Analysis

Will the euro area's robust employment growth continue?

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AUTHORS

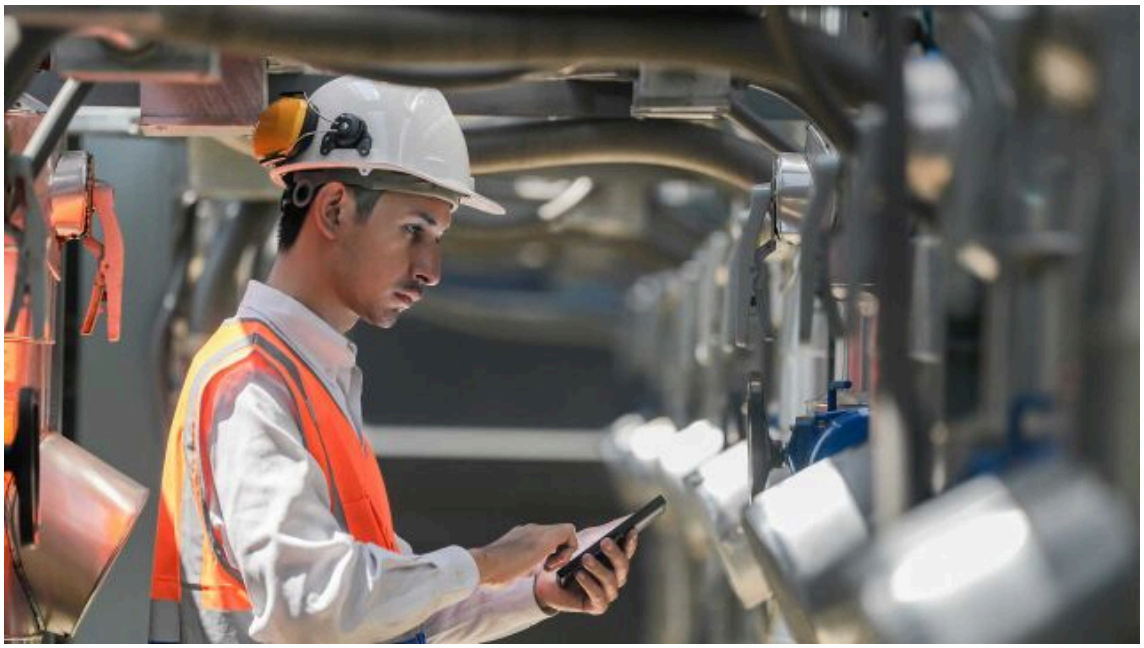


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Employment has grown strongly in the euro area since 2020. The growth in total hours worked has been more modest, because average hours worked has decreased noticeably. Employment growth has been boosted by both demand and supply factors. The unemployment rate has declined partly because of the prevailing economic conditions, but part of the decline is likely to be permanent, or structural. There has been a trend rise in the labour force participation rate of older workers, in particular, and the labour force has grown as a consequence of population growth, especially due to immigration. However, the working-age population in the euro area will start to contract in the near future. Employment growth in the coming years will depend not only on the anticipated sluggish growth in the labour supply, but also on the economic environment and how strongly digitalisation, the green transition and the ageing of the population affect the demand for labour.



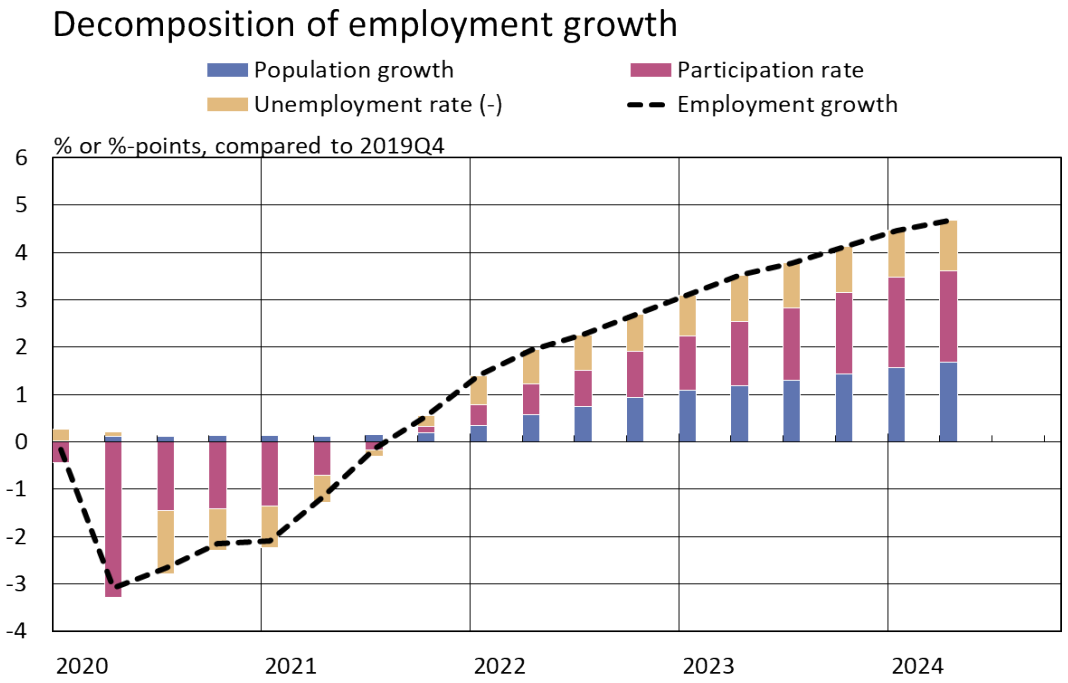
Employment growth in the euro area exceptionally strong in recent years

Employment growth in the euro area has been particularly strong since 2020, measured in terms of both the number of people employed and the employment rate. The decrease in employment at the beginning of the COVID-19 pandemic was quite short-lived, and employment bounced back strongly as the economy recovered from the pandemic-related downturn. Growth in employment has continued in recent years despite the slower economic growth caused by the war in Ukraine and the energy crisis.

