

### III. Removing the roadblocks to growth

The pace of recovery in the large advanced economies has been, at best, disappointing. Emerging economies have generally performed better, but recently they too have lost their vigour. What can be done to restore sustainable growth? The sluggishness of the advanced economies continues to reflect pre-crisis excesses, at least in part. Formerly bloated construction and financial sectors have shrunk significantly, undermining both growth and employment. This economic fallout highlights the extent to which resources were misallocated during the boom.

Returning to strong and sustainable growth will be difficult unless this misallocation is corrected. Structural rigidities slow growth, both current and future, by blocking innovation and creative destruction. Countries should therefore use the time provided by expansionary macroeconomic policy to remove the product and labour market barriers on the road to growth.

#### Productivity and employment after the Great Recession

Economic growth in almost all the major advanced economies has slowed significantly compared with the pre-crisis years. Between 2010 and 2012, real GDP in the advanced economies expanded by an annual average of only 1.3%, compared with 2.3% between 2001 and 2007 (Graph III.1) and 2.7% between 1979 and 2007. The only major exception is Germany, which bounced back from a period of stagnation in the early 2000s. In the emerging market economies (EMEs), GDP growth slowed to an annual average of 5.6% in 2010–12, down from 7.5% between 2001 and 2007, and 6.3% between 1979 and 2007.

This lacklustre growth reflects sagging employment combined with lower productivity growth, relative to the pre-crisis period. The ratio of employment to total working-age population<sup>1</sup> has fallen significantly in most advanced economies, the main exceptions being Germany and Switzerland (Graph III.2, left-hand panel). Employment retreated particularly sharply in Greece, Ireland and Spain. In Greece, just over half of the working-age population was employed at the end of 2012. The corresponding figure for Spain is 55%. In the United States, the employment rate fell by 5 percentage points, and now stands at 67% of the working-age population.

Meanwhile, from 1.8% per year between 1980 and 2000,<sup>2</sup> output per hour growth in the advanced economies declined to 1.3% per annum between 2001 and 2007, and just 0.7% between 2010 and 2012. In emerging market economies, the growth in output per worker fell from 6.1% between 2001 and 2007 to 3.9% between 2010 and 2012.<sup>3</sup> The small group of countries experiencing higher productivity

<sup>1</sup> Measured as the ratio of employment to the population aged 15 to 64 years, whether or not people are available for work.

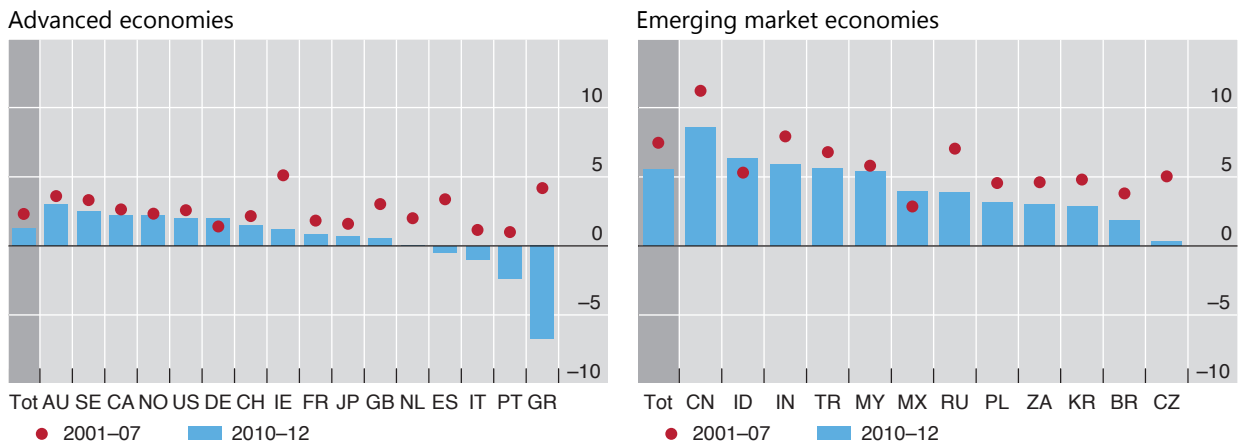
<sup>2</sup> Weighted averages of the economies shown in Graph III.2, based on 2005 GDP and PPP exchange rates.

<sup>3</sup> Weighted averages of the economies shown in the right-hand panel of Graph III.1 (except India), based on 2005 GDP and PPP exchange rates.

## Economic growth<sup>1</sup>

In per cent

Graph III.1



AU = Australia; BR = Brazil; CA = Canada; CH = Switzerland; CN = China; CZ = Czech Republic; DE = Germany; ES = Spain; FR = France; GB = United Kingdom; GR = Greece; ID = Indonesia; IE = Ireland; IN = India; IT = Italy; JP = Japan; KR = Korea; MX = Mexico; MY = Malaysia; NL = Netherlands; NO = Norway; PL = Poland; PT = Portugal; RU = Russia; SE = Sweden; TR = Turkey; US = United States; ZA = South Africa.

<sup>1</sup> Average annual real GDP growth. Regional totals are weighted averages based on 2005 GDP and PPP exchange rates.

