



Wage Formation Report 2026

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In the *Wage Formation Report*, we analyse the economic conditions for wage formation.

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Preface

The Government has instructed NIER to produce reports on the economic conditions for wage formation (Regulation 2007:759) containing instructions for the National Institute of Economic Research). The purpose of these reports is to provide a factual basis for the social partners and the National Mediation Office.

Stockholm, 21 October 2026

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Director-General

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Summary

Since the latest manufacturing wage benchmark was set, wages have risen by an average of 3.5 per cent per year, exceeding the historical average since 2000. Nevertheless, real wages have grown slightly more slowly in Sweden than in the euro area. Productivity growth has accelerated since 2018. Business sector productivity has risen strongly over the past two years and is expected to continue growing. At the same time, unemployment is high, both by international standards and relative to NIER's assessment of the equilibrium unemployment rate. The picture of profitability is mixed: the business sector profit share exceeds its average since 2000, while the return on capital is somewhat low.

NIER's Wage Formation Reports aim to describe the economic conditions for wage formation. The report does not assess the appropriate rate of wage growth in the next agreement period from an economic perspective. Instead, it describes a number of relevant aspects for the social partners to consider in the forthcoming round of collective bargaining. This year's report comprises four chapters addressing wage developments in Sweden and abroad, the labour market situation, productivity developments and business sector profitability. It also includes a special analysis summarising research on how generative AI has affected productivity and the labour market in the Nordic countries.

MACROECONOMIC CONDITIONS IN 2026–2027

According to NIER's September forecast, the recovery of the Swedish economy following the recent recession is well advanced. Rising real wages and temporary tax cuts have strengthened households' purchasing power, and household consumption is increasing rapidly. Business sector fixed capital formation is high and continues to rise. Central government fixed capital formation in the defence build-up contributes to the strong economic growth. Exports, which have benefited from increased activity in Europe, also contribute positively. Employment has yet to follow the recovery, and the increase that has occurred has mainly been in general government authorities. Unemployment remains high. Overall, GDP rises by 3 per cent this year, compared with average growth of approximately 2 per cent since 2000.

Next year, high global energy prices and their indirect effects keep inflation clearly above the Riksbank's target for much of the year. Inflation falls below the target towards year-end, but averages 2.6 per cent (measured by the CPIF) over the year as a whole. Higher inflation and interest rates reduce households' purchasing power, and consumption growth slows in 2027. Fixed capital formation and exports also grow more slowly than this year, although still at a comparatively healthy pace. The labour market recovery strengthens, with rising employment and

falling unemployment. Overall, GDP rises by 2.4 per cent in 2027.

SLOWER WAGE GROWTH

The latest manufacturing wage benchmark was set on 1 April 2025, with negotiated labour cost increases of 6.4 per cent over two years. Wage drift during the subsequent agreement period has been below the average since the introduction of the Industrial Cooperation and Negotiation Agreement, but broadly in line with levels since the financial crisis. Taken together, this has resulted in slower wage growth than in the immediately preceding agreement period. Nevertheless, negotiated increases and actual wage growth have remained substantially above the average since the financial crisis (see Figure 1).

Real wages have continued to strengthen during the agreement period, but growth slows in 2027 as inflation temporarily rises. Since 2020, real wages have grown slightly more slowly in Sweden than in the euro area. At the same time, Swedish unit labour costs in national currency have risen more slowly (2.7 per cent per year, compared with 3.4 per cent in the euro area), reflecting stronger productivity growth in Sweden.

HIGH UNEMPLOYMENT

Unemployment has remained close to 9 per cent since the latest wage benchmark was set, clearly above NIER's assessment of the equilibrium unemployment rate and high by international standards (see Figure 2). The rise in unemployment since 2022 reflects both weaker labour demand and a higher labour force participation rate. This differs from previous downturns, when labour force participation generally fell alongside demand.

The proportion of young people among the unemployed has increased in recent years, while more unemployed people wish to work part-time. Unemployment among foreign-born people is high, and long-term unemployment has risen above its pre-pandemic level. In recent years, unemployment has also risen comparatively sharply among people with post-secondary education.

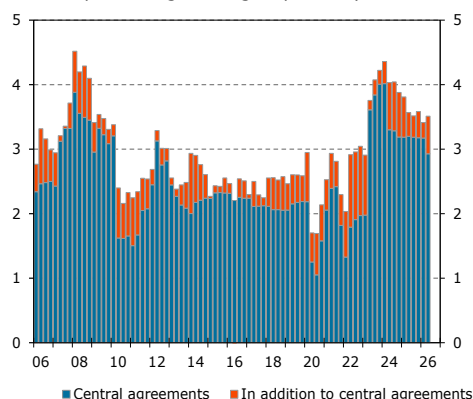
Macroeconomic statistics do not reveal clear effects of generative AI on the labour market. However, the literature suggests that labour market entry may have become somewhat more difficult for recent graduates in occupations highly exposed to AI (see the special analysis 'Generative AI').

STRONG PRODUCTIVITY GROWTH

Swedish productivity growth has been lower since the financial crisis began in 2008 (see Figure 3). The slowdown was not unique to Sweden, but occurred across much of the world. Productivity growth varies considerably across industries over time. Manufacturing and the ICT sector have historically

Figure 1 Wages and salaries

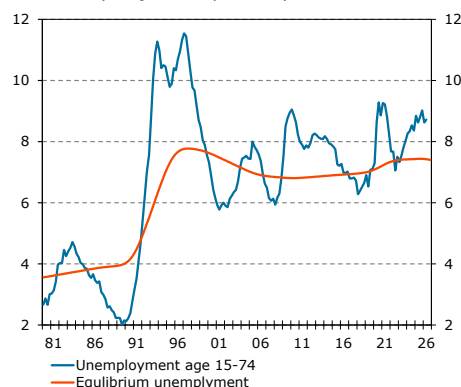
Annual percentage change, quarterly data



Sources: National Mediation Office and NIER.

Figure 2 Unemployment according to the LFS

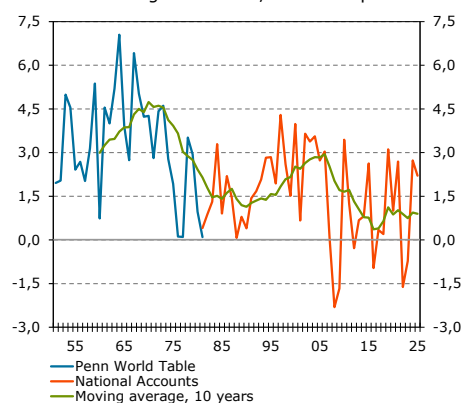
Per cent of the labour force aged 15–74, seasonally adjusted quarterly data



Sources: Statistics Sweden and NIER.

Figure 3 Productivity growth in the whole economy

Actual annual growth rate, constant prices



Note. Productivity is measured as GDP per hour worked in 1950–1980 and as value added per hour worked from 1980 onwards.

Sources: Penn World Table, Statistics Sweden and NIER.

recorded the fastest growth, while construction has performed substantially more weakly.

Following a period of weak productivity growth in the 2010s, growth has accelerated again since 2018. There is no single explanation for this stronger productivity growth; different factors have contributed in individual years. This makes it uncertain whether the growth rate has shifted structurally upwards during this period. NIER assesses that part of the increase is lasting (see Figure 4).

Actual business sector productivity increases by an average of 1.4 per cent per year in 2027–2029, slightly below potential productivity growth of 1.7 per cent per year. To assess longer-term productivity growth, NIER assumes that productivity grows at its historical rate since 1980, adjusted for the larger share of services in today's business sector. This yields productivity growth of 1.6 per cent per year.

HIGH PROFIT SHARE BUT A MIXED PICTURE OF PROFITABILITY

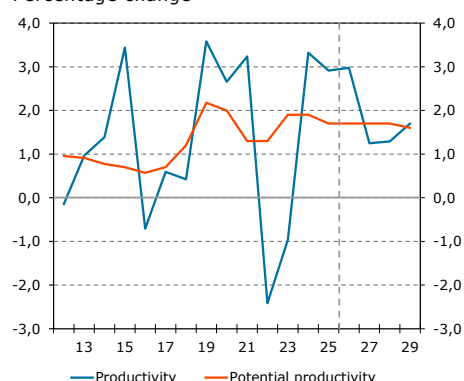
Business sector profitability can be measured in several ways, and the measures give somewhat different pictures. The profit share is high, while other measures are closer to their historical averages.

The profit share has risen since 2018 and remains high in the years ahead (see Figure 5). The return on capital has a stronger theoretical basis as a profitability measure, since it can be compared with corporations' required rates of return. The return on capital has trended downwards. Lower risk-free interest rates reduced required returns and made even lower-return fixed capital formation profitable, probably contributing to lower capital productivity. In recent years, returns on capital have increased, but interest rates have also risen. When compared with the risk-free rate and consumption of fixed capital, the return on capital gives a weaker picture of profitability in 2025 than the profit share. This weaker picture persists in both 2026 and 2027 (see Figure 6).

Other measures, such as operating margins and corporations' own profitability assessments, indicate that business sector profitability has improved in recent quarters, but give different pictures of the current situation.

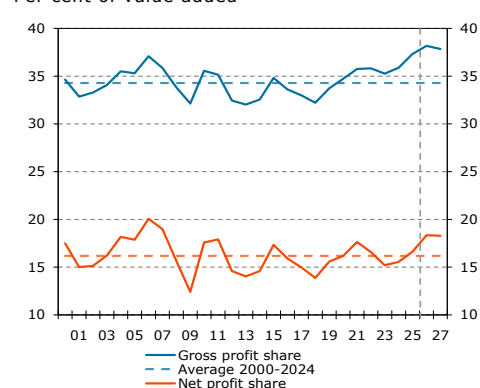
Manufacturing profitability was very high in 2022, when both the profit share and the return on capital reached historically high levels. Both measures have subsequently fallen markedly, partly owing to the appreciation of the krona since autumn 2023. Despite the decline, the profit share remains above its average since 2000. Profitability is somewhat low when measured instead by the return on capital.

Figure 4 Actual and potential productivity in the business sector
Percentage change



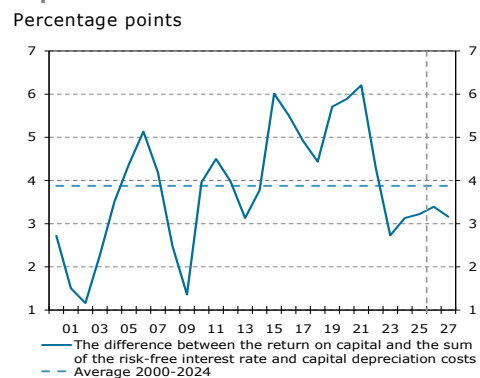
Sources: Statistics Sweden and NIER.

Figure 5 Gross and net profit shares
Per cent of value added



Sources: Statistics Sweden and NIER.

Figure 6 Difference between the return on capital and the sum of the risk-free rate and costs of consumption of fixed capital



Sources: Statistics Sweden and NIER.

Wage developments in Sweden and abroad

Wage growth has gradually slowed since early 2024, but remains high relative to the historical average since 1997. Despite the weak labour market, wage increases beyond central agreements have been broadly in line with the average since the financial crisis. As inflation has subsided, real wages have begun rising again, although they remain below their peak before the inflation surge in 2022–2023. Since 2020, unit labour costs have risen more slowly in Sweden than in the euro area, mainly owing to comparatively strong Swedish productivity growth.

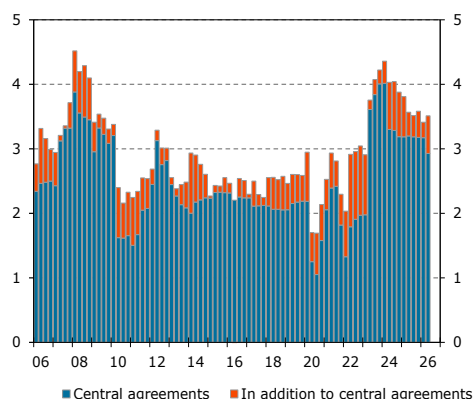
The manufacturing agreement concluded on 1 April 2025 set the wage benchmark for the following two years (see the box ‘The agreement concluded in 2025’). The second year of the agreement, beginning on 1 April 2026, involved some moderation in negotiated wage increases. Wage growth remains high relative to the past twenty years, but the slowdown since 2024 is clear (see Figure 7). Wage drift during the current agreement period has averaged 0.4 percentage points, below the average since the introduction of the Industrial Cooperation and Negotiation Agreement in 1997, but broadly in line with levels since the financial crisis began in 2008 (see Figure 8).

Wage developments have varied across the business sector: wage growth has generally been higher in services, while increases in goods industries (construction and manufacturing) have been more subdued (see Figure 9). Goods industries tend to be more sensitive to the business cycle, and their lower wage increases coincide with weaker employment developments (see Chapter 2). During the current agreement period, wages in general government authorities have risen slightly faster than in the business sector, following slower growth in the immediately preceding years (see Figure 10). However, comparisons should be interpreted cautiously, since wage developments are also affected by agreement structures and changes in the composition of the labour force, among other factors.¹

¹ If employment rises in groups or industries with lower wage levels, this can temporarily dampen average wage growth even if individual wage increases follow central agreements. Actual wage developments should therefore be interpreted against changes in labour market structure.

Figure 7 Wages and salaries

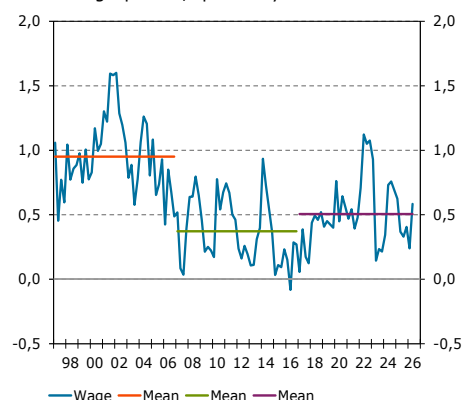
Annual percentage change, quarterly data



Sources: National Mediation Office and NIER.

Figure 8 Wage growth beyond negotiated wage increases

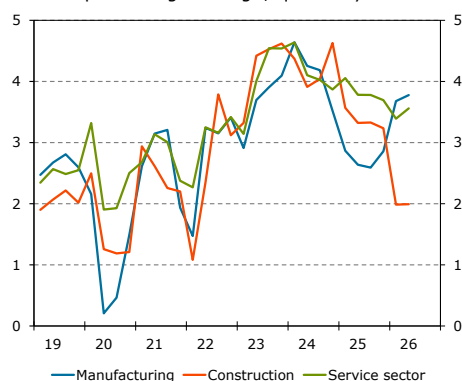
Percentage points, quarterly data



Sources: National Mediation Office and NIER.

Figure 9 Wages and salaries by business sector industry

Annual percentage change, quarterly data



Sources: National Mediation Office and NIER.

The agreement concluded in 2025

The 2025 round of collective bargaining covered most of the labour market. Negotiations took place against a background of inflation falling from high levels and a labour market that remained weak, with high unemployment and falling employment. Real wages had begun recovering, but remained noticeably below their levels before the inflation surge.

The manufacturing benchmark was presented on 1 April and provided for negotiated labour cost increases of 6.4 per cent over two years. The agreement entailed labour cost increases of 3.4 per cent in the first year and 3.0 per cent in the second. Part of the settlement is allocated to items other than wages, including shorter working hours and part-time pensions, meaning that negotiated wage increases are slightly below labour cost increases. According to the National Mediation Office's calculations, negotiated wage increases were 3.1 per cent in the first year and 2.9 per cent in the second. This represented a slowdown compared with 2023–2024, when both inflation and wage demands were higher. Nevertheless, negotiated wage increases remain clearly above the average since the introduction of the Industrial Cooperation and Negotiation Agreement in 1997.

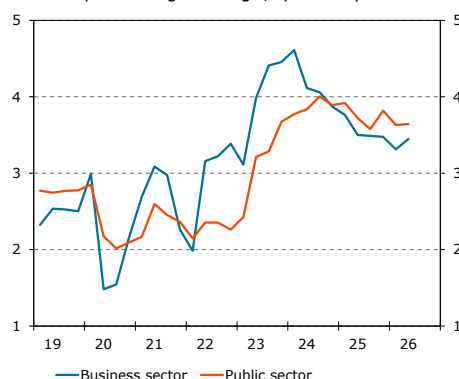
REAL WAGES

Real wages in Sweden have trended upwards for several decades, although developments have varied over time (see Figure 11 for manufacturing). When inflation is low, stable and predictable, the social partners can conclude wage agreements that are more likely to deliver the real wage increases intended when the agreements are signed. During such periods, nominal wage increases have therefore largely translated into higher real wages. When inflation has risen rapidly, however, price increases have often exceeded previously negotiated wage increases, resulting in weak or negative real wage growth (see Figure 12).

High inflation in 2022–2023 interrupted the long period of upward-trending real wages since the mid-1990s. During most of that period, inflation was low and relatively predictable, facilitating wage formation that generated real wage increases. By contrast, the inflation surge in 2022–2023 caused a sharp fall in real wages. The decline was greater than previous real wage falls over the past 50 years, bringing real wages back to approximately their level ten years earlier. The fact that nominal wage increases

Figure 10 Wages and salaries in the business sector and general government authorities

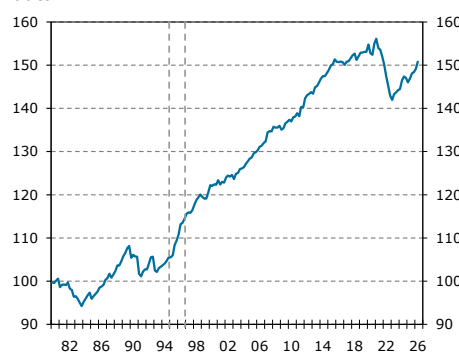
Annual percentage change, quarterly data



Sources: National Mediation Office and NIER.

Figure 11 Real wages in manufacturing

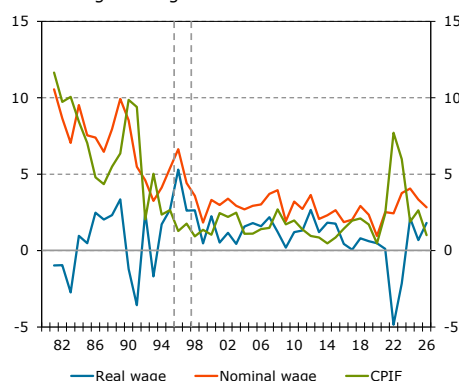
Index 1980=100, seasonally adjusted quarterly data



Note. Vertical dashed lines mark the introduction of the inflation target (1995) and the Industrial Cooperation and Negotiation Agreement (1997). Real wages are deflated by the CPIF. For 1980–1986, the CPIF has been extended backwards using the growth rate of the CPI excluding interest costs.

Figure 12 Manufacturing wages and inflation

Percentage change



Note. Vertical dashed lines mark the introduction of the inflation target (1995) and the Industrial Cooperation and Negotiation Agreement (1997). For 1980–1986, the CPIF has been extended backwards using the growth rate of the CPI excluding interest costs.

Sources: NIER, OECD and Statistics Sweden.

did not keep pace with prices limited the contribution of labour costs to domestic inflationary pressure. At the same time, households' purchasing power, measured by real disposable income, weakened (see Figure 13).

The sharp fall in real wages should be viewed against developments following the introduction of the inflation target in 1995. Inflation has been below target for most of this period (see Figure 14). If wage agreements assumed inflation close to target, lower actual inflation may have contributed to larger real wage increases than anticipated when the agreements were concluded. Part of the long-term rise in real wages in Figure 11 may therefore reflect lower-than-expected inflation, although most of the increase can be explained by positive productivity growth. From this perspective, the decline in 2022–2023 can be seen as a surprise in the opposite direction: agreements concluded with expectations of inflation close to target instead encountered inflation far above it. The historical real wage trend therefore does not necessarily provide an obvious reference point for future real wage growth if inflation remains close to target.

Real wages began rising again during 2025 and the first half of 2026. The main reason is that inflation has subsided while nominal wage increases have remained relatively high.

SWEDISH WAGES AND LABOUR COSTS IN AN INTERNATIONAL PERSPECTIVE

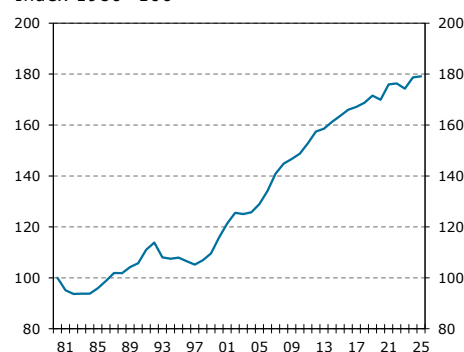
International wage developments in recent years have been characterised by gradual normalisation following the inflation surge in 2022–2023.² Nominal wages rose sharply in most advanced economies in 2023 and 2024. Wage growth in the Swedish business sector has recently been somewhat lower than in Germany and the euro area, but higher than in Denmark and Finland (see Table 1).

In the euro area, business sector wage growth averaged 3.6 per cent in 2020–2025 (see Figure 15). Growth accelerated markedly during the high inflation of 2022–2023 and remained relatively high in 2024–2025 (see Table 1). Developments nevertheless differ across member countries. Germany and the Netherlands recorded comparatively high wage growth during and after the inflation surge, while growth was more subdued in France and Italy. In Belgium, where wages are more closely linked to inflation, wage increases adjusted more rapidly both upwards and downwards. For all comparison countries, average nominal wage growth in 2020–2025 exceeded that in the longer

² For international wage comparisons, this section mainly uses EU-harmonised measures of wages, labour costs and inflation. Other national measures are used for the United States and United Kingdom, meaning differences in growth rates involving these countries should be interpreted with some caution.

Figure 13 Real disposable income per capita

Index 1980=100

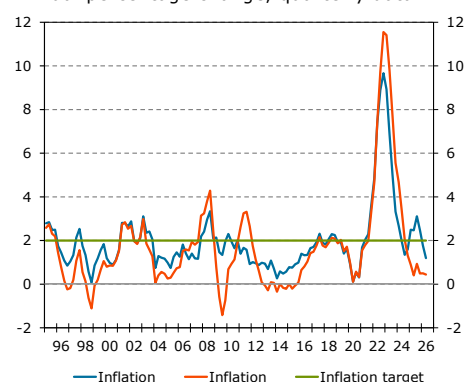


Note. Real disposable income is deflated by the CPIF. For 1980–1986, the CPIF has been extended backwards using the growth rate of the CPI excluding interest costs.

Sources: Statistics Sweden and NIER.

Figure 14 Inflation and the inflation target

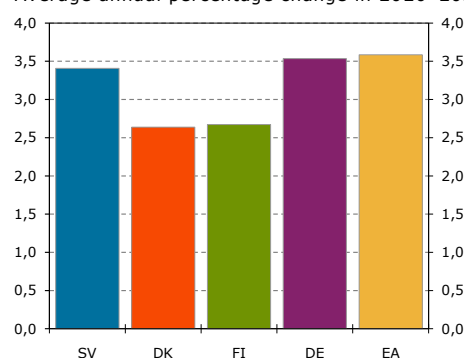
Annual percentage change, quarterly data



Sources: Statistics Sweden and NIER.