The number of people employed in the euro area was nearly 7 million higher in the second quarter of 2024 than at the end of 2019. Employment growth has been attributable to population growth, more active participation in the labour market and a decrease in the unemployment rate (Chart 1). The strongest impact on employment growth has been the continued increase in the labour force participation rate[1] of the working-age population (aged 15 to 74). At the same time, the unemployment rate has declined by around 1 percentage point since the end of 2019, contributing to the increase in the number of people employed.

Participation in the labour market has grown at the same time as the size of the working-age population has also increased. In practice, population growth since 2022 has been a result of increased immigration. In the United States, immigration, which has also increased clearly in the last few years, has been found to have substantially alleviated labour shortages and labour market tightness.[2]

Chart 1.



Numbers based on the Labour Force Survey and on population aged 15–74.
Source: Eurostat.
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Growth in employment remained strong until the first half of 2024, despite the slowing of economic growth in the euro area. However, the solid employment growth has also been accompanied by a reduction in the hours worked per worker. Therefore, although an increasing number of people of working age have found work, those in employment worked fewer hours than before. Thus, measured in hours, the labour input of the economy for the entire euro area has grown by only about 2% since the end of 2019, while the number of people employed has grown by over 4%.

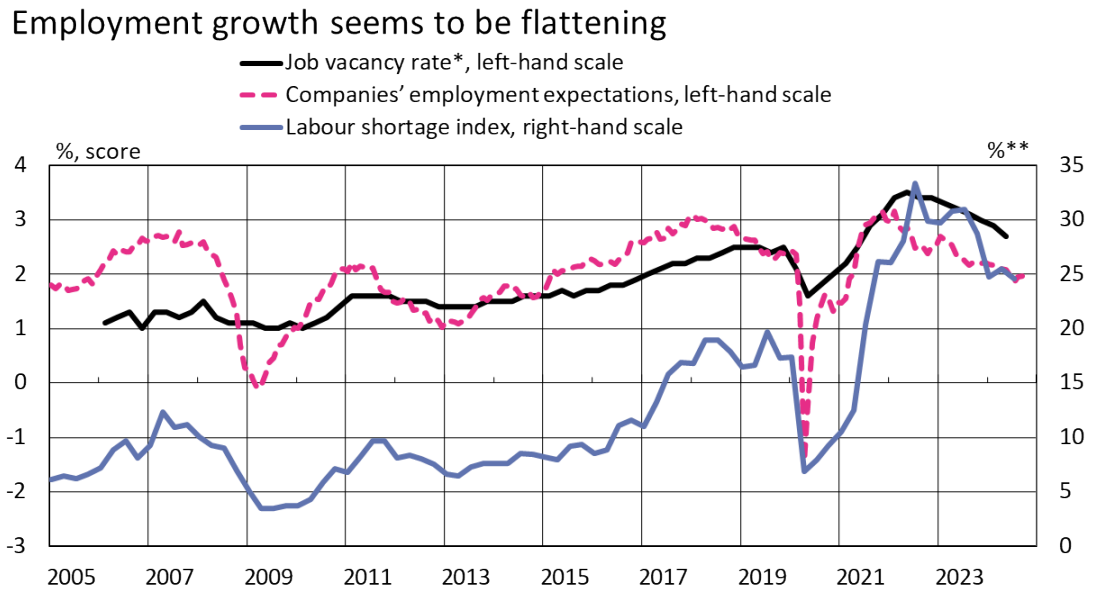
Job vacancies shot up after the acute phase of the pandemic, and companies also reported difficulties in finding skilled labour (Chart 2). The demand for labour was especially strong during 2022, according to various indicators.

Monetary policy tightening, slower economic growth and increased real wages have contributed to what seems to be a flatter path for employment growth. According to the latest leading indicators, companies' employment expectations have returned near to their 2015 level, and the number of job vacancies and the labour shortages experienced by companies have decreased (Chart 2). Nevertheless, the unemployment rate in the euro area has been at a record low, around 6.5%, for a long time already. Thus, the labour market is still tighter than during the years

preceding the pandemic, although the tightness has decreased considerably. From the employer's perspective, this means that for every vacancy the number of unemployed jobseekers is still below average. From the employee's perspective, labour market tightness means there are more vacancies than usual.

This article examines the factors that have maintained labour demand in the euro area and the major trend changes in the labour supply that have taken place. Finally, we attempt to assess whether the changes in the euro area labour market are structural, and what the longer term level of structural unemployment might be.

Chart 2.



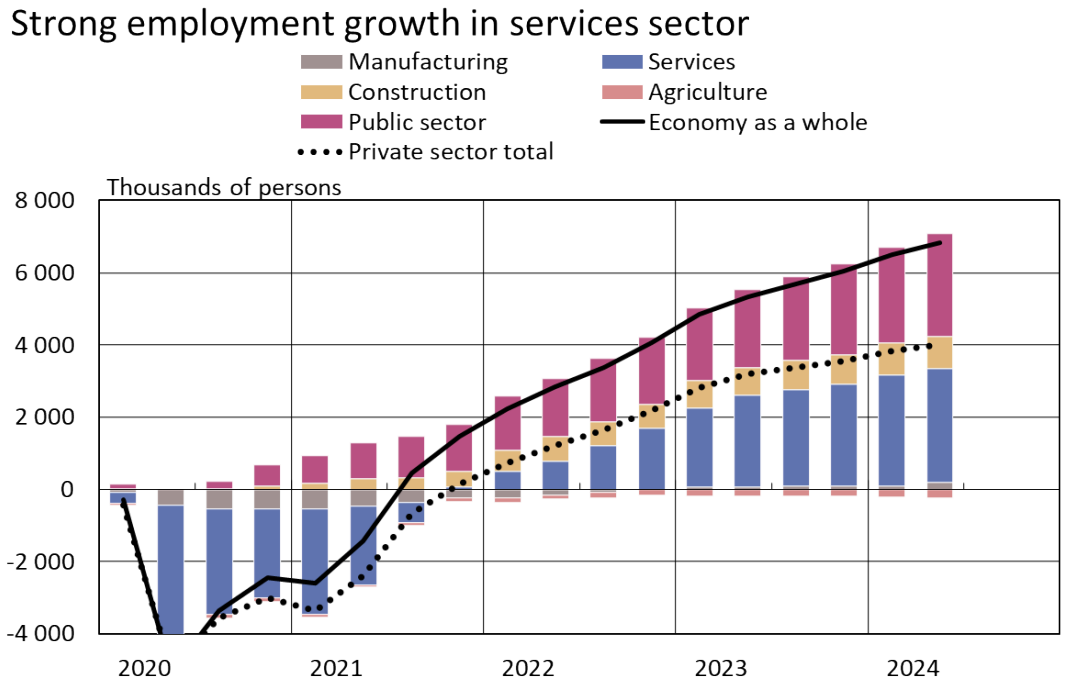
* Private sector job vacancies / all jobs.
** Percentage (industries GDP-weighted) of companies in which shortage of labour force as a factor limiting production.
Sources: Eurostat, European Commission and calculations by the Bank of Finland. © Bank of Finland 1.10.2024

