

ARTICLE – Strong labour market in Sweden and abroad

Unemployment has decreased and the employment rate has increased both in Sweden and abroad following the pandemic. This development has been sustained, even though the high inflation has led to monetary policy tightening and despite restrained GDP growth. The strength of the labour market is partly due to households' pent-up interest in consuming services after the pandemic. Another reason is that companies have chosen to continue to recruit even though demand has slowed down, presumably because they have previously had large labour shortages. In addition, real wages have fallen and this too may have contributed to higher demand for labour.

Since mid-2021, employment in Sweden has developed approximately in line with the historical correlation with GDP growth. However, employment growth in the first quarter of this year was stronger than this and several labour market indicators suggest that employment will continue to increase over the next few months. The recently concluded wage agreements on the Swedish labour market indicate that, although wage increases over the next two years will in fact be higher than normal, they will still be lower than those abroad. Sweden should therefore have better preconditions than other countries for a strong labour market, with high employment, while simultaneously being able to bring inflation down. Nevertheless, our assessment is that employment will fall slightly when demand cools off.

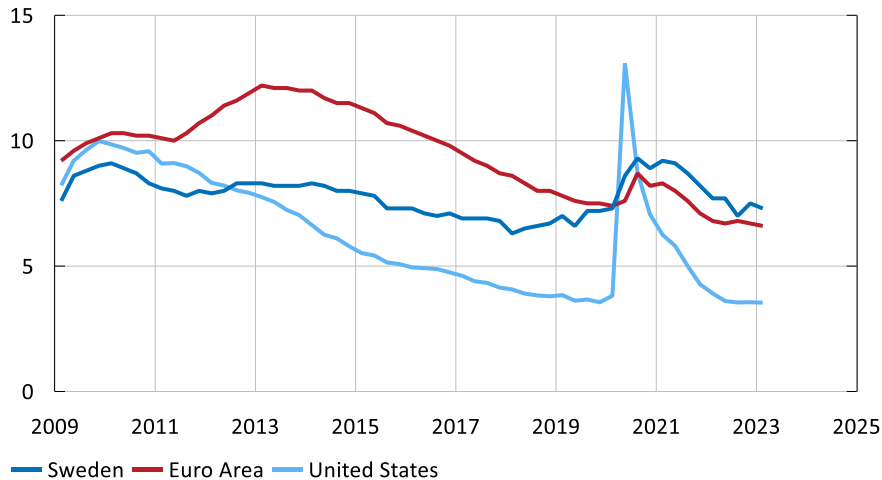
The labour markets have recovered well after the pandemic both in Sweden and abroad. Unemployment has fallen and the employment rate has increased (see figure 48 and figure 49). Last year, inflation rose strongly and central banks around the world started tightening monetary policy. Consumer confidence fell drastically, companies' confidence indicators dropped and the GDP growth slowed down. Nevertheless, however, the labour markets in the euro area, United States and Sweden have continued to develop strongly. Development in Sweden resembles that abroad, despite large differences in the way the labour market functions and how expansionary fiscal policy has been.⁴⁹ In the euro area and Sweden, the employment rate is higher than before the pandemic, while it has not fully recovered in the United States. The recovery of GDP has been stronger in Sweden than in the United States

⁴⁹ For example, there are major differences between countries in how wages are set and how flexible the labour markets are in terms of job security, unemployment benefits and the rules and costs for termination of employment.

and euro area, which could explain why the Swedish employment trend compares favourably in an international comparison.