Figure 15 Business sector wages and salaries

Average annual percentage change in 2020–2025



Note. Geometric means of nominal wage growth, with the base year set to the year preceding the first year of the stated interval.

Sources: Eurostat and NIER.

period 2010–2025, partly reflecting the acceleration associated with the inflation surge (see Figures 15 and 16).

Although the inflation surge was of a similar magnitude in Sweden and the euro area (see Figure 17), nominal wage growth in the Swedish business sector was lower both during the high-inflation period of 2022–2023 and in the subsequent period of inflation around target in 2024–2025 (see Table 1). Sweden has therefore not experienced the same marked acceleration in nominal wage growth as the euro area.

Table 1 International business sector wage increases

Average annual percentage change

	Nominal wages			Real wages		
	2020–2021	2022–2023	2024–2025	2020–2021	2022–2023	2024–2025
Sweden	2.5	4.0	3.8	0.8	–2.8	1.4
Euro area	1.8	4.8	4.2	0.4	–2.0	1.9
Norway	3.7	3.5	6.7	1.1	–2.3	3.8
Denmark	2.6	2.5	2.8	1.4	–3.2	1.2
Finland	2.1	2.8	3.1	0.9	–2.8	1.7
Germany	1.4	4.9	4.3	–0.4	–2.3	1.9
France	1.0	3.9	2.6	–0.3	–1.8	0.9
Netherlands	3.5	4.7	5.2	1.5	–2.8	2.0
Belgium	1.4	7.3	2.0	–0.4	1.0	–1.6
Italy	1.6	2.5	3.4	0.7	–4.5	2.0
United Kingdom	3.9	6.9	5.1	2.1	–1.1	2.1
United States	3.5	4.9	3.7	0.5	–1.0	0.8

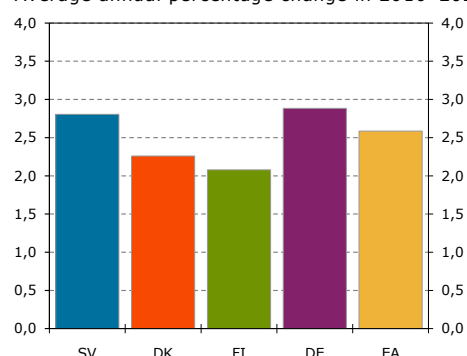
Note. The table reports geometric means, with the base year set to the year preceding the first year of the stated interval. Wages follow Eurostat's Labour Cost Index wage measure WAG. WAG is the 'Wages and salaries' component of the Labour Cost Index (LCI) and measures wages and remuneration per hour worked, excluding employers' social contributions and other non-wage labour costs. The business sector comprises NACE industries B–N. For the United States, the Bureau of Labor Statistics (BLS) Employment Cost Index (ECI), Wages and Salaries series, is used; for the United Kingdom, the Office for National Statistics (ONS) Average Weekly Earnings (AWE) measure is used. Real wages are calculated using the HICP for all countries except the United States and the United Kingdom, where the CPI is used. For Belgium, the 2025 annual average refers to the average for the first two quarters.

Sources: Eurostat, ONS, BLS and NIER.

More subdued nominal wage growth in Sweden after the inflation surge has meant a slower real wage recovery than in the euro area. At the end of 2025, real wages in the euro area as a whole were just above their 2019 level, whereas Sweden had still not returned to its 2019 level. Unlike the euro area, Swedish real wage growth was therefore negative on average in 2020–2025

Figure 16 Business sector wages and salaries

Average annual percentage change in 2010–2025

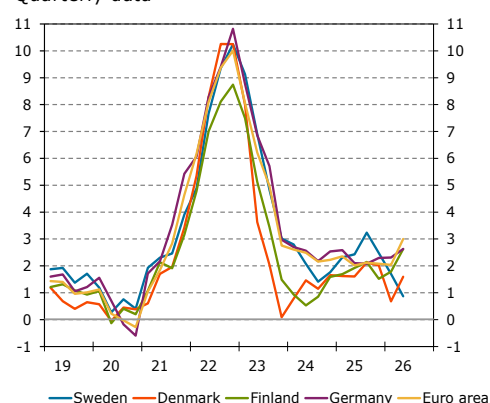


Note. Geometric means of nominal wage growth, with the base year set to the year preceding the first year of the stated interval.

Sources: Eurostat and NIER.

Figure 17 Consumer prices

Quarterly data

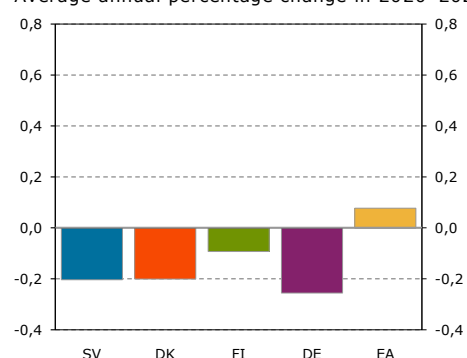


Note. HICP for all countries.

Source: Eurostat.

Figure 18 Real business sector wages

Average annual percentage change in 2020–2025



Note. Geometric means of real wage growth, with the base year set to the year preceding the first year of the stated interval.

Sources: Eurostat and NIER.

(see Figure 18). Over the longer period 2010–2025, however, real wage growth in Sweden was higher than in the euro area (see Figure 19).

Wages rose faster in services than in manufacturing in Sweden in 2020–2025 (see Table 2). The difference was 0.7 percentage points per year, the same as in the euro area. In the euro area, the difference was partly driven by Germany, where service sector wages rose by 4.0 per cent per year compared with 2.6 per cent in manufacturing, a difference of 1.4 percentage points. However, differences across industries may partly reflect changes in workforce composition during the pandemic and should therefore be interpreted cautiously.

Table 2 International business sector wage increases by manufacturing and services

Average annual percentage change

	Nominal wages		Real wages	
	Manufacturing	Services	Manufacturing	Services
	2020–2025	2020–2025	2020–2025	2020–2025
Sweden	2.9	3.6	–0.7	0.0
Euro area	3.1	3.8	–0.4	0.3
Norway	4.1	5.0	0.3	1.2
Denmark	2.8	2.6	0.0	–0.3
Finland	2.7	2.7	–0.1	–0.1
Germany	2.6	4.0	–1.2	0.2
France	2.6	2.5	–0.3	–0.4
Netherlands	4.5	4.5	0.2	0.2
Belgium	2.9	3.8	–0.9	0.0
Italy	2.6	2.4	–0.5	–0.8

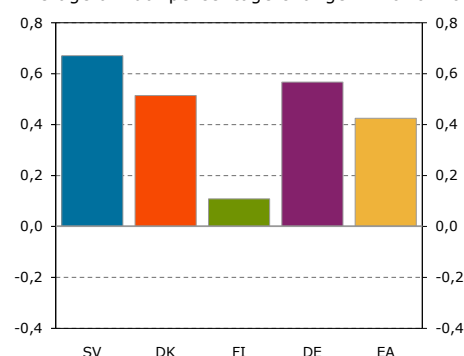
Note. The table reports geometric means, with the base year set to the year preceding the first year of the stated interval. Wages follow Eurostat's Labour Cost Index wage measure WAG. WAG is the 'Wages and salaries' component of the Labour Cost Index (LCI) and measures wages and remuneration per hour worked, excluding employers' social contributions and other non-wage labour costs. Manufacturing refers to NACE industry C and services to NACE industries G–N. Real wages are calculated using the HICP. For Belgium, the 2025 annual average refers to the average for the first two quarters.

Sources: Eurostat and NIER.

Unit labour costs measure labour costs per unit of output and are therefore affected by both labour cost and productivity developments. Swedish unit labour costs have risen at a relatively stable rate since 2000, but developments relative to the euro area and Germany can be divided into three distinct phases (see Table 3). In 2000–2007, Swedish unit labour costs rose by an average of 2.1 per cent per year, compared with 1.4 per cent in the

Figure 19 Real business sector wages

Average annual percentage change in 2010–2025



Note. Geometric means of real wage growth, with the base year set to the year preceding the first year of the stated interval.

Sources: Eurostat and NIER.

euro area. In Germany, they were virtually unchanged owing to restrained wage increases. Overall, Swedish unit labour costs rose faster than in the euro area and substantially faster than in Germany.

In 2008–2019, encompassing the financial crisis and the subsequent low-inflation period, unit labour costs in Sweden again rose faster than in the euro area, but at a similar rate to Germany. In the latest period, 2020–2025, the pattern has been reversed. The inflation surge of 2022–2023 led to higher wage increases in all countries, but unit labour costs have risen substantially more slowly in Sweden (2.7 per cent per year) than in the euro area (3.4 per cent) and Germany (3.9 per cent). Over 2000–2025 as a whole, Swedish unit labour costs increased more than in the euro area and Germany. Developments since 2020 have therefore reversed part, but not all, of the earlier relative increase in unit labour costs.

Table 3 Unit labour costs

Average annual percentage change

	2000–2007	2008–2019	2020–2025
Sweden	2.1	2.2	2.7
Euro area	1.4	1.5	3.4
Denmark	2.3	1.2	2.3
Finland	0.9	1.9	2.8
Germany	-0.1	2.1	3.9

Note. Geometric means, with the base year set to the year preceding the first year of the stated interval. Nominal unit labour costs for the whole economy, based on hours worked, in national currency.

Source: Eurostat.

Differences in unit labour cost growth can be decomposed into contributions from labour costs, measured as compensation per hour worked including employers' social contributions, and productivity (see Table 4). Productivity in Sweden has risen faster than in the euro area and Germany, by 1.2 per cent per year compared with 0.8 and 0.9 per cent respectively. However, labour costs have risen substantially faster, by 3.6 per cent per year compared with 2.7 per cent. Stronger Swedish productivity growth has only partly offset faster labour cost increases. Overall, unit labour costs have therefore risen faster in Sweden than in the euro area and Germany since 2000.

In 2020–2025, labour costs in Sweden rose by an average of 3.7 per cent per year, broadly in line with the euro area (3.8 per cent) and below Germany (4.3 per cent). Productivity rose by 0.9 per cent per year in Sweden, compared with 0.3 per cent in the

euro area and 0.4 per cent in Germany. Relative to the euro area, the difference in unit labour cost growth is therefore mainly explained by stronger Swedish productivity growth. Relative to Germany, lower labour cost increases and higher productivity growth account for roughly equal shares of the difference.

Overall, the decomposition shows that developments since 2020 differ from the longer period since 2000: labour costs have risen more slowly in Sweden than in Germany and the euro area, while productivity growth has remained higher in Sweden.

Table 4 Components of unit labour costs

Average annual percentage change

	Productivity	Labour cost	Unit labour cost
2000–2025			
Sweden	1.2	3.6	2.3
Euro area	0.8	2.7	1.9
Denmark	1.2	3.0	1.8
Finland	0.9	2.7	1.8
Germany	0.9	2.7	1.8
2020–2025			
Sweden	0.9	3.7	2.7
Euro area	0.3	3.8	3.4
Denmark	1.1	3.4	2.3
Finland	0.1	2.9	2.8
Germany	0.4	4.3	3.9

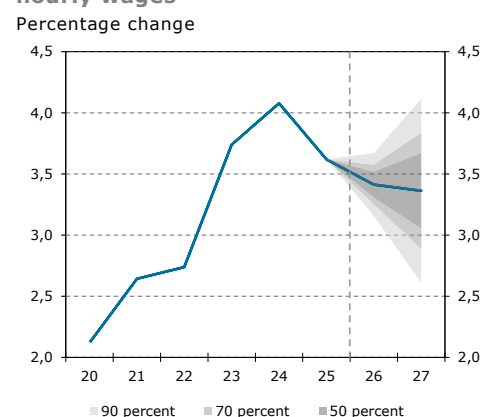
Note. Geometric means, with the base year set to the year preceding the first year of the stated interval. Nominal unit labour costs for the whole economy, based on hours worked, in national currency, and their productivity and labour cost components.

Sources: Eurostat and NIER.

FORECAST FOR WAGE DEVELOPMENTS

Wage growth in Sweden is expected to slow somewhat in 2027 (see Figure 20 for uncertainty intervals), while remaining historically high relative to the average since the financial crisis (see Figure 1). The forecast assumes a continued labour market recovery in 2027, with a rising employment rate and falling unemployment, and inflation temporarily above target. Risks to the forecast are two-sided. A faster-than-forecast labour market recovery could lead to larger wage increases, while a slower economic recovery could restrain wage growth. Based on the distribution of historical forecast errors, the 90 per cent prediction

Figure 20 Uncertainty intervals for hourly wages



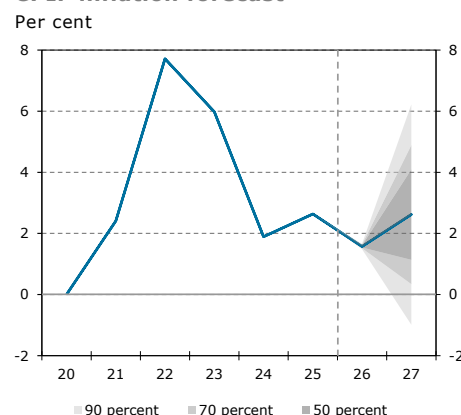
Note. The forecast is presented in The Swedish Economy, September 2026. The intervals are based on NIER's historical forecast errors in its September forecasts for 2017–2025 and the assumption that the errors are normally distributed.

Sources: National Mediation Office and NIER.

interval for wage growth in 2027 is 2.6–4.1 per cent. The 50 per cent interval is 3.1–3.7 per cent.

Real wages are expected to continue rising in 2027, but more slowly than in 2026, mainly because of higher inflation during the year (see Figure 21 for uncertainty intervals for the inflation forecast). However, there is considerable uncertainty about inflationary pressures, particularly how high energy prices will be and how they will affect other prices. Based on the distribution of historical forecast errors, the 90 per cent prediction interval for CPIF inflation in 2027 is –1.0–6.2 per cent. The 50 per cent interval is 1.1–4.1 per cent. This also implies considerable uncertainty about real wage growth in 2027.

Figure 21 Uncertainty intervals for the CPIF inflation forecast



Note. The forecast is presented in The Swedish Economy, September 2026. The intervals are based on NIER's historical forecast errors in its September forecasts for 2017–2025 and the assumption that the errors are normally distributed.

Sources: Statistics Sweden and NIER.

The labour market situation

Unemployment has risen since 2022 and is close to its pandemic level, clearly above NIER’s assessment of the equilibrium unemployment rate. Swedish unemployment is also high by international standards. The increase since 2022 reflects both falling employment and a rising labour force participation rate, unlike previous downturns. The proportion of young people among the unemployed has increased in recent years, while more unemployed people wish to work part-time. Unemployment among foreign-born people is high, and long-term unemployment has risen above its pre-pandemic level. Unemployment has also risen comparatively sharply among people with post-secondary education in recent years. The economic recovery that began in 2024 has yet to leave a clear mark on the labour market. Next year, however, the labour market is expected to improve and unemployment to begin falling.

Wage agreements do more than distribute income: they also affect corporations’ pricing and competitiveness and thus the conditions for high employment and low unemployment. The social partners therefore need to take labour market conditions into account in their negotiations.

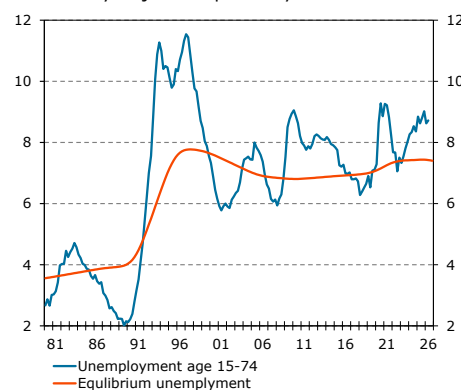
This chapter describes the Swedish labour market situation, focusing on recent cyclical developments. The emphasis is on unemployment and its composition. Unemployment in Sweden is examined through comparisons with nearby countries with similar labour markets. Differences between groups in the Swedish labour market and their recent developments are also analysed. The chapter additionally examines employment developments, with particular attention to differences across industries.

The Swedish labour market in 2019–2026 in a comparative perspective

Unemployment in Sweden is currently high, both relative to other countries and to NIER’s assessment of the equilibrium unemployment rate (see Figure 22). The period since 2020 has been characterised by rapid cyclical fluctuations. Unemployment rose rapidly in 2020 at the start of the COVID-19 pandemic, but fell again in 2022 as the pandemic subsided and restrictions were lifted (see Figure 22). A new recession began towards the end of 2022. Unemployment then turned upwards again and continued rising until 2025. The economic recovery that began in 2024 has

Figure 22 Unemployment according to the LFS

Per cent of the labour force aged 15–74, seasonally adjusted quarterly data



Sources: Statistics Sweden and NIER.

so far had only a limited impact on unemployment. Throughout 2020–2026, unemployment has remained above its 2019 level.

The equilibrium unemployment rate falls from 7.4 per cent

The equilibrium unemployment rate is the unemployment rate that would be observed if the economy were in cyclical balance. NIER's assessment uses the LFS definition of unemployment. Equilibrium unemployment rose between 2019 and 2022, mainly because of rising long-term unemployment during the pandemic (see Figure 22).³ In 2026, it is 7.4 per cent. Over the next few years, it falls slightly, to 7.1 per cent in 2029. There are three main reasons for the decline. First, implemented policies increase incentives to work. Second, the foreign-born population has, on average, spent longer in Sweden.⁴ Third, the working-age population grows slowly in the years ahead, resulting in fewer jobseekers per vacancy, which is assessed to lower equilibrium unemployment.

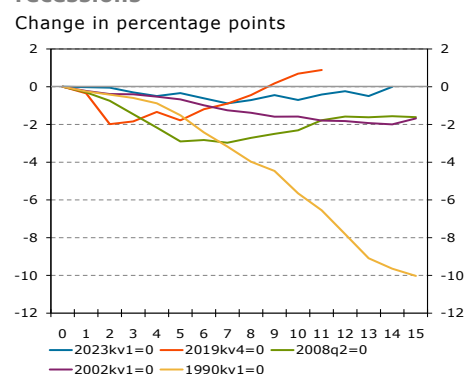
A LONG PERIOD OF RISING LABOUR FORCE PARTICIPATION AND EMPLOYMENT RATES IN SWEDEN

Labour force participation in Sweden has trended upwards since 2010.⁵ The participation rate among people aged 15–74 is now the highest observed for several decades (see Figure 23). Participation has increased particularly among foreign-born people (see Figure 24). The increase has been approximately equal for people born within and outside the EU.

The employment rate among people aged 15–74 has also trended upwards since around 2010. Its level in recent years is nevertheless lower than in the early 1990s, also reflected in substantially higher unemployment now than then.

Cyclical changes primarily affect the employment and unemployment rates. Unemployment is usually affected somewhat less than employment, because some people, often those with weaker labour market attachment, normally choose to leave or enter the labour force depending on economic conditions.

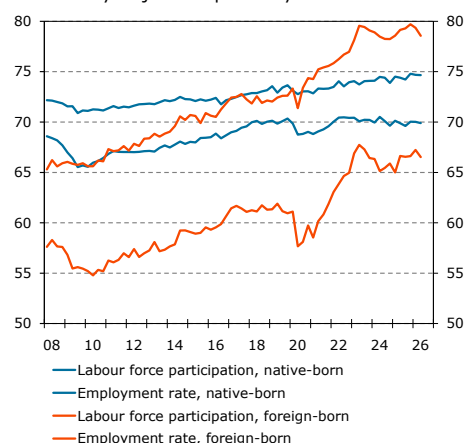
Figure 25 Employment rate among people aged 15–74 in different recessions



Note. Quarter 0 is the quarter before the employment rate began falling in each recession. Sources: Statistics Sweden and NIER.

Figure 24 Employment and labour force participation rates

Per cent of the population aged 15–74, seasonally adjusted quarterly data



Sources: Statistics Sweden and NIER.

³ See The Swedish Economy, March 2026. For a fuller description of NIER's conceptual framework for equilibrium unemployment, see the Wage Formation Report 2019.

⁴ See NIER Special Study 94, 'Rising employment among foreign-born people: How much is explained by demographics?', 2023.

⁵ The labour force participation rate is the proportion of a population age group participating in the labour force.

LABOUR FORCE PARTICIPATION HAS RISEN IN RECENT YEARS DESPITE THE RECESSION

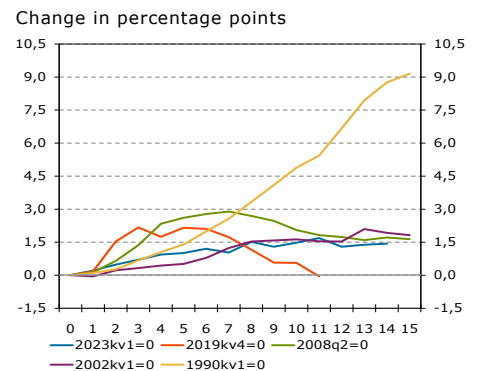
Labour market developments in the latest recession have differed somewhat from previous recessions. Figure 25 shows changes in the employment rate during the 1990s crisis (1990), the dot-com crash (2002), the financial crisis (2008), the COVID-19 pandemic (2020) and the high-inflation period (2023). Quarter zero is the quarter before the employment rate began falling in each downturn. The chart shows employment rate developments over 15 quarters from the onset of the decline. The pandemic period is shortened because it overlaps with the subsequent recession. For the latest recession, data are shown up to the latest available observation.

The latest downturn has had a smaller negative effect on the employment rate than other downturns. The weakening from the first quarter of 2023 lasted approximately seven quarters, resembling developments in 2002. The employment rate subsequently rose and, after 15 quarters, was back at its pre-downturn level. During both the financial crisis and the dot-com crash, the employment rate was still depressed after 15 quarters. The 1990s crisis clearly had a much greater impact on employment than any subsequent downturn. Overall, this suggests that the latest recession has had limited negative effects on Swedish employment.

Nevertheless, unemployment has risen noticeably during the latest downturn (Figure 26). From the first quarter of 2023, unemployment rose slowly for approximately 11 quarters. This also resembles developments from 2002 during the dot-com crash, with a comparatively slow increase in unemployment. After 14 quarters, unemployment in the latest recession remains above its pre-downturn level. The deterioration after 14 quarters remains comparable to the dot-com crash, but also to the financial crisis, although developments then were more dramatic.

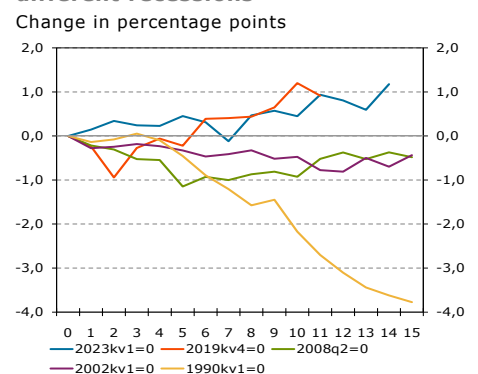
Unemployment has increased in the latest downturn despite comparatively small effects on the employment rate because labour force participation has risen during this recession. After 14 quarters, the participation rate is now almost 1 percentage point above its pre-downturn level. In every previous downturn from the 1990s crisis until the latest recession, labour force participation instead initially fell as the employment rate deteriorated (see Figure 27).