Source: IMF, *World Economic Outlook*.

growth includes Ireland and Spain (Graph III.2, right-hand panel).<sup>4</sup> Labour productivity in these countries increased rapidly as the less productive sectors aggressively shed workers. Given their membership in a currency union, Ireland and Spain could only regain competitiveness by significantly reducing unit labour costs, which they did by cutting their workforce. Between 2010 and 2012, unit labour costs in Spain fell by 2% per annum, and by 4.4% relative to the average unit labour costs of its trading partners. This compared with an average increase of 2.9% per year between 2000 and 2008.<sup>5</sup>

Why employment and productivity growth weakened so markedly across a large number of countries is not yet well understood. It may be that both trend GDP and productivity growth had started to falter even before the crisis. In the main advanced economies, long-run real GDP and labour productivity growth started to fall many years before the crisis struck in 2007–08 (Graph III.3), suggesting that at least part of the slowdown in economic activity may have taken place for reasons other than the financial crisis. From that point of view, the crisis aggravated the slowdown, but it was not the only cause. This view is supported by more detailed studies. For instance, a pullback in corporate investment in information and communications technology came along with the decline in US productivity

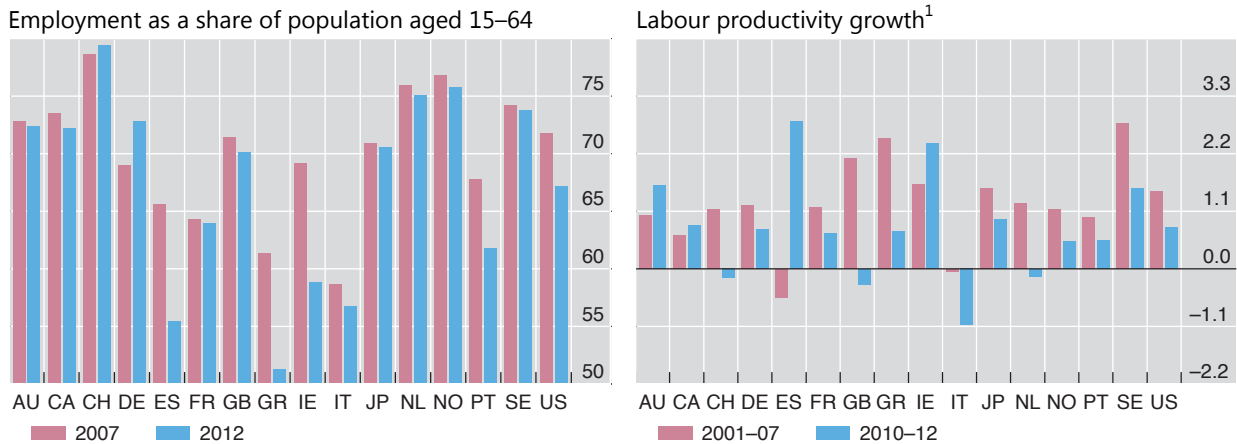
<sup>4</sup> In the case of Spain, labour productivity actually fell in the pre-crisis period. See J Mora-Sanguinetti and A Fuentes, "An analysis of productivity performance in Spain before and during the crisis: exploring the role of institutions", OECD, *Economics Department Working Papers*, no 973, July 2012, who show that the low productivity growth was not primarily driven by the shift of workers to the construction sector. They attribute the poor productivity growth across sectors to rigidities in the labour market and in regulations affecting business.

<sup>5</sup> Source: OECD.

## Productivity and employment

In per cent

Graph III.2



AU = Australia; CA = Canada; CH = Switzerland; DE = Germany; ES = Spain; FR = France; GB = United Kingdom; GR = Greece; IE = Ireland; IT = Italy; JP = Japan; NL = Netherlands; NO = Norway; PT = Portugal; SE = Sweden; US = United States.

<sup>1</sup> Average annual growth of real GDP per employee.

Sources: IMF, *World Economic Outlook*; Datastream.

growth during the first half of the 2000s.<sup>6</sup> The US employment rate likewise peaked around the turn of the century and has since been steadily falling, for reasons still being debated.<sup>7</sup> Structural factors have also been blamed for the energy sector's declining productivity growth.<sup>8</sup>

But technological and similar structural factors are not the whole story. In many economies, slowing growth proceeds directly from the pre-crisis boom in the construction, finance and real estate sectors. When boom turned to bust, it was these bloated sectors that shrank most sharply.<sup>9</sup> Such sectoral imbalances may be hard to spot as they build up, but they tend to make themselves known when times turn bad. Indeed, a good measure for such distortions is the concentration of job losses in specific industries during the bust.<sup>10</sup> For instance, post-crisis job losses in Ireland and Spain were much more concentrated in specific sectors than were those in Germany or Japan – countries that did not experience housing and construction

<sup>6</sup> See J Fernald, "Productivity and potential output before, during, and after the Great Recession", *Federal Reserve Bank of San Francisco Working Paper Series*, no 18, September 2012.

<sup>7</sup> See R Moffitt, "The reversal of the employment-population ratio in the 2000s: facts and explanations", *Brookings Papers on Economic Activity*, Fall 2012, pp 201–50.

<sup>8</sup> See A Hughes and J Saleheen, "UK labour productivity since the onset of the crisis – an international and historical perspective", *Bank of England Quarterly Bulletin*, vol 52, Q2, June 2012, pp 138–46.