Figure 48. Unemployment rate in Sweden, the euro area and the United States

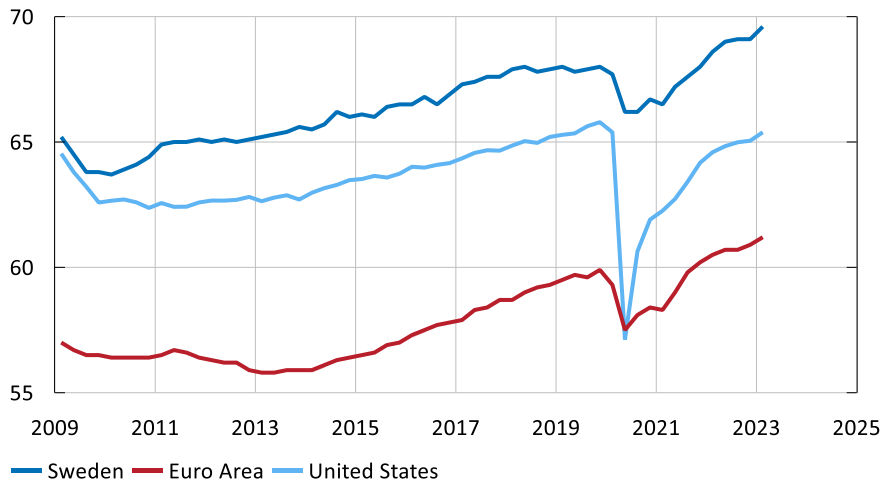
Per cent of labour force, 15–74 years



Sources: Eurostat, the OECD and Statistics Sweden.

Figure 49. Employment rate in Sweden, the euro area and the United States

Per cent of the population, 15–74 years



Sources: Eurostat, the OECD and Statistics Sweden.

The pandemic is an important explanation for this development

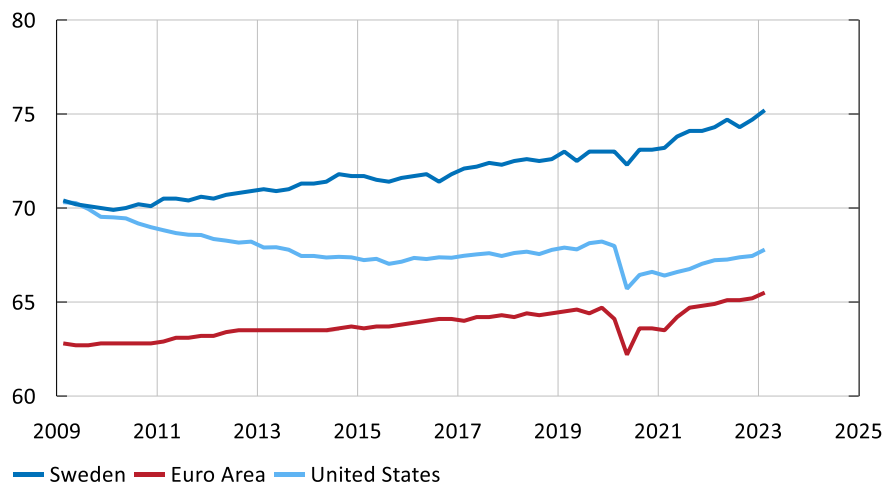
Understanding why the labour market is presently so strong requires an examination of how the pandemic affected the situation. The pandemic changed the labour supply in the euro area, United States and Sweden, but in different ways. In many countries, the supply of labour has decreased. The factors often highlighted as causes of this are that immigration was lower during the pandemic and that many people changed their

preferences concerning working life, such as how much they want to work. Also, in some countries, many older people have retired and left the labour market permanently (primarily in the United States).

In Sweden, the labour force participation rate is very high and it did not decrease appreciably during the pandemic either (see figure 50). This is also the reason that we continue to have relatively high unemployment in Sweden.⁵⁰ But the pandemic affected the supply of labour here too. Many chose to retrain or change sector. The labour supply therefore decreased in certain service sectors, even if the total labour force participation rate did not decline. Consequently, many companies have found it difficult to recruit staff with the desired levels of competence after the pandemic.

Figure 50. Labour force participation rate in Sweden, the euro area and the United States

Per cent of the population, 15–74 years



Sources: Eurostat, the OECD and Statistics Sweden.

There are also factors that have affected demand for labour. During the pandemic, fiscal policy was strongly expansionary in many countries and both households and companies received support. Government support for short-time work in Sweden and many other European countries is one example of crisis measures that contributed to many employees being able to keep their jobs and to unemployment increasing less than it would have without this support. It enabled the rapid recovery of output after the pandemic. Due to short-time work, household incomes in Sweden were also affected to a lesser degree than they would have been had more people become unemployed.⁵¹ In the United States, households were instead given large government

⁵⁰ The numbers participating in the labour force differ greatly from country to country and is partly influenced by the structure of the population and various institutional factors, such as the design of the education, social insurance, pension and tax systems, as well as various traditions, laws and rules that regulate the labour market. A relatively large share of unemployment in Sweden is due to high unemployment among young persons in upper secondary and higher education. The high youth unemployment in Sweden compared to other countries can largely be explained by differences in educational systems. If unemployment in the core labour force (25–54 years) is compared, Swedish unemployment is closer to the levels seen in other countries.