Figure 26 Unemployment rate among people aged 15–74 in different recessions



Note. Quarter 0 is the quarter before the employment rate began falling in each recession.
Sources: Statistics Sweden and NIER.

Figure 27 Labour force participation rate among people aged 15–74 in different recessions



Note. Quarter 0 is the quarter before the employment rate began falling in each recession.
Sources: Statistics Sweden and NIER.

SWEDISH UNEMPLOYMENT IS HIGH BY INTERNATIONAL STANDARDS

Sweden's unemployment rate is high by international standards.⁶ According to Eurostat, Sweden had the fourth-highest unemployment rate in the EU in 2025, after Spain, Finland and Greece. This report instead compares Swedish labour market statistics with a smaller group of geographically close countries with somewhat similar labour markets (Denmark, Finland, the Netherlands, Norway and Germany). Sweden had clearly higher unemployment than these countries in 2025, except for Finland (see Figure 28). Germany, the Netherlands and Norway had the lowest unemployment, at approximately 4 per cent. All these countries had higher unemployment in 2025 than in 2019. The three countries with the lowest unemployment in 2025 also recorded the smallest increases relative to 2019.

Sweden has a relatively high employment rate in this comparison (see Figure 29). It is on a par with Denmark and Norway and higher than Germany and Finland. The employment rate in the Netherlands has risen rapidly in recent years.

Labour force participation is also high in Sweden, exceeding both Norway and Denmark (see Figure 30). Here too, the Netherlands stands out for its rapid increase in recent years. Both Germany and Finland have lower participation rates than Sweden.

Higher unemployment in Sweden across many labour force groups

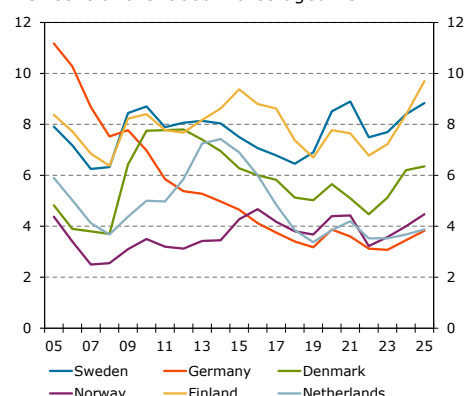
To facilitate comparisons between population groups and over time, unweighted averages have been calculated for the comparison countries' labour force participation, employment and unemployment rates. Table 5 reports differences between Sweden and the comparison-country average in 2025. Unemployment was higher in Sweden among young people (15–24), people aged 25–64 and older people (65–74), as well as men and women, both native-born and foreign-born. Young people in Sweden stand out, with substantially higher unemployment than in the comparison countries (11 percentage points). Foreign-born men and women in Sweden also stand out, with unemployment approximately 6 percentage points higher than in the comparison countries.

Sweden's labour force participation rate was just over 3 percentage points higher than in the comparison countries in 2025

⁶ See, for example, the Wage Formation Report 2024 and Statistics Sweden, 'Theme: Unemployment in Sweden', 2026.

Figure 28 Unemployment rate

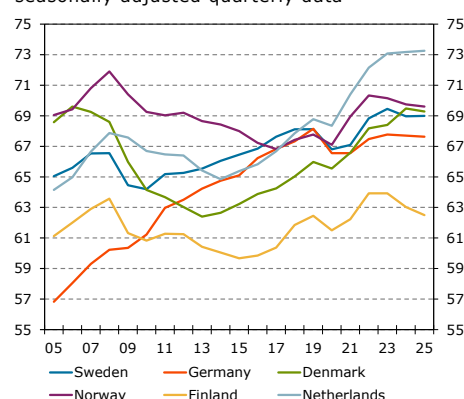
Per cent of the labour force aged 15–74



Source: Eurostat.

Figure 29 Employment rate

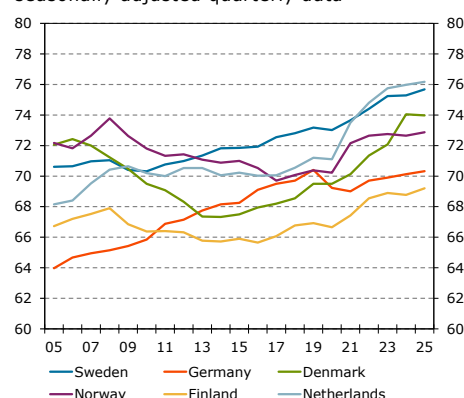
Per cent of the population aged 15–74, seasonally adjusted quarterly data



Source: Eurostat.

Figure 30 Labour force participation rate

Per cent of the population aged 15–74, seasonally adjusted quarterly data



Source: Eurostat.

(see Table 5). Among age groups, people aged 25–64 in particular had higher participation in Sweden in 2025, although this also applied to older people (65–74). Young people (15–24), however, diverged from this pattern: their participation rate was substantially lower in Sweden, by almost 9 percentage points.⁷

Table 5 The labour market in Sweden and comparison countries

Per cent

	Sweden			Comparison countries			Difference		
	LF PR	Empl.	Unemp. p.	LFPR	Empl.	Unemp.	LF PR	Empl.	Unemp.
15–74 years	75.7	69.0	8.8	72.5	68.5	5.6	3.2	0.5	3.2
15–24 years	57.3	43.4	24.3	65.9	57.5	13.1	–8.7	–14.2	11.2
25–64 years	90.1	84.0	6.8	85.0	81.1	4.5	5.1	2.8	2.3
65–74 years	23.3	22.2	4.8	20.5	19.9	2.9	2.8	2.3	1.9
Men	78.0	71.1	8.9	75.9	71.5	5.9	2.1	–0.4	3.0
Native-born	76.3	71.4	6.4	75.5	71.7	5.1	0.8	–0.3	1.3
Foreign-born	83.3	70.2	15.7	78.9	71.0	9.9	4.4	–0.8	5.8
Women	73.3	66.8	8.8	69.1	65.3	5.4	4.2	1.5	3.4
Native-born	72.6	68.4	5.9	69.5	66.5	4.4	3.1	1.9	1.5
Foreign-born	75.1	62.3	17.1	67.8	60.4	10.9	7.3	1.9	6.2

Note. LFPR: labour force participation rate. Empl: Employment as a percentage of the population. Unemp: Unemployment rate Comparison countries are an unweighted average of Finland, Denmark, the Netherlands, Norway and Germany.

Sources: Eurostat, Statistics Sweden and NIER.

Both men and women had higher labour force participation rates in Sweden. The difference was smallest for native-born men, at just under 1 percentage point. Differences were larger for native-born women and foreign-born men and women.⁸ Among foreign-born women, participation was more than 7 percentage points higher in Sweden than in the comparison group.

Sweden's employment rate was also slightly higher than in the comparison countries in 2025 (Table 5). Both people aged

⁷ Comparing Sweden only with the other Nordic countries, youth labour force participation (ages 15–24) is just under 7 percentage points lower than the comparison group.

⁸ Female labour force participation is lower in all comparison countries. Combining only the Nordic countries increases the gap to approximately 4 percentage points.

25–64 and older people (65–74) had higher employment rates in Sweden. As with labour force participation, young people (15–24) stood out with substantially lower employment rates in Sweden. Employment rates among both native-born and foreign-born women were higher in Sweden. Men in Sweden had a slightly lower employment rate than in the comparison countries in 2025. This applied to both native-born and foreign-born men.

A long period of higher unemployment in Sweden

Figure 31 compares unemployment developments over time in Sweden and the comparison countries. Unemployment in Sweden has been higher throughout the period since 2005. Until 2019, the gap was 1–2 percentage points. Since 2020, it has been around 3 percentage points. The pandemic therefore appears to have caused a larger upward shift in unemployment in Sweden than in the comparison group. This difference has not been reversed. Since 2022, unemployment has risen by approximately the same amount in Sweden and the comparison group.

Alongside higher unemployment in Sweden, a larger share of the population has participated in the labour force (see Figure 32). Since 2013, the gap has been broadly unchanged at just over 3 percentage points. Meanwhile, participation has increased in both Sweden and the comparison countries.

Sweden has also had a higher employment rate than the comparison countries during some periods. Differences have narrowed in recent years and have been below 1 percentage point since 2021 (see Figure 33).

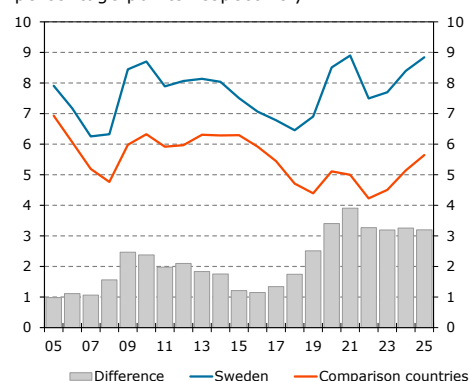
Higher unemployment and a lower employment rate among young people in Sweden

The group that stands out most is young people (15–24) in Sweden, who have clearly lower labour force participation and employment rates than in the comparison countries. At the same time, unemployment is clearly higher. This is not explained by more young people in Sweden studying and therefore remaining outside the labour market. According to Eurostat, the proportion of 15–24-year-olds in formal education is approximately the same in Sweden as the comparison-country average.⁹ What stands out in Sweden is that relatively few of these students are employed: 19 per cent compared with 34 per cent in the comparison countries.

⁹ In Sweden, 69 per cent of this age group were studying in 2025. The comparison-country average was 70 per cent. Within that group, the Netherlands had the highest share, approximately 73 per cent, and Denmark the lowest, 61 per cent.

Figure 31 Unemployment rate

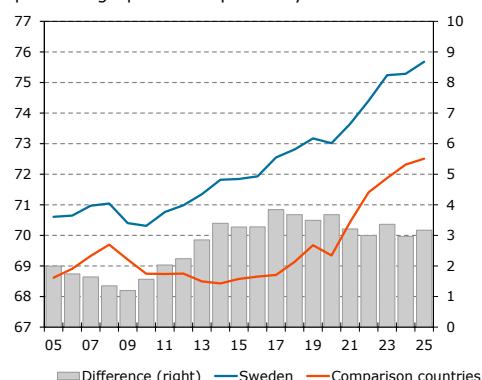
Per cent of the labour force aged 15–74 and percentage points respectively



Sources: Eurostat, Statistics Sweden and NIER.

Figure 32 Labour force participation rate

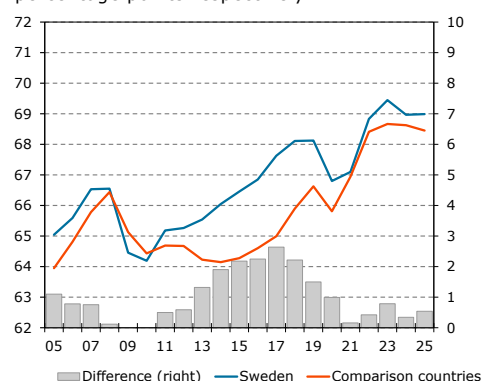
Per cent of the population aged 15–74 and percentage points respectively



Sources: Eurostat, Statistics Sweden and NIER.

Figure 33 Employment rate

Per cent of the population aged 15–74 and percentage points respectively



Sources: Eurostat, Statistics Sweden and NIER.

The picture of young people's labour market situation should also be supplemented *by the measure of young people not in employment, education or training (NEET)*. According to Eurostat, 5.0 per cent of all young people (15–24) in Sweden were NEET, compared with an average of 7.1 per cent in the comparison countries.¹⁰ The lower youth employment rate in Sweden therefore seems mainly to reflect fewer students working, rather than more young people neither working nor studying. Higher youth unemployment in Sweden, despite a smaller proportion participating in the labour force, suggests that young people in Sweden face relatively greater difficulty finding work.

Unemployment in Sweden

This section examines Swedish unemployment in greater detail, focusing on different labour market groups. Unemployment is broken down by duration, sex, origin, educational attainment and age.

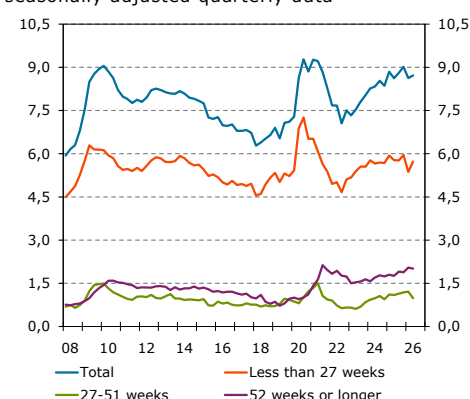
MORE LONG-TERM UNEMPLOYMENT SINCE THE PANDEMIC

Unemployment rose rapidly in 2020 owing to the economic consequences of the pandemic. This caused a sharp increase in short unemployment spells (less than 27 weeks; see Figure 34). In 2021 and 2022, short-term unemployment fell back to approximately its 2019 level. However, the weak labour market during these years also increased long-term unemployment, both 27–51 weeks and 52 weeks or longer. While unemployment lasting 27–51 weeks fell alongside short-term unemployment in 2021 and 2022, unemployment lasting 52 weeks or longer persisted above its pre-pandemic level. This helped keep overall unemployment high.

Unemployment has risen again since 2023, both for short and long durations. Long-term unemployment has increased in both the 27–51-week and 52-weeks-or-longer categories. The current economic recovery has yet to affect long-term unemployment, which has continued rising. Unemployment lasting 52 weeks or longer has risen to its 2021 level.

Figure 34 LFS unemployment among people aged 15–74 by duration

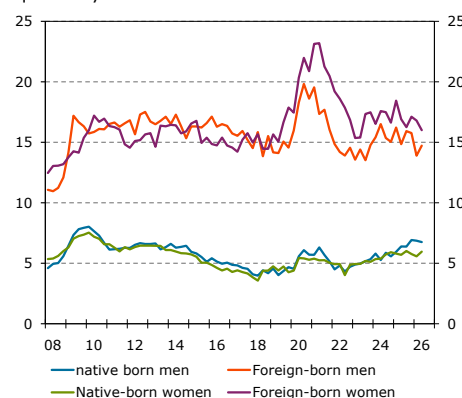
Per cent of the labour force aged 15–74, seasonally adjusted quarterly data



Sources: Statistics Sweden and NIER.

Figure 35 Unemployment among native-born and foreign-born people

Per cent of the labour force, seasonally adjusted quarterly data



Sources: Statistics Sweden and NIER.

¹⁰ In 2025, the comparison countries ranged from 3.9 per cent in the Netherlands to 9.3 per cent in Germany.

UNEMPLOYMENT HAS RISEN MORE AMONG NATIVE-BORN PEOPLE

The pandemic recession affected foreign-born people substantially more than native-born people. The labour market situation for these groups improved markedly in 2021 and 2022. Since 2022, by contrast, unemployment has risen more among native-born people, for both men and women (see Table 6 and Figure 35). Nevertheless, foreign-born unemployment remains substantially higher. There are also considerable differences within the foreign-born group. Among people born outside Europe and the Nordic countries, unemployment is now at its pre-pandemic level (see Figure 36). Unemployment among people born elsewhere in the EU has developed more in line with native-born unemployment: it has risen in recent years and is now above its 2019 level.

A MARKED RISE IN UNEMPLOYMENT AMONG PEOPLE WITH POST-SECONDARY EDUCATION SINCE 2022

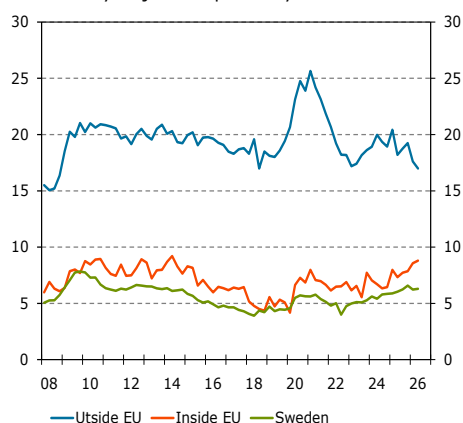
Grouping the unemployed by their highest completed education, unemployment since 2019 has risen most in percentage-point terms among people with less than upper-secondary education (see Figure 37). This largely reflects rising youth unemployment. The group with only pre-upper-secondary education has substantially higher unemployment than other groups. Their unemployment rose rapidly when the pandemic began in 2020 and did not return to its 2019 level before rising again in 2023. The increase since 2022 is substantially smaller than at the start of the pandemic, but unemployment has again approached its 2020 level. In recent years, unemployment has also risen in percentage-point terms relative to people whose highest attainment is upper-secondary education (Figure 38). There is a clear upward trend in unemployment among people with less than upper-secondary education relative to this educational group.

Unemployment among people whose highest attainment is upper-secondary education also rose at the onset of the pandemic. It too failed to return to its 2019 level in 2022 and has risen somewhat since then (see Figure 39).

Unemployment among people with post-secondary education increased less than among those with upper-secondary education at the onset of the pandemic. Unlike other educational groups, it then fell to its pre-pandemic level in 2022. Since 2022, the increase for this group has been greater than for people with upper-secondary education. Nevertheless, unemployment remains lower than among people with upper-secondary education (see Figure 39).

Figure 36 Unemployment by region of birth

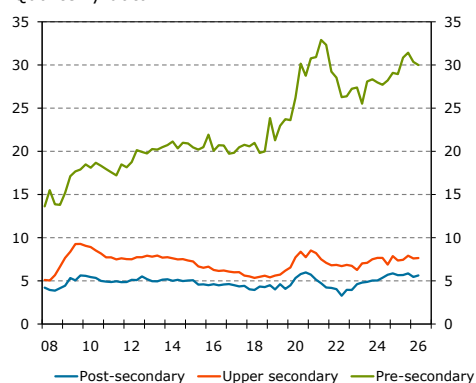
Per cent of the labour force aged 15–74, Seasonally adjusted quarterly data



Sources: Statistics Sweden and NIER.

Figure 37 Unemployment by highest educational attainment

Per cent of the labour force, seasonally adjusted Quarterly data



Sources: Statistics Sweden and NIER.

Table 6 Unemployment in different groups

Thousands of people, per cent of the labour force and change in percentage points respectively

	Num ber	Of which full- time stud- ents	Unemployment rate			Change	
			2019	2022	2025	2022– 2025	2019– 2025
Total	510	174	6.9	7.5	8.8	1.3	1.9
15–24 years	170	102	19.3	21.7	24.3	2.6	5.0
25–34 years	104	30	6.9	6.6	8.6	2.0	1.6
35–44 years	81	19	5.1	5.6	6.2	0.5	1.1
45–54 years	75	14	4.7	4.9	6.1	1.2	1.4
55–64 years	69	9	4.7	5.4	6.4	1.0	1.7
65–74 years	12	0	2.4	4.1	4.8	0.7	2.4
Men	268	87	6.7	7.1	8.9	1.8	2.2
Native-born	143	.	4.4	4.6	6.4	1.8	2.0
Foreign-born	126	.	14.4	14.3	15.7	1.4	1.3
Of which born within the EU	17	.	4.9	6.5	9.2	2.7	4.3
Of which born outside the EU	108	.	17.0	16.5	17.6	1.1	0.6
Women	242	87	7.1	7.9	8.8	0.8	1.7
Native-born	119	.	4.5	4.7	5.9	1.1	1.3
Foreign-born	123	.	16.3	18.1	17.1	–1.0	0.8
Of which born within the EU	11	.	5.5	6.5	6.2	–0.3	0.7
Of which born outside the EU	111	.	20.3	22.4	20.9	–1.5	0.6
Below upper-secondary	.	.	22.8	27.7	29.9	2.2	7.1
Upper-secondary	.	.	5.7	6.8	7.7	0.8	1.9
Post-secondary	.	.	4.3	3.9	5.8	1.9	1.5

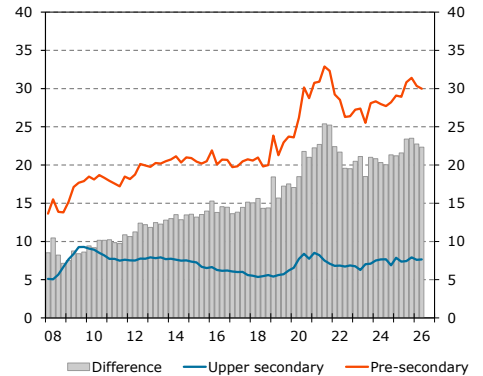
Note. Ages 15–74 unless otherwise stated. Within the EU also includes Norway.
Sources: Statistics Sweden and NIER.

MORE UNEMPLOYED PEOPLE WISHING TO WORK PART-TIME

In the LFS, jobseekers are asked how many hours per week they would like to work. The question is open-ended, with responses expressed in hours. Figure 40 shows unemployment among people aged 15–74 and contributions from people wishing to work

Figure 38 Unemployment by highest educational attainment

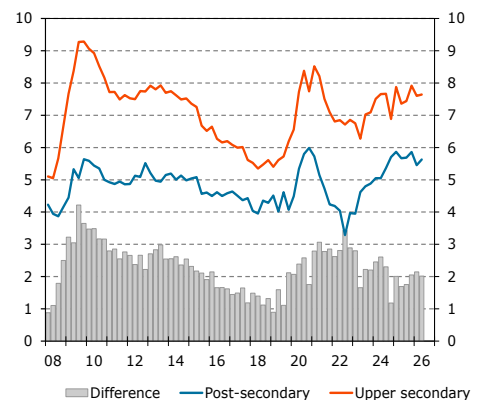
Per cent of the labour force aged 15–74, seasonally adjusted quarterly data, and percentage points respectively



Sources: Statistics Sweden and NIER.

Figure 39 Unemployment by highest educational attainment

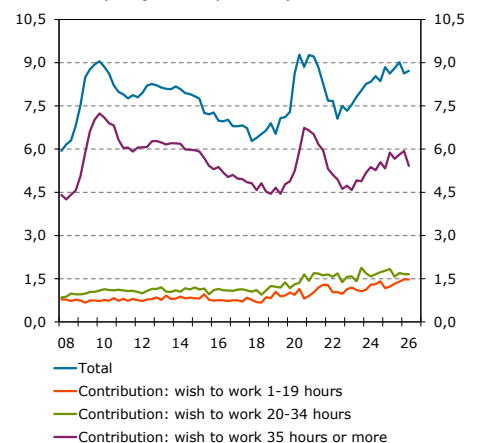
Per cent of the labour force, seasonally adjusted quarterly data, and percentage points respectively



Sources: Statistics Sweden and NIER.