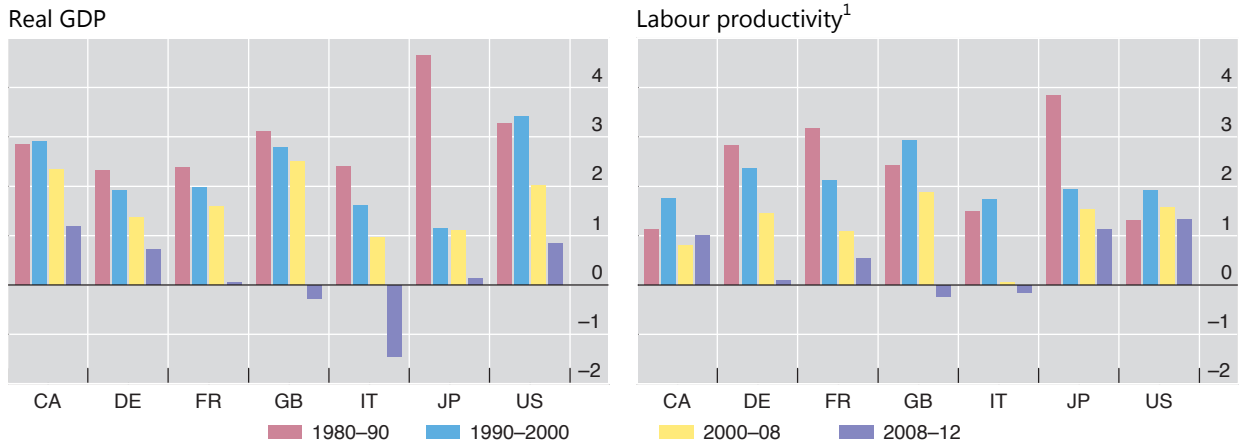
<sup>9</sup> See the discussion in BIS, *81st Annual Report*, June 2011, p 22.

<sup>10</sup> We measure the degree of sectoral imbalances as the average absolute change in sectoral employment share between the beginning and the end of the Great Recession, ie between 2007 and 2009. We consider nine industries to compute this index: agriculture; mining; manufacturing; construction; electricity; trade; transport; finance, insurance and real estate services; and other services. See BIS, *82nd Annual Report*, June 2012, Chapter III.

## Average annual real GDP and labour productivity growth

In per cent

Graph III.3



CA = Canada; DE = Germany; FR = France; GB = United Kingdom; IT = Italy; JP = Japan; US = United States.

<sup>1</sup> Real GDP per hour worked.

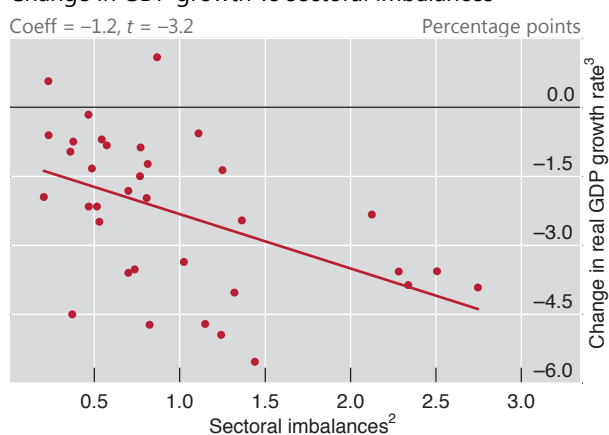
Sources: IMF, *World Economic Outlook*; OECD.

busts but imported the crisis through trade and financial channels. It turns out that growth slowed more in countries with high sectoral imbalances (Graph III.4, left-hand panel) than in countries where the downturn was more balanced.

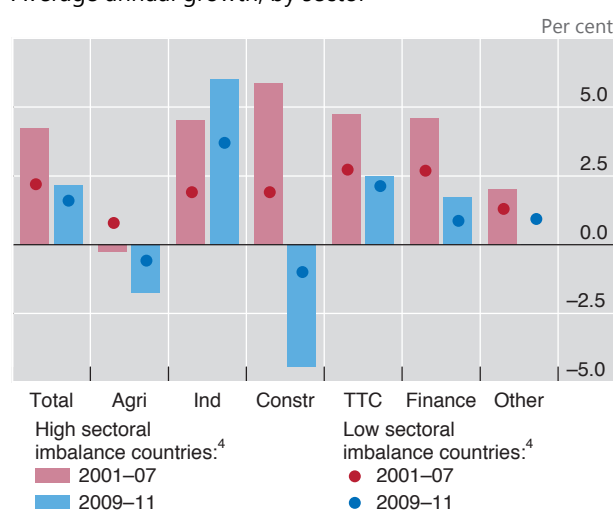
The sectoral breakdown of GDP growth confirms the importance of sectoral imbalances when accounting for the slowdown. The construction sector in countries with high sectoral imbalances grew by 6% annually between 2001 and 2007, only to shrink by almost 5% per year between 2009 and 2011 (bars in Graph III.4, right-hand panel).<sup>11</sup> Given that this sector represented on average around 7% of output in 2009, its shrinkage directly accounts for 0.8 percentage points of the GDP slowdown in these countries. But the boom's legacy does not stop with construction, which was a relatively small part of the economy even at the peak of the housing boom. Output in the service sector also slowed significantly. For instance, growth in the finance, insurance and real estate services sector dropped by almost 3 percentage points. Since this sector accounts on average for 20% of the economy in countries with high sectoral imbalances, its slowdown together with the shrinkage of construction directly explains around 1.4 percentage points of the 2.1 percentage point drop in aggregate growth. Allowing for indirect effects, through the drop in demand for building materials and other inputs, increases this number even further.<sup>12</sup> Although output in both these sectors also slowed in countries with more moderate sectoral imbalances, the deceleration was much milder there.

