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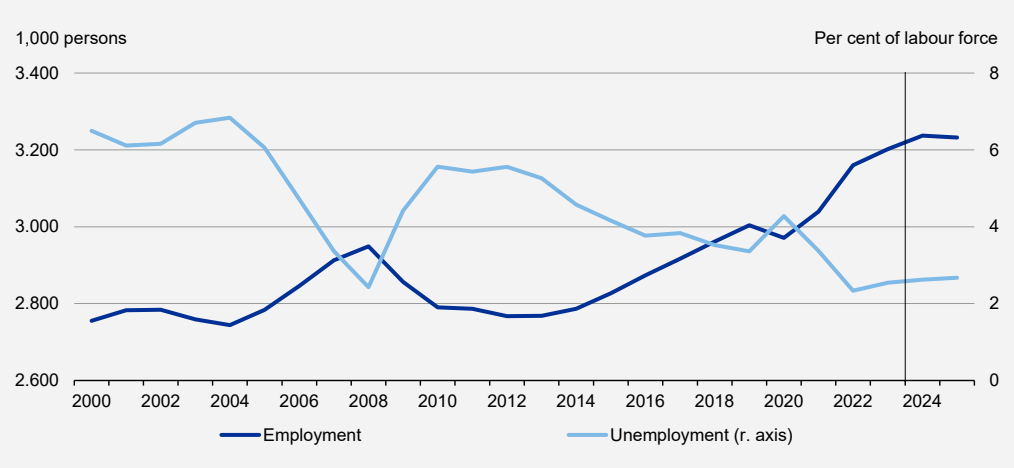
Overview

In recent years and into 2024, the Danish economy has been characterized by a dichotomy, where domestic demand has declined, while exports have been strong, driven by the pharmaceutical industry. Demand has been held back by a period of high inflation and interest rate increases, but inflation has declined and interest rates are slowly coming down again. Households' and companies' expectations have also become more positive in line with falling inflation. This provides the basis for other parts of business activity than the pharmaceutical industry to a greater extent contributing to progress in the economy.

With the fall in inflation and the implementation of agreed wage increases, many households have experienced a significant increase in real wages since the start of 2023. This is expected to lead to increased consumption this year and next year. On the housing market, there is a prospect of an increase in prices, as housing demand is helped along by lower interest rates. Increasing growth abroad, including in the euro area, continues to strengthen export opportunities. However, the same progress in exports cannot be expected as in recent years, when the export of medicinal products has increased particularly strongly.

Overall, GDP is expected to grow by 1.9 per cent in 2024 and 2.2 per cent in 2025. This includes, that the reopening of the Tyra field in the North Sea is estimated to make a contribution to GDP growth of 0.2 percentage points and 0.4 percentage points this year and the next, respectively, and that the pharmaceutical industry will continue to lift overall economic growth. The decline in domestic demand in recent years has so far not led to a corresponding adjustment in the demand for labour. Employment, on the other hand, has continued to rise, and unemployment has only increased slightly and remains low in a historical perspective, cf. figure 1.

Figure 1 **Only a slow deceleration in employment growth and minor increase in unemployment**



Note: Employment incl. persons on leave. Gross number of unemployed I percent of the gross labour force incl. persons on leave.
Source: Statistics Denmark and own calculations.

The counterpart to this is a weak productivity development. With delay, a slowdown in employment growth is to be expected as a result of the weak productivity development, in particular in some parts of the economy. The need for adjustment must also be seen in the context of the fact that employment is still relatively high and above the level that is normally compatible with stable price and wage growth.

The expected slowdown in the demand for labour is estimated to eventually lead to a slight decrease in employment. However, the progress in employment in the first half of 2024 points in the direction of a continued increase in employment on an annual basis in 2024. Thus, employment is estimated to grow by 35,000 persons from 2023 to 2024, while on an annual basis a smaller decrease of 5,000 persons is expected from 2024 to 2025, cf. table 1. Other estimates and figures from the forecast can be found in the annex tables on the Ministry of Economy's website www.oem.dk.

