Czech Republic	+ 2.6	+ 2.4	+ 2.6
Slovakia	+ 4.4	+ 4.1	+ 3.2
Brazil	+ 2.5	+ 3.7	+ 3.4
Russia	+ 0.7	+ 4.1	+ 3.9
China	+ 9.4	+ 10.2	+ 7.4
India	+ 6.1	+ 7.7	+ 6.7
Africa	+ 3.6	+ 4.3	+ 4.6
Latin America	+ 2.7	+ 4.1	+ 3.6

Source: Oxford Economic Forecasting, WIFO. – [1] 29 OECD countries.

Figure 1: Growth of GDP and GDP per capita for selected economic areas 2013-2018



Source: Oxford Economic Forecasting, WIFO. BR . . . Brazil, CN . . . China, ER . . . euro area, GB . . . UK, IN . . . India, JP . . . Japan, RU . . . Russia, US . . . USA. – [1] Share of world GDP/GDP per capita, change 2013-2018 in percentage points; the size of the bubbles corresponds to the shares in 2013. – [2] In relation to world total, change 2013-2018 in percentage points; the size of the bubbles corresponds to 2013 values. – [3] Average year-to-year 2013-2018 percentage changes.

Euro area: institutional shortcomings weighing on the economic outlook

From late 2011 to early 2013, euro area GDP steadily receded quarter-on-quarter. While the recession should by now be overcome, growth prospects remain subdued. Many banks still suffer from high write-offs on their loans outstanding and a narrow equity base, constraining their lending behaviour. In Italy, the total of bad loans exceeds banks' core capital. Instead of lending to private customers, banks rather buy higher-yield government bonds. Due to the sustained fall in real estate values, mortgage loans are a drag on banks' balance sheets, especially in Spain. Structural adjustment in the banking sector has hardly begun. The creation of a Banking Union has shown to be a tedious process, lacking adequate political support. Apart from the announcement of the bond purchasing programme in 2012, the ECB has been acting cautiously.

Moreover, the shortcomings of the architecture of European Monetary Union (EMU) have not been repaired so far. Deeper integration of EMU would be necessary in order to compensate for the loss of monetary sovereignty of the member countries.

Macroeconomic challenges continue being addressed at the national level, without due consideration being given to the implications for the euro area as a whole: thus, while fiscal policy is set to turn less restrictive on the whole than in the last years[1], almost one-half of the overall medium-term consolidation amount will, according to the projections, be shouldered by three of the most vulnerable economies: € 9 billion (5.3 percent of GDP) will be contributed by Portugal, € 46 billion (4.7 percent of GDP) by Spain and € 19 billion (1.4 percent of GDP) by Italy. France is supposed to consolidate by an amount of € 44 billion (2.3 percent of GDP). The tightening of the budgetary rules expected for the next years (*Schulmeister,* 2012) perpetuates the national setting of fiscal policy: a new rule stipulates that a member country's budget deficit, adjusted for cyclical and one-off effects, must not exceed 0.5 percent of GDP. Furthermore, member countries are obliged to reduce their government debt ratios by one-twentieth of the amount exceeding 60 percent of GDP. Plans elaborated by the European Commission for further integration of economic policies are still at a tentative stage (*Ederer,* 2013) and are, from today's perspective, unlikely to play a major role for developments up to the forecast horizon.

Finally, the shrinking of the labour force by 0.3 percent per year will dampen the growth potential. Thus, growth of real GDP, projected at 1.4 percent p.a., remains moderate. There is a risk that high unemployment becomes entrenched in many countries. Hysteresis effects, notably if emerging with youth unemployment, would depress potential growth also in the long run. The euro area unemployment rate is expected to average 11.7 percent over the forecast period, with a slight downward tendency. The rate of inflation of 1.4 percent remains firmly below the ECB benchmark, given the sustained sluggishness of overall demand (Table 3).

Table 3: Key economic indicators of the euro area and Germany

	Euro area		Germany	
	Ø 2003-2013	Ø 2013-2018	Ø 2003-2013	Ø 2013-2018
	Year-to-year percentage changes			
GDP, volume	+ 0.8	+ 1.4	+ 1.3	+ 1.6
GDP per capita, volume	+ 0.4	+ 1.4	+ 1.4	+ 1.7
Population of working age	+ 0.2	− 0.3	− 0.3	− 0.4
Gross fixed investment, volume	− 0.6	+ 2.4	+ 1.1	+ 3.3
Consumer prices[1]	+ 2.1	+ 1.4	+ 1.8	+ 1.6
Real-effective exchange rate	− 0.3	− 1.9	− 0.4	− 0.6
	Ø 2004-2013	Ø 2014-2018	Ø 2004-2013	Ø 2014-2018
	Percent			
Unemployment rate, as a percentage of labour force[2]	9.5	11.7	8.1	5.0
Long-term interest rate	3.9	3.6	3.2	2.5
World market export share	30.6	27.7	9.5	9.3
	As a percentage of GDP			
Current account balance	+ 0.3	+ 1.9	+ 5.8	+ 6.6
General government financial balance[3]	− 3.3	− 1.6	− 1.9	− 0.0
Gross government debt[3]	77.4	98.3	72.7	80.7

Source: Oxford Economic Forecasting, WIFO. – [1] Harmonised consumer price index. – [2] ILO definition. – [3] Maastricht definition.