<sup>11</sup> Based on our estimates, we classify the following countries as having relatively large sectoral imbalances: the Czech Republic, Denmark, Estonia, Hungary, Ireland, Latvia, Lithuania, Poland, Portugal, Romania, Slovakia, Spain, Turkey and the United States. Countries with moderate sectoral imbalances are Austria, Belgium, Finland, France, Germany, Greece, Italy, Japan, Luxembourg, the Netherlands, Sweden and Switzerland.

<sup>12</sup> See M Boldrin, C Garriga, A Peralta-Alva and J Sánchez, "Reconstructing the Great Recession", Federal Reserve Bank of St Louis, *Working Paper Series*, no 006A, February 2013.

Change in GDP growth vs sectoral imbalances<sup>1</sup>

Average annual growth, by sector



Agri = agriculture; Ind = industry excluding construction; Constr = construction; TTC = trade, transport and communication; Other = other services.

<sup>1</sup> The scatter plot represents a number of advanced and emerging market economies, but does not include Greece, which had a change in GDP growth of -11% and a sectoral imbalance index of 0.3. The regression coefficient becomes -0.8,  $t = -1.4$  with Greece included in the sample. <sup>2</sup> Defined as average absolute changes in the sectoral employment share between the beginning and end of the Great Recession, ie from 2007 to 2009. <sup>3</sup> Average annual growth rate between 2010 and 2012 minus average annual growth rate between 2001 and 2007. <sup>4</sup> For the list of countries, see footnote 11 in the main text.

Sources: IMF, *World Economic Outlook*; European Commission; BIS calculations.

To revive growth, workers and capital will need to shift from industries that over-expanded during the boom to more productive sectors. This transfer of resources is facilitated by reforms that increase the incentives for firms to invest, enter new markets and hire new staff.

But overcoming the legacy of the boom-bust cycle will not be enough, especially in countries such as Italy that did not see a housing or credit boom of their own but are still experiencing lower productivity and employment growth. These countries too need a genuine increase in productivity growth. So far, across OECD economies, half of the productivity gain in manufacturing, the only sector where productivity grew faster after the crisis than before, is due to lower employment. But in the longer run, growth tends to come from new goods and services as well as innovative ways of producing and delivering them. Regulations that obstruct innovation and change will therefore slow growth.

## Structural rigidities and growth

By hindering the reallocation of capital and workers across sectors, structural rigidities put the brakes on the economic engine of creative destruction. This nexus is illustrated by the scatter plots in Graph III.5. These show how rigidities in product and labour markets go hand in hand with lower labour productivity and employment.

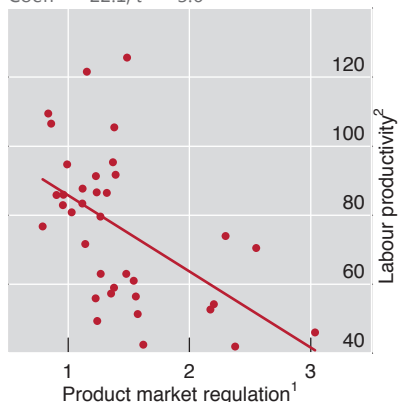
Rigid product markets, for instance, are frequently accompanied by lower labour productivity and employment rates (Graph III.5, left-hand and centre panels). Such rigidities can arise from a wide range of policies, such as price

## Structural rigidities, productivity and employment in advanced and major emerging market economies

Graph III.5

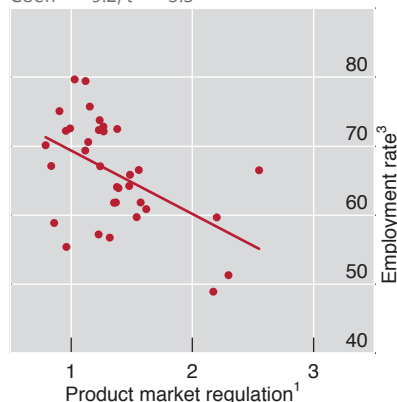
### Labour productivity and product market regulation

Coeff = -22.1,  $t = -3.6$



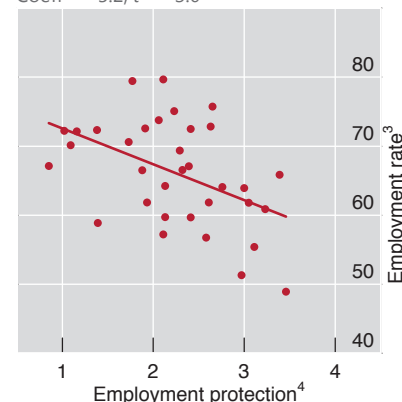
### Employment rate and product market regulation

Coeff = -9.2,  $t = -3.3$



### Employment rate and employment protection

Coeff = -5.2,  $t = -3.0$



<sup>1</sup> The OECD indicator of product market regulation (PMR) measures how far policies promote or inhibit competition in areas of the product market where competition is viable. The scale ranges from 0 (least stringent) to 6 (most restricted). The PMR for each country covers formal regulations in the following areas: state control of business enterprises; legal and administrative barriers to entrepreneurship; and barriers to international trade and investment. The most recent observation is for 2008. <sup>2</sup> Defined as GDP per employee in thousands of US dollars, current PPPs, in 2012. <sup>3</sup> In the population aged 15–64, in 2012. <sup>4</sup> The OECD indicator of employment protection reflects the strictness of regulation of dismissals and the use of temporary contracts. It is calculated as a weighted average of protection of permanent workers against (individual) dismissal, regulation of temporary forms of employment and specific requirements for collective dismissal. The scale ranges from 0 (least stringent) to 6 (most restricted). The most recent observation is for 2008.