Table 1 **Key numbers regarding the economic forecast and fiscal policy**

	2023	2024	2025
GDP growth, per cent.	2.5	1.9	2.2
Inflation, per cent	3.3	1.8	2.0
Hourly wage growth, private sector, per cent	4.2	5.4	3.4
House prices, percent change	-2.6	2.7	3.0
Employment change, 1,000 persons	42	35	-5
Gross unemployment, 1,000 persons	84	87	89
Balance of payments, per cent of GDP	9.8	10.5	10.2
Output gap, per cent[1)]	1.7	1.5	1.2
Employment gap, per cent[1)]	2.4	2.3	1.9
Structural general government budget balance, percent of structural GDP	1.1	0.6	0.2
Actual general government balance, percent of GDP	3.3	1.9	1.0
Public consumption growth, per cent[2)]	-0.2	3.3	2.5
Multi-year fiscal effect, level, percentage-points[3)]	-0.7	-0.7	-0.2
One-year fiscal effect, percentage-points[4)]	-1.3	0.1	0.5
EMU-debt, percent of GDP	33.6	32.8	31.4
General Government net wealth, per cent of GDP	20.4	21.5	21.6

1) Estimated measures of how much production and employment deviate from the structural levels. When the gaps are positive, it indicates that there are scarce resources in the economy compared to a normal economic situation.
2) The estimated public consumption growth is assumed to be the same for the input and output methods, respectively. For 2023, the growth in public consumption is shown by the input method.
3) The multi-year fiscal effect is a measure of how much changes in fiscal and structural policy affect the output gap (level effect compared to 2019).
4) The one-year fiscal effect is a measure of how much the planned fiscal and structural policy contributes to changes in the output gap in a given year.

Source: Statistics Denmark, Confederation of Danish Employers and own calculations.

Since 2012, employment has increased in total by over 450,000 persons, an increase that among other things has been supported by reforms that have increased structural employment.

In recent years, a large influx of international labor has enabled a continued increase in employment, so that unsustainable pressure has not arisen on the labor market.

The long period of growth in employment has contributed to households and businesses generally being able to consolidate by saving and reducing debt. This contributes to households and businesses overall having good opportunities to adapt to unexpected fluctuations in the economy. The savings are also reflected in the balance of payments surplus, which is around 10 percent of GDP. In recent years, earnings from the export of medicinal products and from sea freight have contributed significantly to the balance of payments surplus.

The adaptability of households and businesses, together with a responsible fiscal policy, has been decisive for the Danish economy avoiding a real setback during the period of high inflation and rising interest rates, and for there to be good opportunities for continued progress in the coming years. However, there is still great uncertainty linked to the development of the global economy, as a result of geopolitical tensions.

The forecast implies that the capacity pressure will gradually ease, but that activity in 2025 will continue to be above the level of normal capacity utilization, corresponding to the economy being in a moderate boom.

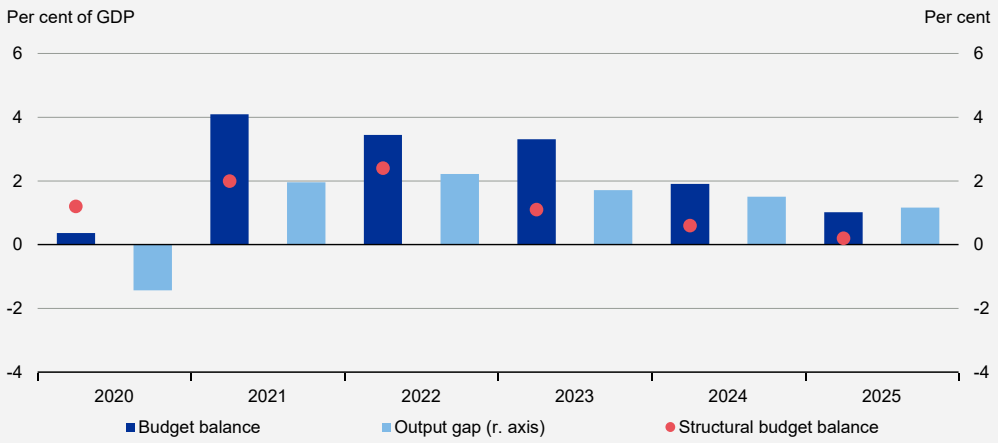
The strong Danish economy is also reflected in the public finances. In recent years, there have been significant public surpluses, partly due to favourable cyclical conditions characterised by high activity, historically high employment, and low unemployment, and partly due to underlying structural surpluses. Fiscal policy has been tightened in recent years to counter the pressure on the economy. In 2023, the public finances surplus is estimated at DKK 92¾ billion, corresponding to 3.3 per cent of GDP, while the structural surplus is estimated to be 1.1 per cent of GDP.