Germany: external trade surplus remains high

Developments in Germany during the last decade were marked by a steady improvement in the current account balance which swung from a deficit at the time of euro introduction in 1999 to a surplus of over 7 percent of GDP. Germany thus produces substantially more goods and services than domestically consumed. Wage increases are set to pick up somewhat in the years to come, while annual in-

[1] The general government deficit shall narrow from around € 267 billion (2.8 percent of GDP) in 2013 to some € 110 billion (1 percent of GDP) by 2018, corresponding to fiscal restraint to the tune of € 167 billion or 1.8 percent of GDP over the next five years. Between 2010 and 2013, the deficit was cut by about € 300 billion, of which € 180 billion in the single year 2010.

flation of 1.6 percent will slightly exceed the euro area average. In a global context, Germany's price competitiveness will nevertheless strengthen further. Also, the country will continue to benefit from its technological advance, as many emerging economies will pursue catching up towards the rich countries. The current account surplus is likely to remain at or above 6 percent of GDP. The productivity advance of the over-proportional export sector will offset the weakness of domestic demand. The investment-to-GDP ratio has dropped by around 4 percentage points since 2000, while the population of working age has followed a downward trend since 1999. The export boom has therefore not gone hand-in-hand with strong GDP growth which was only 1.3 percent p.a. in real terms between Germany's entry into EMU and 2012 (euro area +1.4 percent, UK +1.8 percent, USA +2.1 percent). The unemployment rate is nevertheless relatively low (5.5 percent in 2012 according to the ILO definition) and expected to decline further over the next years. GDP growth is projected to edge up to an annual average 1.6 percent. Together with improving current account balances in the periphery countries, the German surplus will imply a positive external balance for the euro area to the tune of 2 percent of GDP (China 3 percent, Japan 2 percent, USA –2 percent, India –4 percent).

France: losses in export market shares diminishing

Unlike for Germany, the current account balance of France has been on a downward trend since the introduction of the euro in 1999 and is expected to stabilise over the medium term around –2 percent of GDP. Since 1999, French exports have suffered bigger market share losses (–1.5 percentage points) than Italian (–1.4 percentage points) or Spanish exports (–0.4 percentage point; Austria: –0.1 percentage point, Germany +0.9 percentage point). Yet, the rise in nominal unit labour cost during the periods 1999-2007 and 1999-2012 has been in line with the ECB's inflation target of "below, but close to 2 percent" per year (Italy +2.6 percent, Spain +2.9 percent). In a medium-term perspective, price competitiveness will be preserved, while the decline of export market shares will abate.

Table 4: Key economic indicators of the UK and France

	UK		France	
	Ø 2003-2013	Ø 2013-2018	Ø 2003-2013	Ø 2013-2018
	Year-to-year percentage changes			
GDP, volume	+ 1.1	+ 2.2	+ 1.0	+ 1.2
GDP per capita, volume	+ 0.3	+ 1.6	+ 0.4	+ 0.9
Population of working age	+ 0.8	+ 0.7	+ 0.3	– 0.2
Gross fixed investment, volume	– 0.6	+ 2.8	+ 0.7	+ 1.6
Consumer prices[1]	+ 2.7	+ 1.4	+ 1.8	+ 1.5
Real-effective exchange rate	– 0.8	+ 1.7	– 0.2	– 0.6
	Ø 2004-2013	Ø 2014-2018	Ø 2004-2013	Ø 2014-2018
	Percent			
Unemployment rate, as a percentage of labour force[2]	6.4	7.8	9.4	10.9
Long-term interest rate	3.9	3.0	3.5	3.2
World market export share	4.7	4.0	4.2	3.6
	As a percentage of GDP			
Current account balance	– 2.2	– 1.4	– 1.0	– 1.8
General government financial balance[3]	– 5.7	– 4.0	– 4.3	– 2.3
Gross government debt[3]	58.8	96.8	74.4	99.6

Source: Oxford Economic Forecasting, WIFO. – [1] harmonised consumer price index. – [2] ILO definition. – [3] Maastricht definition.

