# ARTICLE – Labour shortages and higher wage pressures abroad

In many countries the spare capacity in the labour market has declined rapidly over the past year. Demand for labour has increased, which has entailed higher employment rates and lower unemployment. An increasing share of companies are reporting labour shortages and the number of job openings is at present high in relation to the number of unemployed.

Wages often rise faster when there is competition for labour. In addition, employees can require compensation for today's unusually high inflation. Wages are already rising rapidly in both the United States and the United Kingdom, and there are also signs of somewhat higher wage increases going forward in the euro area, including in Germany. Wage formation abroad affects inflation abroad and Swedish inflation via imported goods and services. For the parties in the manufacturing industry, which set the benchmark for wage increases in the Swedish labour market, wage increases in competing countries are important prior to the autumn's wage bargaining rounds. Wage formation is important for how inflation develops and thereby for monetary policy. Going forward, wage growth in Sweden is expected to be a good 3 per cent a year. This is somewhat higher than that in recent years, but is compatible with close-to-target inflation in the long run.

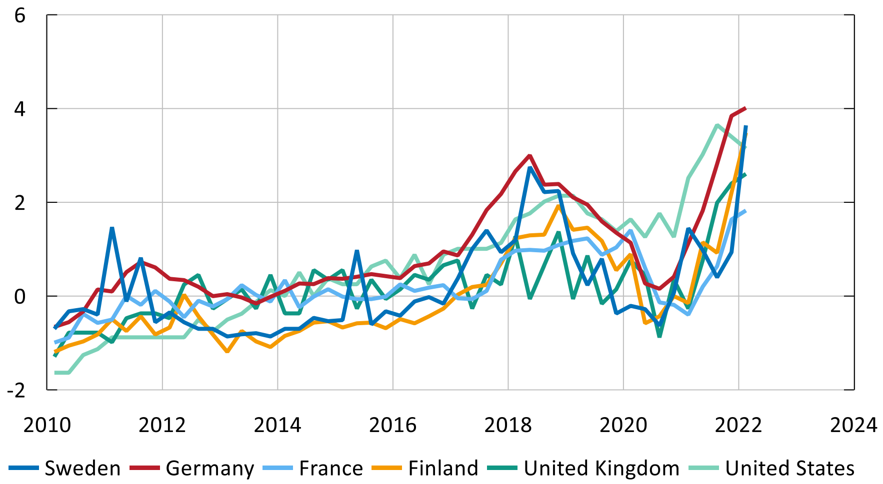
## Little spare capacity in the labour market

Over the past year, spare capacity in the labour market has declined rapidly in many countries. The demand for labour has risen, and an increasing number of companies are reporting that it is difficult to get hold of labour (see Figure 53). In Germany, labour shortages have increased very rapidly and never been as high as they are now, and in the United States, around half of the companies state that they have not succeeded in filling their vacancies. The labour shortages are relatively widespread and are not concentrated to certain industries. In some countries, such as the United States and United Kingdom, it has been particularly difficult to get hold of staff for low-paid and contact-intensive jobs, for instance in the retail, hotel and restaurant industries.[32] In addition, in the United Kingdom, the shortages are reinforced by Brexit having made the large European labour pool less accessible.[33]

When demand for labour is high and there are plenty of job openings, employees' negotiating strength increases and it is easier to advance to better jobs. It then becomes more difficult to recruit to the least attractive jobs. Moreover, there can be lingering effects from the coronavirus crisis, that have aggravated labour shortages in some industries, for instance due to many people changing industry and some groups not having returned to the labour market yet.

**Figure 53. Share of companies reporting labour shortage**

Standardised data, mean = 0, standard deviation = 1




Note. United States: percentage of small companies (private sector) stating that they have not succeeded in filling vacancies. United Kingdom: percentage of companies in the manufacturing industry stating shortage of skilled labour as an obstacle to production. EU countries: percentage of companies in the manufacturing industry stating shortage of labour as limiting production. For Sweden, the time series break in 2021 Q4 may entail an overestimate.