Labour demand has been maintained by strong growth in the services sector

The favourable employment trend is partly accounted for by continued strong labour demand, as shown by the job vacancy and employment expectation indicators referred to above. A closer examination in terms of industrial sectors reveals that labour demand in the euro area has been boosted especially by growth in the services sector (Chart 3). Over 3 million new jobs have been created in the private service sector since 2019. A significant portion of these have been created in the information and communications industry and in professional, scientific and technical

activities. In addition, more than 2.5 million new jobs have been created in the public sector (including healthcare and education). In contrast, in manufacturing and agriculture the euro area employment rate has not grown at all in the past four years, which in turn reflects the generally weak development of industrial output in the euro area.

Chart 3.



Public sector includes healthcare. NB. 2020Q2 cut off.
Source: Eurostat.
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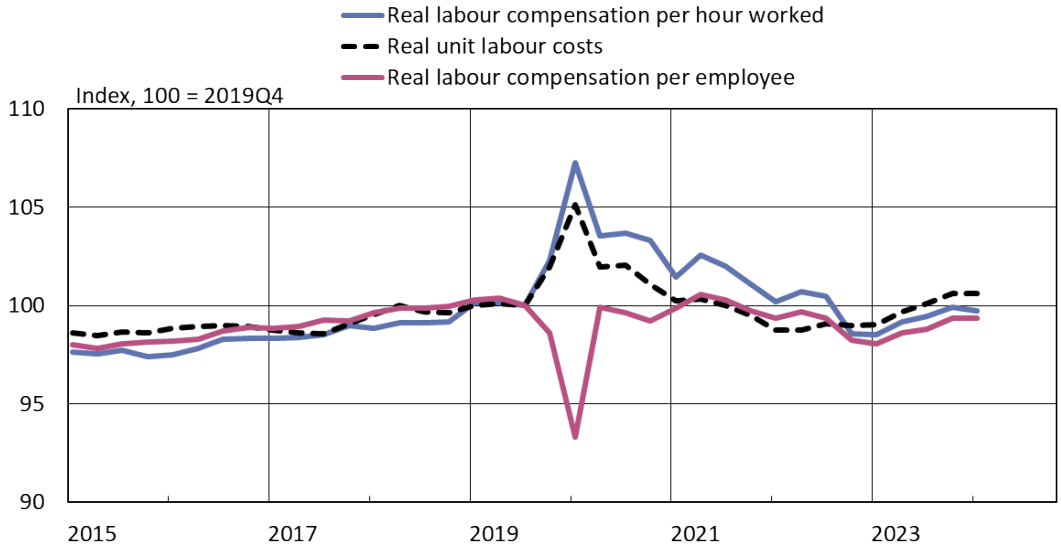
In addition to the cyclical need for labour, businesses in the euro area have sought, in a tight labour market, to hold on to available labour ('labour hoarding'). This can be seen in the European Commission's labour hoarding indicator, for example, which is based on its business surveys.[3] According to the indicator, a higher proportion of companies than before expect to hire employees despite the company's output not being expected to grow. The reduction in working hours could also explain the increased need for hoarding. Companies seem to be making preparations for skilled labour being increasingly difficult to recruit in the near future.

The fact that employee compensation has not kept pace with inflation may be a further factor maintaining labour demand. The real labour cost[4] per employee declined in 2021–2023 and is still near the 2019 level (Chart 4). This is partly explained by the strong decrease in average hours worked in 2020, which was caused by working time arrangements introduced during the pandemic and other support measures. The real labour cost per hour even increased at the

beginning of the pandemic because of the above-mentioned decrease in average hours worked. Although nominal hourly wages (wages + social security contributions per hour worked) have risen fairly rapidly since 2022, the price of domestic value added has also increased quickly. Thus, growth in real unit labour costs has been moderate. These factors have helped support the demand for labour.

Chart 4.

Moderate development of real labour costs contributed to labour demand in 2021–2023



Deflated with GDP price index. Figures for hours worked and number of employed persons apply to employees.
Sources: Eurostat and calculations by the Bank of Finland.
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This year, the rise in prices has levelled off and wages have continued to grow quite strongly, causing the real labour cost to increase moderately as well. With growth in productivity very weak at the same time, the unit labour costs of companies in the euro area have grown and returned near to their pre-2020 level. If wages continue to rise rapidly and productivity growth remains muted, the rise in unit labour costs could threaten the continuation of strong employment growth in the future.

The exceptionally strong demand for labour has now eased in the euro area. Economic growth has remained low, average hours worked have returned to their earlier slightly declining trend, and real unit labour costs have also returned to pre-pandemic levels. In the services sector, too, the strongest phase of employment growth and possible labour hoarding seems to be passing as the economy weakens.