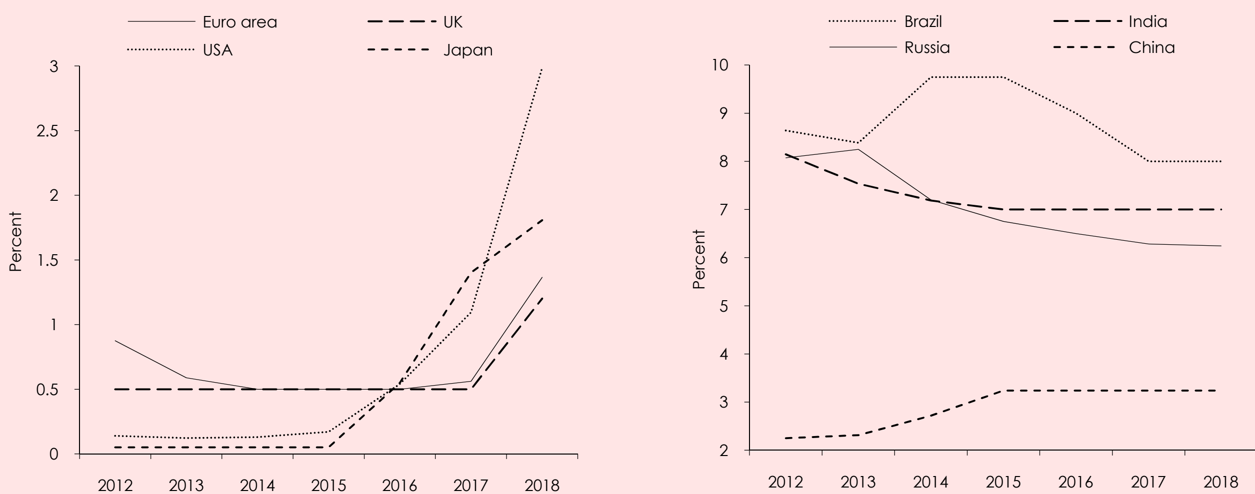
The momentum of investment has been moderate during the last years, with profit margins in France lower than elsewhere in the euro area. Fiscal restriction is adding to the weakness of private demand. Although the deadline by which the budget deficit has to be brought below 3 percent of GDP has been extended by two years (until 2015), substantial expenditure cuts will be necessary which in times of cyclical sluggishness will further dampen aggregate demand. Over the period from 2014 to 2018, GDP growth is projected at 1.2 percent p.a. (Table 4).

UK: shortfall in value added caused by slump in the financial industry

Unlike in other industrialised countries, the UK saw but a slow recovery from the deep recession of 2009. Real GDP in the first quarter 2013 was almost 4 percent lower than five years earlier when it had reached its pre-crisis peak. Among the countries of the G 20, this gap is higher only for Italy. The losses in the financial sector undermine business activity to a greater extent than elsewhere: the share of the banking and insurance industry in national value added has shrunk by nearly 3 percentage points since 2009, although at 7.9 percent in 2012 still markedly exceeding the euro area average of 5.1 percent. At the same time, the GDP contribution from the real estate and housing sector has increased significantly. Higher real estate values, fuelled by the easy monetary policy, have given rise to a loan-driven expansion of private consumption. Investment dropped by around one-quarter during the crisis and has remained flat ever since. The low investment ratio of 13.5 percent of GDP (euro area 17.7 percent, USA 18.9 percent, Japan 21.3 percent) is squeezing the medium-term growth potential, leaving narrow scope for wage increases. Exports benefited only marginally from the effective sterling depreciation of 2008, with world market shares declining steadily. The Bank of England has announced its intention to leave the key interest rate at 0.5 percent as long as the unemployment rate has not declined below 7 percent (ILO definition). In view of the sustained rise in labour supply, it is unlikely that the jobless rate will undershoot this benchmark in the foreseeable future. The rate of inflation is expected to drop below 2 percent in 2014, confirming the longer-time prospect of a low-interest-rate environment.

Given the moves towards tighter regulation, the contribution of the financial industry to GDP will not increase substantially. The weakness of the manufacturing sector constrains the economic growth potential, despite the positive impact of an expanding labour force (2014-2018 +0.7 percent p.a.). Growth of GDP over the medium term, projected at 2.2 percent p.a., will be lower than in the USA, but higher than in the euro area or Japan. Growth of GDP per capita, for its part, estimated at 1.6 percent per year, will be similarly low as in Japan (+1.4 percent) where total population is set to decline or in the euro area (+1.4 percent) where it remains flat (Table 4).

Figure 2: Key interest rates until 2018



Source: Oxford Economic Forecasting, WIFO.

Italy: business-unfriendly environment holding back growth

Since late 2011, the Italian economy finds itself in the second recession within six years. Between 2000 and 2007, real GDP had increased by an average 1 percent per year. After the slump by over 5 percent in 2009 and given the new recession since 2011, Italy bemoans a "lost decade" since output is no higher than it was in 2002 (real GDP 2000-2012: Italy, Portugal and Greece –0.0 percent each, euro area +1.0 percent). Several factors inhibit the country's innovative capacity and investment: as regards the quality of the macroeconomic governance framework, Italy

ranks on 73rd place out of 185 countries according to a *World Bank* (2012) Report, far behind other euro area members such as Germany (rank 20), Austria (29), France (34) or Spain (44). When it comes to the efficiency of the justice system, Italy holds rank 160, behind countries like Egypt, Pakistan or Columbia. In a recession as right now, when the number of legal disputes increases, e.g. due to payment defaults, this shortcoming may undermine mutual confidence, increase uncertainty and delay a cyclical recovery of business activity. Other deficiencies, according to the World Bank, relate to access to capital, connection to electricity, the reception of construction permits and a high tax burden.