⁵¹ In contrast, in many European countries, employees covered by short-time working receive unemployment benefits.

grants during the pandemic. These different kinds of support meant that households in Sweden and abroad could save money, particularly because they could not travel and consume as normal.

Demand for labour increased rapidly after the pandemic when it became possible to return to a life without restrictions. This resulted in resource utilisation rising and many companies reported labour shortages. Many people wanted to travel, go to restaurants and do other things they were unable to do during the pandemic, which meant that demand for staff increased rapidly in certain sectors.

Companies have retained more staff than they believe demand requires in the short term

High savings during the pandemic have made it possible for households to continue consuming services, even though living costs have now increased heavily. The high demand for services seems to be persisting, even if Sweden's total household consumption has decreased in recent quarters. In addition, the weak krona has contributed to higher exports and thereby also to higher demand for labour in the export industry and in the service sectors that are closely linked to the exporting manufacturing industry.⁵² The green transition in the manufacturing industry has made a positive contribution to labour demand and is expected to do so for a long time to come.

At least in Sweden, there are signs that companies that have long had labour shortages and recruitment difficulties have been unwilling to reduce their workforces, even when they expect a deterioration in demand. The National Institute of Economic Research's new indicator of labour hoarding, which measures the proportion of companies choosing to have more staff than required by output over the short term, has been at a relatively high level and remains higher than normal (see figure 51). The recent fall in the indicator seems to be due to companies taking a slightly brighter view of demand in the period ahead. Companies' recruitment plans have also been surprisingly positive in recent months. This may indicate that companies do not expect the downturn in demand to be particularly deep or persistent.

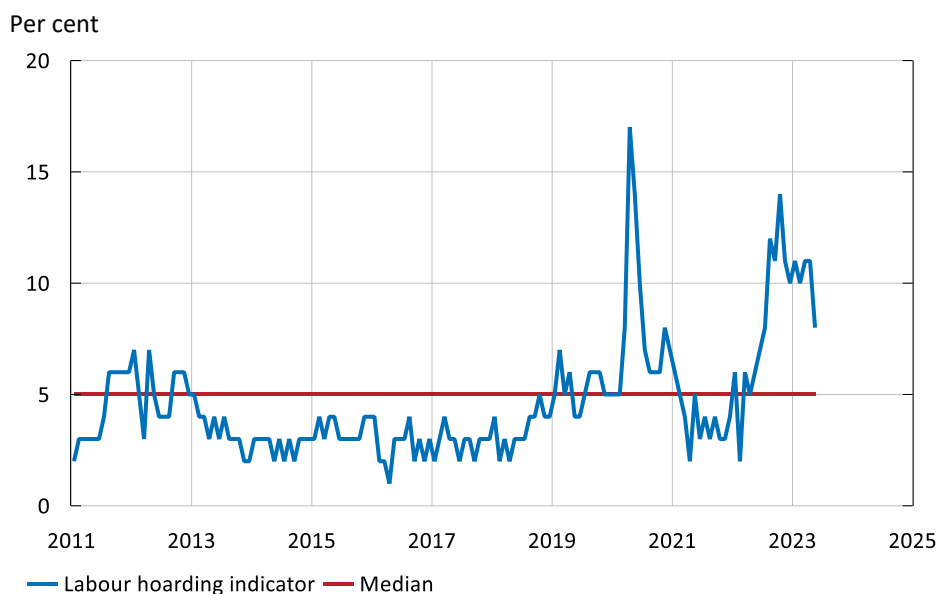
One further factor that may have contributed to increasing labour demand in Sweden is the heavy fall in real wages due to the high inflation. Labour has become less costly relative to capital, as well as relative to labour costs in other countries, where nominal wage increases have been higher. The Industrial Agreement, which applies from the second quarter of the year, provides wage increases totalling 7.4 per cent over two years, divided into 4.1 per cent the first year and 3.3 per cent the second year. The wage agreements concluded since then seem to comply with the manufacturing sector's benchmark. According to the National Mediation Office, agreed wages will increase by a nominal 3.3 per cent in 2023 and 3.5 per cent in 2024.⁵³

⁵² See "Bargain hunting intensifies", *Riksbank's Business Survey*, May 2023, Sveriges Riksbank.