Trend changes in labour supply

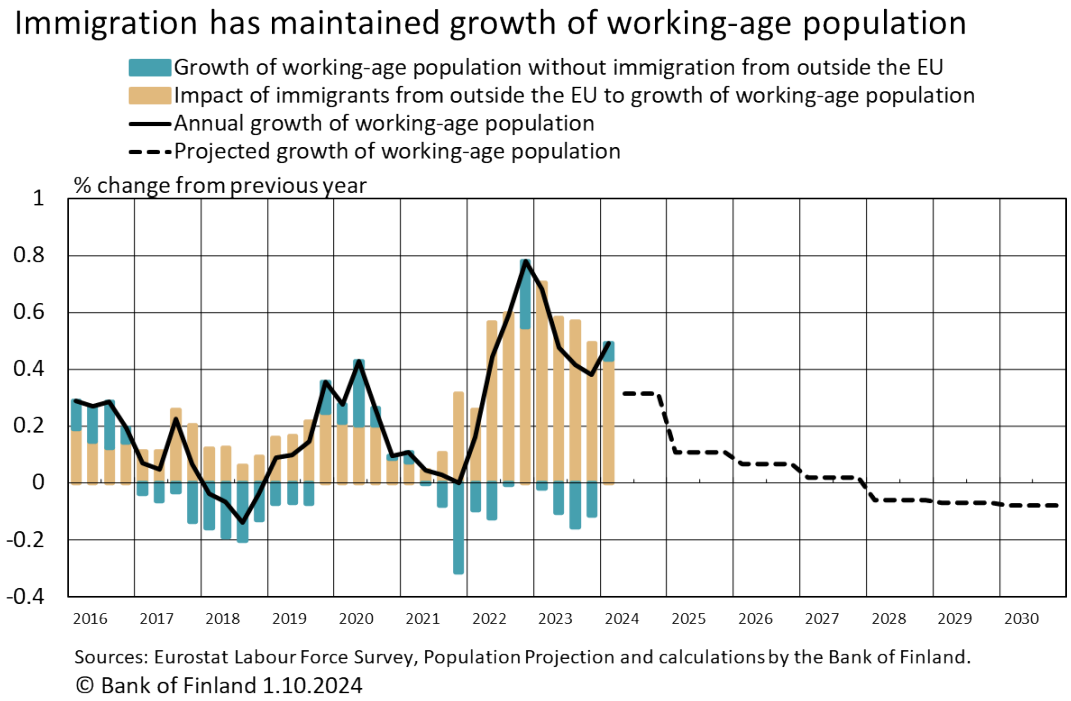
Employment growth in the euro area has been underpinned in recent years not only by the demand for labour but also by favourable changes in labour supply. The working-age population has grown, and the labour force participation rate has increased.

However, the growth of the working-age population has been subdued for a long time: it grew by just 0.2% per year on average in 2012–2023 (Chart 5). The working-age population is growing slowly because of the low birth rate, which has long continued in the euro area, and the resulting relative ageing of the population. Ageing is forecast to accelerate in the coming years, as projected in the Ageing Report published by the European Commission in spring 2024.[5] The size of the working-age population (age 15 to 74) is forecast to start decreasing in the second half of the 2020s. This is expected to continue over the long term, for at least the next 50 years on the basis of population projections.

In recent years, growth in the euro area's working-age population has been maintained by increased immigration from outside the EU, while the number of working-age EU citizens in the euro area has already started to decline (Chart 5).[6] As a result of increased immigration, the working-age population of the euro area has grown since 2022 at an average annual rate of 0.4%, which is considerably faster than before 2020. Excluding the effect of immigration, the working-age population in the euro area would already have contracted.

The labour force of the euro area, i.e. the sum of employed and unemployed people, grew by a total of 2.9% between 2019 and 2023. The number of people who were born outside the EU and are part of the workforce grew by around 19% in the same period. The growth in the number of people coming from third countries accounts for 2.0 percentage points of the 2.9% growth in the workforce. In the euro area, immigration has been especially high in Spain, Portugal and Ireland. The employment rate of third country citizens in the euro area is 60%.[7] The influx of Ukrainians resulting from Russia's unjustified war in Ukraine is one factor that has substantially increased the number of working-age people in the euro area in recent years.[8]

Chart 5.



In the future, population ageing will have an increasing effect on the size of the working-age population. In the population projection published by Eurostat,[9] immigration is expected to increase the euro area's working-age population in the coming years at roughly the same rate as in the last few years, around 0.4% annually (Chart 5). Under this immigration assumption, the working-age population of the euro area would remain fairly stable in the coming years but would nevertheless start to decline around 2027. An increase in the work-based immigration trend will be of key significance to the labour supply in the years ahead. Without net immigration, the working-age population of the euro area would contract in the coming years at an annual rate of about 0.3%–0.4%, according to the population projection.

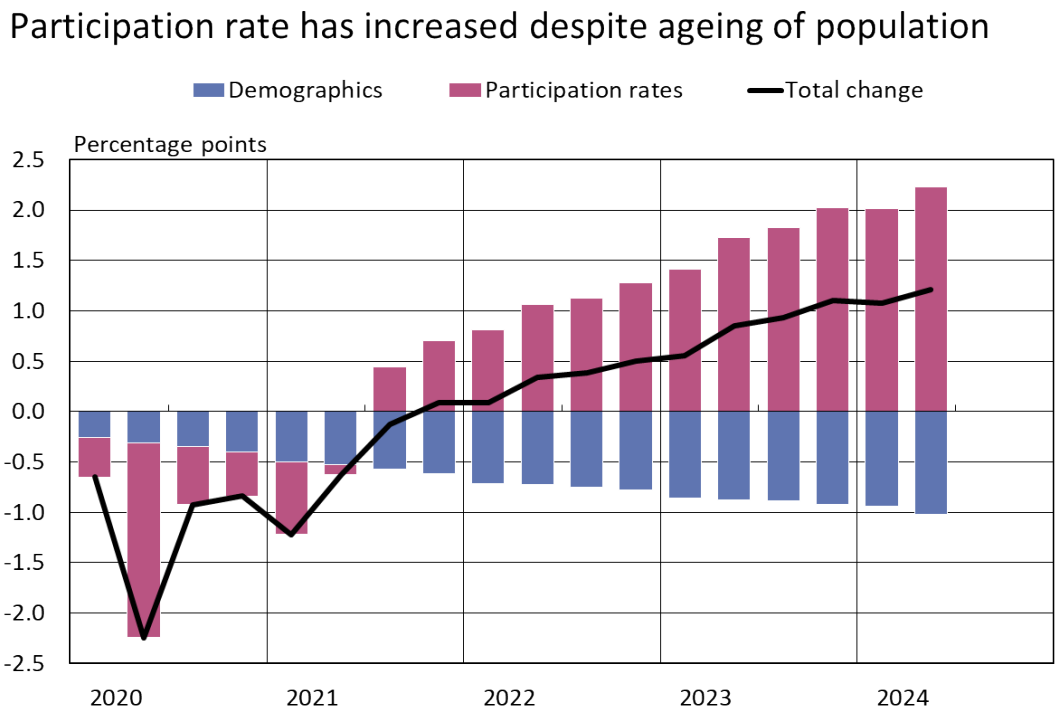
Increase in participation rate among people aged 55 and above dampens impact of ageing on labour supply