Among the euro area countries, Italy exhibits the second-highest public debt ratio (after Greece) and one of the highest debt levels world-wide (behind the USA and Japan). Fiscal consolidation will therefore be pursued over the medium term. Competition from the rising economies in Asia has mounted substantially, given large overlaps in the supply and export structure (*di Mauro – Forster – Lima,* 2010). The current account balance has been negative since 2002. It may turn positive in the years to come on account of weak imports; world market export shares, however, remain on a downward trend. The projection for the period 2014-2018 anticipates modest GDP growth averaging 1.1 percent per year (Table 5).

Table 5: Key economic indicators of Italy and Spain

	Italy		Spain	
	Ø 2003-2013	Ø 2013-2018	Ø 2003-2013	Ø 2013-2018
	Year-to-year percentage changes			
GDP, volume	− 0.3	+ 1.1	+ 0.8	+ 1.5
GDP per capita, volume	− 0.8	+ 1.3	− 0.2	+ 1.4
Population of working age	+ 0.2	− 0.5	+ 0.8	− 0.2
Gross fixed investment, volume	− 2.4	+ 2.3	− 2.7	+ 1.6
Consumer prices[1]	+ 2.2	+ 1.3	+ 2.6	+ 0.9
Real-effective exchange rate	+ 0.0	− 0.8	+ 0.7	− 1.0
	Ø 2004-2013	Ø 2014-2018	Ø 2004-2013	Ø 2014-2018
	Percent			
Unemployment rate, as a percentage of labour force[2]	8.3	11.6	15.6	25.3
Long-term interest rate	4.4	4.6	4.4	5.1
World market export share	3.5	2.9	2.3	2.2
	As a percentage of GDP			
Current account balance	− 1.5	+ 0.3	− 5.3	+ 0.9
General government financial balance[3]	− 3.6	− 2.1	− 4.2	− 3.5
Gross government debt[3]	113.0	131.1	55.7	104.7

Source: Oxford Economic Forecasting, WIFO. – [1] Harmonised consumer price index. – [2] ILO definition. – [3] Maastricht definition.

Spain: high unemployment threatening to become entrenched

Like Italy, the Spanish economy has been in recession since late 2011. The high unemployment rate of over 25 percent constitutes a major risk for the country's economic performance, particularly since it can hardly be brought onto a firm downward path under the prevailing circumstances. The fall in unit labour cost (by a nominal 4 percent in 2012) improves the price competitiveness of Spanish companies; however, exports are rising mainly because output grows in trading partner countries, notably the emerging markets, as already witnessed before the onset of the crisis. Wage cuts, on the other hand, weaken private consumption. Moreover, the export sector contributes comparatively little to GDP and can hardly absorb the workers laid off during the crisis (mainly in the construction sector). The unemployment rate will therefore move onto a sustained downward path only once domestic demand picks up and investment gains momentum.

Real estate prices have dropped to meanwhile 70 to 75 percent of their level held before the crisis and are easing further, leading to high credit losses. In coping with the claims to be written off, Spanish banks are being supported by transfers from the European Stability Mechanism (ESM). The ailing banking sector nevertheless acts as

a drag on the economic recovery. Real GDP growth over the period 2014-2018 is projected at a moderate 1.5 percent p.a. (Table 5).

USA: foundations laid for stronger growth

The recovery of the US economy continues. Debt of private households is declining steadily, while rising asset values are boosting private consumption. The Federal Reserve provides support to bank lending, through targeted measures such as the purchase of securitised claims. The ratio of share price to book value of above 1 for banks suggests that they have overcome the financial market crisis and its repercussions (as opposed to European banks whose share prices are on average still below book values). The upward trend of industrial production since 2010 is supported by favourable developments on commodity markets. The International Energy Agency (IEA) sees the exploitation of shale oil and shale gas as the key factor for the future of global oil supply (*IEA*, 2013). Not only lower prices, but also the introduction of new technologies for transport, stocking and refinery will provide stimulus for US growth. Favourable real economic and credit conditions will allow the crisis-driven setback of investment to be made up quickly. Gross fixed capital formation is projected to increase by an annual average 6 percent, broadly like in China and clearly above the pace in other industrialised countries (UK +2.8 percent, euro area +2.4 percent, Japan +1.5 percent). This creates scope for stronger wage growth which in turn would benefit private consumption that has recently been largely driven by wealth effects. However, global competitive pressure may constrain wage gains and undermine the sustainability of consumption growth. During the last ten years, thanks to the depreciation of the dollar, unit labour cost rose by one-third less than the global average, leading to a marked improvement of the relative cost position of the USA. At the same time, this fuelled credit demand for consumption purposes and largely contributed to the build-up of the financial market crisis, without raising US export shares on world markets. The current account deficit, which has fallen sharply during the crisis, is expected to hover around 2 percent of GDP in the medium term.

