

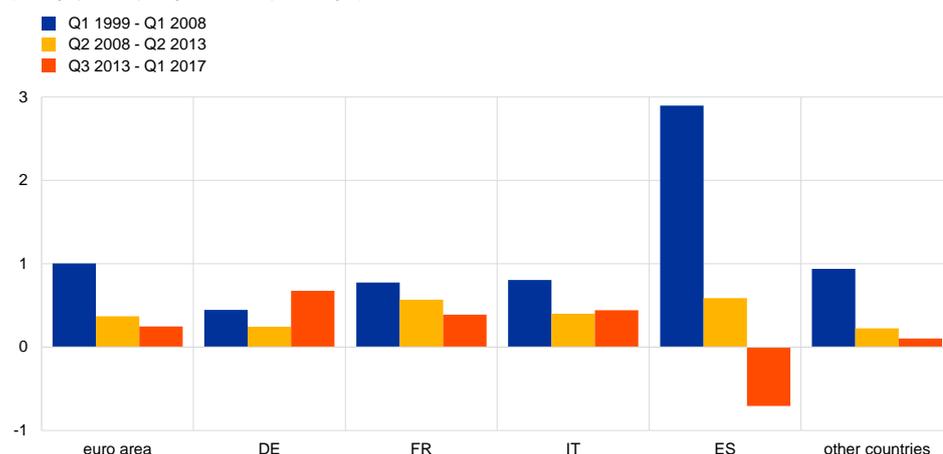
3 Recent developments in euro area labour supply

Labour supply developments are an important driver of both the economic recovery and longer-term growth. On the structural side, labour supply can be a significant contributor to potential growth, while, from a cyclical perspective, it has a direct impact on employment and unemployment. Furthermore, it is not only the size of the labour force that matters, but also its composition. Labour supply in the euro area has been increasing for a long time, but, while this has continued during the recent recovery, its growth rate has moderated in comparison with both the pre-crisis and crisis periods (see Chart A). This box looks at the factors underlying the increasing labour supply over the course of the economic recovery and the moderation in its growth rate, as well as the changes in its composition.

Chart A

Average growth rate of the labour force in the euro area and the largest euro area countries

(average year-on-year growth rates, percentages)



Sources: Eurostat national accounts and short-term statistics.

Note: The labour force is defined as the sum of employment as measured by national accounts and the number of unemployed.

Although the labour supply in the euro area is continuing to rise, over the past decade there has been moderation in the rate at which it is increasing. In the immediate aftermath of the Great Recession, the average growth rate of the labour force moderated in all of the largest euro area countries compared with the pre-crisis period. This moderation continued in the recovery period (from the third quarter of 2013 to the first quarter of 2017), with the notable exception of Germany, where there has been an acceleration in labour force growth that now exceeds the rates of expansion seen before the crisis. The weakening in labour force developments was most dramatic in Spain, which can be explained primarily by the effect of changing migration flows. Before the crisis, there was significant net inward migration to Spain, which reversed after Spain experienced a marked increase in its unemployment rate. This had a large negative impact on both the working age population and labour supply in Spain, and was also reflected in euro area labour supply developments. In the euro area as a whole, however, immigration has made a large positive contribution to the working age population during the recovery, reflecting primarily the inflow of workers from new EU Member States. In turn, this is likely to also have

had a significant impact on the labour force, particularly in Germany and Italy, but also in some smaller euro area economies.

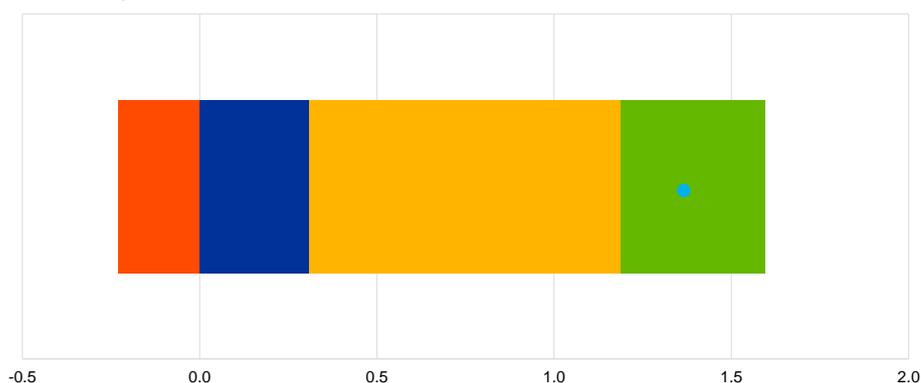
Since the start of the recovery, the rise in the participation rate has been a very important driver of growth in the labour force (see Chart B). The change in the labour force can be decomposed into contributions from changes in the working age population (15-64) on one hand and the participation rate on the other. The slowdown in the growth of labour supply compared to the pre-crisis period reflects a moderation of growth in both the working age population and the participation rate, although the contribution from both components has remained positive over the course of the recovery. However, the largest contribution to the growth in the labour force has come from the rising participation rate.