To make room for important societal priorities and in light of an expected soft landing in the coming years with decreasing capacity pressures, fiscal policy is planned to gradually be eased from its current tight level. With the budget proposal for 2025, there is room for both increases in spending on Danish defence and security, as well as a significant addition to the budgets of municipalities and regions in 2025, as agreed upon in the spring's economic agreements. Additionally, the budget proposal includes measures related to the green transition, the business sector, and making everyday life easier for Danes, as outlined in the Government's proposal for the 2025 budget.

There are also expected surpluses on the actual public balance in the coming years, although they are estimated to decrease as capacity pressures ease. At the same time, a more lenient fiscal policy will contribute to a decline in structural surpluses, which are expected to fall to 0.2 per cent of GDP in 2025, *cf. figure 2*.

Given surpluses in the public balance public debt is expected to decrease from an already low level of 33.6 per cent of GDP in 2023. Denmark's EMU debt is among the lowest in the EU and well below the Stability and Growth Pact limit of 60 per cent of GDP.

Figure 2 The large public surpluses are expected to diminish as capacity pressures ease



Note: The output gap indicates how much production (excluding raw material extraction) exceeds the structural level. A positive output gap suggests that capacity utilisation is higher than what is typically consistent with stable price and wage developments.
Source: Statistics Denmark and own calculations.

The forecast is based on the new main revised set of national accounts, which was published by Statistics Denmark on June 28, 2024, *cf. box 1*. Overall, the main revision does not lead to a change of the assessment of the direction of the Danish economy, but it has an impact on specific projections for GDP and employment.

Box 1 Main revision to the national accounts

Since the latest assessment in the Economic Survey, May 2024, Statistics Denmark has published main revised figures for the national accounts. The new report shows that activity growth in the economy excl. the medical industry since 2019 has been somewhat stronger than previously estimated. Productivity development has also been better, especially outside industry, which points in the direction of a smaller need for adjustment on the labor market than previously assessed. This is reflected in the new forecast in that the slowdown in employment is estimated to be smaller than previously estimated.

The main revision also involves some technical changes that, among other things, have an impact on the calculation of the EMU debt. This particularly applies to the sector change from KommuneKredit to public administration and services, which has resulted in a slightly higher calculated EMU debt.

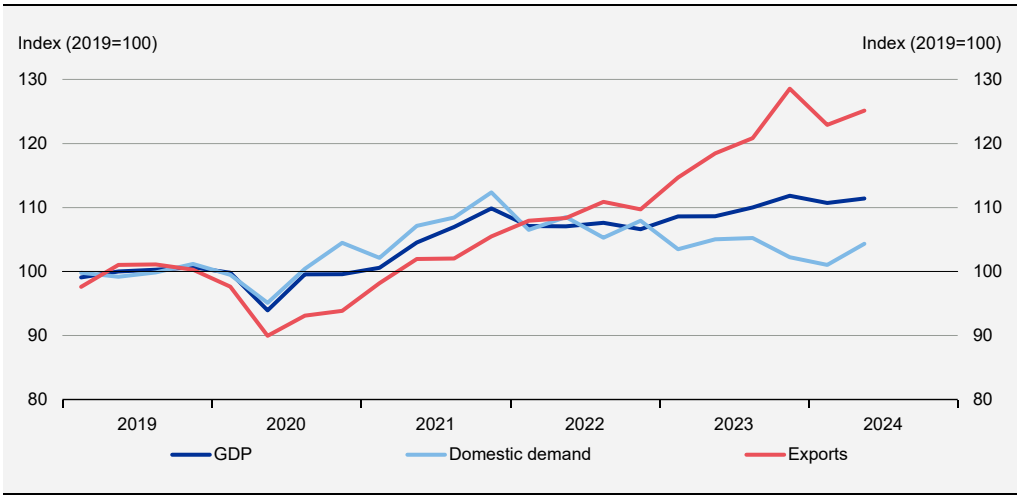
A more detailed review of the main revision can be found in box 1.1 in chapter 1.