The negative impacts on the labour supply from population ageing and the low birth rate are alleviated by the increase in the labour force participation rate and the employment rate: an increasing number of working-age people in the euro area are active in the labour market. In the second quarter of 2024, the participation rate of people aged 15 to 74 was 65.8%, more than a percentage point higher than at the end of 2019.

The significance of ageing can be examined by first standardising the participation rates per age group to the end-2019 level and then examining the extent to which solely a change in the age structure of the population would have affected the average participation rate. In this case, there are two factors at play in the changes in the participation rate: the effects of population ageing, or demographic change (Chart 6, blue bars), and changes in participation rates in various age groups (Chart 6, purple bars).

If the participation rates by age groups had not increased but instead remained at the end-2019 level, the average participation rate of the euro area would be as much as 2 percentage points lower than at present, and would have fallen below 64% (Chart 6). This is because the size of the population has increased in those age groups with a lower-than-average participation rate, such as people aged 55 and above. Therefore, without the increase in participation rates in age groups, the change in the population structure would have reduced the labour supply in the euro area.

Chart 6.



Sources: Eurostat and calculations by the Bank of Finland.
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The increase in the participation rate of people aged 55 and above, in particular, has raised the participation rate for the entire economy. In 2008 before the financial crisis, the participation rate of the 55 to 64 age group was around 47%. By the end of 2019 it had risen to 64.1%, and in the second quarter of 2024, it was already at 68.5%. The participation rate of those aged 55 and above

has increased steadily in all the major euro area countries throughout the last decade, while in the other age groups, participation rates have remained nearly unchanged.

Several reasons have been noted for the increase in the participation rate for older people, including improved level of education and state of health of employees, and the increase in the retirement age carried out in many countries.[10] The rise in the participation rate for women is also expected to contribute in the coming decades to a higher participation rate for those aged 55 and above.[11] The increase in the participation rate can be thought of as permanent, at least for the most part, and may even strengthen in the coming years.

Average hours worked in decline

The decline in hours worked per worker has negatively affected the labour supply especially since the pandemic.[12] The average weekly hours worked in the euro area has already been decreasing for decades, but the decline gathered pace during the COVID-19 pandemic. In the early stages of the pandemic, the number of hours worked collapsed, and has so far only partly recovered. Average weekly hours worked has not returned to the gentle downward trajectory of 2013–2019, but instead, based on longer-term observations, seems to be declining more strongly (Chart 7). Figures from the Labour Force Survey indicate that the average weekly hours worked by employees is now around 50 minutes shorter than at the end of 2019.

The reduction in working hours seems to apply broadly to different age groups, industries and levels of education.[13] The decrease in the working hours of fathers of young children has been especially pronounced. The decline in working hours in the euro area affects full-time employees, in particular, rather than part-time employees.

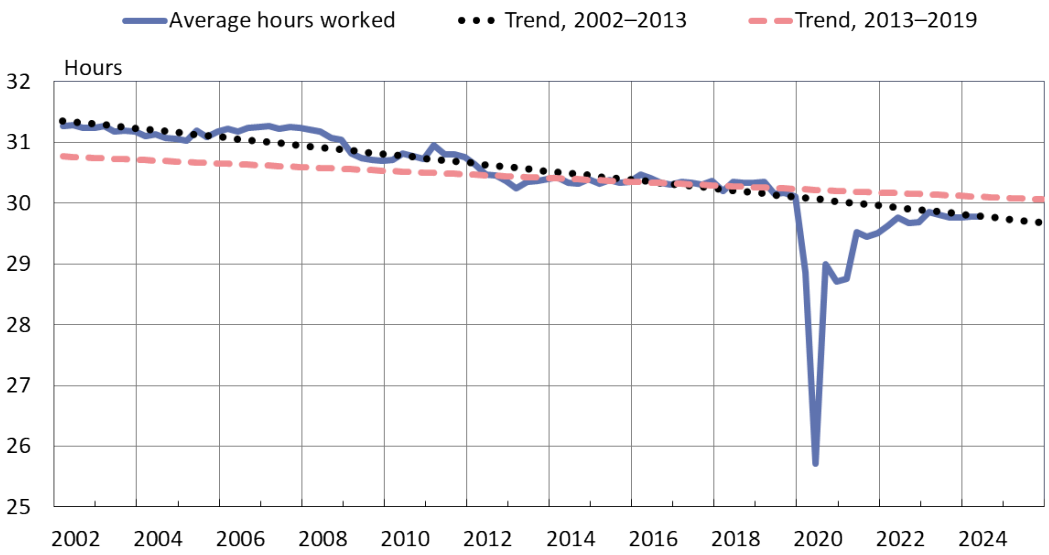
The reduction in working hours seems mainly to represent a supply factor in terms of employees' willingness to work, rather than being a consequence of a reduction in the demand for working hours.[14] In the long term, the decrease in average working hours has to do with the appreciation of free time as living standards improve. Demand factors could also partly explain the reduction in the average number of hours worked.[15]

There are separate reasons for the sudden collapse in average hours worked at the beginning of the pandemic, such as the various working time arrangements, lay-offs and new ways of combining work and leisure brought about by remote working. In any case, the reduction in average hours worked is a question of a longer term change occurring in people's willingness to work shorter working weeks than previously. Although the exceptional crash in average working hours during the pandemic seems to have remained temporary, average working hours will likely continue on a

long-term gradually declining trend. This will slightly impede the growth in total labour input.