⁵³ Wage increases for the calendar years 2023 and 2024 are affected by the new agreements applying from the second quarter and onwards this year.

Aggregated wage growth is also being affected by changes in the composition of employees and by wage increases over and above agreements. The Riksbank deems that overall wages will rise at a pace that – given economic developments otherwise – are compatible with inflation returning to target. The forecast implies that real wages will continue to fall this year and will not increase until next year, which could counteract falling labour demand to an extent. For good real wage growth in the long run, it is important that inflation subsides to stabilise around the target again. However, productivity growth is also an important element for real wages to rise over the long term. Higher productivity growth will allow for higher wage increases without them pushing up inflation.

Figure 51. Labour hoarding in the business sector as a whole



Note. The labour hoarding indicator is calculated as the proportion of companies expecting an increased or unchanged number of employees at the same time as they expect demand to deteriorate.

Source: National Institute of Economic Research.

Employment growth in Sweden after the pandemic has been approximately in line with historical GDP correlations

One way of investigating whether the development of the labour market has been stronger than expected is to compare actual employment growth with how it would have been if it had followed GDP growth according to historical patterns. This is done by using Okun's law to estimate the correlation between percentage changes in

employment and real GDP growth for the period 1995–2019.⁵⁴ After this, actual GDP outcomes are used to make a projection of the number of persons employed until the end of the first quarter of 2023. The solid lines in figure 52 show outcome for the number of persons employed in the euro area, United States and Sweden, while the light blue fields show what employment would have been if developments had followed historical correlations with GDP growth, estimated using different models.⁵⁵

In Sweden, employment developed less favourably than indicated by historical correlations until the end of the second quarter of 2021 (see figure 52). One explanation for this is that the pandemic was quite a different crisis that entailed large changes for both the economy and society as a whole. Among other things, the pandemic entailed a strong decrease in the consumption of many employment-intensive services, such as hotels, restaurants and cultural and leisure activities. On the other hand, industrial production did not fall as sharply. The manufacturing sector has considerable significance for Sweden's GDP growth, which largely explains why GDP growth was better than employment growth until mid-2021.

The recovery in 2021 also deviated slightly from normal patterns. In an economic upswing, hours worked by existing employees are usually increased before any new recruitment takes place. However, after the pandemic, companies instead increased the number of employees more than the number of hours worked. From the second half of 2021 until the end of 2022, the number of persons employed in Sweden increased approximately in line with the historical correlation with GDP growth and, at the start of 2023, employment growth was even somewhat stronger.^{56, 57}

Employment had fully recovered by the fourth quarter of 2021. Due to short-time working, the number of hours worked fell much more than employment during the pandemic and did not recover until the second quarter of 2022 (see figure 53).

⁵⁴ The correlation between changes in unemployment and real GDP growth is often estimated, which is also the case in the original study, A. M. Okun (1962), "Potential GNP: Its Measurement and Significance" in *Proceedings of the Business and Economics Statistics Section*. Alexandria, VA: American Statistical Association. However, employment is a better measure of economic activity and a fairer measure from an international comparison, as there are such large structural and cyclical differences in the labour force participation rate from country to country.

⁵⁵ The results differ slightly, depending on the model specification. The figure shows the lowest and highest projection for each quarter from the different model estimates. Two models are used for the euro area and United States, one based on annual percentage change and one based on quarterly percentage change. The models also include lagged variables to allow for a certain time lag in the correlation between GDP and employment. In addition, a specification based on an assessed GDP and employment gap is included for Sweden. The models for Sweden also include what is known as a BVAR model with 11 variables that are conditional on outcomes for all variables except employment.

⁵⁶ In conjunction with the publication of GDP for the first quarter of 2023, historical GDP outcomes were revised upwards, particularly for 2021. Before this revision, estimates showed that employment had developed more strongly than GDP. The upward revision of GDP growth means that employment has now developed more in line with GDP, except for in the first quarter of 2023.