Sources: OECD; BIS calculations.

controls, exemptions from competition law for public enterprises, barriers to entry in services such as retail trade and professional services, or restrictions on acquisitions by foreign entities.<sup>13</sup> While most advanced economies have undertaken significant reforms to remove such rigidities, pockets of high regulation remain. This is particularly true for parts of the service sector.<sup>14</sup> Taken at face value, the correlation between employment rates and the OECD product market indicators in a large sample of advanced and emerging market economies suggests that further liberalisation of product markets would allow countries in continental Europe (Austria, Belgium, France, Germany and Italy) to raise their employment rates by about 3 percentage points.<sup>15</sup> In EMEs, the scope for reducing product market rigidities is even greater. Reforms in this area could thus give a further boost to growth and help EMEs to catch up with the advanced economies at a faster pace.

<sup>13</sup> The OECD indicator of product market regulation (PMR) for each country covers formal regulations in the following areas: state control of business enterprises; legal and administrative barriers to entrepreneurship; and barriers to international trade and investment.

<sup>14</sup> See A Wölfl, I Wanner, T Kozluk and G Nicoletti, "Ten years of product market reform in OECD countries – insights from a revised PMR indicator", OECD, *Economics Department Working Papers*, no 695, April 2009.

<sup>15</sup> All these correlations are robust to outliers and continue to hold in multivariate regressions. The bivariate relationships are weaker for a sample of advanced economies only, especially if Greece is ignored, owing to the limited variation in the two rigidity indicators.

Reforms in labour markets could yield even greater benefits than liberalising product markets. High employment protection is associated with lower employment (Graph III.5, right-hand panel). The estimated correlation suggests that, in countries with rigid labour markets such as France, Greece and Spain, a reduction in the index to the sample mean could boost employment rates by roughly 4 percentage points. The correlations in Graph III.5 are confirmed by studies that control for other factors affecting growth and for the direction of causality.<sup>16</sup> At the firm level, higher employment protection lowers productivity growth by holding back firms that operate in an environment of technological change. Similarly, there is evidence that tight regulation which reduces competition in the service sector can slow growth in sectors that rely heavily on service inputs. These include the information and communications technology sector, which grows more sluggishly in countries with less market-friendly regulation.<sup>17</sup>

That said, one should not expect reforms to product and labour markets to produce miracles. First, while different methodologies point towards a statistically significant negative relationship between structural rigidities and growth and employment, the size of this relationship varies across studies. Second, it is unclear whether reforms will permanently lift growth rates or merely generate a one-time upward shift in the level of GDP. Finally, the benefits of removing structural rigidities will not materialise overnight, as it can take many years for some reforms to gain traction. The transfer of workers and capital across sectors tends to be difficult, costly and time-consuming. The skills required in the growth sectors may be very different from those offered by workers laid off during the downturn. By the same token, some of the machinery used to build homes and shopping centres will be difficult to deploy elsewhere. This will be a particular challenge for economies with an overextended building sector which used to attract significant investment and employ large numbers of semi-skilled labourers.

## Structural rigidities and the recovery

Economies with large sectoral imbalances recovering from a downturn have a particularly acute need to reallocate resources from one sector to another. By hindering this adjustment, rigid product or labour markets slow the pace of recovery.

This intuition is supported by econometric evidence. Graph III.6 shows that, when an economy is coming out of a recession that featured large sectoral imbalances, lower output growth and larger increases in unemployment are often associated with high readings of the employment protection index (red dots and

<sup>16</sup> A number of studies using the OECD PMR indicators and similar measures find that higher rigidities tend to be associated with lower productivity growth, especially because they inhibit competition. For a review, see N Crafts, "Regulation and productivity performance", *Oxford Review of Economic Policy*, vol 22, no 2, 2006, pp 186–202; and R Bouis and R Duval, "Raising potential growth after the crisis: a quantitative assessment of the potential gain from various structural reforms in the OECD area and beyond", OECD, *Economics Department Working Papers*, no 835, January 2011.

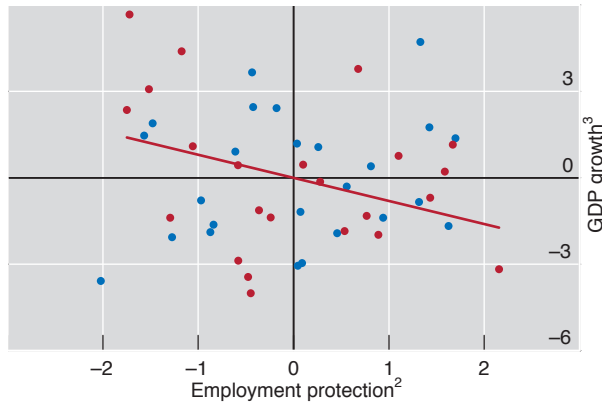
<sup>17</sup> See J Arnold, G Nicoletti and S Scarpetta, "Regulation, allocative efficiency and productivity in OECD countries: industry and firm-level evidence", OECD, *Economics Department Working Papers*, no 616, June 2008.