Chart 7.

Average number of weekly hours worked declining in euro area



Calculated from figures in the National Accounts.
Source: Eurostat.
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Exceptional tightness in the euro area labour market has eased

The positive employment growth has also been reflected in a lower unemployment rate. Unemployment has declined while at the same time the number of job vacancies has been high (Chart 8). Next, we will examine the extent to which the decline in the unemployment rate may have been cyclical or structural.

The Beveridge curve (Chart 8) describes the dynamics of the labour market through changes in the number of job vacancies and in the unemployment rate. The dotted line indicates the longer term relationship of these variables between 2010 and 2024. Movements taking place along the Beveridge curve illustrate changes in the labour market cycle, while the shifting of the entire curve nearer to or further from its origin is interpreted as a change in labour market matching, which is the structural efficiency to match job vacancies with unemployed people who seek work.[16]

In a tight labour market, in the top left corner of the chart, there are many job vacancies and few unemployed people. In such times, job vacancies are difficult to fill and the unemployment rate is low. Correspondingly, in periods of downturn, the labour market situation involves a move to the

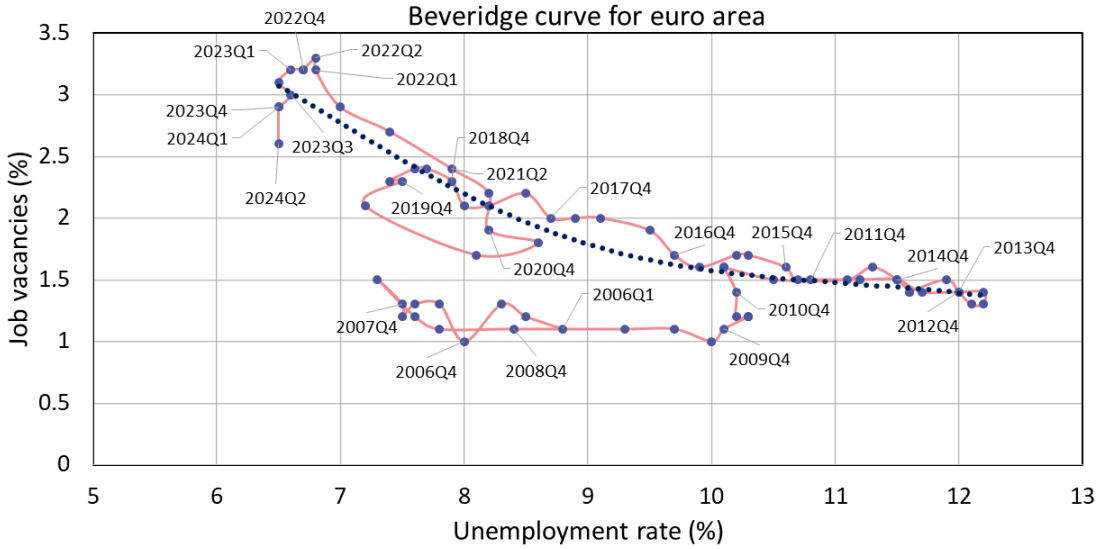
lower right along the curve, when there are relatively few job vacancies and unemployment is high.

By contrast, structural changes in the labour market are seen as shifts of the Beveridge curve. Shifts to the top right indicate a worsening of structural problems in the labour market, which is referred to as a labour market mismatch.[17] However, the distinction between business-cycle shifts and structural shifts in the Beveridge curve is somewhat imprecise because, for example, job vacancies react to business cycles more quickly than the unemployment rate. In fact, business cycles are often depicted as 'counterclockwise loops' in the Beveridge curve.[18]

According to the Beveridge curve, the euro area labour market continues to be quite tight. The unemployment rate and job vacancies are currently somewhat below the longer term Beveridge curve. The shift of the curve downwards and counterclockwise primarily indicates a weaker labour market cycle, and not necessarily a structural improvement in labour market efficiency. The labour shortages reported by companies in recent years do not seem to have been especially attributable to a labour market mismatch. Instead, the match in 2021 seemed to be similar to the one seen in equivalent cyclical conditions in 2018.

Chart 8.

Euro area labour market still quite tight



Dotted line depicts the statistical relationship of 2010–2024 observations.
Sources: Eurostat and calculations by the Bank of Finland.
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A key question regarding the future labour market is whether the current slower economic growth will lead to an increase in unemployment, or will the euro area labour market remain

relatively tight? In the first case, we would move to the lower right along the Beveridge curve as companies reduce the number of workers in a weaker economy. In the second case, we would stay on the left side of the Beveridge curve and the structural economic changes in labour demand and supply would maintain the tightness of the labour market. In this case, wage pressures could also remain stronger than before.