1. The economic outlook

1.1 The current economic situation

Recent years have been characterised by a very diverse development across the Danish economy. Domestic demand has been slowing since the end of 2021, in part as a result of the period of high inflation and rising interest rates, while overall exports have continued to grow, especially due to a considerable increase in exports of pharmaceutical products. The bifurcation in the Danish economy has continued into 2024, but demand has become slightly more broadly composed. Thus, domestic demand has increased, while exports have slowed down slightly from the high level at the end of 2023, *cf. figure 1.1*. Overall, demand growth has been subdued over the past six months, and GDP in the second quarter was roughly unchanged compared to the end of 2023.

Figure 1.1 Fluctuations in GDP, domestic demand and exports during the first half of 2024



Note: Constant prices and seasonally adjusted.
Source: Statistics Denmark and own calculations.

The dampening of domestic demand since 2021 has contributed to the significant decline in inflation, which over the past 12 months has been close to or below 2 per cent. Thus, inflation nearing normalisation, although the price increases for services are still slightly higher compared to the period before 2021, when inflation started to pick up speed, *cf. figure 1.2*. Lower inflation combined with large wage increases means that many wage earners have experienced increasing purchasing power since the start of 2023. For private employees in the DA area, the real wage now exceeds the 2021 level. Therefore, the real-wage loss that occurred during the period of high inflation has been recovered, *cf. figure 1.3*.

Figure 1.2 Inflation is back at 2 per cent and especially buoyed by services prices

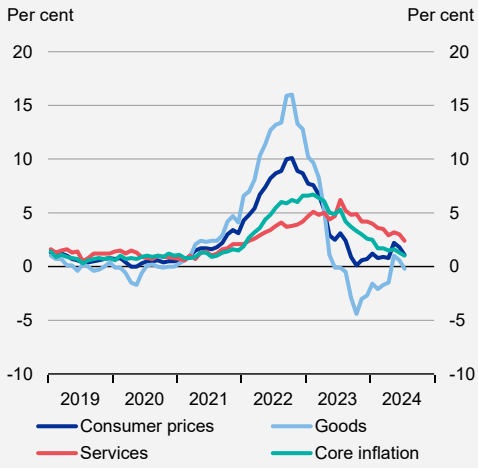


Figure 1.3 Real wages in the private sector are above 2021-levels

Note: In figure 1.3, the real wage is calculated on the basis of quarterly nominal wage growth rates, excluding inconvenience allowance from the Confederation of Danish Employers' (DA) Wage Statistics and the consumer price index.
Source: Confederation of Danish Employers, Statistics Denmark and own calculations.

In line with falling inflation, both households' and companies' expectations have become more positive, *cf. figure 1.4*. This is reflected, among other things, in the fact that manufacturing industry production expectations and the service industry's assessment of their business situation have improved over the past six months.

The more positive mood must also be seen in connection with the development in employment. Wage-earner employment has increased by almost 30,000 persons in the past year, while unemployment has only increased slightly and has remained at a low level. Increasing employment overall increases household incomes and thus consumption opportunities.

During 2023, there seems to have been a certain slowdown in progress on the labour market, which must be seen in the context of the fall in domestic demand. However, the increase in employment has continued into 2024, *cf. figure 1.5*. In a slightly longer perspective, the continued increase in employment has largely been made possible by the influx of international workers, which has contributed to keeping the pressure on the labour market down in a situation where unemployment was already low, cf. chapter 3.