Figure 40 LFS unemployment among people aged 15–74 by desired weekly working hours

Per cent of the labour force aged 15–74, seasonally adjusted quarterly data



Sources: Statistics Sweden and NIER.

full-time (35 hours or more), longer part-time hours (20–34 hours) or shorter part-time hours (1–19 hours). Contributions from people wishing to work shorter and longer part-time hours have both increased markedly since 2019 and are now clearly above earlier levels. Just over one-third of the rise in unemployment between 2019 and 2025 comes from people wishing to work part-time, while just under two-thirds comes from those wishing to work full-time.¹¹

Figure 41 shows the composition of the unemployed by age and desired working hours. People aged 25–74 wishing to work full-time are by far the largest group, at around 50 per cent of the unemployed. However, this share has fallen markedly in recent years. The share of people aged 15–24 wishing to work full-time has been relatively unchanged. By contrast, people aged 15–24 and 25–74 wishing to work part-time have increased as a share of the unemployed. The increase is clearest among young people, particularly those wishing to work shorter part-time hours.

Considering only the contribution from people seeking full-time work, the rise in unemployment since 2019 is smaller (see Figure 40), reflecting the fact that a substantial part of the increase has occurred among young people seeking part-time work.

UNEMPLOYMENT HAS RISEN MOST AMONG YOUNG AND OLDER PEOPLE SINCE 2019

Unemployment has risen across all age groups since 2019, but the impact has differed (see Figure 42 and Table 6). The largest percentage-point increase has been among young people aged 15–24.¹² As a group, young people are normally more sensitive to the business cycle than other age groups, partly because they are more likely to have temporary contracts.¹³

The 15–24 age group itself comprises people with quite different degrees of labour market attachment. The vast majority of the younger group, aged 15–19, attend school. The 20–24 age group includes both those who have continued to post-secondary education and those not studying. The older group is larger

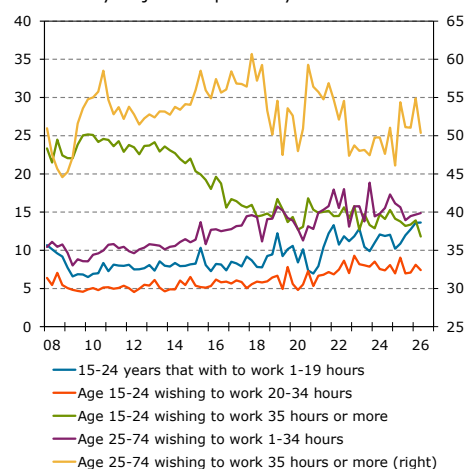
¹¹ Unemployment rose by 1.9 percentage points over this period, of which 0.8 percentage points came from people wishing to work part-time and 1.1 percentage points from those wishing to work full-time.

¹² This group normally has high unemployment compared with older groups. Many young unemployed people are full-time students. Among the approximately 70,000 in this group not reported as students in the LFS, many are probably young people seeking summer jobs. LFS statistics do not classify people as full-time students during summer holidays, when many in this group wish to work.

¹³ Half of employed people aged 15–24 had temporary contracts in 2025. Among 15–19-year-olds, just over 70 per cent had temporary contracts, compared with just under 40 per cent among 20–24-year-olds.

Figure 41 LFS unemployed by age and desired weekly working hours

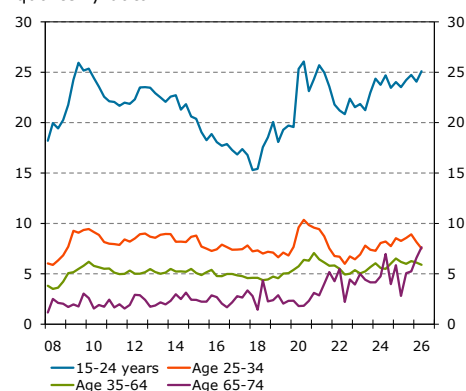
Per cent of unemployed people aged 15–74, seasonally adjusted quarterly data



Sources: Statistics Sweden and NIER.

Figure 42 Unemployment in different age groups

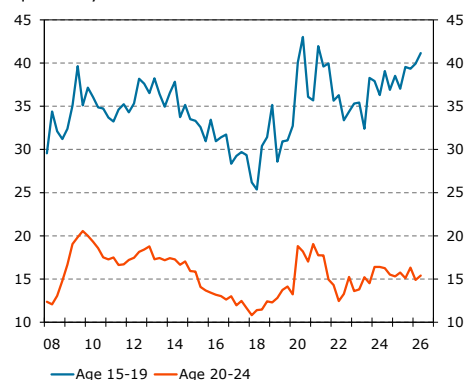
Per cent of the labour force, seasonally adjusted quarterly data



Sources: Statistics Sweden and NIER.

Figure 43 Youth unemployment

Per cent of the labour force, seasonally adjusted quarterly data



Sources: Statistics Sweden and NIER.

in terms of the labour force, while the younger group is larger in terms of unemployed people.¹⁴

Unemployment is substantially higher among 15–19-year-olds than among 20–24-year-olds (see Figure 43). For the younger group, unemployment is strongly seasonal, as many seek summer jobs. Over 2019–2025 as a whole, unemployment rose comparatively more in percentage-point terms among 15–19-year-olds than in the older group. This also applies to the period since 2022.

The share of 15–19-year-olds in the total labour force aged 15–74 has increased in recent years, from approximately 3.5 to 4.5 per cent. This mainly reflects increased participation in this group (see Figure 44). A marked increase occurred in 2022, after which participation remained around 41 per cent of the population in this group. No corresponding increase occurred among 20–24-year-olds. In addition, 15–19-year-olds have increased as a share of the population, itself contributing to their greater share of the labour force.

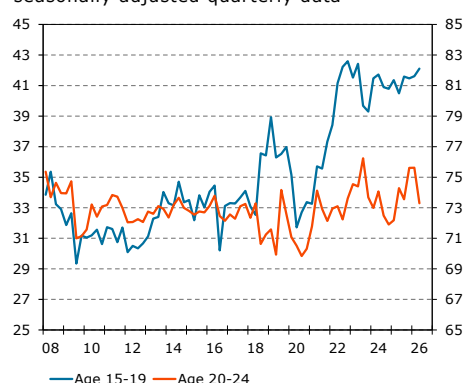
MORE OLDER PEOPLE AMONG THE UNEMPLOYED AS WELL

Unemployment among older people (65–74) is low compared with other groups, and they account for a small share of unemployed people aged 15–74 (see Figure 46 and Table 6). Nevertheless, unemployment has risen comparatively sharply in the older labour force (55–64 and 65–74) since 2019. The increase in both groups occurred in 2020 and 2021, coinciding with rising long-term unemployment. This is also confirmed by Swedish Public Employment Service statistics, in which the proportion of long-term unemployed people aged 55 or over has increased since 2019.¹⁵ In 2022–2025, the increase in unemployment in these age groups differed less from other groups.

Older people's labour force participation has trended upwards for many years, reflecting improved health and increased life expectancy alongside higher age thresholds in pension and social security systems (see Figure 45).¹⁶ Their participation appears largely unaffected by either the pandemic or the high-inflation years. Together, increased participation and unemployment

Figure 44 Youth labour force participation rate

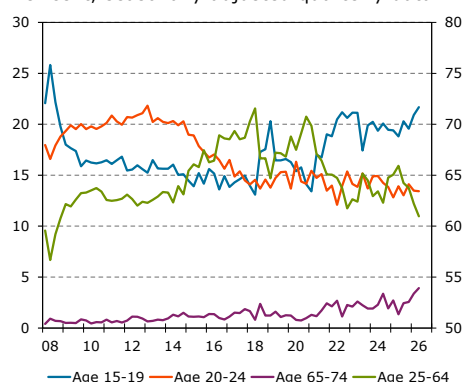
Per cent of the population in each age group, seasonally adjusted quarterly data



Sources: Statistics Sweden and NIER.

Figure 45 Share of unemployed people in different age groups

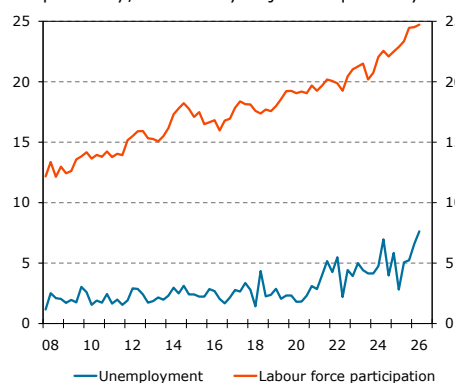
Per cent, seasonally adjusted quarterly data



Sources: Statistics Sweden and NIER.

Figure 46 Labour force participation and unemployment among older people aged 65–74

Per cent of the population and labour force respectively, seasonally adjusted quarterly data



Sources: Statistics Sweden and NIER.

¹⁴ In 2025, the labour force included 258,000 people aged 15–19 and 440,000 aged 20–24. There were 100,000 unemployed people aged 15–19 and 69,000 aged 20–24.

¹⁵ In August 2026, 34 per cent of people unemployed for 25 months or longer were aged 55 or over, compared with 25 per cent in 2019 as a whole. For people unemployed for 13–24 months, the corresponding figures were 21 per cent in August 2026 and 17 per cent in 2019.

¹⁶ From 1 January this year, the age limit for registering with the Swedish Public Employment Service rose from 65 to 66, potentially encouraging more 65-year-olds to seek work. This may in turn have increased both labour force participation and unemployment among 65–74-year-olds.

have meant that 65–74-year-olds now account for a slightly larger share of the unemployed than before 2021.

Employment developments across industries

Employment in Sweden has increased by just over 210,000 people since 2019. Most of the increase occurred between 2019 and 2022. Since 2022, employment has risen by approximately 30,000 people. Employment fell from late 2023 and during 2024, but has increased again since early 2025.

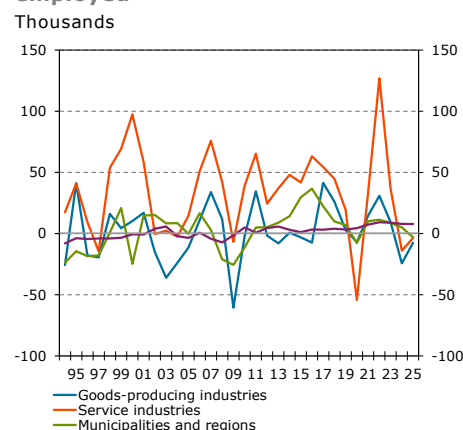
Employment has increased mainly in services (see Figure 47). Cyclical fluctuations are evident in both goods and service industries, but also to some extent in the local government sector. Municipalities and county council districts are subject to a balanced-budget requirement, making their finances sensitive to changes in tax revenue and potentially necessitating staff reductions in downturns.

During the latest recession, employment has developed more weakly in goods industries than in services, particularly in construction. Service sector employment has also been comparatively weak over the past two years. The local government sector has likewise performed weakly in recent years. Municipalities and county council districts have faced high costs for consumables and extraordinary pension expenditure. Lower birth rates have also reduced demand for childcare and schooling. Central government employment, by contrast, has risen comparatively strongly in recent years, reflecting major spending initiatives, particularly in defence and the justice system.

At a more detailed industry level, business services and public administration and defence have recorded the largest employment increases since January 2020 (see Figure 48).¹⁷ After falling in 2020, employment in business services, particularly engineering, legal and accounting consultancy, rose strongly until late 2022 and has since been broadly unchanged. The increase in public administration and defence has also been large, but more evenly spread over the period, reflecting initiatives in the justice system and defence, among other areas. Human health and social work services have also grown, reflecting increased employment in both elderly care and healthcare. Employment in

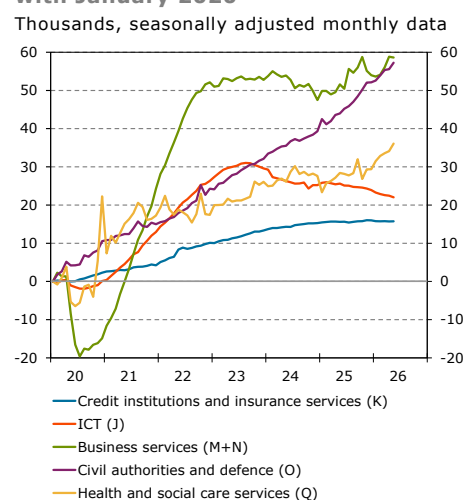
¹⁷ The analysis uses employment according to Labour Market Status of the Population (BAS), available from January 2020. The first months precede the pandemic and restrictions in Sweden, making them suitable pre-pandemic comparison points. The industry breakdown here covers the whole economy, rather than only the business sector.

Figure 47 Change in the number employed



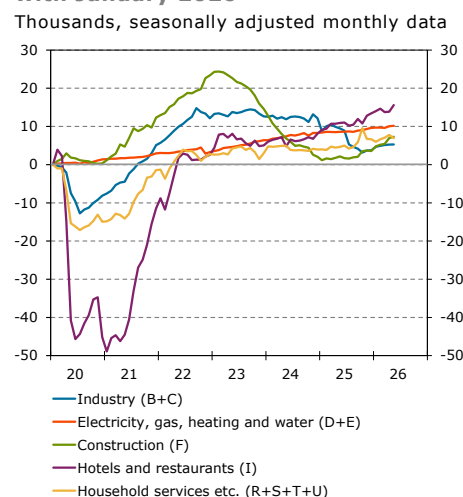
Sources: Statistics Sweden and NIER.

Figure 48 Number employed compared with January 2020



Sources: Statistics Sweden and NIER.

Figure 49 Number employed compared with January 2020



Sources: Statistics Sweden and NIER.

information and communication services (ICT) increased until 2023, but has subsequently weakened, partly reversing the earlier rise.

Figure 49 shows industries with smaller employment increases since before the pandemic. Several were severely affected at the start of the pandemic, particularly accommodation and food services, but also household services and manufacturing. Employment in these three industries had recovered by 2022. Manufacturing employment declined somewhat during 2025, while employment increased in both accommodation and food services and household services.

Employment in construction, a cyclically sensitive industry, has fluctuated sharply since January 2020. It grew strongly until early 2023, but the increase was subsequently largely reversed. Some renewed growth has occurred in 2026.

Figure 50 shows the industries with the weakest employment developments since January 2020. Employment in education services has fallen markedly, particularly in recent years, potentially partly reflecting smaller cohorts in preschool and school. Employment in transport services fell in 2020 and subsequently recovered, but not to its earlier level. Trade employment was also clearly affected at the start of the pandemic. It then rose until mid-2023 before falling again. Weak household consumption probably plays an important role here. Employment in agriculture, forestry and fishing has also declined since January 2020.

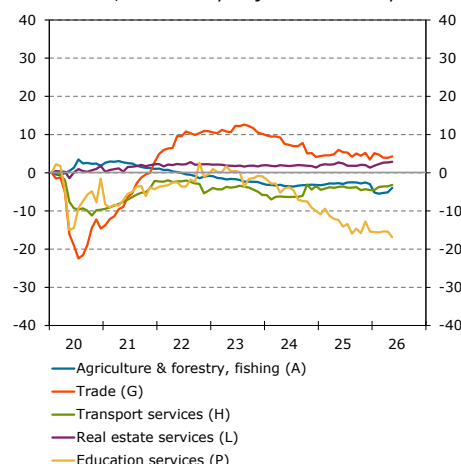
EMPLOYMENT AND UNEMPLOYMENT FORECAST

GDP growth in recent years has mainly been driven by productivity, with limited labour market effects. Next year, employment is expected to gather momentum as resource utilisation within corporations becomes strained (see Figure 51). However, forecast uncertainty is substantial: negative employment growth lies within a 90 per cent probability interval. There are also upside risks, with employment growth potentially stronger than forecast.

Unemployment is assessed to fall to 8.7 per cent in 2026, then decline faster next year to average 8.2 per cent (see Figure 52). Here too, unemployment remaining almost unchanged at its current level lies within the 90 per cent probability interval. Developments could also be substantially stronger than forecast if employment grows more rapidly than projected.

Figure 50 Number employed compared with January 2020

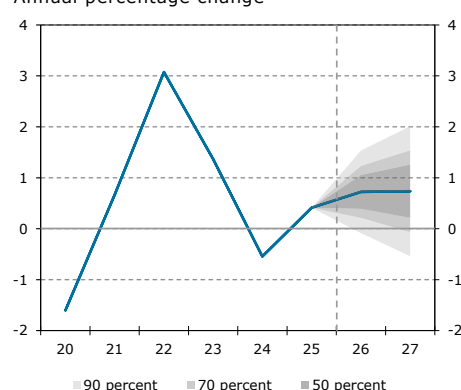
Thousands, seasonally adjusted monthly data



Sources: Statistics Sweden and NIER.

Figure 51 Uncertainty intervals for LFS employment among people aged 15–74

Annual percentage change

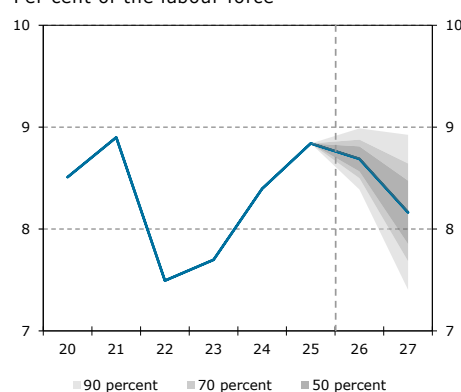


Note. The forecast is presented in The Swedish Economy, September 2026. The intervals are based on NIER's historical forecast errors in its September forecasts for 2017–2025 and the assumption that the errors are normally distributed.

Sources: Statistics Sweden and NIER.

Figure 52 Uncertainty intervals for LFS unemployment among people aged 15–74

Per cent of the labour force



Note. The forecast is presented in The Swedish Economy, September 2026. The intervals are based on NIER's historical forecast errors in its September forecasts for 2017–2025 and the assumption that the errors are normally distributed.

Sources: Statistics Sweden and NIER.

Appendix: Different unemployment measures for describing the labour market situation

This report describes unemployment using Sweden's official measure, based on the Labour Force Surveys (LFS). Alongside the LFS, unemployment in Sweden is also measured using the number registered with the Swedish Public Employment Service, reported both by that agency and by Statistics Sweden in the Labour Market Status of the Population (BAS). These measures use different definitions and serve different purposes, describing partly different labour market aspects. The measures and their relationship to the LFS are discussed below.

MANY FULL-TIME STUDENTS AMONG THE LFS UNEMPLOYED

Under the LFS, a person aged 15–74 is defined as unemployed if they have no job, have *sought* or *tried* to find work, and can start working shortly (see the box ‘Three statistical sources for unemployment in Sweden’). By this measure, unemployment was 8.8 per cent in 2025 (see Figure 53). The LFS definition includes all full-time students seeking work. The previous official unemployment measure excluded full-time students.¹⁸ Under that earlier measure, unemployment was 6.0 per cent in 2025. Full-time students seeking work therefore accounted for 2.8 percentage points of unemployment (see Figure 53).

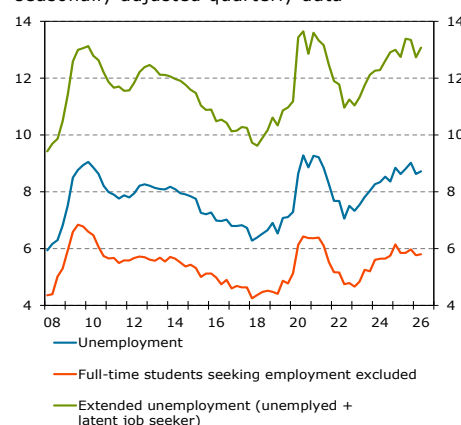
Full-time students seeking work are a heterogeneous group. They include both people in regular education and those studying through the Swedish Public Employment Service. Full-time students constitute a labour reserve, but do not always see themselves primarily as unemployed. Of full-time students aged 15–74 in 2025, only one-quarter considered themselves unemployed, while most considered themselves students. A large share of unemployed full-time students are aged 15–24 (see Figure 54 and Table 6), among whom participation in labour market training is uncommon.¹⁹ The situation differs at older ages. In 2025, just over 40 per cent of unemployed full-time students aged 25–54 participated in education, a measure or an activity through the Swedish Public Employment Service. Among those aged 55–65, most full-time students were participating through that agency.

¹⁸ Full-time students have been included since 2007. Many data series have been linked back to 1987 at the micro level, making the LFS system broadly comparable from that year.

¹⁹ Among young people aged 15–24, only 5 per cent of full-time students consider themselves unemployed.

Figure 53 Different LFS unemployment measures

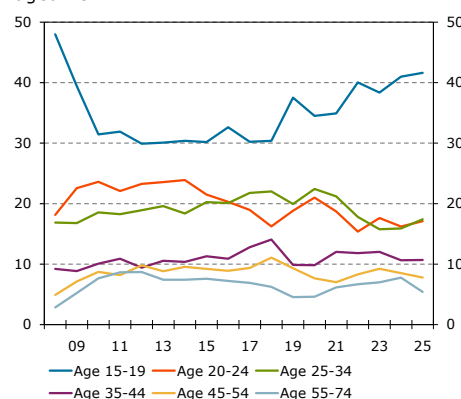
Per cent of the labour force aged 15–74, seasonally adjusted quarterly data



Sources: Statistics Sweden and NIER.

Figure 54 Full-time students seeking work by age

Per cent of all full-time students seeking work aged 15–74



Source: Statistics Sweden.

LATENT JOBSEEKERS CONSTITUTE A LABOUR RESERVE

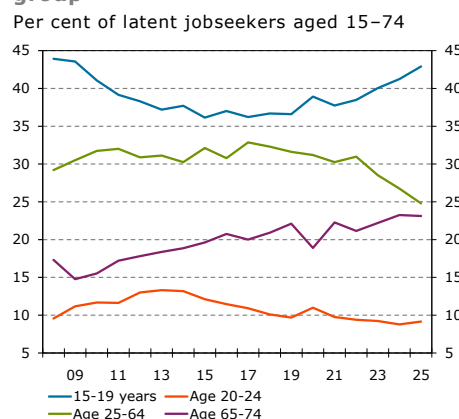
Conversely, the unemployment measure can be expanded to include latent jobseekers: people who want and are available to work but have not *sought* a job. In 2025, there were 287,000 latent jobseekers aged 15–74. Under this expanded measure, unemployment was 13.2 per cent in 2025 (see Figure 53). Latent jobseekers also constitute a potential labour reserve. Individuals commonly move between being classified as unemployed and as latent jobseekers depending on their job search. The group mainly comprises young people under 25 and older people over 64 (see Figure 55). Only approximately 25 per cent are aged 25–64. Young and older people normally have weaker labour market attachment than the 25–64 group, which also explains their presence among latent jobseekers.

SWEDISH PUBLIC EMPLOYMENT SERVICE UNEMPLOYMENT STATISTICS

Another source for measuring unemployment is the Swedish Public Employment Service's statistics on registered unemployed people. These data are compiled into unemployment measures both in that agency's operational statistics (AF) and in Statistics Sweden's Labour Market Status of the Population (BAS; see the box 'Three statistical sources for unemployment in Sweden'). BAS unemployment has tracked LFS unemployment excluding full-time students relatively closely (see Figure 56). However, as discussed above, a substantial proportion of unemployed full-time students participate in Swedish Public Employment Service training programmes and thus appear in AF statistics. These unemployment measures therefore do not measure exactly the same thing, even if the statistics appear to coincide.

