

## Box 5

**RECENT LABOUR SUPPLY DEVELOPMENTS**

In the period 2008-09 the euro area experienced its most severe recession since the end of the Second World War. The recession has implied a significant fall in demand for labour and a rise in unemployment rates. However, ultimately, an economic crisis can be expected to affect not only labour demand, but also more broadly labour supply. This effect comes about via two distinct channels, affecting both population growth and participation rates. This box assesses the impact of the recent downturn on euro area labour supply using data from the EU Labour Force Survey.

The effects of the economic crisis on population growth tend to be driven, in the short run, by migration. This is, in turn, largely determined by relative earnings and employment opportunities.<sup>1</sup> Severe downturns – and the resulting reductions in job opportunities – may dampen immigration into the euro area, thus reducing population growth.

Severe downturns are also likely to influence participation rates. However, the effect is not clear-cut. On the one hand, sharp downturns may encourage workers to leave the labour market – for instance, older workers may decide to take early retirement and younger workers may opt to continue in full-time education. In addition, the lower likelihood of finding employment during a severe downturn may lead some workers to withdraw from the labour force – the so-called “discouraged worker” effect. Both phenomena will induce reductions in participation rates – or, at least, reductions in the rate of participation growth. On the other hand, severe

<sup>1</sup> See, for example, Frigyes Ferdinand Heinz and Melanie Ward-Warmedinger, “Cross-border labour mobility within an enlarged EU”, *ECB Occasional Paper Series*, No 44, October 2006.

downturns may also increase participation growth – if reductions in household incomes (due to job or financial losses) draw formerly inactive “added workers” into employment.

### Changes in labour force growth and contributions

Prior to the crisis, taking the average of the period 2006-08, euro area labour supply grew by 1.1% per year, boosted to a large extent by considerable inward migration into the euro area by job-seekers from the new Member States following EU enlargement (see the table). By contrast, following the downturn, annual euro area labour force growth fell significantly, recording, in the third quarter of 2009, the first year-on-year contraction in the ten-year history of the series. This resulted in an annual average rate of euro area labour supply growth of only 0.3% in 2009. In part, the contraction in labour supply growth seen in the second half of 2009 reflects a sharp slowing in the rate of inward migration into the euro area, which had previously helped to mitigate otherwise low levels of (natural) population growth. But the recession (which began in the second quarter of 2008) also had a marked impact on the growth of euro area participation, particularly for younger citizens.

### Participation effects

Overall, euro area participation growth has clearly stagnated since the onset of the crisis, in stark contrast to the steady growth seen in the middle part of the decade. Moreover, as shown in the table, the recent downturn has resulted in a broad and marked acceleration in the secular decline in participation among younger age groups (aged 15-24). Part of this decrease undoubtedly reflects simply the reduction in market opportunities for school leavers as a consequence of the

### Growth in euro area labour force, population and participation rates for selected groups

(annual percentage changes)

	2006	2007	2008	2009	2009 Q4
<b>Labour force</b>					
<b>Total</b>	<b>1.2</b>	<b>1.0</b>	<b>1.1</b>	<b>0.3</b>	<b>0.1</b>
Young (15-24)	-0.8	-0.2	-0.3	-2.8	-3.6
Prime age (25-54)	1.1	0.6	0.9	0.0	0.0
Older (55-64)	4.6	4.7	3.7	4.5	4.1
Male	0.9	0.6	0.6	-0.3	-0.4
Female	1.7	1.4	1.6	0.9	0.7
<b>Participation</b>					
<b>Total</b>	<b>0.8</b>	<b>0.5</b>	<b>0.7</b>	<b>0.1</b>	<b>0.1</b>
Young (15-24)	-0.2	0.3	0.4	-1.8	-2.6
Prime age (25-54)	0.6	0.3	0.5	0.0	0.0
Older (55-64)	2.9	2.7	2.0	2.9	2.6
Male	0.3	0.2	0.2	-0.3	-0.4
Female	1.3	0.9	1.2	0.8	0.6
<b>Population</b>					
<b>Total</b>	<b>0.5</b>	<b>0.5</b>	<b>0.4</b>	<b>0.1</b>	<b>0.0</b>
Young (15-24)	-0.6	-0.5	-0.7	-1.1	-1.1
Prime age (25-54)	0.5	0.4	0.4	0.0	-0.1
Older (55-64)	1.6	1.9	1.7	1.5	1.4
Male	0.5	0.5	0.4	0.1	0.0
Female	0.4	0.5	0.4	0.1	0.1
Euro area nationals	0.1	-0.4	0.2	-0.2	-0.2
Other EU nationals	3.9	116.1	29.1	6.4	2.9

Sources: EU Labour Force Survey and ECB calculations.

sharp contraction in activity in the construction and industrial sectors. Faced with worsening employment prospects, young people were forced to reconsider their options outside the labour market, with many simply choosing to continue in further education and training. A priori, factors which contribute to increased take-up of further education and training (albeit, by temporarily postponing labour market entry) might be expected to give rise to higher participation rates in later life, with cohorts demonstrating stronger labour market attachment. However, there is also a growing body of evidence suggesting that low employment rates among young people whose early working lives coincide with severe recessions may lead to permanent decreases in labour market attachment among these groups.<sup>2</sup>

In addition, it appears that participation growth among men has also begun to contract, again reflecting, in large part, the heavy sectoral concentration of the crisis in traditionally “male dominated” industries (construction, manufacturing and transport). However, the slowdown in growth is largely concentrated among younger workers, with participation among “prime age” males showing markedly lower rates of contraction, while participation rates among older males continue to register positive rates of growth, which are even slightly higher than those observed before the onset of the crisis.