# Employment protection and the speed of recovery<sup>1</sup>

Partial correlations

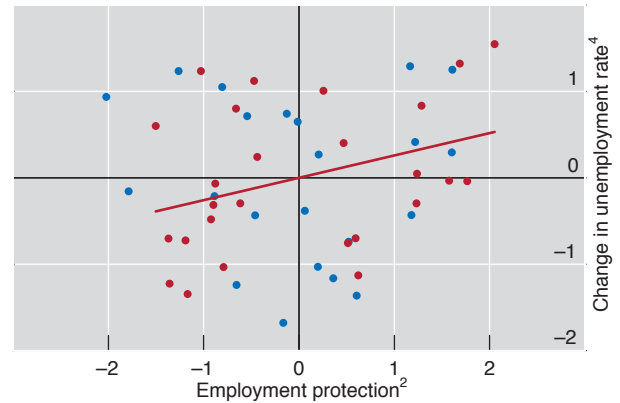
Graph III.6

Employment protection and GDP growth during recoveries



Sectoral imbalances:<sup>5</sup> ● Severe<sup>6</sup> (coeff = -0.8;  $t = -1.8$ )  
● Moderate<sup>7</sup> (coeff = 0.4;  $t = 0.9$ )

Employment protection and unemployment rate change during recoveries



Sectoral imbalances:<sup>5</sup> ● Severe<sup>6</sup> (coeff = 0.3;  $t = 1.8$ )  
● Moderate<sup>7</sup> (coeff = -0.04;  $t = -0.2$ )

<sup>1</sup> Based on a sample of 24 advanced OECD economies starting in 1970. Recessions are defined as periods of negative GDP growth and recoveries as the two-year windows after GDP fell to its trough. <sup>2</sup> See footnote 4 in Graph III.5. <sup>3</sup> Partial correlations from regressing GDP growth during recovery periods on GDP growth during recession periods, employment protection and sectoral imbalances. <sup>4</sup> Partial correlations from regressing the change in the unemployment rate during recovery periods on GDP growth during recovery periods, employment protection and sectoral imbalances. <sup>5</sup> Defined as average absolute changes in the sectoral employment share during recession periods. <sup>6</sup> Recoveries for which the average absolute change in sectoral employment shares during the preceding recession period is above the sample median. <sup>7</sup> Recoveries for which the average absolute change in sectoral employment shares during the preceding recession period is below the sample median.

Sources: OECD; BIS calculations.

regression line).<sup>18, 19</sup> By contrast, in countries that emerge from recessions without sizeable sectoral imbalances (blue dots), there is no statistically significant relationship between the pace of recovery or the change in unemployment on the one hand, and the degree of employment protection on the other. The inference is that labour market rigidities do the most damage when the need for labour reallocation across sectors is greatest. Roadblocks to the reallocation process reinforce the misuse of resources and are especially damaging for potential growth. A similar conclusion comes from looking at employment growth. That is, in countries with higher employment protection, employment usually grows more slowly during recoveries from a recession with severe imbalances. Conversely, no significant relationship emerges in the full sample.

<sup>18</sup> The analysis is based on a sample of 24 advanced OECD economies starting in 1970. We define recessions as periods of negative GDP growth and recoveries as the two-year windows after GDP fell to its trough. We then ask to what extent output and employment growth developments during recoveries vary according to the degree of labour market regulation and the extent of sectoral imbalances in an economy. Our evidence is in line with that in J Haltiwanger, S Scarpetta and H Schweiger, "Assessing job flows across countries: the role of industry, firm size and regulations", Institute for the Study of Labor (IZA), *Discussion Paper*, no 2450, November 2006, who find that strict labour protection raises labour adjustment costs and thus slows down the reallocation process. Moreover, the results are robust to controlling for monetary and fiscal policies.

<sup>19</sup> Note that the evidence presented for changes in unemployment is actually obtained after controlling for the effect of GDP growth. Higher employment protection therefore raises unemployment for a given growth in GDP.



Overall, these results suggest that flexible labour markets allow economies with large sectoral imbalances to recover more quickly from downturns. To get a sense of how large these benefits can be, consider the following experiment: what would be the effect of cutting the index for laying off workers with regular contracts to the lowest level observed in the OECD? Our estimates suggest that, in a country with large sectoral imbalances, cutting dismissal costs for workers on regular contracts to the minimum could raise GDP growth by 0.25 percentage points annually. This figure compares with an average annual growth rate in GDP of just 3%. And the unemployment rate two years after the trough would be 0.4 percentage points lower than without the reform. Importantly, such benefits appear to accrue quite quickly once the reforms are in place.

## The current state of structural rigidities

Removing structural rigidities that hinder the reallocation of capital and workers across sectors can boost growth. But the nature of these rigidities varies from country to country. Further, the various types of regulation may interact in complex ways. This means that the measures that need to be taken also differ from country to country. For instance, product markets in the most advanced economies tend to be much less regulated than those in many emerging market economies (Graph III.7, top panels).