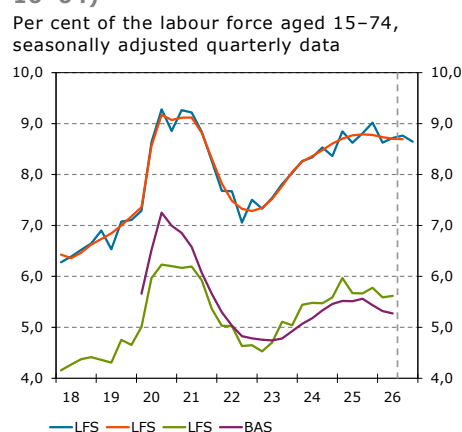
Using BAS gives a different comparison between early 2026 and the latest peak in 2020. BAS unemployment was 5.5 per cent in 2025, clearly below its 2020 level, unlike the picture given by the LFS. One important explanation is that more people in age groups that do not approach the Swedish Public Employment Service are now unemployed according to the LFS. This has raised the LFS unemployment measure more than measures based on registrations with the Swedish Public Employment Service.

Figure 55 Latent jobseekers by age group



Sources: Statistics Sweden and NIER.

Figure 56 Unemployment according to the LFS (ages 15–74) and BAS (ages 16–64)



Sources: Statistics Sweden and NIER.

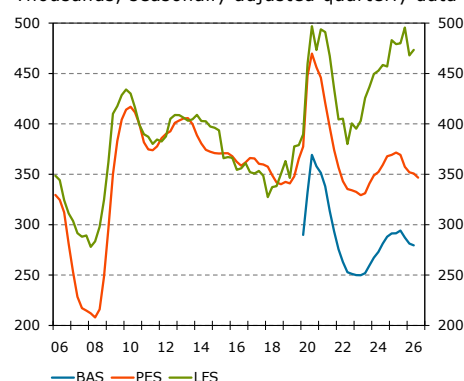
Three statistical sources for unemployment in Sweden

There are three main sources of unemployment statistics in Sweden, with the Labour Force Surveys (LFS) providing the official measure. Unemployment is also measured in Labour Market Status of the Population (BAS) and by the Swedish Public Employment Service (AF). Both the LFS and BAS form part of Statistics Sweden's official statistics and aim to classify people by their labour market situation, describing whether they are employed, unemployed or outside the labour force. The Swedish Public Employment Service classifies registered jobseekers by their current status with AF, for example whether they are available for work or participate in a labour market policy programme. These sources measure partly different things and should be used as complements when analysing the Swedish labour market. Figure 57 shows unemployed people aged 16–64 according to the different sources. Levels differ considerably, mainly because of the definitions of unemployment.

The LFS is a sample survey of the registered population aged 15–74, asking individuals about their labour market status.²⁰ Its definitions follow International Labour Organization (ILO) recommendations and EU guidelines. To be classified as unemployed, a person must have no work (not be employed) and have sought or tried to find a job in the past four weeks. They must also have been available to take a job at short notice. The LFS definition of seeking or trying to find work is relatively broad, including answering a job advertisement, contacting an employer or the employment service, asking friends and acquaintances about jobs, reading a job advertisement, posting a CV online, attending a job fair or preparing to start a business. Full-time students simultaneously seeking work under these criteria count as unemployed, whether in regular education or education organised by the Swedish Public Employment Service.

People who have not actively sought work in the past four weeks but wanted and were available to work are defined in the LFS as latent jobseekers. They are not included among the unemployed, but can be identified as a group

Figure 57 Number unemployed aged 16–64 according to different sources
Thousands, seasonally adjusted quarterly data



Sources: Statistics Sweden, Swedish Public Employment Service and NIER.

²⁰ The LFS covers private households and excludes people in elderly care homes, supported housing, institutions or prison.

outside the labour force. Overall, the LFS depicts total labour supply. It shows the labour resources available in the economy (the labour force) and the extent to which they contribute to output (employment and unemployment).

Unlike the LFS, BAS is a total population survey based on data from various registers. Like the LFS, its classification is hierarchical. A person is employed during a month if they have received a wage payment according to employer tax returns (AGI). To be classified as unemployed, a non-employed person must have been registered as unemployed with the Swedish Public Employment Service at some point during the month. Only people aged 16–66 can be registered. BAS records fewer unemployed people than the LFS. Many young people classified as unemployed in the LFS are not registered with the Swedish Public Employment Service.

The Swedish Public Employment Service also reports its own unemployment measure from operational statistics. These data refer to people registered with AF on the last day of the month. People in AF statistics count as unemployed even if they worked during part of the month, unlike BAS, which counts them as employed that month. This is an important reason why BAS records fewer unemployed people than AF (see Figure 57).

Productivity developments in Sweden

Productivity growth is crucial to real wage growth. The extent to which higher productivity leads to rising wages depends, among other things, on why productivity rises and how flexibly corporations can use labour and capital in production. Productivity growth has varied over time and was low after the financial crisis. After 2018, the trend shifted towards higher growth. In 2027–2029, potential productivity grows by 1.7 per cent per year, close to long-term productivity growth. Actual productivity grows slightly more slowly, at 1.4 per cent per year, because resource utilisation within corporations is above normal in 2026.

This chapter analyses business sector productivity developments. Productivity is examined as labour productivity: value added produced per hour worked (see Figure 58). Productivity therefore rises when value added increases faster than hours worked.

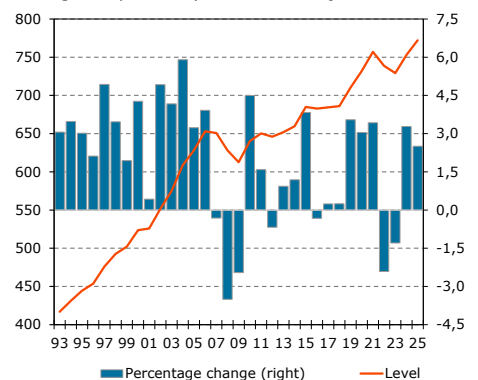
The chapter analyses both actual and potential productivity. Actual productivity is presented using observed data and NIER's forecast for the business sector in 2026–2029. Historical productivity is analysed over different periods to illustrate how growth has varied over time and the resulting considerable uncertainty about future developments. Potential productivity is an assessment of what productivity would be without cyclical variation. It cannot be observed, making its assessment more uncertain.

The chapter begins by discussing the link between growth in productivity and real labour costs. It then describes and analyses historical productivity developments in Sweden using data from 1950 to the present. A more detailed analysis examines Information- and communication technology (ICT) industries and their contribution to Swedish productivity growth.

The chapter continues with NIER's view of productivity developments in 2026–2029, presenting the actual productivity forecast and potential productivity assessment for the business sector. This is followed by an analysis of productivity growth drivers in terms of human capital, capital deepening and total factor productivity (TFP).

The chapter concludes with NIER's view of long-term productivity developments and a comparison with other forecasting institutions.

Figure 58 Business sector productivity
SEK per hour at constant prices and percentage change respectively, calendar-adjusted data



Sources: Statistics Sweden and NIER.

The link between productivity and wages

Wages are determined by labour supply and demand. Corporations are willing to pay a wage corresponding to the additional value an employee contributes through their work in production.

Wages normally rise with productivity growth. However, wage growth depends on several factors. Economic theory considers, among other things, bargaining power between employers and employees, the value of earning labour income relative to other transfers, and general labour market conditions. The greater the value created by a job and the stronger an employee's bargaining position, the higher the wage.²¹ This reasoning assumes that demand for goods and services rises simultaneously.

The reason productivity rises also matters. Some productivity growth is driven by developments that complement labour and thus raise the value created by an employee. Other productivity growth is driven by developments that can replace labour, potentially having a smaller effect on wage growth (see the box 'Different types of productivity growth' and the appendix 'Productivity and different production functions').

Different types of productivity growth

The business sector can produce goods and services using different inputs, with production factors divided into the broad categories of labour and capital. Depending on production technology, output may be more or less labour-intensive.

Productivity growth can be decomposed into contributions from human capital, capital deepening and total factor productivity (TFP), where TFP is the change in output that cannot be attributed to changes in labour input or capital.

Different types of technological change affect productivity and, in turn, determine the extent to which a corporation uses labour or capital in production. Depending on technological developments, corporations decide how to organise production and how much capital and labour to use in future (see Acemoglu & Restrepo, 2019). The implications for wage growth depend heavily on long-term developments in profit and labour shares (see the discussion in the chapter 'Profitability').

²¹ The starting point is the reasoning in the search and matching model (see Diamond (1982), Mortensen (1982) and Pissarides (1985)). This simple discussion assumes perfect competition and homogeneous workers with identical wages.

THE EMPIRICAL RELATIONSHIP BETWEEN PRODUCTIVITY AND REAL LABOUR COSTS

Historical data show strong co-movement between productivity and real labour costs in Sweden. Real labour costs include corporations' costs of wages and other employee compensation.

Productivity and real labour costs track each other closely over time, with some exceptions (see Figure 59). In the early 2000s, productivity grew in line with labour costs. After the financial crisis, labour costs rose faster than productivity for several years. Since 2023, productivity has instead grown faster than labour costs, opening up a gap between productivity and real wages in 2023–2025.

Historical productivity developments

Productivity growth in Sweden has varied considerably over time (see Figure 58), both in the whole economy and in the business sector. Overall, Sweden has experienced different productivity regimes, with high growth in some periods and low growth in others. Average annual productivity growth therefore varies with the years included.

Using different data sources, NIER has calculated historical productivity series for both the whole economy and the business sector. Most of the productivity analysis starts in either 1980 or 1993, partly because of data quality and partly because the pre-1980 period is considered less relevant. Appendix 2, 'Data sources', describes data availability in greater detail.

STRONG GROWTH IN 1950–1980

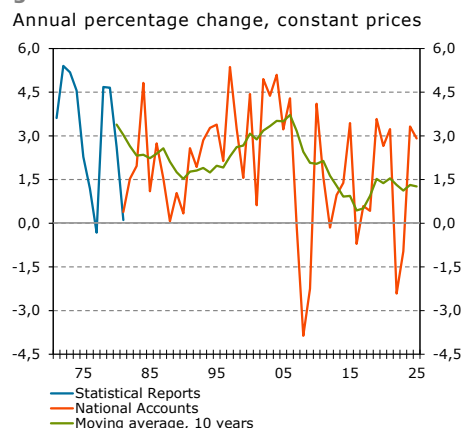
For 1950–1980, data are available only for the whole economy, and productivity is measured as GDP per hour worked because business sector value-added series are unavailable before 1970 (see Figure 60). Productivity growth was strongest in the 1960s and slowed somewhat in the 1970s. Whole-economy productivity rose by an average of 3.4 per cent per year in 1950–1980.

From 1970, business sector value added and productivity can be identified separately (see Figure 61). Productivity growth was highest in the 1970s, averaging 3.4 per cent per year.

LOWER PRODUCTIVITY GROWTH IN 1980–2025

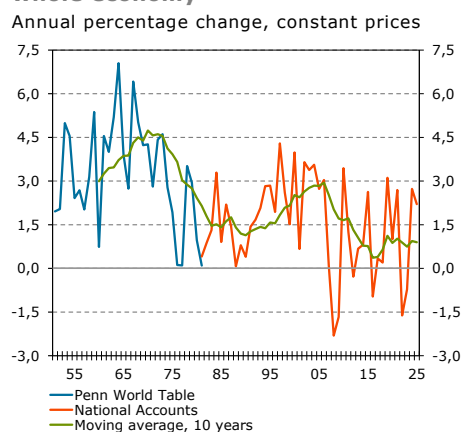
Official Swedish national accounts data are available from 1980. Productivity growth has been lower since 1980 than in the preceding period and varies considerably up to 2025 (see Figure 60). For example, it rose during the 1990s and into the 2000s during

Figure 59 Real labour costs and productivity
Figure 61 Business sector productivity growth



Sources: Statistics Sweden and NIER.

Figure 60 Productivity growth in the whole economy



Note. Productivity is measured as GDP per hour worked in 1950–1980 and as value added per hour worked from 1980 onwards.

Sources: Penn World Table, Statistics Sweden and NIER.

the IT boom. As before, average annual growth therefore depends on the years included. From 1980 to the latest full-year observation in 2025, business sector productivity growth averaged 1.9 per cent per year.²² Restricting the period to 1993–2025 also yields average annual business sector growth of 1.9 per cent (see Table 7).²³ Between 2000 and 2025, however, productivity growth was 1.7 per cent per year.

Large differences across industries

Productivity developments also differ across industries (see Table 7). The description of industry developments covers 1993–2025. Table 7 divides this into subperiods representing important events since 1993, such as the financial crisis and the pandemic.

Productivity growth has been highest in manufacturing, both over 1993–2025 as a whole and in 1993–2007 (before the financial crisis) and 2010–2019 (after the crisis). Construction has recorded the lowest productivity growth, both overall and before and after the financial crisis. Services occupy an intermediate position.

During the financial crisis in 2008–2009, productivity growth was negative in all industries and subsequently shifted to a lower rate. ICT forms part of services and stands out for high productivity growth even after the financial crisis (see the section on ICT below).

Weaker productivity growth in the 2010s was a global phenomenon rather than being confined to Sweden.²⁴ According to NIER (2026), Swedish productivity has grown at a healthy pace compared with much of Europe both since the financial crisis and since 2023, but more weakly than in the United States.

²² Business sector productivity is measured using calendar-adjusted data starting in 1981. Since the analysis concerns percentage changes, the first year refers to the change between 1981 and 1982.

²³ Other productivity measures, such as value added per employed person, have shown similar developments over time. Comparing business sector value added per hour worked and per employed person in 1993–2025 shows almost identical productivity developments. The greatest difference occurred during the pandemic, when hours worked fell sharply, sustaining value added per hour while value added per employed person fell.

²⁴ NIER analysed post-financial-crisis developments and possible explanations for weaker growth in the Wage Formation Report 2022.

Table 7 Actual productivity growth

Percentage change, average annual growth

	1994	1994	2008	2010	2020	2022
	–	–	–	–	–	–
Industry	2025	2007	2009	2019	2021	2025
Whole economy	1.6	2.6	–2.0	1.1	1.8	0.6
Business sector	1.9	3.2	–3.0	1.5	3.2	0.5
Construction industry	0.3	1.8	–4.6	–0.6	0.5	0.0
Service sector	1.7	2.1	–1.0	1.4	3.4	1.2
Wholesale and retail trade	2.7	4.5	–1.4	2.1	6.6	–2.2
Information and communication services	4.4	4.9	3.4	4.4	7.9	1.8
Real estate activities	0.8	1.0	1.1	–0.9	0.3	4.6
Manufacturing industry	3.3	6.2	–7.9	3.2	3.5	–0.8

Note. Geometric means. Data are available from 1993, but as the table shows percentage changes, the first year refers to the change between 1993 and 1994. Productivity is defined as value added at constant prices divided by hours worked. Unadjusted data are used for the whole economy; other series are calendar-adjusted. All series are at basic prices.

Source: Statistics Sweden.

The pandemic and its aftermath

Business sector productivity growth accelerated after 2018, with particularly strong growth during the pandemic.²⁵ The acceleration in 2020–2021 stands out at first glance, particularly in services, where growth was clearly stronger than in the 2010s.

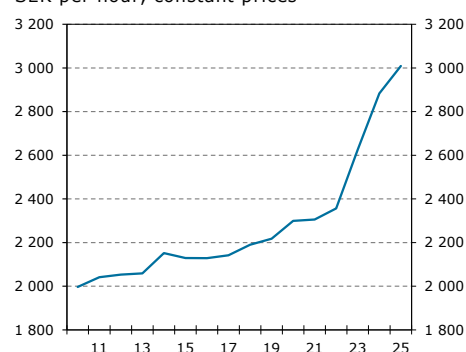
Growth was especially high in wholesale and retail trade and in information and communication services.

Pandemic restrictions disproportionately affected lower-productivity service industries.²⁶ The expanded short-time work scheme allowed corporations to adjust hours worked without bearing the full cost themselves.

Post-pandemic developments are particularly characterised by very strong productivity growth in real estate activities (see Table 7 and the box ‘High productivity in real estate activities’). This industry is difficult to analyse because it includes households’ owner-occupied houses and holiday homes, which ‘produce’ housing services without labour input. However, the overall productivity increase in real estate activities is mainly driven

Figure 62 Productivity in commercial real estate activities (L68B)

SEK per hour, constant prices



Sources: Statistics Sweden and NIER.

²⁵ According to the WHO, the pandemic ended in May 2023. Sweden’s economy, particularly average working hours, had already normalised during the second half of 2021, when restrictions were lifted and much of the population had been vaccinated. The years 2020–2021 are therefore analysed separately.

²⁶ See the section on composition effects in the productivity chapter of the Wage Formation Report 2022.

by commercial property rather than owner-occupied houses and holiday homes (see Figure 62).²⁷

Developments in other business sector industries have varied during and after the pandemic (see Figure 63). For example, manufacturing productivity rose by just over 9 per cent in 2022 before falling by almost 12 per cent in 2023. Trade productivity instead fell by 20 per cent in 2022 and did not return to pre-pandemic levels until 2025 (see Figure 64).

High productivity in real estate activities

Productivity growth in real estate activities was very high in 2023 and 2024 (see Figure 65). The industry contributed 1 percentage point to business sector productivity growth in 2023 and 0.7 percentage points in 2024.

Real estate activities are a distinctive industry that is difficult to analyse. It comprises two subindustries: households' owner-occupied houses and holiday homes (L68A), and other real estate activities (L68B), including commercial property corporations.²⁸ There are no hours worked in owner-occupied houses and holiday homes, so they do not contribute to business sector wage growth. Labour productivity therefore cannot be calculated for them either. Other real estate activities form a more conventional market, with value added from letting and property management and associated hours worked.²⁹

The property stock generally evolves slowly, with relatively stable labour input. Higher real estate productivity in 2023–2024 was driven by increased value added, while hours worked in other real estate activities changed little.³⁰

The latest recession

Productivity in the business sector as a whole fell in both 2022 and 2023 owing to the recession. Developments reversed in

²⁷ Commercial property refers to other real estate activities.

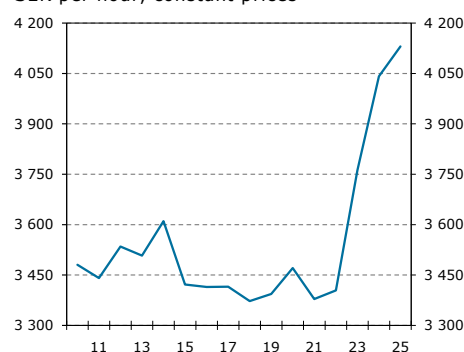
²⁸ Owner-occupied houses and holiday homes consist of household-owned dwellings that produce housing services for households in the national accounts. In brief, this accounting construction treats people who rent a house and pay rent equally with homeowners. In practice, an owner produces a housing service, sells it to themselves and consumes it. This is called imputed rent.

²⁹ When productivity for all real estate activities is calculated, gross output and intermediate consumption from owner-occupied houses and holiday homes are combined with those from other real estate activities. Hours worked, however, come exclusively from other real estate activities.

³⁰ See The Swedish Economy, September 2026, for a discussion of developments in 2023–2024 being driven by reduced intermediate consumption.

Figure 65 Productivity in real estate activities (L68A+L68B)

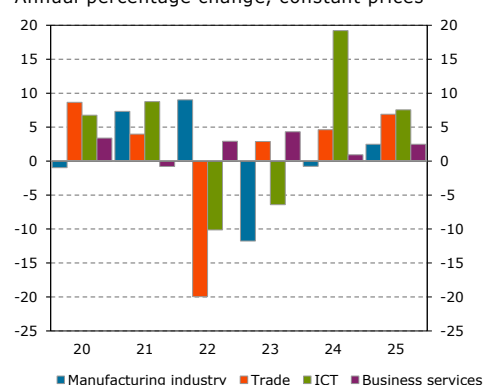
SEK per hour, constant prices



Sources: Statistics Sweden and NIER.

Figure 63 Productivity growth during and after the pandemic

Annual percentage change, constant prices

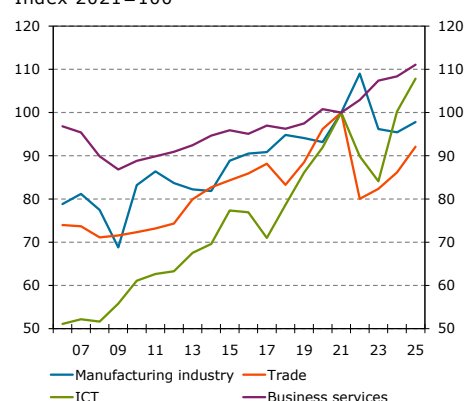


Note. According to the WHO, the pandemic ended in May 2023.

Sources: Statistics Sweden and NIER.

Figure 64 Productivity growth across industries

Index 2021=100



Sources: Statistics Sweden and NIER.

2024, with productivity rising again as the economy bottomed out. The increase mainly reflected falling hours worked alongside a small rise in value added.³¹ Much of the productivity increase can be attributed to specific service industries (see Table 7). Both information and communication services and trade have recorded particularly strong productivity growth over the past two years (see Figure 64). However, productivity in both ICT and trade was also growing rapidly before the pandemic and is now growing broadly in line with that trend. Both industries experienced sharp productivity falls in the preceding weak period of 2022–2023. Other related service industries without a comparable decline in 2022–2023, such as business services, recorded much more modest growth in 2024–2025 (see Figure 63). Strong growth in 2024–2025 should therefore be viewed relative to the preceding weaker developments.

There are signs that corporations retained surplus labour during Sweden's recession. As demand gradually returned, they could therefore increase output without a corresponding rise in hours worked or employment.

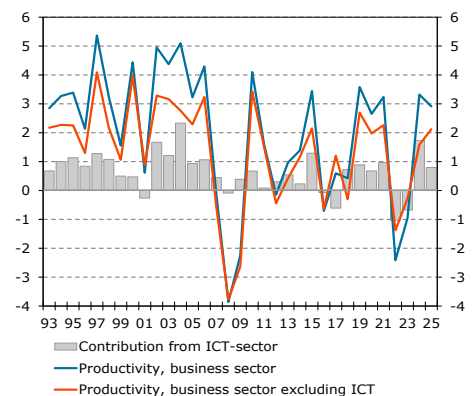
Information and communication industries drive Swedish productivity

The period from the second half of the 1990s to the financial crisis saw strong global growth in ICT industries, resulting in substantial productivity increases. ICT industries also performed strongly in Sweden, and their rapid productivity growth contributed to strong productivity growth in the business sector as a whole (see Figure 66).

Understanding ICT productivity developments requires recognising that strong growth in the 1990s and 2000s was partly driven by quality improvements (see the box 'Productivity growth in volume terms from quality adjustments'). In brief, Statistics Sweden calculated productivity growth using estimates of improvements in the products produced by ICT industries.

A similar future scenario is conceivable for AI services.³² Depending on whether the product is consumed domestically or exported, quality improvements may generate more or less wage growth in Sweden.