Unemployment rate seems to have fallen further than usual on a sustained basis

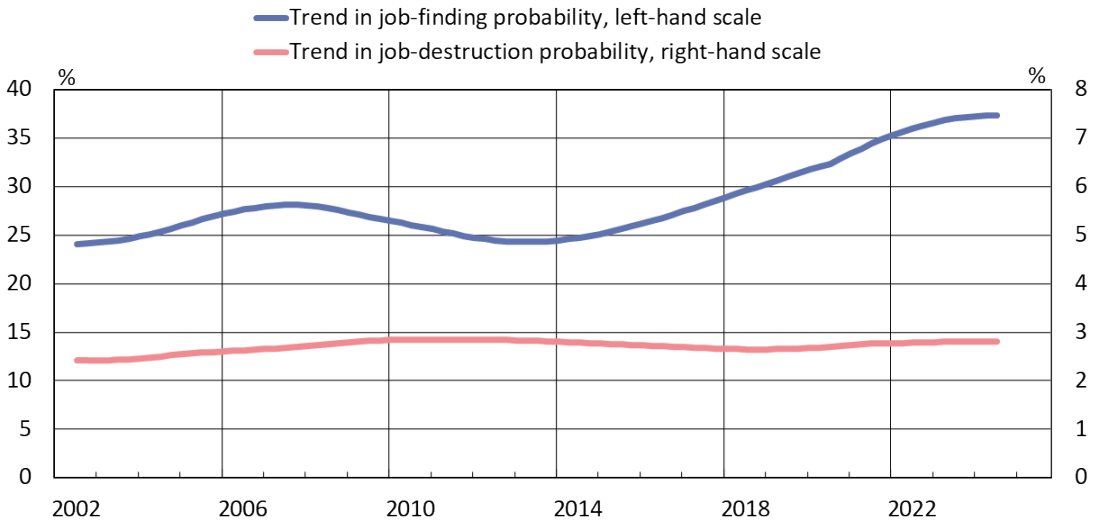
More detailed information on changes in the labour market can be obtained by examining labour market flows in both directions between employment and unemployment.[19] This also allows an assessment of the equilibrium unemployment rate which the current labour market flows would lead to when the effect of the economic cycle is taken into account. The equilibrium unemployment rate will decline if the job-finding probability of an unemployed person increases or the job-destruction probability decreases.

Estimated trends in the job-finding and job-destruction probabilities for the euro area since 2005 are presented in the accompanying chart (Chart 9).[20] These cyclically adjusted trend components reflect changes in variables that are not due to cyclical fluctuations in the economy, but are instead caused by more structural changes affecting labour market flows.

Since 2012, the job-finding probability trend has grown steadily in the euro area, which means it has been easier for unemployed jobseekers to find work than before. In the past five years, this trend has been much more pronounced than before. In addition to this, cyclical conditions have certainly also improved the job-finding probability of unemployed people. The fluctuations in job-destruction probability are more muted, and a trend change similar to that for the job-finding probability is not observed.

Chart 9.

Unemployed people are more likely to find jobs than before



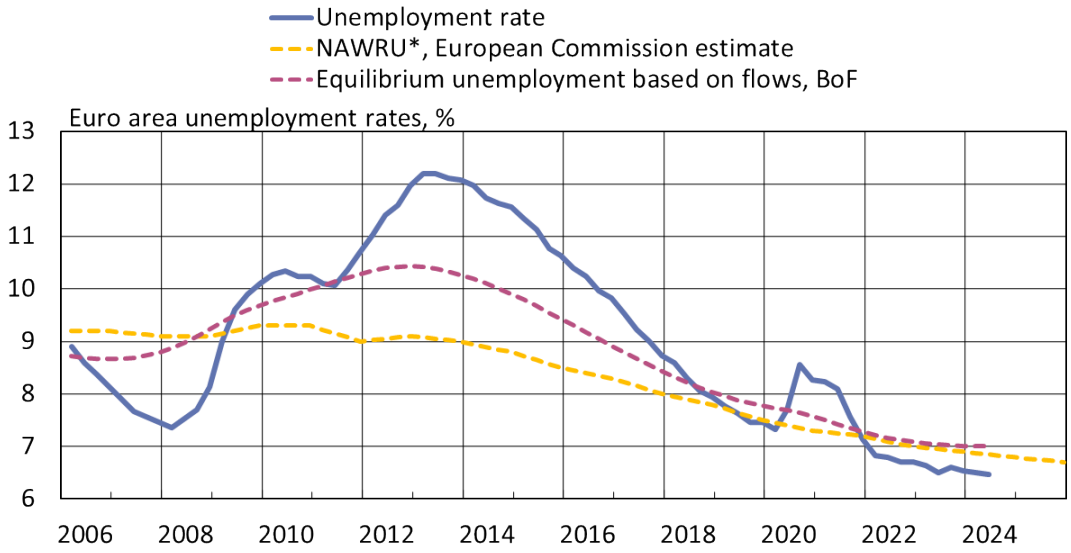
Sources: Eurostat and calculations by the Bank of Finland.
Probabilities derived from Labour Force Survey and unemployment duration.
Probability trends derived with Tasci's (2012) method.
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Due to the improvement in job-finding probability, the structural unemployment rate in the euro area seems to have declined. The equilibrium unemployment rate based on trends in labour market flows has declined steadily in recent years to around 7% (Chart 10). This rate describes the level of structural unemployment which the current labour market flows would lead to when the effect of the business cycle is removed.

Traditionally, the measures of structural unemployment used are the non-accelerating inflation rate of unemployment (NAIRU) and the non-accelerating wage rate of unemployment (NAWRU) in relation to the central bank's inflation target.[21] The difference between the unemployment rate and the equilibrium unemployment rate can be thought of as cyclical, while changes in structural unemployment are longer term. According to the European Commission, the NAWRU for the euro area has fallen below 7%. Thus, the current low unemployment rate of 6.5% is not too far from the long-term equilibrium level. The historically low unemployment rate in the euro area seems to be a long-term phenomenon after all.

Chart 10.

Euro area equilibrium unemployment is estimated to have decreased



* non-accelerating wage rate of unemployment.
Sources: Eurostat, European Commission and calculations by the Bank of Finland.
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The above analysis shows that a significant portion of the decline in euro area unemployment is structural. On the basis of labour market flows, the change is due to a clear improvement in job-finding probability. Therefore, the situation is very different to the one following the global financial crisis, when job-finding probability declined for many years in both the euro area and the United States. Lower structural unemployment has, in fact, reduced the tightness of the labour market and upward pressure on wages.

Summary: fastest stage of employment growth is probably over

Since 2019, euro area employment has grown rapidly in terms of both the number of people employed and the employment rate, but the increase in total hours worked has been considerably more moderate. The favourable trend in employment is based on a number of factors that have been in place for some time. Participation rates have risen, the job-finding probability of unemployed people has increased and structural unemployment has declined. Moreover, strong labour demand has been maintained by robust growth in the services sector, a decrease in average hours worked and possible labour hoarding. Employment growth has been supported especially by work-based immigration, which has increased since the pandemic.