Chart B

Decomposition of the cumulative change in the labour force since the second quarter of 2013

(percentage points)

- owing to the change in the working age population
- owing to the change in the participation rates in age groups
- owing to the changing age composition of the working age population
- residual
- total change



Source: Eurostat, Labour Force Survey.

Notes: 15-64 age group. Non-seasonally adjusted data. The change in the labour force can be decomposed into the change in the working age population and the change in the participation rate. The latter can be decomposed further into developments in the relative sizes of the age groups in the population and changes in the participation rates of the different age groups. For the calculations, we used five-year age groups. The residual includes other compositional changes, for example by gender.

The euro area labour force is ageing, and more people are remaining economically active later in life. The share of those aged 50-64 in the 15-64 labour force has increased from 30% to 32% over the course of the recovery, following a longer-term upward trend.¹⁴ As this age group has traditionally had relatively low labour force participation rates, its increasing share of the population might be expected to reduce the overall labour force participation rate. However, participation rates have increased among those aged 50-64 in the past four years (between the second quarter of 2013 and the first quarter of 2017 the participation rate increased by 0.7, 3.8 and 7.6 percentage points in the 50-54, 55-59 and 60-64 age groups

¹⁴ The trend increase in the older generations reflects the fact that the post-war “baby boomers” have reached these age categories and the share of younger generations has declined. See “Population structure and ageing”, *Eurostat Statistics Explained*, Eurostat, June 2017, available at <http://ec.europa.eu/eurostat>

respectively), driven by the increasing pension age in most countries, as well as other factors, for example the increasing education level of the population (which is discussed later). This is driving up the overall participation rate, counterbalancing the otherwise negative impact of the changing age composition (see the red bar in Chart B). Furthermore, the declining share in the population of the 15-24 age group has also contributed to the increase in the overall participation rate, as this age group typically has a relatively low participation rate. This positive compositional effect, however, has been partly offset by a decline in the group's participation rate since 2008.

Continuing a long-term trend, the increase in the labour force during the economic recovery has been driven by the participation of women. While the increasing share of the older age groups is characteristic of both genders, for women, growth in the participation rate over the course of the recovery has been larger and the decline in the prime-age labour force has been smaller (see Chart C). The rising participation rate for women and the way in which female participation differs from male participation are explained to a large degree by diverging developments in the educational levels of men and women. The share of women with tertiary education in the female working age population is greater than the corresponding share for men.¹⁵ It has also increased more steeply over the last decade in both the prime and older age categories and is a major driver of the increasing female participation in the labour force.¹⁶

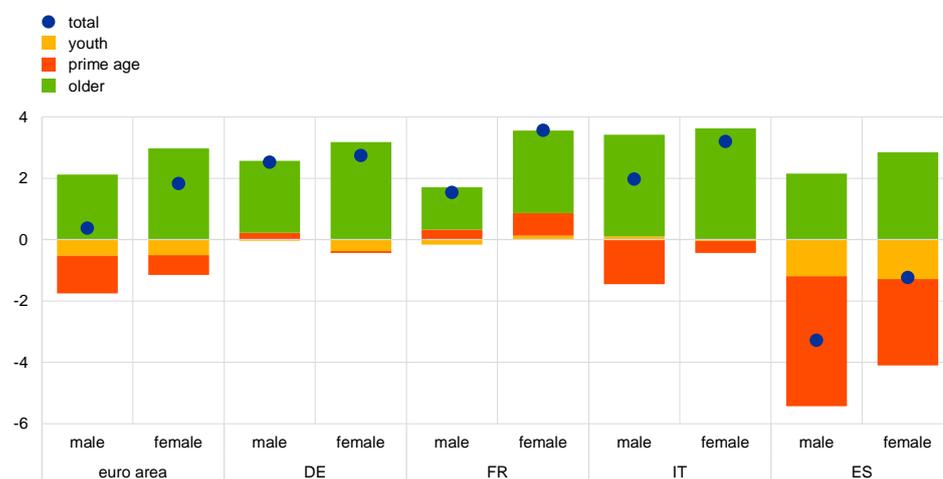
¹⁵ In the working age population, the share of those with tertiary education is only lower for women than for men in the older (55-64) age range, but the gap with men has been closing considerably over the last decade.

¹⁶ See Thévenon, O., "Drivers of Female Labour Force Participation in the OECD", *OECD Social, Employment and Migration Working Papers*, No 145, OECD, 2013, available at <http://www.oecd-ilibrary.org>

Chart C

Decomposition of the cumulative change in the labour force by gender and age in the euro area and the largest euro area countries during the economic recovery (from the second quarter of 2013 to the first quarter of 2017)

(percentages of the labour force in the second quarter of 2013)



Source: Labour Force Survey.

Notes: Youth: 15-24, prime age: 25-54, older: 55-64. Non-seasonally adjusted data.

Cyclical effects have contributed to diverging developments in prime-age male and female participation rates.