Figure 66 ICT industries' contribution to the business sector
Percentage change



Sources: Statistics Sweden and NIER.

³¹ Employment also fell.

³² See Statistics Sweden (2025). According to Statistics Sweden, ICT industries currently lead AI use in Sweden, and future AI-driven productivity developments may resemble ICT developments in the 1990s. However, ICT productivity developments do not depend solely on AI.

Productivity growth in volume terms from quality improvements

Growth in the volume of value added in goods-producing ICT industries around the turn of the millennium largely reflected Statistics Sweden's estimated quality improvements. Growth at current prices was much weaker.

During the 1990s, mobile phones improved rapidly and became more advanced, while their prices did not rise correspondingly. This increased value added at constant prices.

If high productivity growth at constant prices mainly reflects quality improvements, the value-added deflator will, other things being equal, be lower.

This can have two different consequences for wage growth depending on where the final product is consumed. If the mobile phone is sold and consumed in Sweden, it lowers inflation (a falling CPI), potentially allowing wages to rise to achieve the 2 per cent inflation target. If the phone is instead exported, the export deflator falls and the terms of trade *deteriorate*. In that case, the quality improvement does not itself contribute to rising Swedish wages.

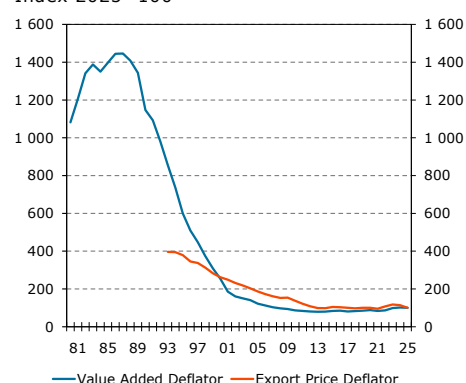
The value-added deflator for the manufacture of computers, electronic and optical products fell sharply during the 1990s until around the turn of the millennium and has since broadly stabilised (see Figure 67). The export deflator for the same industry also fell, but less dramatically (see Figure 67).

The effect on Swedish consumer prices came later. According to CPI statistics, prices for information and communication services continued rising for much of the 1990s. They did not turn downwards until around 1997 and have since continued falling markedly throughout the 2000s.

The sharp price falls suggest that consumers in Sweden benefited from quality improvements without corresponding increases in customer prices. However, the export deflator's development indicates that part of ICT productivity growth benefited foreign consumers.

**Figure 67 Deflators for SNI 26
Manufacture of computers, electronic
and optical products**

Index 2025=100



Note. The deflators are calculated by dividing value added/exports in SNI 26 at current prices by value added/exports in SNI 26 at constant prices.

Sources: Statistics Sweden and NIER.

POTENTIAL PRODUCTIVITY GROWTH IN 1980–2025

NIER calculates potential productivity from 1980 onwards. Potential productivity growth represents NIER's assessment of productivity growth without cyclical variation. Potential business

sector productivity rose by an average of 1.9 per cent per year in 1980–2025 (see Table 8).

Potential productivity is calculated using a Hodrick–Prescott (HP) filter for 1980–2019, following actual productivity developments but smoothing them over time. Potential productivity therefore grew faster in 1993–2007 than in the post-financial-crisis period 2010–2019 (see Table 8). For years after 2019, NIER assesses potential productivity growth using indicators and models. In the long term, potential productivity is assumed to grow at the historical business sector average since 1980, adjusted for composition effects.

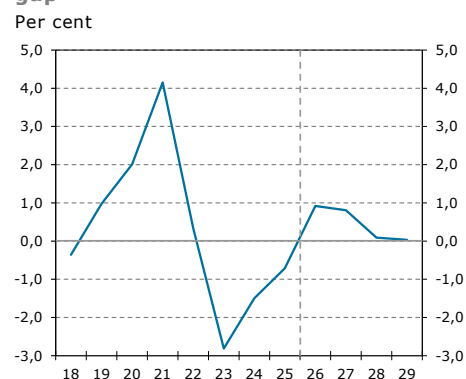
Potential growth was temporarily elevated during the pandemic owing to composition effects and short-time work, among other factors (see Table 8). More productive manufacturing industries could continue producing during the pandemic, while less productive services were more severely affected by restrictions. The restrictions were not cyclical and should be viewed as structural factors, therefore also affecting potential productivity. After restrictions were lifted and composition effects subsided, potential productivity growth fell back again.³³

Actual productivity fell in 2022 and 2023 as the economy weakened. Potential productivity growth nevertheless held up, since the decline in actual productivity was cyclical, opening a negative business sector productivity gap. This gap shows the percentage deviation of actual from potential business sector productivity and thus measures resource utilisation within corporations. The productivity gap is assessed to have bottomed out in 2023 (see Figure 68).

While actual productivity fell in the business sector as a whole in 2023, real estate productivity rose sharply (see the box ‘High productivity in real estate activities’). The increase in real estate productivity shifted the business sector’s productivity level upwards. Given higher actual productivity levels in these years, potential productivity is also raised so that assessed corporate resource utilisation remains consistent with indicators. Potential productivity growth is therefore temporarily elevated in 2023 and 2024. In 2025, potential productivity growth is somewhat lower, but remains relatively high (see Figure 69). In this way, the business sector productivity gap reflects indicators of corporate resource utilisation.

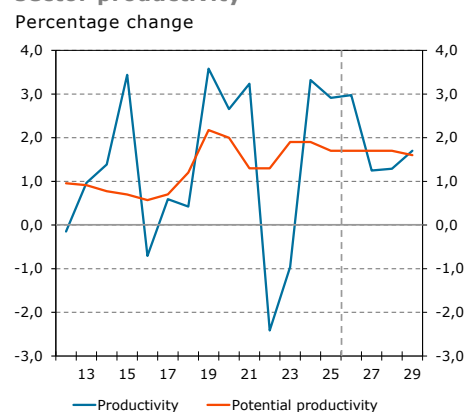
NIER assesses that potential productivity growth shifted upwards after 2018. However, 2020–2025 was a period of major disturbances that strongly affected productivity growth in

Figure 68 Business sector productivity gap



Sources: Statistics Sweden and NIER.

Figure 69 Actual and potential business sector productivity



Sources: Statistics Sweden and NIER.

³³ Consistent with this reasoning, NIER assesses that potential average working hours fell during the pandemic owing to restrictions and began recovering after COVID-19 vaccinations were completed.

individual years. The potential productivity assessment is therefore subject to considerable uncertainty.

Table 8 Potential productivity growth

Percentage change, average annual growth

	1981	1994	1994	2008	2010	2020	2022
	–	–	–	–	–	–	–
	2025	2025	2007	2009	2019	2021	2025
Whole economy	1.5	1.5	2.4	0.6	0.6	0.9	1.2
Business sector	1.9	2.0	3.1	0.2	0.9	1.6	1.7

Note. Geometric means. Data are available from 1980, but as the table shows percentage changes, the first year refers to the change between 1980 and 1981.

Sources: Statistics Sweden and NIER.

Productivity developments in 2026–2029

This section presents the actual productivity forecast and the potential productivity assessment for the coming years.

ACTUAL PRODUCTIVITY GROWTH SLOWS

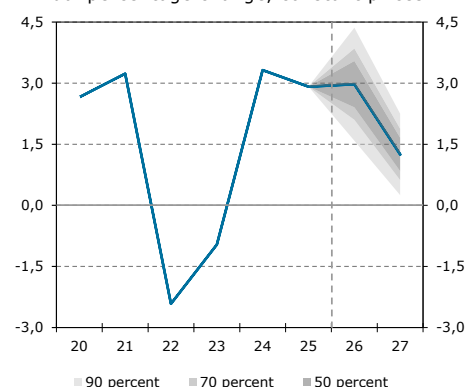
For 2025 and 2026 as a whole, actual business sector productivity growth slows compared with 2024, but remains above its historical average since 1980 (see Figure 69). Corporate resource utilisation has increased and begins to become strained in the second half of 2026 (see Figure 68). Corporations therefore eventually need to increase hours worked and recruit more staff, itself lowering productivity growth. This is the normal pattern over a business cycle. Sweden's recession fades during autumn 2026, after which resource utilisation in the economy as a whole is balanced.

Productivity growth slows further in 2027. Value-added growth is strongest in 2027, but hours worked also rise faster, helping labour market resource utilisation to normalise. This closes the business sector productivity gap from above (see Figure 68). In the scenario years 2028 and 2029, the economy is in cyclical balance and the productivity gap is essentially closed. Productivity is then expected to develop in line with its potential. Average annual business sector productivity growth is 1.4 per cent in 2027–2029.

One way to illustrate productivity forecast uncertainty is to construct probability intervals based on historical forecasting performance. With 90 per cent probability, productivity growth will be between 1.5 and just over 4 per cent in 2026, and between 0.5 and just over 2 per cent in 2027. Forecast uncertainty is therefore substantial (see Figure 70).

Figure 70 Uncertainty intervals for business sector productivity

Annual percentage change, constant prices



Note. The forecast is presented in The Swedish Economy, September 2026. The intervals are based on NIER's historical forecasting errors in its September forecasts for 2017–2025 and the assumption that the errors are normally distributed.

Sources: Statistics Sweden and NIER.

ASSESSMENT OF POTENTIAL PRODUCTIVITY

The potential productivity assessment for the coming years starts from the actual productivity forecast, supplemented by model analysis and indicators of economic resource utilisation, such as capacity utilisation, demand conditions, recruitment plans and labour shortages. These indicators inform the initial assessment of the business sector productivity gap.

The final potential productivity growth assessment forms part of NIER's overall forecast for the Swedish economy. The assessment for the coming years assumes that recovery from the recent recession has been productivity-driven.

Potential business sector productivity grows by an average of 1.7 per cent in 2026–2029, slightly faster than actual productivity. This is because corporate resource utilisation is somewhat elevated initially and the productivity gap is positive in 2026.

Drivers of productivity

This section analyses the factors underlying productivity developments. Different components of productivity can play different roles in wage growth. Assumptions about the long-term profit share and hence how flexibly corporations can use labour and capital determine the extent to which productivity growth leads to rising wages (see the appendix 'Productivity with different production functions' for a more technical account, and the chapter 'Profitability').³⁴

CONTRIBUTIONS TO PRODUCTIVITY

Productivity growth can be analysed through growth accounting, decomposing it into contributions from human capital, the size of the capital stock and TFP. Growth accounting is performed for both observed data and forecasts.

Human capital is measured as quality-adjusted hours worked. Labour economics generally assumes that workers have different individual productivity levels, which aggregate into the human capital contribution to productivity. Since individual productivity cannot be measured, a proxy must be constructed. Average wages and numbers of people with different years of education are used to estimate population human capital.³⁵ This is a

³⁴ That is, whether the profit share is stationary.

³⁵ FASIT 2024 version 2 is used to project average wages and numbers of people in different educational groups up to 2029.

simplification, since human capital should ideally be measured as individual abilities useful for creating value added.

Capital deepening is analysed in terms of the size of the capital stock.³⁶ TFP is a residual, whose size partly depends on the detail and accuracy of the data used to analyse human capital and the capital stock. If correctly calculated, the TFP contribution captures broader technological progress contributing to productivity growth. TFP is thus a scaling factor in the production function, raising value added independently of the quantity of labour and capital.³⁷

Contributions to actual productivity are shown in Figure 71. Changes in human capital clearly play a very small role in productivity growth. Capital deepening and TFP are instead the most important components. Given human capital's small role, the following analysis focuses on capital deepening and TFP contributions.

Capital deepening has made a substantial contribution since productivity began rising after 2018, driven by capital growing faster than hours worked. Notably, each hour worked involved more capital in the pandemic year 2020 because of short-time work, raising productivity through capital deepening. In 2024 and 2025, when actual productivity began rising, capital deepening accounted for just under half the increase. Its contribution to productivity growth is expected to remain large in 2026–2029, accounting for approximately 40 per cent of total productivity growth during these years (see Figure 71).

TFP increases also contribute substantially to growth. The TFP contribution was particularly high in 2019 and 2021. In 2024 and 2025, TFP accounted for slightly more than half of productivity growth. Its contribution is also expected to be substantial in 2026–2029, accounting for most productivity growth.

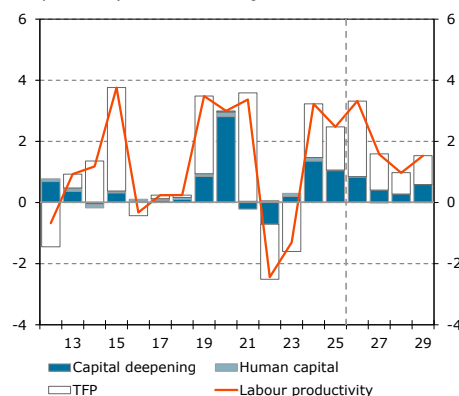
POTENTIAL TFP

Empirical TFP estimates are uncertain and contain cyclical dynamics. Understanding structural TFP developments requires removing these cyclical variations, since wage growth is probably determined by long-term TFP developments rather than short-term cyclical fluctuations.

One way to remove cyclical fluctuations is to calculate potential TFP by HP-filtering actual TFP. This corresponds to

Figure 71 Labour productivity, capital deepening, human capital and TFP

Contributions and percentage change respectively, calendar-adjusted annual data



Source: NIER.

³⁶ Capital deepening is calculated using recent business sector fixed capital formation and consumption of fixed capital. Some variables associated with these calculations are projected for 2027–2029 using the previous year's growth rate.

³⁷ The TFP calculation assumes a constant long-term business sector profit share, including owner-occupied houses and holiday homes.

potential productivity less the contributions from capital deepening and human capital.³⁸

Since 2012, actual TFP has generally been below potential TFP, except in 2015 and during the pandemic (see Figure 72). At the start of 2026, actual TFP is above its potential level. One interpretation is that technological progress in 2026 exceeds average technological progress. Potential TFP grows by an average of 1.3 per cent per year in 2027–2029.

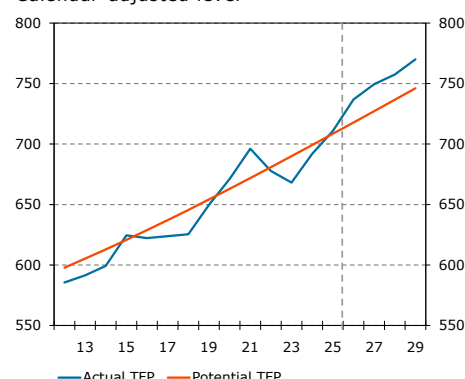
CONTRIBUTIONS TO PRODUCTIVITY AND WAGE FORMATION

It is difficult to establish how much productivity growth can be expected to translate into rising wages. A larger human capital contribution makes each hour worked more efficient, other things being equal, which should raise wages. However, the human capital contribution as measured in the data is very small, meaning it will play little role in future wage growth. Its small size partly reflects unavailable data on workers' abilities. When human capital is approximated by years of education, a small contribution is reasonable as growth in average educational attainment slows.

TFP measures how much can be produced per hour independently of the quantity of labour and capital. If TFP rises, workers can produce more value added per hour without any change in capital, which should ultimately raise wages.³⁹

How the capital deepening contribution should be interpreted depends on how flexibly corporations can use labour and capital in production, and hence on the long-term profit share. The key issue is what new capital is used for. In a small open economy, capital is available on international capital markets. Corporations can therefore access capital at an internationally determined price, affecting the profitability of fixed capital formation in productive assets. If technological progress allows corporations to replace labour with capital relatively flexibly, they can use more capital in production. This produces a larger long-term capital deepening contribution and can permanently raise the capital-output ratio. Labour productivity will then rise, but wages need not rise proportionately. If capital instead

Figure 72 Actual and potential total factor productivity (TFP)
Calendar-adjusted level



Source: NIER.

³⁸ To address HP-filter endpoint problems, filtering extends to 2027. For 2028–2029, potential TFP is projected using its 2027 growth rate.

³⁹ TFP similarly raises the marginal product of capital.

complements labour, productivity growth through capital deepening may lead to rising wages to a greater extent.⁴⁰

Long-term productivity growth

In the long term, when the economy is assumed to be in balance, actual productivity developments coincide with potential developments (see Figure 73).

Long-term productivity growth is difficult to assess. NIER's assessment for 2029 onwards is based on average historical productivity growth since 1980. A longer historical series may capture many different economic developments and thus underlying structural conditions for Swedish productivity growth.

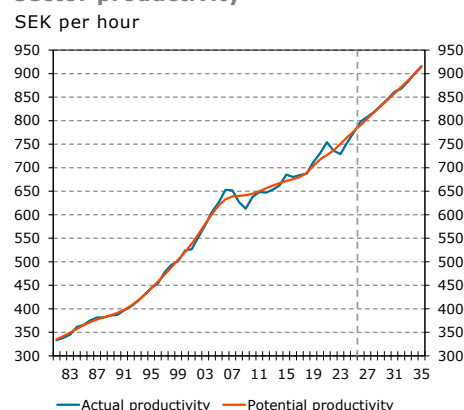
Swedish business sector productivity rose by an average of 1.9 per cent per year between 1980 and 2025. The choice of starting year largely reflects the availability of official Statistics Sweden data. Generally, the longer the period included, the higher the average, because productivity growth was higher further back in time (see Figure 61). For example, average productivity growth in 2000–2025 was 1.7 per cent per year, below the 1980–2025 average.

The Swedish business sector has changed over time. Manufacturing's share of total business sector value added fell from 30 per cent in 1980 to approximately 20 per cent in 2025, while services' share rose from 50 to approximately 70 per cent. This change is taken into account when assessing long-term productivity growth. NIER therefore adjusts for industry composition using value-added weights from 2022–2025. With the changed industry composition, long-term productivity growth is assessed at 1.6 per cent in the business sector and 1.3 per cent in the whole economy. Long-term potential productivity growth is thus marginally below assessed potential growth in 2026–2028.

Different forecasters' assessments of future potential productivity growth

Only a few forecasting institutions publish potential productivity growth assessments several years ahead, and definitions vary across forecasters. Table 9 presents selected other forecasts for

Figure 73 Actual and potential business sector productivity



Sources: Statistics Sweden and NIER.

⁴⁰ Technological progress may initially appear in TFP, raising labour productivity. The corporation then determines future capital use, given capital availability on international markets. This may affect capital deepening in subsequent years. Wage growth effects differ depending on whether capital complements or substitutes for labour.

Swedish productivity alongside NIER's assessments for the corresponding periods.

The Government assesses potential whole-economy productivity growth at an average of 1.0 per cent per year in 2026–2029, below NIER's assessment.

The OECD calculates potential productivity by dividing potential GDP by potential employment. Its growth forecast for Sweden's whole economy is 1.0 per cent per year in 2026–2029, also below NIER's assessment.

NIER's potential productivity assessment for the whole economy is broadly in line with assessments of potential productivity growth in the United States.

The CBO (2026) assesses US productivity growth at an average of 1.6 per cent per year in 2026–2030.

Table 9 Assessments of Swedish productivity growth

Average annual percentage change over the stated period

	Variable	Period	Forecast
NIER, September 2026	Potential whole-economy productivity	2026–2029	1.4
Government, Spring Bill 2026	Potential whole-economy productivity	2026–2029	1.0
OECD, September 2025	Potential GDP per potentially employed person, whole economy	2026–2029	1.0

Sources: NIER, Government and OECD.

Appendix 1 Productivity and different production functions

This appendix discusses how productivity components relate to wage growth. Whether productivity growth leads to rising wages can be analysed both at the micro level, from a corporate perspective, and at the macro level in long-run equilibrium. The discussion begins at the micro level before moving to long-run equilibrium.

PARTIAL ANALYSIS AT THE CORPORATE LEVEL

Assume that a corporation produces goods (Y) using quality-adjusted hours worked (L) and capital (K). Labour productivity is defined as Y/H , where H is hours worked. An increase in L/H , for example, means that workforce skills and abilities have improved, so that a quality-adjusted hour (L) contributes more to output than before, other things being equal. Labour productivity is therefore an average and is linked to the marginal product of labour (MPL), which in turn determines wages. Whether labour productivity and MPL move together depends on how the corporation can use labour and capital in production. In some production functions, labour productivity is proportional to MPL; in others, it is not. To illustrate how conclusions may differ, the analysis focuses on two production functions: Cobb–Douglas and a constant elasticity of substitution (CES) function.

In a Cobb–Douglas production function (see the margin box “Labour productivity with a Cobb–Douglas production function”), each additional quality-adjusted hour worked contributes a fixed share of output, implying that the labour share $(1-\alpha)$ and profit share (α) are constant. Labour and capital can be substituted, with their use depending on relative prices, but substitution is limited by an elasticity of 1. Higher labour productivity then raises the marginal product of labour (MPL) proportionately, ultimately leading to rising wages.

With a more general production function, the link between labour productivity and the marginal product of labour changes. In a CES production function whose elasticity may differ from 1, not everything moves proportionately: a corporation can substitute capital for labour or vice versa more or less flexibly than under Cobb–Douglas. Substitution possibilities are determined by σ in the production function (see the margin box ‘Labour productivity, labour share and profit share with constant elasticity of substitution between production factors’). If σ is less than 1, substituting between labour and capital is difficult; if σ exceeds 1, it is easy. Either way, MPL is not proportional to labour productivity, so the extent to which higher labour productivity

Labour productivity, labour share and profit share with constant elasticity of substitution between production factors

$$\text{Production function: } Y = A(\beta K^\rho(1-\beta)L^\rho)^{\frac{1}{\rho}}$$

where Y is value added, K is capital and L is quality-adjusted hours worked. A is TFP. β is the distribution parameter between labour and capital. ρ is the shape parameter determining the elasticity of substitution. The elasticity of substitution is defined as $\sigma = \frac{1-\rho}{\rho}$

$$\text{Labour productivity: } \frac{Y}{H} = \frac{A(\beta K^\rho(1-\beta)L^{1/\rho})^{1/\rho}}{H}$$

Labour productivity with a Cobb–Douglas production function

$$\text{Production function: } Y = AK^\alpha L^{1-\alpha}$$

$$\text{Labour productivity: } \frac{Y}{H} = \frac{AK^\alpha L^{1-\alpha}}{H}$$

Productivity growth:

$$\Delta \ln\left(\frac{Y}{H}\right) = \underbrace{\Delta \ln(A)}_{\text{TFP}} + \underbrace{\alpha \Delta \ln\left(\frac{K}{H}\right)}_{\text{Capital deepening}} + \underbrace{(1-\alpha) \Delta \ln\left(\frac{L}{H}\right)}_{\text{Human capital}}$$

TFP + Capital deepening + Human capital
where Y is value added, H is hours worked, K is capital and L is quality-adjusted hours worked. A is TFP. α is the profit share and $(1-\alpha)$ is the labour share in the production function.

raises wages is not self-evident. Under a CES production function, labour and profit shares can therefore vary over time.