Potential growth is strengthened by still another factor that distinguishes the USA from other advanced economies: the economically active population will grow by a dynamic 0.9 percent per year, while in the euro area it will shrink by 0.3 percent p.a., in Japan even by 1 percent; an exception is the UK where labour force growth is projected at 0.7 percent per year. The traditionally business-friendly environment in the USA provides a solid base for robust GDP growth of 2.9 percent on annual average over the forecast horizon (Table 6).

Demand for labour will pick up accordingly, allowing unemployment to decline further. By 2015, the jobless rate should fall below 6.5 percent, i.e., the benchmark announced by the Fed for an increase in the key interest rate. Inflation will remain moderate at an annual average rate of 2 percent. In the years to come, fiscal policy will turn distinctly less restrictive than lately. Automatic spending cuts and the partial expiry of tax concessions will narrow the deficit by around 2.3 percent of GDP in the current year. The consolidation measures implemented are less harmful to growth than those of the euro area in 2011 when the deficit decreased by about 2.1 percent of GDP. Unlike in the euro area, consolidation in the USA in 2013 focuses on the revenue side of the budget. A large part is brought about by a cut in social security contributions to their level before 2011. Tax increases concentrate on higher incomes with a comparatively low consumption propensity (increase in the top marginal tax rate and the capital gains tax). While these are one-off effects, the sequestration triggered by the reaching of the debt ceiling will have an impact for several years. While the multiplier effect of sequestration is relatively higher since it concerns public expenditure, the annual amount of budget cuts is markedly lower than the revenue increases of 2013. Between 2013 and 2018, the government deficit is expected to narrow by about $ 250 billion, from 6 percent of GDP to around 3.5 percent. The debt ratio is set to fall only slightly, remaining above 100 percent of GDP in a medium-term perspective.

Table 6: Key economic indicators of the USA and Japan

	USA		Japan	
	Ø 2003-2013	Ø 2013-2018	Ø 2003-2013	Ø 2013-2018
	Year-to-year percentage changes			
GDP, volume	+ 1.7	+ 2.9	+ 0.9	+ 1.2
GDP per capita, volume	+ 0.8	+ 2.2	+ 0.9	+ 1.4
Population of working age	+ 1.1	+ 0.9	− 0.8	− 1.0
Gross fixed investment, volume	+ 0.6	+ 5.5	− 0.5	+ 1.5
Consumer prices	+ 2.4	+ 2.0	− 0.1	+ 1.3
Real-effective exchange rate	− 1.5	+ 0.5	− 2.7	− 2.3
	Ø 2004-2013	Ø 2014-2018	Ø 2004-2013	Ø 2014-2018
	Percent			
Unemployment rate, as a percentage of labour force	6.9	6.3	4.4	4.0
Long-term interest rate	3.5	3.5	1.3	1.4
World market export share	11.0	11.3	5.0	4.8
	As a percentage of GDP			
Current account balance	− 4.0	− 1.8	+ 3.0	+ 1.8
General government financial balance	− 6.4	− 4.2	− 6.1	− 4.4
Gross government debt[1]	80.5	105.8	178.3	211.9

Source: Oxford Economic Forecasting, WIFO. – [1] Japan: central government.

Japan: price shocks looming after deflation has ended

Broad-based price declines, from which the Japanese economy has suffered since the end of the 1990s, have recently attenuated. In times of deflation, investment and purchases of durable consumer goods will be postponed in anticipation of further falls in sales prices. Money will increasingly be hoarded and private savings will rise. A return to moderate price increases combined with a pick-up in GDP growth will only materialise if deflationary expectations are turned around and companies can be persuaded to pay higher wages and step up investment. Under present circumstances such a turnaround appears doubtful. Of crucial importance in this context are structural reforms of the economy that have hitherto been delayed by bureaucracy. High hopes had been set in this regard into the new government of Premier Shinzo Abe which enjoys broad support in Parliament. However, intentions declared so far do not go beyond conventional ideas such as the establishment of special economic areas. For the aspired access to a free-trade zone in the context of the Trans-Pacific Partnership (TPP), in which inter alia the USA, Canada and Australia would participate, major structural and policy changes would be required. Reforms like in the agricultural sector dominated by small entities, in the labour market ridden by insider-outsider problems, of energy supply or addressing the lack of competition in sheltered sectors have so far not been initiated.