Sources: Confederation of British Industry, European Commission, National Institute of Economic Research and National Federation of Independent Business.

A common measure of labour market tightness is the number of job openings in relation to the number of unemployed. The changes should be interpreted with some caution over the longer run, as digitalisation has made it easier and cheaper to advertise.[34] However, over the past year the number of job openings has increased substantially at the same time as the number of unemployed has declined and the ratio is now at a very high level in many countries (see Figure 54). An additional sign that there is little spare capacity in the labour market is that the core employment rate (25–54 years) has risen and, in most countries, is now as high as, or higher than, before the pandemic. Employment has essentially recovered in the industries that were

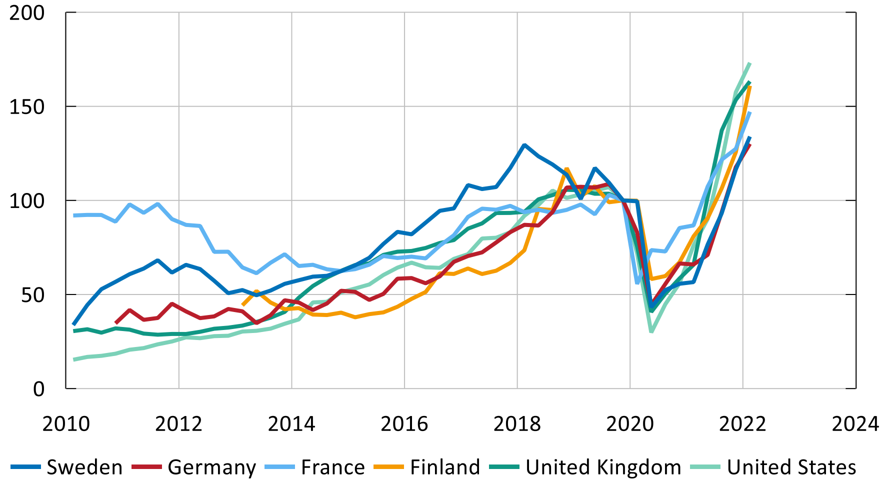
[32] See, for example, R. Duval, Y. Ji, L. Li, M. Oikonomou, C. Pizzinelli, I. Shibata, A. Sozzi and M. Tavares (2022), "Labor Market Tightness in Advanced Economies", IMF Staff discussion note 2022/001.

[33] See, for example, A. S. Pose and L. Rengifo-Keller (2022), "Brexit is driving inflation higher in the UK than its European peer after identical supply shocks", PIIE.

[34] The fact that it has become easier and cheaper to advertise job openings contributes to an increasing trend in the vacancy rates, which makes it more difficult to make comparisons far back in time. Changes in the unemployment statistics may also have affected the measure.

hit hard during the coronavirus crisis, such as hotels, restaurants and other contact-intensive service industries. But, employment has risen and the number of job openings has increased in other industries too, such as the manufacturing industry. Also, the core labour force participation rate has recovered in most countries. However, looking at the total labour force, the participation rate is still lower in some countries and this contributes to the labour market tightness. This applies, for instance, to the United Kingdom, United States and Germany.

**Figure 54. Number of job openings in relation to number of job seekers**
Index, 2019 Q4 = 100




Sources: Eurostat, Statistics Sweden, U.K. Office for National Statistics and U.S. Bureau of Labor Statistics.

## Both the labour market situation and institutional factors affect how wages develop

In a labour market where there is little spare capacity, wages tend to rise faster, as the competition for labour is great.[35] Mobility in the labour market may also be important for the development of wages as new employees' salaries are often affected the most by the business cycle.[36] Both in the United States and the United Kingdom, the number of people leaving their jobs voluntarily has risen to historically high levels, which indicates considerable mobility in the labour market. Wages also rise much more among those who change jobs.[37] At the aggregate level, it does not appear that those who changed employer in Sweden at the start of 2022 are receiving much

[35] In aggregate wage statistics this is not always clear, as the composition of the jobs and the employed varies over the business cycle and resource utilisation differs between different industries and regions.