Broader technological progress that fundamentally affects labour efficiency and organisation should appear in TFP, since it is a scaling factor (A) in both production functions. Higher TFP allows output to increase for given L and K . Such an increase raises both MPL and the marginal product of capital (MPK), under both Cobb–Douglas and CES production functions. From a microeconomic perspective, TFP increases should therefore always raise wages for given quantities of L and K .

An embodied technological change enabling labour substitution is not expected to raise TFP. However, it allows the corporation to increase capital in production. Under Cobb–Douglas, this distinction does not matter because changes in labour productivity translate proportionately into MPL and thus wages, regardless of how productivity growth arises. Under CES, technological change reflected in capital deepening can raise the profit share without necessarily increasing MPL and wages. It is also possible for MPL to rise.

LONG-RUN GENERAL EQUILIBRIUM AT THE MACRO LEVEL

So far, the discussion has considered a representative corporation at the micro level. Although partial, this reasoning illustrates the mechanisms. Moving to the long term and the macro level makes the question more complicated.

In a small open economy, capital is available in the long term on international capital markets at an exogenously determined price r^* ⁴¹. Long-term capital costs then equal r^*K . Just as the marginal wage equals MPL, $r = r^* = \text{MPK}$ in equilibrium. Corporations choose their capital stock accordingly, given the technological advances available when the fixed capital formation decision is made. Technological progress may complement labour or enable labour to be replaced with capital. Some progress also augments both labour and capital (TFP).

The first scenario uses a Cobb–Douglas production function. If technological change raises TFP, both MPL and MPK increase. Given an internationally determined required return, capital flows into the country until MPK again equals r^* . Capital and wages are higher in the new equilibrium, while the capital-output ratio K/Y remains unchanged. Since MPL has risen, wages also rise until $\text{MPL} = w$ in equilibrium.

With a CES function and higher TFP, the conclusions are similar. Both MPL and MPK increase. Since $\text{MPK} > r^*$, capital

⁴¹ r^* is used here as shorthand for the full user cost of capital, including risk premia and consumption of fixed capital.

flows into the country until $MPK = r^*$ again. Capital and output are higher than before. Higher MPL also generates more value added from labour, raising wages. The conclusion is therefore the same despite greater flexibility in substituting between capital and labour.

The major difference arises with factor-augmenting technological change, which can augment labour or capital. Under Cobb–Douglas, it does not matter whether technological progress is TFP-neutral, capital-augmenting or labour-augmenting. Because profit and labour shares are constant, real wages rise in all cases: MPL has increased, while MPK returns to r^* after an adjustment period.

The major difference arises with capital-augmenting technological progress combined with a CES production function. The key parameter is the elasticity of substitution (see the margin box “Labour productivity, labour share and profit share with constant elasticity of substitution between production factors”). A larger capital stock increases the capital deepening contribution. Free capital mobility brings $MPK = r^*$. Under perfect competition, wages equal MPL. If $\sigma > 1$, meaning labour and capital are more substitutable, the corporation can replace workers with capital relatively easily. Since the required return is fixed at r^* , the capital-output ratio K/Y can rise, lowering the labour share. Labour productivity then grows faster than MPL and hence wages.

Appendix 2: Data sources

This appendix describes how NIER constructed historical productivity data for 1950–1980.

For the whole economy, Statistics Sweden has backcast GDP at market prices to 1950. However, industry-level data are unavailable, so business sector productivity cannot be calculated that far back, although it is often of greater interest than whole-economy productivity.

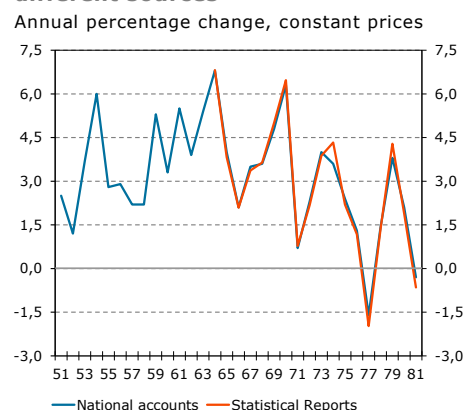
NIER has access to printed national accounts publications from the 1980s. These report both business sector value added and GDP developments throughout the 1970s. GDP growth in the Statistical Report (SM) is not exactly the same as in Statistics Sweden’s official series, but the series are relatively comparable (see Figure 74). Their comparability supports the view that business sector value-added growth rates in the Statistical Report are also reasonably accurate.

Statistics Sweden does not provide equivalent backcast series for hours worked. The Labour Force Surveys (LFS) began in 1959 and initially lacked full coverage. The older historical data available from Statistics Sweden extend only one year further back than the regular national accounts publications.

An alternative to Statistics Sweden data is the Penn World Table (PWT), containing estimates of hours worked per employed person and employment back to 1950. Together, these can be used to calculate whole-economy hours worked. Where they overlap with actual national accounts, PWT hours growth broadly matches national accounts growth.

In summary, productivity is measured as GDP per hour worked for the whole economy from 1950, and as value added per hour worked for the business sector from 1970. According to PWT statistics, whole-economy productivity rose by an average of 3.4 per cent per year in 1950–1980. Average growth in the 1970s was 2.4 per cent per year (see Table 10). Business sector productivity rose by an average of 3.4 per cent per year in the 1970s according to SM statistics (see Table 11).

Figure 74 GDP growth according to different sources



Sources: Statistics Sweden and NIER.

Table 10 Historical actual productivity growth in the whole economy

Percentage change, average annual growth

Period	PWT
1951–1980	3.4
1971–1980	2.4

Note. Geometric mean. Data are available from 1950 and 1970 respectively, but as the table shows percentage changes, the first year refers to the change between 1950/1970 and 1951/1971.

Sources: Penn World Table and NIER.

Table 11 Historical actual productivity growth in the business sector

Percentage change, average annual growth

Period	SM
1971–1980	3.4

Note. Geometric mean. Data are available from 1970, but as the table shows percentage changes, the first year refers to the change between 1970 and 1971.

Sources: Statistical Report and NIER.

Profitability in the business sector

Profitability can be measured in different ways, with different measures highlighting partly different aspects of corporations' financial situation. The picture of Swedish business sector profitability is mixed. The profit share is high, while the return on capital appears somewhat low by historical standards. In services, the profit share has recently risen rapidly. Returns on capital have also increased and are now historically normal. In manufacturing, by contrast, both the profit share and the return on capital have declined since their 2022 peak.

Profitability is central to corporations' output, pricing, fixed capital formation and recruitment decisions. Understanding its development over time also matters when assessing scope for wage increases. However, profitability can be measured in several ways, with each measure illuminating partly different aspects of corporations' financial situation. This chapter presents four measures: return on capital, profit share, operating margin and survey-based profitability assessments. For a brief description of how the first three are calculated and relate to each other, see the margin box 'Return on capital, profit share and operating margin'. Unless otherwise stated, measures and underlying data are at current prices.

Economic theory assumes that corporations seek to maximise profits when deciding on output, prices, fixed capital formation and recruitment. In the short term, with the capital stock assumed given, profit maximisation means maximising the return on capital, making it a theoretically well-founded profitability measure.⁴² A drawback is that capital stock statistics, needed to calculate returns on capital, are more uncertain than other observed data used in this chapter and are published with a longer lag.⁴³ The profit share shows how value added generated during a period is distributed between labour and capital owners. It is reported with a shorter lag and less measurement uncertainty than the return on capital.⁴⁴ Operating margins are less commonly used in macroeconomic analysis than returns on capital and profit shares, but are relevant because they are closer to

⁴² Maximising profit is equivalent to maximising operating surplus. Since the capital stock is constant in the short term, profit maximisation is equivalent to maximising the return on capital, measured as operating surplus divided by a constant; see Varian (2014).

⁴³ For a description of capital stock measurement, see Appendix 2 in NIER (2026c).

⁴⁴ Because of their construction, returns on capital and profit shares generally differ in level. However, their changes co-move strongly, with a correlation coefficient of 0.95 for the whole business sector, allowing short-period changes in profit shares to proxy changes in returns on capital.

Return on capital, profit share and operating margin

All measures and underlying data are at current prices. Value added in owner-occupied houses and holiday homes (SNI L68A) is excluded, and labour costs are adjusted for self-employed compensation. For a fuller description of the measures and data, see NIER (2026c).

The profit share is based on the national accounts and measured as operating surplus (OS) relative to value added:

$$VA = \frac{OS}{FV} \quad (1)$$

where VA is the profit share, OS is operating surplus and FV is value added. Value added is measured at factor cost unless otherwise stated. Operating surplus is calculated as value added less labour costs. The profit share measures the proportion of value added accruing to capital owners. Operating surplus must, among other things, replace consumed capital, cover any interest costs and provide owners with a return on invested capital.

The return on capital is also based on national accounts, but relates operating surplus to the capital stock:

$$KA = \frac{OS}{K} \quad (2)$$

where KA is the return on capital and K is the capital stock. The return on capital thus measures the return generated by physical capital.¹

The return on capital can be decomposed into two components: capital productivity² and the profit share:

$$KA = \frac{FV}{K} \cdot VA \quad (3)$$

where FV/K is capital productivity, showing the value added created per unit of physical capital.

The operating margin is defined as operating profit as a share of operating revenue:

$$RM = \frac{RR}{RI} \quad (4)$$

where RM is the operating margin, RR is operating profit and RI is operating revenue. Operating profit is calculated by subtracting operating expenses, including staff costs, from operating revenue. The operating margin in this chapter is based on Statistics Sweden's Quarterly Economic Statistics, published with approximately the same lag as the preliminary national accounts.³

Both final and preliminary observations are used

Up to and including 2024, the return on capital and profit share are based on final annual national accounts. After 2024, data from preliminary national accounts extending to the second quarter of 2026 are used, together with NIER's own projections and forecasts. Operating margins use only Statistics Sweden's Quarterly Economic Statistics.

¹ Physical capital includes, for example, machinery, software and other productive capital used in the production process.

² Capital productivity at current prices can be decomposed into a volume component and a component reflecting the relative price of value added and the capital stock.

³ For a more detailed description of the underlying series and differences between the national accounts and Quarterly Economic Statistics (ESK), see NIER, 'Different profitability measures', NIER Comment, October 2026 (2026c).

some indicators used by many corporations in their own financial monitoring.

Return on capital and profit share

THE RETURN ON CAPITAL IS COMPARED WITH THE REQUIRED RETURN

Interpreting observed returns on capital requires relating them to the required return. This is determined by the user cost of capital: the sum of the risk-free interest rate, risk premium, costs of consumption of fixed capital and expected capital price developments (see the margin box ‘Return on capital and required return’). Over time, returns must meet the required return for fixed capital formation to take place and operations to continue.

Figure 75 shows the risk-free rate alongside the return on capital, here termed the gross return on capital. To illustrate a return closer to an actual surplus for capital owners and to profit in its everyday sense, the return excluding the costs of replacing consumed capital is also shown.⁴⁵ This is termed the net return on capital. The risk premium and expected capital price developments cannot be observed directly.

RETURNS ON CAPITAL HAVE FOLLOWED INTEREST RATES DOWNWARDS

Other things being equal, a lower risk-free rate means a lower required return and normally a lower return on capital. Consistent with this relationship, both interest rates and returns on capital fell from the mid-1990s until approximately a decade into the new millennium (see Figure 75). The decline in returns on capital was particularly marked in 2008 and 2009, around the outbreak of the financial crisis. Afterwards, the decline became more moderate and uneven, sometimes interrupted by small increases. Meanwhile, the risk-free rate continued falling to historically low levels during the 2010s.

One way to assess profitability is to examine the difference between the gross return on capital and observable user costs, namely the risk-free rate and costs of consumption of fixed capital, assuming unobserved user costs, namely the risk premium and expected capital price developments, remain constant. An

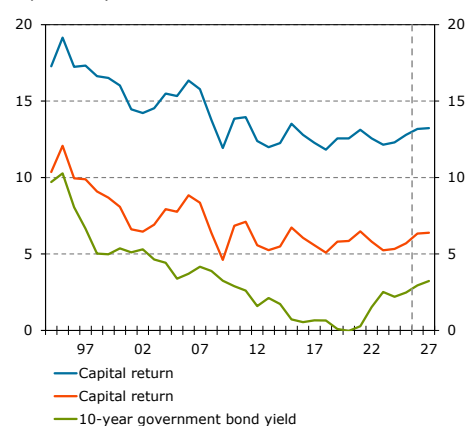
Return on capital and required return

Over time, the return on capital a corporation has invested, or is considering investing, must at least equal the required return. The required return is the return owners expect as compensation for tying up capital in the business.

At the aggregate level, the required return depends partly on the return on a risk-free asset and a risk premium. For example, rising interest rates increase returns on alternative assets, helping raise the required return. The required return also depends on how rapidly capital depreciates or is consumed: faster depreciation means a higher required return. Expected capital price developments also matter. The faster capital prices are expected to rise, the more attractive investing today becomes, other things being equal, implying a lower required return. Conversely, expected falls in capital prices make postponement more attractive, implying a higher required return.

Figure 75 Return on capital and the risk-free interest rate

Per cent of the capital stock and per cent respectively



Note. Gross returns on capital include costs of consumption of fixed capital in operating surplus; these costs are subtracted from operating surplus in net returns on capital.

Sources: Statistics Sweden and NIER.

⁴⁵ The available data would also allow the risk-free rate to be subtracted. This has not been done because, unlike consumption of fixed capital, those data do not come from the national accounts. There is also value in showing the interest rate separately. In Figure 76, the risk-free rate has also been subtracted from the return on capital.

unusually large positive difference between the return on capital and the sum of the risk-free rate and consumption of fixed capital can then be interpreted as strong profitability exceeding the required return, and vice versa. This assumption and data uncertainty call for caution, particularly for individual years. Figure 76 shows gross returns on capital exceeding the sum of the risk-free rate and consumption of fixed capital by a relatively large margin in 2015–2021.

A MORE STABLE PROFIT SHARE

The return on capital can be defined as capital productivity multiplied by the profit share (see the margin box ‘Return on capital, profit share and operating margin’). Figure 77 shows that declining returns on capital since the turn of the millennium have coincided with falling capital productivity. This is consistent with the relationship between the risk-free rate and returns on capital discussed above: lower interest rates reduce required returns, encouraging fixed capital formation in physical capital, including projects with lower expected returns. This depresses capital productivity and hence returns on capital.⁴⁶

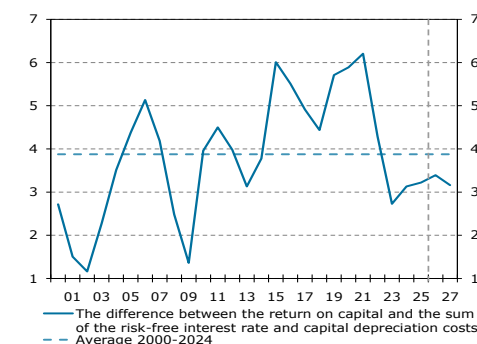
Figure 78 shows that, unlike capital productivity and returns on capital, the profit share displayed no trend during the 2000s and 2010s. As with returns on capital, both gross and net profit shares are examined. The chart also shows that gross and net profit shares normally co-move closely.

A PROLONGED PERIOD OF RISING GROSS PROFIT SHARES BEGINS

Returns on capital began rising in 2019 while the risk-free rate remained low. Capital productivity continued trending downwards, but this was more than offset by a rising profit share, which persisted for several more years (see Figure 77). Several factors explain the comparatively favourable operating surplus developments in these years. Many Swedish corporations successfully compensated for soaring input prices by raising selling prices.⁴⁷ Export prices rose strongly from spring 2021, partly

Figure 76 Difference between the return on capital and the sum of the risk-free rate and costs of consumption of fixed capital

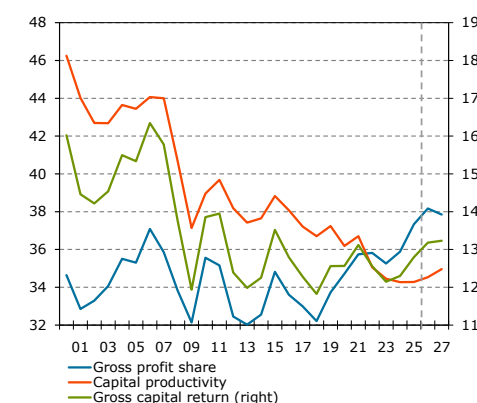
Percentage points



Sources: Statistics Sweden and NIER.

Figure 77 Profit share, capital productivity and return on capital

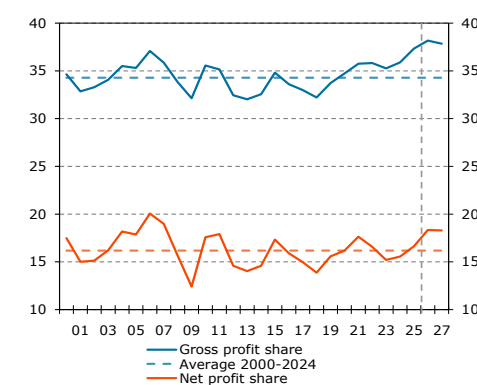
Per cent of value added and per cent of the capital stock respectively



Sources: Statistics Sweden and NIER.

Figure 78 Gross and net profit shares

Per cent of value added



Sources: Statistics Sweden and NIER.

⁴⁶ Capital productivity at current prices equals capital productivity at constant prices multiplied by the ratio of the implicit value-added price index to the implicit capital stock price index: $KP_t = KP_t \cdot \frac{P_y}{P_k}$. Capital productivity at constant prices equals the ratio of labour productivity (Y/L) to capital intensity (K/L), both at constant prices: $KP_t = \frac{(Y/L)_t}{(K/L)_t}$. Falling capital productivity at current prices since the turn of the millennium reflects both the capital stock price index rising faster than the value-added price index, particularly early in the period, and weaker capital productivity at constant prices. The latter mainly reflects weaker labour productivity, particularly after the financial crisis (see the chapter ‘Productivity developments in Sweden’), while capital intensity shows no clear pattern.

⁴⁷ Prices of many inputs began rising rapidly in the latter part of 2020.

because of the weak krona. Sales volumes also increased rapidly in several industries during the pandemic, particularly in the initial recovery phase. The rise in the profit share was sufficient to raise returns on capital in 2019–2021 despite continued falls in capital productivity. Note that most of this period coincided with the pandemic and the high-inflation period.⁴⁸

As a result, the difference between the gross return on capital and the sum of the risk-free rate and costs of consumption of fixed capital rose further, peaking in 2021 (see Figure 76).

WEAK OPERATING SURPLUS GROWTH AND HIGHER INTEREST RATES SQUEEZE PROFITABILITY

Labour costs began rising relatively rapidly in 2021 and continued doing so for approximately two more years. As value-added growth slowed from 2022, operating surplus growth fell markedly in 2022 and 2023 (see Figure 79). The profit share consequently stopped rising in 2022 and fell slightly in 2023.⁴⁹ The net profit share fell more sharply because of rapidly increasing consumption of fixed capital (see Figure 78).⁵⁰ Meanwhile, capital productivity continued declining, helping depress returns on capital.

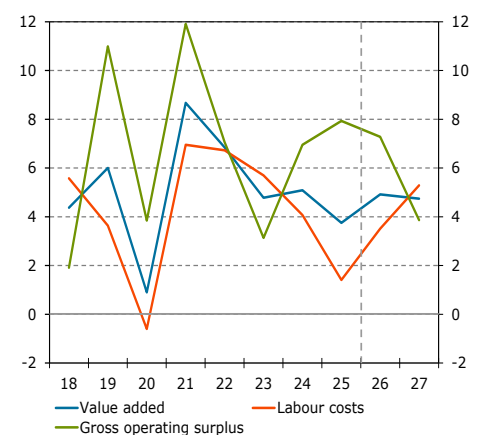
The risk-free rate rose rapidly in 2022 and 2023, its first clear increase for decades, coinciding with the high-inflation period. The difference between the gross return on capital and the sum of the risk-free rate and consumption of fixed capital consequently fell rapidly below its average since 2000 (see Figure 76).

IMPROVED BUT STILL SOMEWHAT DEPRESSED RETURNS ON CAPITAL IN 2025

Apart from the small decline in 2023, the gross profit share has risen since 2018, the longest period of rising gross profit shares since at least 1980. However, larger increases have occurred historically.⁵¹ In 2025, the gross profit share was clearly above its historical average. The net profit share was just above its historical average (see Figure 78).

Figure 79 Value added, labour costs and operating surplus

Percentage change



Source: Statistics Sweden.

⁴⁸ According to the WHO, the global pandemic ended in May 2023. In Sweden, however, illness rates and negative economic effects subsided considerably earlier, with conditions perceived as normal again by spring or summer 2022.

⁴⁹ Note that the profit share falls if labour costs (red line in Figure 79) rise faster than operating surplus (green line in Figure 79), and vice versa.

⁵⁰ The rate of consumption of fixed capital began increasing in 2022. In 2024, consumption of fixed capital as a share of value added reached its highest level since at least 1993. Excludes owner-occupied houses and holiday homes.

⁵¹ Over 1980–2025, cumulative increases were larger in 1981–1984 and 1991–1995, despite these periods being shorter than the 2018–2025 rise. Note that pre-1993 data are more uncertain.

Capital productivity improved somewhat in 2025, also contributing to higher returns on capital (see Figure 75). The risk-free rate also rose, but by slightly less. Costs of consumption of fixed capital increased in line with average annual growth since the turn of the millennium. Together, these movements increased the difference between the gross return on capital and the sum of the risk-free rate and consumption of fixed capital in 2025, although it remained somewhat below the 2000–2024 average (see Figure 76).⁵²

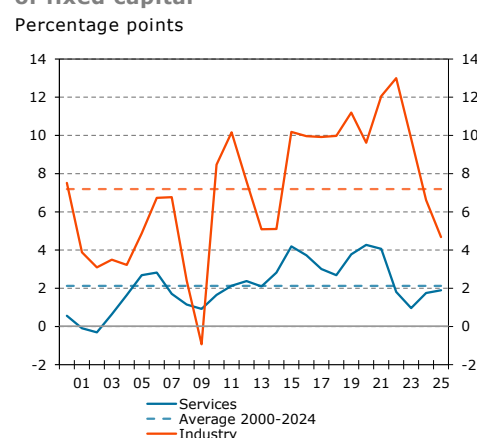
RISING PROFITABILITY IN SERVICES⁵³

This section presents profitability developments in services and manufacturing respectively. Note that capital stock estimates are even more uncertain at industry and sector level than for the business sector as a whole.

Service sector returns on capital have trended downwards for most of the period since the turn of the millennium (see Figure 80). The profit share also fell after the financial crisis until shortly before the pandemic. Developments have subsequently been more positive, with the gross profit share clearly above its historical average in 2025.⁵⁴ Returns on capital have also risen in recent years. In 2025, the difference between the return on capital and the sum of the risk-free rate and consumption of fixed capital was in line with the 2000–2024 average (see Figure 81).