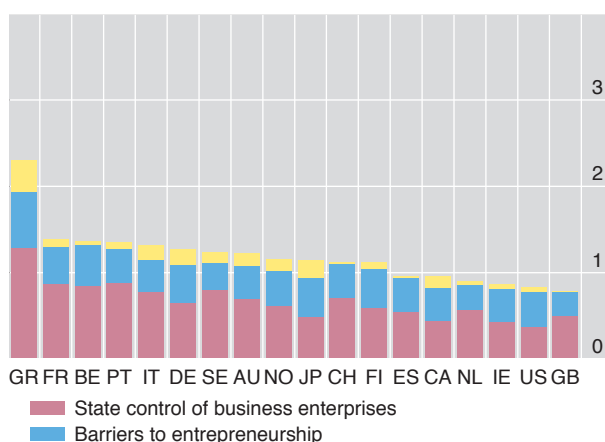
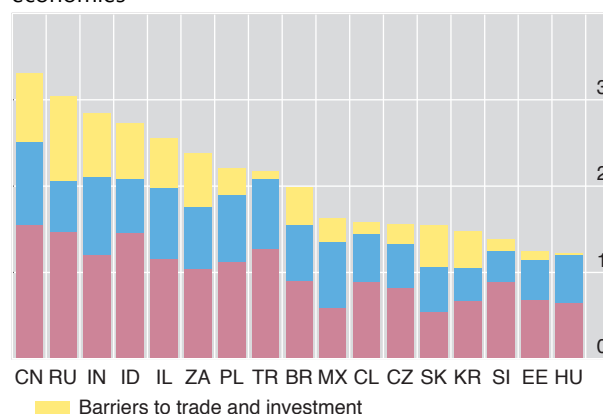
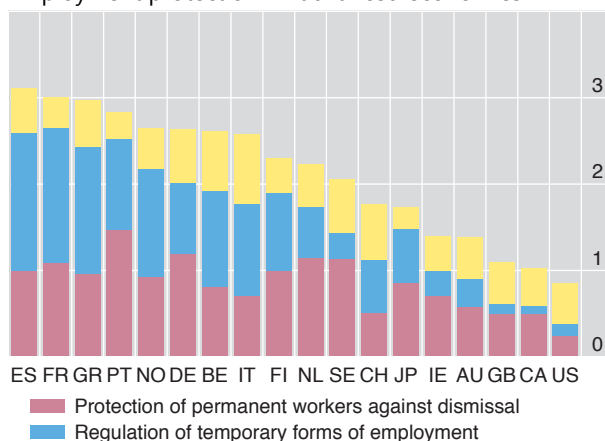
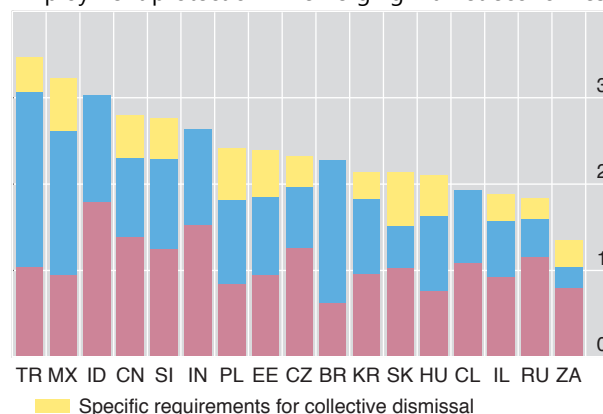
The degree of employment protection also varies greatly across countries (Graph III.7, bottom panels). Labour markets in the English-speaking advanced economies tend to be much less regulated than those in most euro area countries, where the need for reform is greater. Similarly, some countries tend to regulate permanent contracts relatively strictly, but temporary contracts less so, resulting in a two-track labour market. Here a relaxation of the regulations covering open-ended contracts could help workers on temporary contracts to find permanent positions.

Moreover, labour and product market reforms are only one part of a larger set of structural measures that need to be taken. To return to a path of strong and sustainable growth, countries should also address flaws in their education systems and make their tax systems more growth-friendly, to mention just a few of the challenges. While all these measures are important, the benefits of some will take longer to materialise than those of others. Although the effects of product and labour market reforms are generally not immediate, they tend to feed through more quickly than the dividends of, say, improving the education system.<sup>20</sup>

## Conclusions

Given the evident benefits of liberalising product and labour markets, why are such rigidities still in place? One answer is that reforms produce losers as well as winners. Indeed, members of a small group may have more to lose than those of a larger one stand to gain from, say, lower prices. Another objection is that reforms could make things worse in the short run, particularly if undertaken in bad times. Ideally, the argument goes, reforms should be carried out in good times. Relaxing

<sup>20</sup> R Bouis, O Causa, L Demmou, R Duval and A Zdzienicka, "The short-term effects of structural reforms: an empirical analysis", OECD, *Economics Department Working Papers*, no 949, March 2012, find that some structural reforms can raise the level of GDP or employment in a matter of a few years.