⁵⁷ It may be surprising to find that employment growth according to Okun estimates has developed approximately in line with GDP at the same time as the labour-hoarding indicator has been on a high level. However, there are several conceivable explanations for the inconsistency between the Okun estimates and the labour-hoarding indicator. For example, companies may have been surprised by the strength of demand. In addition, GDP consists of more components than just companies' output, for example public consumption and public investment.

Figure 52 shows that, following the pandemic, employment growth in the euro area has been stronger than the historical correlation with GDP. On the other hand, hours worked have developed more weakly than employment in the euro area (see figure 53). For the United States, estimates show that employment development has been significantly weaker than historical correlations would suggest, which is partly due to demographic changes such as relatively large groups retiring and reduced immigration. The development of hours worked has also been relatively weak in the United States. Real wages have developed more strongly abroad than in Sweden, which could be one possible explanation for employment being higher in Sweden than abroad. Hours worked have also developed strongly in Sweden since the second half of 2022.

Figure 52. Outcome and projection of number of persons employed in Sweden, the euro area and United States

Index, quarter 4 2019 = 100

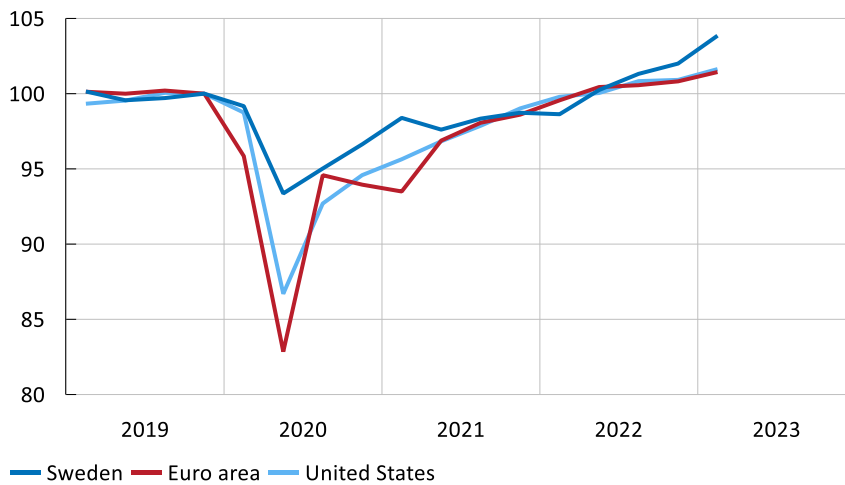


Note. The field shows the lowest and highest estimated value from various models. For Sweden, three Okun estimates and a BVAR estimate are included. For the euro area and United States, two Okun estimates are included.

Sources: Eurostat, the OECD, Statistics Sweden and the Riksbank.

Figure 53. Number of hours worked

Index, quarter 4 2019 = 100



Sources: Eurostat, Statistics Sweden and US Bureau of Labor Statistics.

Uncertain how much the labour market will cool down in the period ahead

The rapid increase in demand that followed the pandemic led to many companies experiencing labour shortages, and they now seem to be hoarding labour. In addition, demand for labour may have been positively affected by heavily reduced real wages. These factors explain, at least partly, why the labour market has resisted tightening so well. According to the Economic Tendency Survey, recruitment plans remain somewhat positive and both households and companies have recently become a little less pessimistic about the future. The recently concluded wage agreements on the Swedish labour market indicate that, although wage increases over the next two years will in fact be higher than normal, they will still be lower than those abroad. The conditions for Sweden to have a strong labour market in terms of employment, while simultaneously being able to bring inflation down, should therefore be better than for other countries.

Nevertheless, the Riksbank's assessment is that employment will fall slightly as demand slows down in the period ahead. The cooling of the labour market and falling resource utilisation should lead to lower inflationary pressures. There is significant uncertainty in this forecast, however. Major shocks to the economy, such as the pandemic, change the way the labour market functions, temporarily or permanently, and mean that developments do not necessarily follow historical correlations. This, in turn, means that forecasts based on such correlations are becoming less reliable. In addition, analyses in real time are complicated by GDP statistics being revised retrospectively and that these revisions are sometimes relatively extensive.