The projection nevertheless suggests an increase in consumer prices by 1.3 percent per year over the period 2014-2018. However, the turnaround is not caused by a change in expectations, but rather by a series of negative supply shocks with potentially dampening effects on growth. The prospect of an ultra-expansionary monetary policy with the monetary base set to increase by 100 percent until 2015 has led to a marked currency depreciation that has partly wiped out the previous appreciation since 2007 and has pushed up prices of imported commodities. In addition to the depreciation-induced price increases there are problems of energy supply. Since the nuclear disaster of Fukushima in 2011, Japan has shut down most nuclear reactors and has become more dependent on energy imports. Energy prices are thus likely to increase above average, notably between 2014 and 2016, thereby driving up the headline inflation rate by 0.3 percentage point per year over the entire projection horizon and reducing real GDP growth by 0.2 percentage point per year. The VAT rate of currently 5 percent is to be raised to 8 percent in 2014 and 10 percent in 2015 in order to redress the chronical underfinancing of the government sector. Another important reason for the "explosion" of government debt from below 70 percent of GDP in 1997 to over 200 percent in 2012 is the persistent deflation which disadvantages the debtor (i.e., the government) vis-à-vis the lender. With

nominal GDP shrinking, the debt ratio moves up. Furthermore, the government tried to close the demand gap created by deflation by means of ever new stimulus programmes. The planned increase in VAT will boost headline inflation by some 1.3 percentage points p.a. and will reduce GDP growth by almost 1 percentage point to a modest 1.2 percent per year between 2014 and 2018. The revenue-raising effect will thereby largely be offset, such that the central government debt-to-GDP ratio will level off at around 210 percent in the medium term. The labour force has been on an accelerating downward trend since 1996 that should, however, lose momentum in the years to come, to an annual average loss of 1 percent. The unemployment rate is expected to remain low at around 4 percent (Table 6).

China: investment boom losing momentum

Real GDP growth of 7.8 percent in 2012 was the lowest rate recorded for the Chinese economy since 1999. In the last ten years, annual growth ranged between 9.2 percent (2009) and 14.2 percent (2007). From the perspective of growth theory, a gradual slowdown should be expected for the years to come: the period of swift catching-up was characterised by extensive growth driven by investment and exports, and by a shift of labour from the primary to the secondary sector. This created scope for solid wage gains and boosted private purchasing power. Private consumption is gaining momentum, and the contribution of the service sector to GDP growth is now on a par with that of manufacturing industry. The current account surplus has narrowed from 10.2 percent of GDP in 2007 to 2.3 percent in 2012 and is expected to stay in that order of magnitude. While rapid economic growth generated solid real income gains, it also led to massive environmental damage and mis-allocation of resources, both reinforced by the system of state capitalism. As these deficiencies are increasingly being internalised, they will act as a further drag on growth. Moreover, the population of working age will reach a peak in 2016-17 and edge down thereafter.

Driven by buoyant growth and strong wage drift, the yuan appreciated steadily. Expectations for a gradual liberalisation of the currency regime may also have played a role. In the next few years, the yuan will continue heading up, thereby helping to keep inflation under control. Consumer prices are projected to increase by only 3 percent on annual average. The income gap vis-à-vis the USA has narrowed since the mid-2000s, but it remains substantial: in 2002, real GDP per capita at purchasing power parities was 7.5 percent of the US-level, moving up to 17.3 percent in 2012 and expected at around 23 percent in 2018. The imitation-driven catching-up process is thus believed to continue, albeit at a somewhat slower pace.

Economic policy responded to the slowdown in export growth since 2007 by providing strong incentives to domestic demand. This gave rise to mis-allocation of resources in some sectors, notably in the construction industry. Local authorities took on debt in order to support demand. Banks proved unable to meet the rising demand for credit, also because the ceiling on deposit interest rates left them with insufficient capital. This led to the creation of financial investments carrying higher interest rates and a massive spreading of shadow banks. By restraining the supply of liquidity, the Central Bank has signalled its intention to rein in their further expansion.

Yet, several factors argue against a "hard landing", i.e., a financial market crisis triggered by excessive lending and an overheating real estate sector: high aggregate savings have accumulated to substantial capital reserves allowing to cope even with potentially large credit defaults without disruptions on the external front. Moreover, the strict credit regulations, while favouring the emergence of shadow banks, at the same time reduce the risk of a crisis in the regular banking sector. In view of the latest turmoil on financial markets, the authorities hesitate with relaxing capital controls and liberalising the exchange rate. Still, the effects on medium-term growth, projected at an annual average 7.4 percent for the period 2014-2018, are likely to remain limited (Table 7).

Table 7: Key economic indicators of India and China

	India		China	
	Ø 2003-2013	Ø 2013-2018	Ø 2003-2013	Ø 2013-2018
	Year-to-year percentage changes			
GDP, volume	+ 7.7	+ 6.7	+ 10.2	+ 7.4
GDP per capita, volume	+ 6.2	+ 5.5	+ 9.5	+ 6.8
Population of working age	+ 2.0	+ 1.6	+ 1.0	+ 0.1
Gross fixed investment, volume	+ 9.9	+ 7.2	+ 11.7	+ 6.2
Consumer prices	+ 8.0	+ 5.1	+ 3.1	+ 2.9
Real-effective exchange rate	+ 2.3	+ 1.7	+ 2.9	+ 5.0
	Ø 2004-2013	Ø 2014-2018	Ø 2004-2013	Ø 2014-2018
	Percent			
Unemployment rate, as a percentage of labour force	12.6	12.5	4.2	4.0
Long-term interest rate	7.5	7.4	3.7	5.1
World market export share	1.6	2.3	7.7	8.9
	As a percentage of GDP			
Current account balance	− 2.3	− 3.9	+ 5.3	+ 2.9
General government financial balance	− 4.8	− 2.8	− 0.6	− 1.3
Gross government debt[1]	57.1	47.2	17.4	18.7

Source: Oxford Economic Forecasting, WIFO. – [1] China: central government.