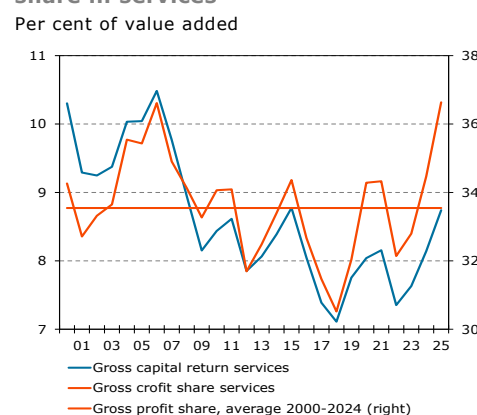
Manufacturing shows no corresponding downward trend in returns on capital since the turn of the millennium. Its profit share has also developed more favourably than in services, rising markedly in the years immediately after the pandemic (see Figure 82). Manufacturing therefore largely drove the increase in business sector returns on capital and profit shares in 2019–2021 discussed above. Several factors may explain why manufacturing returns did not fall alongside the risk-free rate. The gradual weakening of the krona in 2014–2023 probably strengthened profitability.⁵⁵ To the extent that this depreciation was viewed as temporary, it may have weakened incentives for further fixed

Figure 81 Difference between the return on capital and the sum of the risk-free rate and costs of consumption of fixed capital



Sources: Statistics Sweden and NIER.

Figure 80 Return on capital and profit share in services



Sources: Statistics Sweden and NIER.

⁵² The difference was 3.3 percentage points in 2025. The average difference in 2000–2024 was 3.9 percentage points. The period choice is not entirely self-evident. Excluding post-pandemic years and using 2000–2019 yields an average difference of 3.7 percentage points. The average difference in 1993–2024 was 3.5 percentage points.

⁵³ Both the business sector and services exclude owner-occupied houses and holiday homes. Services excluding these dwellings account for 65 per cent of business sector value added excluding them, while manufacturing accounts for 20 per cent.

⁵⁴ The average for 2000–2024 is 33.6 per cent.

⁵⁵ Domestic currency depreciation increases revenue in domestic currency from exports of products with internationally determined prices. Sales volumes may also benefit, potentially raising operating surplus because labour costs are often slow to adjust.

capital formation in physical capital, helping sustain capital productivity and hence returns on capital. The risk premium required for fixed capital formation may also have increased.

Manufacturing returns on capital and profit shares both reached historically high levels in 2022 but have since fallen markedly. The krona appreciation beginning in autumn 2023 probably contributed. Nevertheless, the gross profit share remained above its historical average in 2025.⁵⁶ The return on capital still exceeds the combined risk-free rate and consumption of fixed capital, but by a smaller-than-normal margin (see Figure 81).

Other measures of profitability

OPERATING MARGINS ROSE AFTER THE PANDEMIC

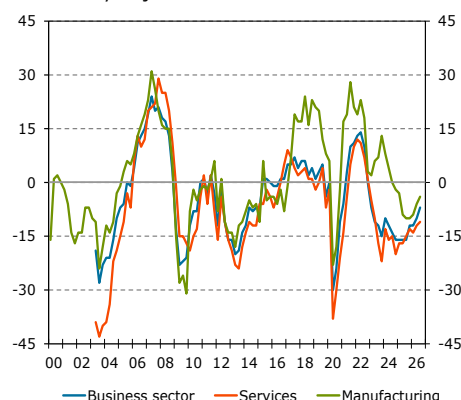
Like the profit share, the operating margin relates a surplus to ongoing operations during a particular period. Over the available data period, operating margins broadly follow a pattern similar to profit shares (see Figure 83).⁵⁷ One difference is that operating margins fell more in 2022 and 2023, when corporations faced sharply rising input costs. When input prices rise faster than labour costs, operating margins fall more than profit shares, explaining the weaker performance of this measure.⁵⁸ Conditions have since normalised, and operating margins in recent quarters have been in line with or slightly above their 2008–2024 average.⁵⁹

CORPORATIONS CONSIDER PROFITABILITY LOW BUT SEE SIGNS OF IMPROVEMENT

Profitability assessments fell in both services and manufacturing during the high-inflation period (see Figure 84).⁶⁰ In services, assessments continued deteriorating gradually in 2022 and 2023 and were clearly below their historical average by late 2023. In

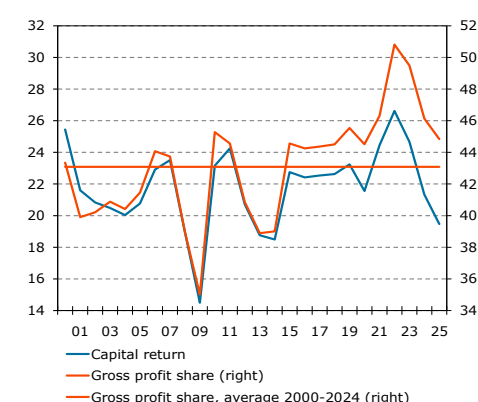
Figure 84 Survey-based profitability assessments

Seasonally adjusted net balances



Source: NIER.

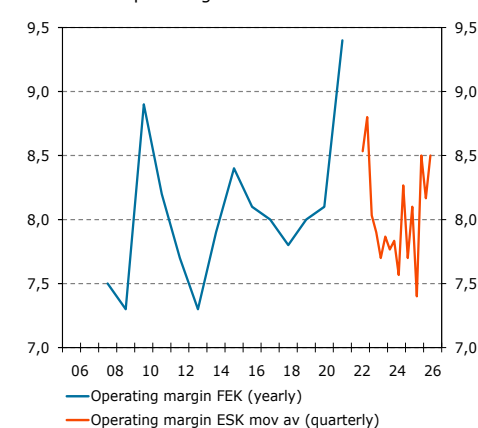
Per cent of value added



Sources: Statistics Sweden and NIER.

Figure 83 Business sector operating margin

Per cent of operating revenue



Source: Statistics Sweden.

⁵⁶ The average for 2000–2024 is 43.1 per cent.

⁵⁷ Figure 83 also shows operating margin data constructed in the same way as Quarterly Economic Statistics, available for 2008–2021.

⁵⁸ If corporations pass increased input costs on to customers one-for-one in currency terms, operating margins fall, other things being equal, while operating surplus, returns on capital and profit shares remain unchanged. For a fuller description, see NIER (2026d).

⁵⁹ The average for 2008–2024 is 8.1 per cent.

⁶⁰ For a fuller description of how these measures are calculated, see the 'Methodology Handbook for the Economic Tendency Survey': <https://www.konj.se/media/o2jni00n/metodbok.pdf>

manufacturing, the decline began from a higher level; assessments turned upwards in early 2023 and continued rising for the rest of the year.

For most of 2024 and 2025, the gap between services and manufacturing narrowed as manufacturing profitability assessments fell again while services remained relatively unchanged. In recent quarters, profitability assessments have risen in both sectors, but remain somewhat low by historical standards.⁶¹

Developments in the whole business sector largely follow services, which have a large weight in the overall index. After remaining relatively low during 2024 and most of 2025, whole-business-sector profitability assessments have gradually risen since late 2025. Despite this increase, the level in the third quarter of this year remained below its historical average.

The still somewhat depressed profitability assessments may be linked to the similarly somewhat depressed returns on capital discussed above.⁶² However, it is unclear which profitability measures corporations have in mind when answering the survey, probably varying across corporations. Relationships between Economic Tendency Survey profitability assessments and the measures analysed in this report are neither strong nor unambiguous over time.

Future developments

BOTH PROFIT SHARES AND RETURNS ON CAPITAL ARE EXPECTED TO RISE IN THE COMING YEARS

NIER's forecasts for returns on capital and profit shares follow from forecasts for many other variables. Table 12 shows some of the most important alongside gross return on capital and gross profit share forecasts from The Swedish Economy, September 2026.

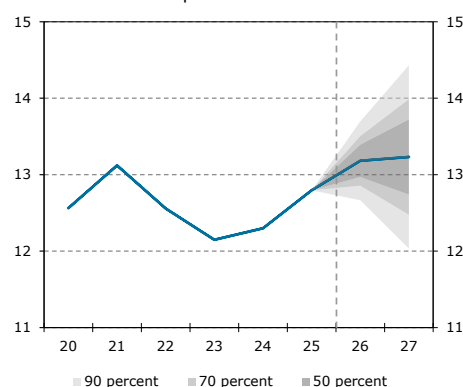
The gross profit share is expected to rise in 2026 as value added increases clearly faster than labour costs (see Figure 79). In 2027, value added rises slightly more slowly than labour costs and the gross profit share falls somewhat, remaining above its historical average (see Figure 78). The net profit share also rises in 2026, then remains broadly unchanged in 2027, above its

⁶¹ Average seasonally adjusted net balances since the second quarter of 2003 are –6.6 for services, 1.6 for manufacturing and –4.1 for the business sector as a whole.

⁶² In business economics, the term profitability ratio is used as the counterpart to the return on capital.

Figure 85 Uncertainty intervals for the gross return on capital

Per cent of the capital stock

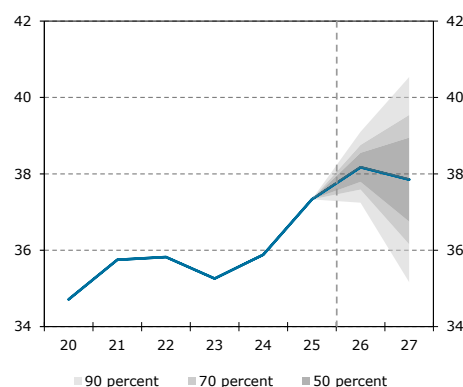


Note. The forecast is presented in The Swedish Economy, September 2026. The intervals are based on NIER's historical forecast errors in its September forecasts for 2017–2025 and the assumption that the errors are normally distributed.

Sources: Statistics Sweden and NIER.

Figure 86 Uncertainty intervals for the gross profit share

Per cent of value added



Note. The forecast is presented in The Swedish Economy, September 2026. The intervals are based on NIER's historical forecast errors in its September forecasts for 2017–2025 and the assumption that the errors are normally distributed.

Sources: Statistics Sweden and NIER.

historical average (see Figure 78).⁶³ The gross return on capital is expected to rise in 2026 and remain unchanged in 2027 (see Figure 77). The 2026 increase reflects both faster capital productivity growth and a continued rise in the profit share. The difference between the return on capital and the sum of the risk-free rate and consumption of fixed capital then increases somewhat. Next year it declines slightly again, remaining somewhat below its historical average (see Figure 76).

Table 12 Forecasts in The Swedish Economy September 2026

Percentage change, per cent of the capital stock and per cent of value added respectively, current prices

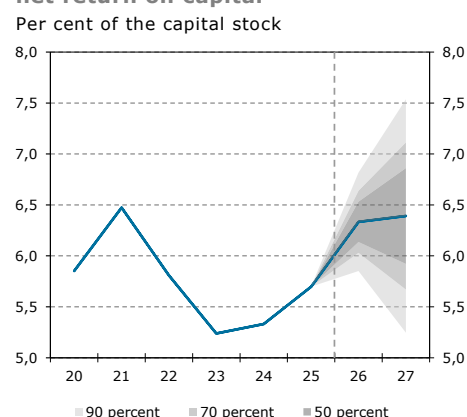
	2025	2026 ¹	2027
Value added ²	3.7	4.9	4.7
Labour costs ³	1.7	3.7	5.4
Sum of wages and salaries ³	2.5	3.6	4.4
Operating surplus	7.9	7.3	3.9
Capital stock ⁴	3.7	4.1	3.5
Gross return on capital	12.8	13.2	13.2
Gross profit share	37.3	38.2	37.8

¹ For 2026, preliminary Statistics Sweden observations for underlying data, except capital stocks, are available up to the second quarter of 2026. Arithmetically, this means observations cover just over 80 per cent of full-year growth in 2026. ² At factor cost. Excluding owner-occupied houses and holiday homes. ³ National accounts. Adjusted for self-employed compensation. ⁴ Excluding owner-occupied houses and holiday homes.

Sources: Statistics Sweden and NIER.

All forecasts are uncertain. One way to illustrate this is through uncertainty intervals based on historical forecasting performance, showing the range within which observations can be expected to fall. For 2027, the gross return on capital is forecast at 13.2 per cent and the gross profit share at 37.8 per cent. Figures 85 and 86 show a 90 per cent probability of returns on capital being 12.0–14.4 per cent and the profit share 35.2–40.5 per cent. Corresponding 50 and 70 per cent probability intervals can also be read from the charts. Figures 87 and 88 present equivalent calculations for net returns on capital and net profit shares.

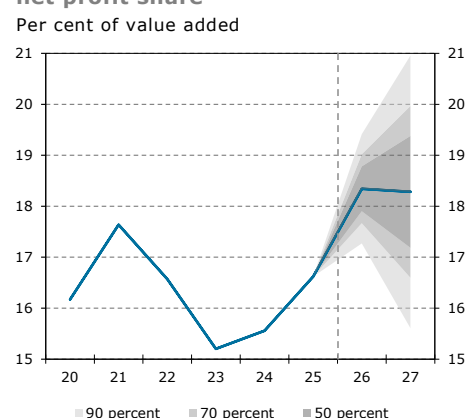
Figure 87 Uncertainty intervals for the net return on capital



Note. The forecast is presented in The Swedish Economy, September 2026. The intervals are based on NIER's historical forecast errors in its September forecasts for 2017–2025 and the assumption that the errors are normally distributed.

Sources: Statistics Sweden and NIER.

Figure 88 Uncertainty intervals for the net profit share



Note. The forecast is presented in The Swedish Economy, September 2026. The intervals are based on NIER's historical forecast errors in its September forecasts for 2017–2025 and the assumption that the errors are normally distributed.

Sources: Statistics Sweden and NIER.

⁶³ For 2000–2024, the average gross profit share is 34.3 per cent and the net profit share 16.2 per cent. In The Swedish Economy, September 2026, the gross profit share reaches 37.8 per cent and the net profit share 18.3 per cent in 2027.

Effects of generative AI in the Nordic countries

The effects of generative AI are difficult to assess. The technology has only been available since late 2022, limiting evaluations through data availability. So far, generative AI does not appear to have had a major aggregate impact on productivity or the labour market. However, there are signs that it has made labour market entry somewhat harder for young people and recent graduates in AI-exposed occupations.

ChatGPT was launched in late 2022, and generative artificial intelligence (AI) has since been introduced widely to the market by several large corporations.⁶⁴

Discussion of generative AI is intense and spans several research fields. In economics, questions have centred on whether generative AI increases productivity and affects the labour market. Few studies have yet been published in academic journals, so findings should be interpreted cautiously.

NIER has previously analysed generative AI.⁶⁵ This special analysis reviews the research, focusing on studies of the Nordic countries published after the Wage Formation Report 2024.

GENERATIVE AI AND PRODUCTIVITY

Few academic studies have focused on AI's effects on productivity growth in the Nordic countries. One reason is the difficulty of measuring productivity at the micro level. This also complicates comparisons with macro-level productivity, defined as value added divided by hours worked.

Nordström-Skans and Romin (2026) measure productivity gains indirectly using sales per employee in corporations with varying use of generative AI. They find higher sales per employee in AI-exposed Swedish corporations. Using Swedish register data, Gidehag (2023) shows that AI-using corporations are on average more productive than non-users after controlling for background variables, including previous years' productivity.⁶⁶

⁶⁴ GPT stands for General Pre-Trained Transformer, but in the debate it has also been interpreted as General Purpose Technology, an economic term for a technological shift with major structural effects on the economy. Whether generative AI is a GPT is not self-evident; much economic analysis investigates precisely this question.

⁶⁵ See the Wage Formation Report (2024) and the special analysis 'Generative AI as a technological shift' in NIER (2026a), with its associated alternative scenario. See also NIER (2026b) on productivity in AI-related industries.

However, Gidehag (2023) studies AI generally rather than generative AI. Humlum and Vestergaard (2026) do not study productivity directly, but show that workers in Denmark perceive efficiency gains from generative AI and changes in their tasks.

GENERATIVE AI AND THE LABOUR MARKET

Academic discussion has focused more extensively on generative AI's labour market effects. Brynjolfsson et al. (2025b), using US data, provides the basis for several studies using Nordic data. The original study finds falling employment among young workers in industries highly exposed to generative AI since ChatGPT's launch in November 2022. No corresponding negative effect is observed among older workers, whose employment growth has remained positive. Effects among young workers are concentrated in occupations where generative AI can replace labour; no corresponding effect is observed where it complements labour.

Generative AI and occupations

Like Brynjolfsson et al. (2025b), the Nordic studies analyse how generative AI affects occupations with differing exposure. Using data from Sweden and Denmark, among other countries, Engberg et al. (2024) show that white-collar jobs are primarily exposed to generative AI, particularly those involving little social interaction. This should be considered alongside rising returns to social skills and falling returns to cognitive ability in the Swedish labour market (Edin et al., 2024).

Gardeberg et al. (2026) show that women are more likely to work in occupations highly exposed to generative AI. It may therefore affect men and women differently. Ghayad (2026) argues that relating entire occupational categories to generative AI is a simplification, since variation in tasks is central. In a country such as Sweden, with low wage dispersion, central collective agreements and transition study support, occupational exposure may therefore differ from, for example, the United States.

Effects on employment and wages

Engberg et al. (2024) study AI exposure and effects using Swedish data, among others.⁶⁷ However, their labour demand analysis extends only to 2020, mainly capturing AI developments in

⁶⁶ Brynjolfsson et al. (2025a) show that generative AI raises micro-level labour productivity by approximately 15 per cent among US customer service workers with access to an AI-based tool. The effect appears largest among workers with initially weaker abilities.

⁶⁷ The analysis includes data from Denmark, Sweden and Portugal.

the 2010s rather than generative AI after ChatGPT's launch in November 2022. They find increasing demand for white-collar labour and decreasing demand for blue-collar labour, despite greater AI exposure among white-collar workers. A possible explanation is that, at the aggregate level, AI primarily complements rather than substitutes for labour.

Later studies focus more specifically on developments after November 2022. Lodefalk et al. (2026) replicate Brynjolfsson et al. (2025b) using Swedish data. They find no effect on overall Swedish labour demand. Consistent with Brynjolfsson et al. (2025b), however, employment growth declines among 22–25-year-olds in more AI-exposed occupations, while no corresponding decline is observed among older workers in the same occupations. Employment among older workers has instead increased. Sweden differs from the United States because students are relatively older, meaning that the age boundary in Lodefalk et al. (2026) may capture effects on jobs alongside studies.⁶⁸

Nordström-Skans and Romin (2026) focus on occupational effects in Sweden, supplemented by educational background data. Their focus is recent graduates rather than a strictly defined age group. Their main conclusion is that generative AI appears not to have caused major structural transformation in the economy as a whole, consistent with Lodefalk et al. (2026). They find that the most AI-exposed quarter of the economy mainly comprises highly educated service sector workers in large cities. People with AI-exposed education appear to receive a positive wage premium, consistent with generative AI raising individual productivity for some workers. This does not apply to recent graduates, whose wage developments have instead been weaker. Similarly, employment developments have been weaker among recent graduates with more AI-exposed education.

Hellsten et al. (2025) study Swedish small and medium-sized corporations receiving Vinnova AI support in 2019–2020, comparing them with corporations that did not receive such support. Recipients posted more job advertisements with the Swedish Public Employment Service over the following five years, but no clear employment effect was found. This may indicate that AI increases demand for new staff without corporations necessarily finding people with suitable backgrounds. Unlike Lodefalk et al. (2026) and Nordström-Skans and Romin (2026), the study does not focus strictly on ChatGPT's launch, but on support for corporations beginning to work with AI.

Humlum and Vestergaard (2026) study Denmark. They first use corporate survey data to examine generative AI adoption.

⁶⁸ The authors implement an event study. There also appear to be some signs of trends before the final quarter of 2022.

Responses indicate widespread implementation and employees perceiving changes in how they work. The authors then use register data to study labour market effects in the corporations concerned. They find effects on hours worked close to zero and no wage effects. One explanation may be that efficiency gains are too small and concentrated in individual tasks to allow corporations to use less labour, despite widespread use of generative AI in their operations.

Like Humlum and Vestergaard (2026), Bonin et al. (2026) find no aggregate employment effect in Denmark. However, they find lower employment growth in AI-exposed corporations relative to their previous employment paths compared with non-users. The decline is clearest among corporations with fewer than 100 employees. The findings suggest that generative AI's effect primarily concerns jobs not being created, rather than existing employees losing jobs. These results are therefore broadly consistent with the Swedish findings in Lodefalk et al. (2026) and Nordström-Skans and Romin (2026).

Kauhanen and Rouvinen (2025) find no effects on Finnish employment or wages in more AI-exposed occupations. Extending this analysis with a method similar to Brynjolfsson et al. (2025b), Kauhanen and Rouvinen (2026) show that young people in AI-exposed occupations in Finland have not experienced weaker employment growth since late 2022. This applies to both the 22–25 and 26–30 age groups.

Overall, these studies provide no clear evidence that generative AI has substantially affected Nordic labour markets. However, the literature suggests somewhat greater difficulties entering the labour market for recent graduates in highly AI-exposed occupations.

This effect therefore concerns a particular subgroup, rather than all young people and recent graduates. It could indicate falling demand for some junior workers while generative AI raises the productivity of senior workers in the same occupations. One hypothesis is that generative AI can automate simpler tasks, reducing corporations' need for junior staff. However, this creates a tension because junior positions are normally prerequisites for developing skills over time. Without opportunities to learn their occupation on the job, junior employees cannot become senior workers and ultimately use generative AI as a complement. Corporations may therefore recruit more junior staff over time, even though some have recently been more cautious about recruitment in certain occupational groups.

Remote work as a possible alternative explanation for more difficult youth labour market entry

Some studies show that weaker youth employment can partly be explained by remote work. The introduction of generative AI coincides with remote work becoming increasingly established across large occupational groups.

Remote work became widespread during the pandemic. This continued afterwards, with large occupational groups increasingly working remotely for all or part of the week. Lambert and Schindler (2026) conduct an analysis using US data similar to Brynjolfsson et al. (2025b), but accounting for the extent of remote work across occupations. They find that the negative youth employment effect weakens substantially after controlling for remote work. Falling youth employment is therefore explained to a significant extent by remote work rather than generative AI.

According to Lambert and Schindler (2026), remote work limits opportunities to train junior employees on site. Corporations invest for the long term by recruiting junior employees who are expected to become more productive through learning on the job. When senior colleagues are absent, these opportunities diminish.

A related paper, Emanuel et al. (2026), studies US programmers in large corporations using 2019–2024 data. Remote work reduced feedback from senior colleagues to junior employees. This became particularly evident during the pandemic, when many corporations switched entirely to remote work. When corporations began requiring a return to the office at least three days per week, feedback to junior employees increased. One broad interpretation is that remote work mainly benefits senior employees, allowing them to work with fewer interruptions and raising productivity, while disadvantaging junior employees through reduced feedback.

It should be recalled that US and Swedish labour markets differ: some occupational groups in US corporations have worked entirely remotely, rather than only a few days per week as is common in Sweden. No corresponding study using Nordic data has yet been conducted. Although Nordic remote work primarily takes a hybrid form, some reduced demand for junior labour may partly reflect the spread of remote work within the same occupations, rather than solely generative AI use.

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