However, the ageing of the euro area population will, in the future, increasingly restrict the supply of labour and the growth in the number of people employed. According to population projections, the working-age population of the euro area will contract in the coming years. Although the participation rates of older age groups can be expected to continue rising, this does not seem sufficient to maintain employment growth. Moreover, the hours worked per worker seems to have persistently fallen below the earlier level, and the long-term declining trend can be expected to continue.

The labour supply outlook is indeed muted. Nevertheless, the growth in employment and total labour input in the coming years will also be affected by how strongly digitalisation, the green transition and population ageing affect the demand for labour.

Notes

1. The labour force participation rate is the ratio between the labour force (i.e. employed and unemployed persons) and the working-age population. ↑
2. See also Duzhak, E.A. (2023), 'The Role of Immigration in U.S. Labor Market Tightness', FRBSF Economic Letter 2023-06, and interview with Jason Furman, Harvard Professor Jason Furman on Immigration and the U.S. Economy, 16 July 2024. ↑
3. European Business Cycle Indicators – 'A new survey-based labour hoarding indicator', European Commission Technical Paper 066, July 2023. See also Botelho, V. (2024) 'Higher profit margins have helped firms hoard labour', ECB Economic Bulletin, 4/2024. ↑
4. Here, the real labour cost is measured using wages, salaries and employers' social security contributions obtained from the National Accounts, divided by either the number of wage earners or the number of working hours of wage earners, and deflated by the GDP deflator. ↑
5. European Commission (2024) 2024 Ageing Report. Economic and Budgetary Projections for the EU Member States (2022-2070), April 2024. The population projections are based on Eurostat calculations. With long-term forecasts, it is worth remembering that population projections are also subject to uncertainty, for example regarding assumptions on birth rates and immigration. ↑
6. Eurostat collects quarterly figures on the number of people employed in the euro area, covering both EU citizens and non-EU citizens. Statistics are not available on euro area citizens only, which is why this section on immigrants refers to immigrants from outside the EU. ↑
7. The employment rate of EU citizens is higher, around 70%. The employment rates of educated (secondary or higher) third country citizens are equivalent to those of EU citizens. ↑
8. See e.g. Pogarska, O., Tucha, O., Spivak, I. and Bondarenko, O. (2023) How Ukrainian migrants affect the economies of European countries, VoxEU column, 7 March 2023; and Botelho, V. (2022)The impact of the influx of Ukrainian refugees on the euro area labour force, ECB Economic Bulletin, 4/2022. ↑
9. European Commission Ageing Report (2024), see footnote 5. ↑

10. Berson, C. and Botelho, V. (2023) Record labour participation: workforce gets older, better educated and more female, ECB Blog; and Bodnár, K. and Nerlich, C. (2020) 'Drivers of rising labour force participation – the role of pension reforms', ECB Economic Bulletin, 5/2020. ↑
11. Obstbaum, M., Oinonen, S., Pönkä, H., Vanhala, J. and Vilmi, L. (2023), 'Transmission of recent shocks in a labour-DSGE model with wage rigidity', BoF Economics Review, 1/2023. ↑
12. Astinova, D., Duval, R.A., Hansen, N-J.H., Park, B., Shibata, I. and Toscani, F.G. (2024) 'Dissecting the Decline in Average Hours Worked in Europe', IMF Working Paper, No. 2024/002. ↑
13. Astinova et al. (2024), see footnote 13. ↑
14. The hours worked per worker may have declined due to labour underutilisation, for example. In this case, the labour input is adjusted by reducing working hours. Labour hoarding could be connected with low working hours, see VoxEU article by Gayer et al. The creation of jobs outside manufacturing has also contributed to the decline in average hours worked, see e.g. ECB blog post (Arcen et al.). ↑
15. See also Consolo, A. and Dias da Silva, A. (2019) 'The euro area labour market through the lens of the Beveridge curve', ECB Economic Bulletin, 4/2019. ↑
16. In the United States, labour market matching has been observed to have weakened since the financial crisis. See Ahn, H.J. and Crane, L.D. (2020) 'Dynamic Beveridge Accounting', Finance and Economics Discussion Series, No. 2020-027; and Furlanetto, F. and Groshenny, N. (2016) 'Mismatch Shocks and Unemployment During the Great Recession', Journal of Applied Econometrics, Vol. 31(7). The Beveridge curve in the United States is reported to have temporarily shifted outwards after the pandemic, and to have returned to its previous level only recently. It has been proposed that the reason for the upward shift in the Beveridge curve in the US was the reduction in the labour supply and changes in labour demand in various sectors (see Kindberg-Hanlon, G. and Girard, M. (2024) 'What Caused the Beveridge Curve to Shift Higher in the United States During the Pandemic?', IMF Working Paper, No. 2024/008). ↑
17. Blanchard, O., Diamond, P., Hall, R., Yellen, J. (1989) 'The Beveridge Curve', Brookings Papers on Economic Activity, Vol. 1989(1). ↑
18. A corresponding analysis for the Finnish economy has been carried out by Juvonen, P. and Obstbaum, M. (2017), 'A new method to measure structural unemployment via labour market flows', Bank of Finland Bulletin. ↑
19. Statistics on the duration of unemployment, especially the number of people unemployed for a short time, are utilised in the calculation. For more details, see Shimer, R. (2011) 'Reassessing the ins and outs of unemployment', Review of Economic Dynamics, Vol. 2012(15); and Elsby, M., Hobijn, B. and Şahin, A. (2013) 'Unemployment dynamics in the OECD', Review of Economics and Statistics, Vol. 95(2). The cyclically adjusted component is calculated using Tasci's (2012) method; Tasci, M. (2012) 'The ins and outs of unemployment in the long run: unemployment flows and the natural rate', Cleveland Fed Working Paper, pp. 12–24. ↑
20. NAIRU refers to an unemployment rate that is harmonious with a stable inflation rate. ↑

NAWRU refers to the lowest unemployment rate that can be achieved in conditions of stabilised wage growth.

Keywords

ageing, employment, euro area, immigration