India: under the influence of international capital markets

Some ten years ago, India embarked on a wave of growth that rose to a peak in 2006 and 2007, when real GDP gained almost 10 percent respectively. In 2012, activity slackened markedly, to a growth rate of 5.1 percent that even fell short of the +6.5 percent recorded in the crisis year of 2009. The repercussions of weakening global demand were compounded by a restrictive interest rate policy adopted in the wake of the world-wide recession. In 2012, the monetary reins were loosened again, with the key interest rate being cut from 8.5 percent to 7.25 percent. While wholesale price inflation decelerated from almost 8 percent in late 2011 to under 4 percent in the last months, consumer prices kept rising by over 10 percent annually on the back of persistent inflationary expectations.

India's current account balance has turned increasingly negative since 2005, with the deficit reaching 5 percent of GDP in 2012. Large-scale capital outflows have recently been triggered by expectations of a monetary tightening in the USA, but partly caused also by the slowdown in growth and disappointed hopes for reform. This led to shifts in investment portfolios, with higher-risk titles of emerging markets being sold to a large extent. In reaction, the depreciation of the Indian rupee accelerated and inflationary danger mounted further. Although the weaker currency will strengthen the competitiveness of Indian exports, the current account will still stay in deficit in the next years. The strong upward drift in consumer prices will only abate once inflation expectations can be brought down, like by introducing structural reform measures. The economic reforms announced in September 2012 have so far failed to meet expectations. Profound changes in the tax system, electricity supply, land ownership and market access are currently not envisaged, weighing on the medium-term growth outlook. However, unlike in China, India continues to benefit from a demographic dividend: the population of working age will expand by an annual average 1.6 percent over the forecast period, one of the highest rates even among the emerging market economies. Overall, real GDP is projected to grow by a solid 6.7 percent per year (Table 7).

Russia: strong expansion increasingly hitting capacity limits

Like in most emerging markets, business activity in Russia may moderate somewhat in the current year, whereas constraints to medium-term growth are rather of structural nature. The current unemployment rate of 5.5 percent is lower than at the trough of 6.1 percent in 2007, before the Great Recession. Although the low jobless rate is partly due to a substantial increase in public sector employment during the last years, it is also a sign of demand and output growth approaching its potential.

Capacity utilisation has increased steadily since the devaluation of the rouble during the crisis of 1998. Output losses caused by the recession of the 1990s have been made up step by step. The economically active population, having broadly stagnated since 2000, is set to decline by around 1 percent per year. Although the inflation rate has come down from the double-digit figures recorded during the boom period, it has remained high, at over 7 percent in the first six months of 2013, due to supply-side constraints. A gradual moderation to 5 percent is expected for the next years as demand pressure should also ease. Developments are shaped mainly by oil and gas market conditions. The price boom before the onset of the crisis led to a general government surplus above 8 percent of GDP in 2005 and 2006. In 2009, the government balance swung sharply to a deficit of 5.8 percent of GDP, as the slackening in the real economy was magnified by a slump in oil prices. At present, the achievement of a balanced budget would require an oil price of $ 115 per barrel (*NIESR*, 2013). Fiscal policy is therefore expected to turn less expansionary. In addition, oil exports are likely to decline in the next years with the exploitation of shale oil and shale gas. Indeed, Bulgaria succeeded this year in obtaining a discount of 20 percent for Russian gas, when a ten-year supply contract came up for renewal. Apart from oil exports, investment and private consumption growth will be less dynamic than at the time of the oil price boom. Russian GDP is projected to grow at an annual average 3.9 percent between 2014 and 2018, down from the 5.2 percent p.a. recorded over the period from 1999 to 2012 (1999-2008: 6.9 percent; Table 8).

Table 8: Key economic indicators of Russia and Brazil

	Russia		Brazil	
	Ø 2003-2013	Ø 2013-2018	Ø 2003-2013	Ø 2013-2018
	Year-to-year percentage changes			
GDP, volume	+ 4.1	+ 3.9	+ 3.7	+ 3.4
GDP per capita, volume	+ 4.2	+ 4.2	+ 2.7	+ 2.6
Population of working age	− 0.1	− 1.0	+ 1.4	+ 1.1
Gross fixed investment, volume	+ 7.6	+ 5.9	+ 7.0	+ 4.6
Consumer prices	+ 9.5	+ 4.8	+ 5.5	+ 5.4
Real-effective exchange rate	+ 4.8	+ 2.6	+ 6.1	− 0.0
	Ø 2004-2013	Ø 2014-2018	Ø 2004-2013	Ø 2014-2018
	Percent			
Unemployment rate, as a percentage of labour force	6.9	6.2	7.5	6.0
Long-term interest rate	7.6	6.7	13.5	11.3
World market export share	2.1	1.9	1.0	1.0
	As a percentage of GDP			
Current account balance	+ 6.2	+ 0.3	− 0.9	− 2.5
General government financial balance	+ 2.7	− 1.7	− 0.7	− 2.4
Gross government debt	11.0	11.9	58.6	53.2

Source: Oxford Economic Forecasting, WIFO.