[36] See, for example, M. Carlsson, I. Häkkinen Skans and O. Nordström Skans (2019), "Wage Flexibility in a Unionized Economy with Stable Wage Dispersion", *IZA DP* No 12093, and A. Carneiro, P. Guimarães and P. Portugal (2012), "Real Wages and the Business Cycle: Accounting for Worker, Firm, and Job Title Heterogeneity", *American Economic Journal: Macroeconomics* 4 (2).

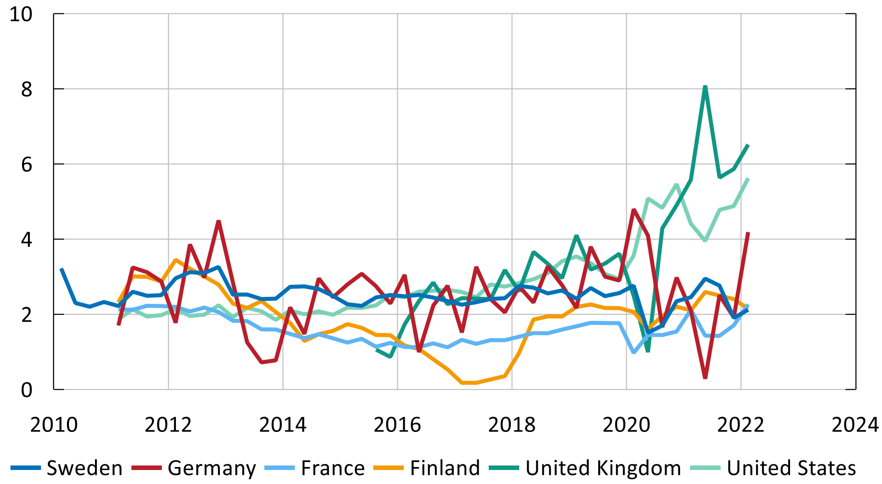
[37] According to Atlanta Fed's Wage Growth Tracker, the median salary in the United States rose by 6 per cent in May for those who have changed job, compared with 4.5 per cent for those who have not done so.

higher wage increases than those who changed employer in 2019.[38] However, some companies state in the Riksbank's Business Survey that new employees are now entering the workplace on higher salary levels.[39]

How quickly and how much the tight labour market will affect wages is to some extent due to institutional factors with regard to wage formation. In countries where wages are set directly in negotiations between employers and employees, such as in the United States and United Kingdom, wage-setting is more flexible and wages can therefore vary more than in countries where wage formation is centralised to a larger degree, such as in many European countries, including Sweden. In the United States and the United Kingdom, wages have overall also increased at a rapid pace (see Figure 55). Inflation has been high for a long time in these countries, which may have led to even higher wage demands. Wage cost increases can in turn have a greater impact on inflation when it is already high, particularly if inflation expectations are not anchored.[40] This increases the risk of wage-price spiral and is the reason why monetary policy needs to react. Central banks have now begun to tighten monetary policy. This reduces the risk of the high inflation becoming entrenched in price setting and wage formation.

**Figure 55. Wage growth in selected countries**

Annual percentage change




Note. NMO wages for Sweden, monthly or hourly wages for others.

Sources: French Ministry of Labour, Swedish National Mediation Office, Statistics Finland, Federal Statistical Office of Germany, U.K. Office for National Statistics and U.S. Bureau of Labor Statistics.

In the EU countries, inflation has not been high for as long, and wage growth does not appear to be as high there (see Figure 55). But there are indications that wages are

[38] According to calculations based on data from employers' tax returns at individual level until the end of March, made by Statistics Sweden on behalf of the Riksbank. See also Chapter 3.

[39] See "Everyone is talking about the problems, no one about how well things are going", *The Riksbank's Business Survey*, May 2022, Sveriges Riksbank.