Product market regulation<sup>1</sup> in advanced economiesProduct market regulation<sup>1</sup> in emerging market economiesEmployment protection<sup>2</sup> in advanced economiesEmployment protection<sup>2</sup> in emerging market economies

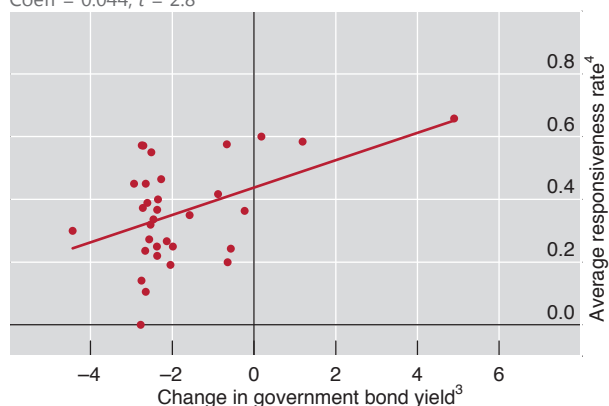
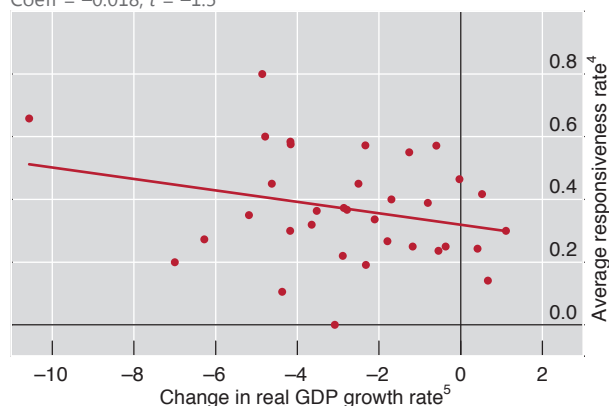
AU = Australia; BE = Belgium; BR = Brazil; CA = Canada; CH = Switzerland; CL = Chile; CN = China; CZ = Czech Republic; DE = Germany; EE = Estonia; ES = Spain; FI = Finland; FR = France; GB = United Kingdom; GR = Greece; HU = Hungary; ID = Indonesia; IE = Ireland; IL = Israel; IN = India; IT = Italy; JP = Japan; KR = Korea; MX = Mexico; NL = Netherlands; NO = Norway; PL = Poland; PT = Portugal; RU = Russia; SE = Sweden; SI = Slovenia; SK = Slovakia; TR = Turkey; US = United States, ZA = South Africa.

<sup>1</sup> See footnote 1 in Graph III.5. <sup>2</sup> See footnote 4 in Graph III.5.

Source: OECD.

employment regulations when growth is slow, for instance, could lead to further job losses in the short term. Yet there are reasons to believe that such an argument does not always hold. First, when an economy faces the need for adjustment, maintaining labour market protection may not prevent massive layoffs.<sup>21</sup> Second, this argument does not apply to product market reform. Product market liberalisation can be a useful tool in propelling growth, especially in bad times. Liberalising entry into regulated sectors, for instance, can be a significant source of investment and job creation. All this suggests that it is critical to implement labour and product market reforms without delay.

<sup>21</sup> A similar analysis to that presented above suggests that, when sectoral imbalances are large, any relationship between employment protection and the increase in unemployment during a downturn is dissolved. This may sound surprising, but the intuition is clear: when firms go bankrupt, regulations that protect jobs become moot.

Responsiveness vs change in government bond yields<sup>1</sup>Coeff = 0.044,  $t = 2.8$ Responsiveness vs change in GDP growth rate<sup>2</sup>Coeff = -0.018,  $t = -1.5$ 

<sup>1</sup> The regression coefficient becomes 0.042,  $t = 1.8$  without Greece in the sample. <sup>2</sup> The regression coefficient becomes -0.01,  $t = -0.7$  without Greece in the sample. <sup>3</sup> Difference in the 10-year government bond yield between the 2001–07 average and the latest observation (31 May 2013), in percentage points. <sup>4</sup> Average rate of responsiveness to recommendations in the 2009–10 and 2011–12 issues of the OECD *Going for Growth* report. The reform responsiveness rate indicator is based on a scoring system in which recommendations set in the previous issue of the report take a value of one if “significant” action has been taken and zero if not. <sup>5</sup> Annual growth rate between 2011 and 2012 minus average annual growth rate between 2001 and 2007, in percentage points.

Sources: IMF, *World Economic Outlook*; OECD; Bloomberg; Datastream; national data; BIS calculations.

But such arguments rarely get much of a hearing. Rather, it seems, policymakers act only when their hand is forced. Taking as a rough gauge for reforms the number of measures implemented in response to the two latest OECD *Going for Growth* assessments, it was the countries that faced the most intense market pressures that pushed through the most reforms.<sup>22</sup> For instance, countries that benefited less from the decline in yields (or where yields went up) in recent years have usually implemented more reforms than countries facing less pressure (Graph III.8, left-hand panel).<sup>23</sup> Similarly, countries experiencing a sharper slowdown in economic activity reformed more than those where growth held up better (right-hand panel), although here the correlation is weaker.

That countries tend to start liberalising only when compelled to is unfortunate. Although some reforms may take effect relatively quickly, others require time and additional measures to smooth their path. Reforms are therefore best undertaken sooner rather than later. For instance, as our analysis indicates, the countries that went through a housing and credit boom would surely have been better off today if they had taken a bolder, swifter approach to labour and product market reforms.

<sup>22</sup> In its assessments, the OECD uses a combination of quantitative indicators and judgment to identify the five areas with the greatest need for action.

<sup>23</sup> The correlation remains statistically significant if we exclude the main outlier (Greece).