The participation rate of prime-age males has been declining since the start of the crisis, likely driven by the cyclical decline in employment in sectors and positions which are traditionally male-dominated (namely, construction and low-skilled physical work).¹⁷ The recent moderation in this rate of decline over the course of the recovery reflects the improving labour market situation in these male-dominated sectors. At the same time, the female participation rate may have been impacted over the business cycle by the “added worker effect” – the tendency for women to enter the labour market when their male partner loses his job or withdraws from participation. The added worker effect may have become particularly relevant given the strong impact of the crisis on income (and wealth), and thus it is likely to have played a role in the increasing female participation during the crisis in several euro area countries.¹⁸ More recently the participation rate of prime-age women has been increasing at a slower rate during the recovery than before, which again may reflect the fact that, with an increase in male employment, there is now a reduced need for women to enter the labour market solely to maintain family income.

¹⁷ See Black, S., Furman, J., Rackstraw, E. and Rao, N., “The long-term decline in US prime-age male labour force participation”, VOX, CEPR’s Policy Portal, Centre for Economic Policy Research, 2016, available at <http://voxeu.org>, which explains the reasons for declining prime-age male participation for the United States. Similar factors may be present in the euro area. Among the largest euro area countries, over the course of the crisis, the participation rates of prime-age males have declined most in Italy, but some moderation has also been seen in Germany and France (in the latter, even before the crisis).

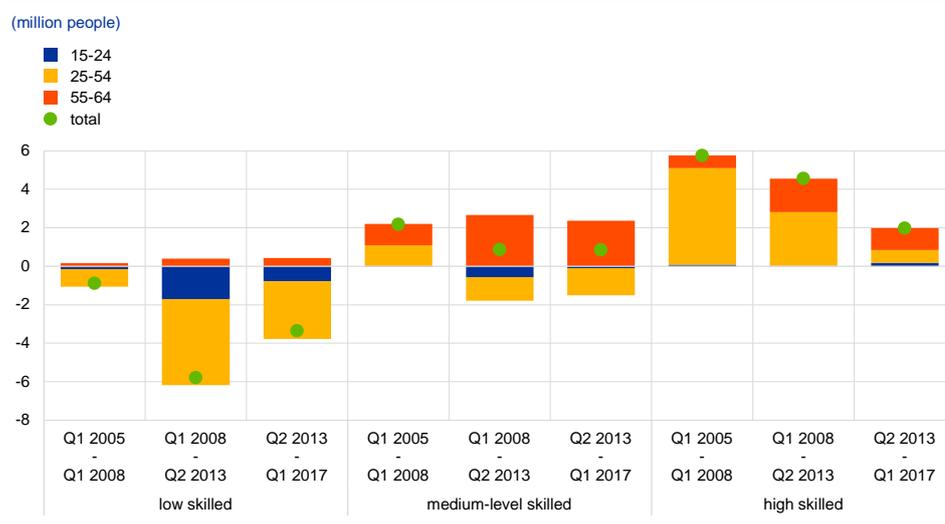
¹⁸ For an examination of the added worker effect in European countries, see Riedl, A. and Schoiswohl, F. “Is there an added worker effect? – European labor supply during the crisis”, *Focus on European Economic Integration*, No Q4/15, Oesterreichische Nationalbank, 2015.

The composition of the labour force by skill is also changing, which is explained by structural forces.

Over the course of the recovery, the increase in labour supply has been dominated by the highly skilled. There is a clear longer-term shift towards a growing number of the highly skilled in the labour supply, while the numbers of those who have only primary education or less have been declining since the second quarter of 2013. The number of those with medium-level skills has been increasing only moderately, as a result of increasing labour supply of the medium-level skilled in the older age categories and declines in the prime-age segment (see Chart D). All these changes are driven primarily by developments in the composition of the population by educational level.

Chart D

Composition of the change of in the euro area labour force before the crisis, during the crisis and over the course of the recovery by age and education level



Source: Labour Force Survey.
Notes: 15-64 age group. Low skilled: less than primary, primary and lower secondary education (levels 0-2), medium: Upper secondary and post-secondary non-tertiary education (levels 3 and 4), high: tertiary. Non-seasonally adjusted data.

Overall, while the pace of growth has moderated, the labour supply has continued to increase over the course of the recovery, largely driven by ongoing structural factors.

The increase in the participation rates of the older generations is the single most important explanatory factor behind the recent increases, but the growing participation of women has also contributed positively. By contrast, the changing age composition of the labour force and the declining participation of prime-age males and the young have both made a negative contribution to the labour supply. Finally, the increase in the labour force has been driven by the highly skilled, while the supply of low-skilled labour has decreased. These developments follow longer-term trends, while the business cycle has had a smaller impact on labour supply. The increasing contribution of older age groups, women and the highly skilled to the labour supply are also reflected in the changing composition of employment. At the same time, there is potential for policies to enhance labour supply, which is also indicated by the heterogeneity in participation rates across the euro area. Such policies could include, among others, increased flexibility in working time arrangements, tax systems that incentivise the participation

of second earners, availability of quality and affordable child care facilities, and training and retraining policies aligned with labour market needs.