

Box 5

Labour force developments in the euro area ¹

According to the recently released Eurostat Labour Force Survey, which covers all European Union Member States, labour force growth in the euro area is estimated to have been 0.8% in 1999. This is the same figure, as that for labour force growth on average in recent years, i.e. 1996-99, and it is expected to continue to grow at a similar rate this year.

In order to put labour force growth and its determinants in the relevant analytical context, the top part of the table shows developments in the labour force in the euro area as determined by working-age population growth and the participation rate, on the one hand, and as reflected in developments in employment and unemployment, on the other. Three recent periods have been considered: 1986-90, 1992-95 and 1996-99. 1991 has been excluded on account of a break in the series owing to German unification. While the first and third periods were ones of economic expansion, the second was characterised by a recession. Over the whole period population growth, which can be considered as exogenous, was on a downward trend. The participation rate fell slightly in the early 1990s; however, it shows an upward trend for the period as a whole and has been positively related to the economic situation. In response to these driving forces, labour force growth slowed down to 0.1% on average between 1992 and 1995, after having recorded an average rate of 1.3% in the previous period, only to resume its growth again in recent years. At the same time, from the point of view of labour force components, i.e. employment and unemployment, they moved in opposite directions over the three periods. Employment growth, in response to economic strengthening, absorbed the increasing labour force in the expansionary periods, leading to unemployment reductions. During the recession the fall in employment, together with the slight increase in the labour force, implied a significant increase in unemployment.

There is evidence that labour force growth responds to the situation of the economy through the participation rate. The argument is that strong economic growth leads to a fall in the unemployment rate, which gives a positive signal to those not participating in the labour market, i.e. not working and not seeking a job, while an economic slowdown tends to discourage potential workers from participating at all. However, changes in the population also play a role, both in terms of growth and composition. Furthermore, it is also important to look at developments by gender, owing to the different trends in participation rates.

Changes in participation rates have dominated demographic changes in recent years

Changes in the labour force can be categorised according to two effects: effects of population growth, which take into consideration changes in population for a given participation rate, and those of changes in labour force participation, via changes in the activity rate for a given population. The results indicate that over the past few years (1996-99) the effect of changes in the participation rate has dominated the growth of the population, contributing by 0.6 and 0.2 percentage point respectively to the change in the labour force (see the table below). This contrasts with the end of the 1980s, when the two effects were more similar (i.e. a contribution of 0.8 and 0.5 percentage point respectively). Finally, during the period of recession, i.e. the first part of the 1990s, the small increase in the labour force was fully explained by population growth, which counterbalanced the slightly negative contribution from the fall in the participation rate.

Apart from population growth, in order to explain labour force developments it is also important to focus on changes in the composition of population. From 1986 to 1999 both changes in the composition of the population and changes in participation rates among age groups seem to have been relevant in terms of labour force developments. Middle age categories, which have the highest rates of participation, increased their

¹ Only data for Germany, France, Italy, Spain and the Netherlands are available for the reference period. These countries added up to 86% of the euro area labour force in 1999.

Population, participation rate and labour force in the euro area

(average percentage change of the reference period)

	1986-90	1992-95	1996-99
Total			
Population growth	0.6	0.3	0.2
Participation rate	63.8	65.0	65.9
Change in the participation rate	0.4	-0.1	0.4
Employment growth	1.7	-0.8	1.1
Unemployment growth	-2.0	7.9	-1.2
Labour force growth	1.3	0.1	0.8
Population growth effect ¹⁾	0.5	0.1	0.2
Participation rate change effect ¹⁾	0.8	0.0	0.6
Males			
Labour force growth	0.6	-0.2	0.4
Population growth effect ¹⁾	0.7	0.2	0.1
Participation rate change effect ¹⁾	-0.1	-0.4	0.3
Participation rate	78.8	76.7	76.5
Change in the participation rate	-0.1	-0.6	0.2
Females			
Labour force growth	2.4	0.9	1.3
Population growth effect ¹⁾	0.4	0.2	0.1
Participation rate change effect ¹⁾	2.0	0.7	1.2
Participation rate	49.0	53.3	55.4
Change in the participation rate	0.9	0.3	0.7

Sources: Eurostat and ECB calculations.

Note: Results for 1991 are not included owing to a break in the German data.

1) Contributions to labour force growth.

relative weight in the population. At the same time, all age categories experienced an increase in labour force participation, with the exception of the youngest and the oldest. One possibility for examining the importance of population composition in relation to changes in participation is to calculate the participation rate of the whole economy using 1986 population weights and the observed participation rates in 1999 using a breakdown by age and gender. The results indicate that the current participation rates alone cannot explain the increase in the labour force, although these again appear to be more important than changes in population. Moreover, the effect of participation rates is comparatively more significant in the second half of the 1990s than in the second half of the 1980s.

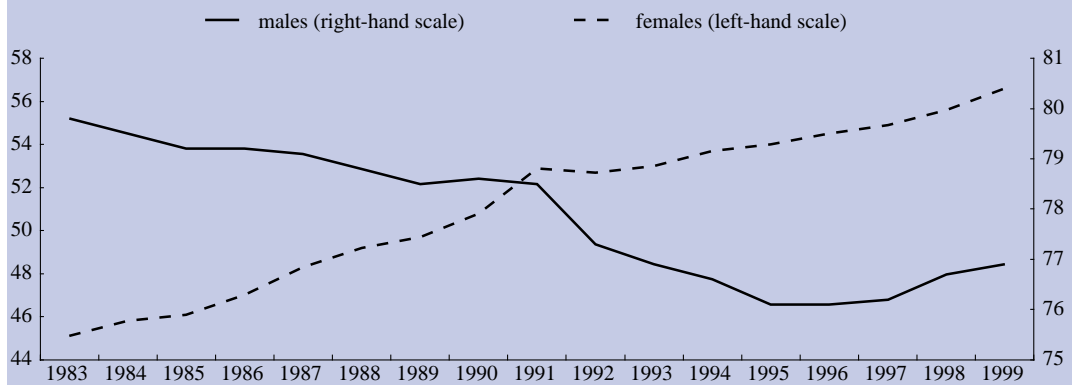
Male participation rates have increased over the past few years

The decomposition of labour force growth showing the effect of population growth and participation rate changes for a breakdown by gender reveals two different forms of behaviour. On the one hand, the female labour force has grown over all three periods, basically as a result of the effect of growing participation rates, which contribute by between 0.7 and 2.0 percentage point to labour force growth, while population growth effects are much less significant. On the other hand, the male labour force grew in the previous 1986-90 period owing to population growth effects. However, as shown in the chart below, male participation behaviour in the recent past (1996-99) has changed and the increasing participation rate has mainly been responsible for the growth of the labour force. Indeed, since the early 1980s male participation had been decreasing constantly, falling more strongly during the recession, while in recent years it has started to increase

(rising by 0.2 percentage point on average). By contrast, female participation has increased throughout all three periods. The breakdown by gender and age group indicates that changes in male participation rates between the two expansionary periods are mainly identified in the youngest and oldest population groups, while the increase in female participation rates is broadly based among age groups in both periods, although it was less intense in the second period.

Participation rates by gender in the euro area

(as a percentage of the total population by gender; annual data)



Sources: Eurostat and ECB calculations.

In summary, in terms of explaining labour force developments, changes in participation have been more significant in recent years than changes in population, by contrast with the end of the 1980s. In addition, although females continue to be the main contributors to the labour force increase, it is important to note that over the past few years males have gained some weight in explaining this increase, owing to a rise in male participation rates after some years of a continuous downward trend.