[40] See, for example, E. Bobeica, M. Ciccarelli and I. Vansteenkiste (2020), "The link between labor cost inflation and price inflation in the Euro Area" i G. Castex, J. Galí and D. Saravia (ed.), *Changing Inflation Dynamics, Evolving Monetary Policy*, edition 1, volume 27, chapter 4, Central Bank of Chile.

now beginning to rise faster in the euro area too, although not as rapidly as in the United States and United Kingdom. The ECB’s indicator for agreed wages pointed during the first quarter of this year to almost 3 per cent wage increases for the euro area as a whole (see Figure 56). However, the high inflation is expected to lead to higher total wage increases. Going forward, the Riksbank's forecast is that wages in the euro area will rise by around 4 per cent a year.

## International developments affect Swedish wage formation

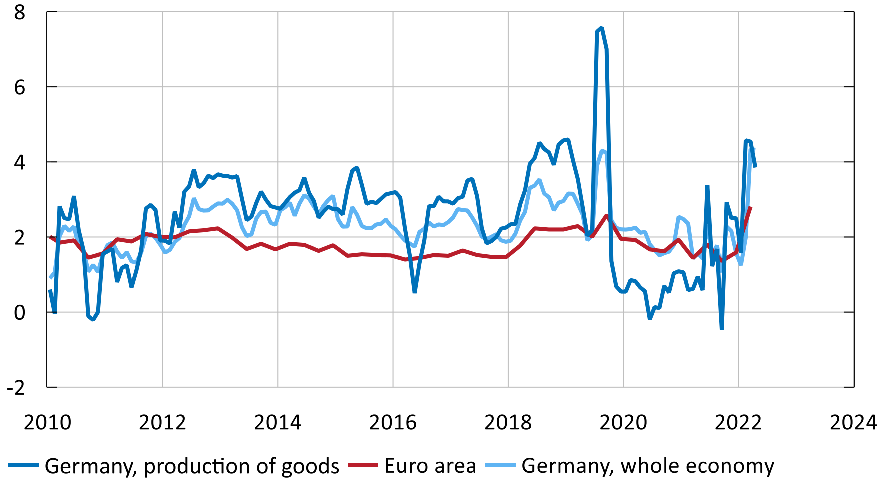
How payroll costs in competitor countries develop is important for collective bargaining in the Swedish industrial sector. It is therefore interesting to follow how wages develop abroad. In Germany, recent agreements in both the manufacturing industry and service industries have been higher than before (see Figure 56). Wage expectations have also risen. Germany intends to also raise minimum wages by a total of 20 per cent this year, to EUR 12 per hour. Around six million Germans are directly affected by the increase in minimum wages, but this may also lead to demands to further increase agreed wages that are just above the minimum level.[41] The negotiations for IG Metall (trade union for industrial and metalworkers) in the steel industry in north-west Germany concluded in an agreement giving 6.5 per cent wage increases over 18 months, corresponding to 4.3 per cent at an annual rate, plus a one-off payment of EUR 500. This is the highest agreed wage increase in the German steel industry for 30 years.

In Sweden, the current Industrial Agreement applies until March 2023, and the trade unions in the manufacturing industry will stipulate their wage demands later in the autumn. The centrally agreed wage increases in the labour market as a whole usually follow the manufacturing industry´s benchmark. Total wage increases are also affected by local wage negotiations, where the high inflation and the strong labour market are expected to lead to somewhat higher increases than in recent years. Wage growth is important to the development of inflation and thereby for the formation of monetary policy. The tighter monetary policy will contribute to lower resource utilisation in the labour market going forward and wages in Sweden are expected to increase by a good 3 per cent a year. This rate of wage growth is somewhat higher than that in recent years, but is compatible with close-to-target inflation in the long run.

[41] See G. Koester and G. Wittekopf (2022), ”Minimum wages and their role for euro area wage growth”, *ECB Economic bulletin* 3/2022. The United Kingdom and France also raised minimum wages by a relatively large amount this year, almost 7 per cent and 6 per cent respectively. In France, the minimum wage is linked to inflation and average real wage developments.

**Figure 56. Centrally agreed wage increases**

Annual percentage change




Note. Euro area: quarterly data agreed rate of wage growth including one-off payments. Germany: monthly data agreed rate of wage growth including one-off payments (3 month moving average).

Sources: Deutsche Bundesbank and ECB.