In contrast to most sub-groups, two groups of workers continue to show steady participation growth: women and older workers. Ongoing growth in female participation, in large part, points simply to a continuation of the longer-term secular trends for this group; but it is likely also to reflect an increase in traditional “added worker” effects, which are typical in severe downturns. Similarly, while part of the notable increases in participation rates among older workers may simply reflect a tightening-up or reversal of early retirement schemes, some part is also likely due to a need to make up for wealth losses sustained as a consequence of the financial crisis and for lower expected pensions from defined contribution schemes.<sup>3</sup>

### Population effects

Since the onset of the recession, euro area population growth has progressively slowed – turning negative for the first time in the history of the series in the third quarter of 2009 – after growth of around 0.5% per year, on average, in the years prior to the onset of the crisis. While much of this decline simply reflects long-standing developments in the euro area working age population, part also reflects a marked slowing in inward migration into the euro area.

### Cross-country differences

Behind the euro area total, country developments show considerable heterogeneity, as depicted in the chart, which shows the relative contributions from population and participation effects to euro area and individual countries’ annual labour force growth between the fourth quarters of 2008 and 2009. These data show developments ranging from an annual labour force contraction of 3.3% in Ireland to a continuing growth rate of around 2.2% in Malta.<sup>4</sup>

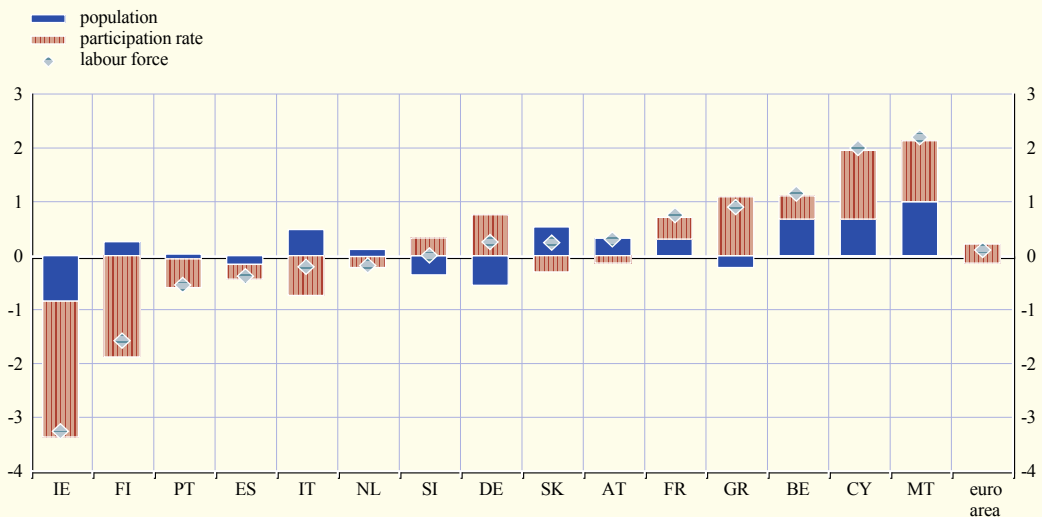
2 See, for example, K. Hämäläinen, “Education and unemployment: state dependence in unemployment among young people in the 1990s”, VATT Discussion Paper No 312, 2003; and S. Burgess, C. Propper, H. Rees and A. Shearer, “The class of 1981: the effects of early career unemployment on subsequent unemployment experiences”, *Labour Economics*, Vol. 10, Issue 3, 2003.

3 See, for example, the boxes entitled “Country-specific evidence of effects from early retirement and disability schemes on participation” and “Participation decisions in response to sharp drops in pension wealth”, *OECD Working Paper Series*, ECO/CPE/WP1(2010)2 entitled “The response of labour force participation to severe downturns”.

4 Data for Luxembourg are not reported, following recommendations from the Banque centrale du Luxembourg.

### Contributions of growth in population and participation to labour force growth in euro area countries Q4 2008-Q4 2009

(annual percentage changes; percentage point contributions)



Sources: Eurostat and ECB calculations.  
Note: Data unavailable for Luxembourg.

The reaction of labour force participation to the recent downturn appears to be fairly evenly split between the euro area countries, with 8 of the 15 countries considered here reporting decreases in participation growth rates, and 7 showing increases. Recorded declines in participation rates appear to have been particularly sharp in Ireland and Finland in part reflecting the severity of the output declines experienced in these countries.

The pattern of migration across euro area countries is fairly balanced. Where the population has fallen, it tends to be largely attributable both to a voluntary withdrawal of foreign workers from national labour markets and to a reduction in inflows from new migrants as a consequence of reduced opportunities.

This box has shown that over recent quarters euro area labour supply growth has been adversely affected via both the participation and population channels. Some of these effects should be of a cyclical nature and can be expected to be reversed when the economy strengthens again. However, it is vital to avoid a situation in which part of the decline in labour supply growth becomes longer-lasting. In the longer run, labour supply is a key determinant of potential output, thus influencing long-term productivity potential and ultimately the chances of improvements in the living standards of euro area citizens.