Brazil: booming commodity prices weigh on prospects for the years to come

GDP growth in Brazil has been slower and more volatile over the last years than in China or India. Demand and output slackened markedly in 2012, with GDP stagnating on a per-capita basis. The current account balance has been negative since the end of 2007. The inflow of foreign capital, fuelled by high interest rates, turned around as markets expect monetary policy to tighten in the USA. The Brazilian real has been falling against the dollar since the end of 2011. Further depreciation, while boosting the competitiveness of Brazilian exports, would carry the danger of inflation accelerating further. Already now, consumer prices are rising at a pace exceeding the range from 2.5 percent to 6.5 percent tolerated by the Central Bank. In order to rein in capital outflows and currency depreciation, a tax on purchases of Brazilian bonds by foreigners has been waived. The Central Bank has recently tightened monetary policy by raising the benchmark interest rate from 7.25 percent early this year to currently 9.5 percent. While interest rate restriction supports the currency and dampens inflation, it holds back a cyclical recovery. The dilemma of stagflation de-

rives not least from the boom in commodity prices which during the period from 2002 to 2007 improved the current account balance significantly and exerted upward pressure on the currency. This episode of "Dutch disease" was also marked by a stagnating investment-to-GDP ratio at low level (having fallen to around 17 percent during the 1990s), while the ratio climbed markedly in other emerging market economies (in India by 10 percentage points from 2000 to 2007, in China and South Africa by 5 percentage points each, in Russia by 4 percentage points). The labour force, for its part, continues to rise swiftly, by 1.1 percent on annual average. Medium-term growth will therefore not abate significantly, but maintain a rate of 3.4 percent, on a par with the average for the period 2000-2012. The unemployment rate has dropped since 2003 from almost 10 percent to 5.8 percent and is expected to remain at this level.

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Per-Capita Growth Exceeding Pre-Crisis Pace Only in USA

Medium-term Projections for the World Economy until 2018 – Summary

Several beneficial factors will enable the USA to enjoy the highest pace of growth among the industrialised economies in the years to come: lending behaviour has recovered from the financial market crisis and is working more smoothly nowadays than, for example, in the euro area. Investment is boosted by improving supply conditions for commodities, as shale gas and shale oil will have a major impact on energy markets. The labour force is growing rapidly and budgetary restrictions are expected to ease. While fiscal policy will turn less restrictive also in the euro area, the planned cuts in expenditure will largely occur in countries that are still struggling with the crisis and its repercussions (Portugal, Spain, Italy). The fragility of the banking sector is one of the key challenges for the euro area. Each of its members is also facing specific problems – such as the heavy export bias of the German economy, the under-developed institutional and regulatory framework in Italy or the extremely high unemployment in Spain. The UK needs to compensate over the medium term the severe output losses of the financial sector since 2009. However, unlike the euro area, the country can rely on a steadily growing working population, while monetary policy, from today's perspective, should remain accommodating over several years. After an extended period of deflation, Japan may now have to cope with supply-side price shocks holding back economic growth: by 2015, the VAT rate is foreseen to rise from currently 5 percent to 10 percent. Moreover, the increase in commodity prices related to currency devaluation will be exacerbated by the domestic energy problems and the need for higher energy imports.

India and Brazil also struggle with exchange-rate induced inflation risks. In both countries, the consequences of policy failures are to some extent mitigated by the favourable demographic trend. In China, however, the economically active population will reach a peak in 2016-17. Solid wage increases and the appreciation in real terms of the Yuan will gradually shift demand from exports towards domestic private consumption. China's imitation-driven productive capacity remains nevertheless high; the negative implications of credit default are cushioned by the country's high financial reserves. Strong growth in Russia is increasingly hitting capacity constraints, while sluggish oil prices keep domestic demand in check. Over the medium term, oil prices are set to head up somewhat, though remaining below $ 120 per barrel, judging from present fundamentals. Also from today's perspective, the euro appears slightly over-valued against the dollar and should abate over time towards $ 1.25. The loss of the pound vis-à-vis the euro early this year is expected to be reversed over the medium term. The yen will further depreciate against the dollar, whereas the yuan should appreciate. The Indian rupee is likely to stay at its current low level. The present forecast covers the period from 2014 to 2018 and has been established on the basis of the global economic model developed by Oxford Economics.