Figure 1.4 The confidence of households and businesses have improved since the end of 2022

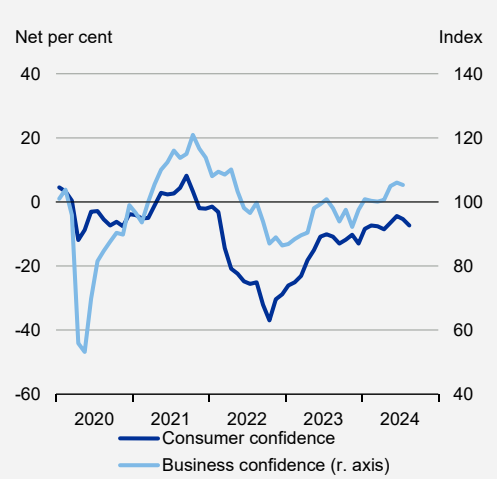


Figure 1.5 Employment has continued to grow

Note: The index 100 level for the business confidence indicator in figure 1.4 is set as the average from 1990-2018. In figure 1.5 the number of employees is shown (seasonally adjusted).
Source: Statistics Denmark and own calculations.

Growth in employment has been remarkably strong given the slowdown in domestic demand in recent years. Thus, the counterpart to the increase in employment is a very weak productivity development in large parts of the economy. However, the recent main revision to the national accounts data show that activity growth in the economy excl. the pharmaceutical industry since 2019 has been somewhat stronger than previously estimated. Productivity development has also been better, especially outside manufacturing, *cf. box 1.1*. However, the main revision to the national accounts does not change the impression that productivity development has been weak in parts of the economy, but merely points to a smaller need for adjustment on the labour market than previously assessed. At the same time, the weak productivity development of recent years is not considered to be an expression of a long-term structural problem, but rather cyclical. In the shorter term, there are often fluctuations in productivity in connection with business cycles, typically related to developments in the labour market. For example, there has been a tendency towards weaker productivity development in periods of moderation, i.e. positive but narrowing output gap.[1]

[1] See box 4.1 in Economic Survey, August 2022.

Box 1.1 Main revision of the national accounts

On 28 June 2024, Statistics Denmark published a major revision of the national accounts. The national accounts have been recalculated for the preliminary years (currently 2021 onwards) and for the latest final year (2020), as well as for the years dating back to 1966. New sources and calculation methods have been incorporated as well as a new classification for private consumption (COICOP18). Also, the reference year for the chained values in the previous year's prices has changed from 2010 to 2020.[1] The new calculation of the price-adjusted development in GDP since 2019 shows that the growth until 2023 has been approx. 0.6 per cent higher than previously calculated. Nominally, GDP in 2023 is now close to DKK 20 bn. DKK higher than previously estimated. Private consumption in current prices has also generally been adjusted upwards, and in combination with a downward revision to disposable incomes, this has raised the consumption ratio by approx. 3 percentage points in recent years. The main revision of the national accounts also reflects a new handling of energy trade related to the Baltic Pipe. Both export and import of energy have thus been significantly reduced in 2023, but this has not changed GDP significantly. Statistics Denmark has also changed the approach to price correction of the pharmaceutical industry's activities. The new method means that the national accounts no longer exhibit a sharp drop in the price of the pharmaceutical industry's production in 2022 and 2023. Although the pharmaceutical industry's activities calculated in nominal terms have been slightly adjusted upwards, the new price index means that the growth in the manufacturing output in constant prices is less powerful than previously calculated. Thus, the new method means that the contribution of the pharmaceutical industry to the increase in activity since 2019 is smaller. This applies especially for 2022 and 2023, where the growth contribution to GDP is reduced by approx. ½ percentage points in both years, *cf. figure a*. However, the pharmaceutical industry still has a large contribution to GDP growth in both years. Employment and hours worked have been revised down since 2019, which, together with the adjustment to GDP, is reflected in upward revision to hourly productivity since 2019. This applies especially to the economy excluding manufacturing industries, where the hourly productivity in 2023 is approximately at the level of 2019, whereas the previous estimate showed a decrease of almost 3 per cent, *cf. figure b*. The shift in productivity between manufacturing and the rest of the economy reflects the fact that the downward adjustment in the hours worked primarily lies in the service industries, and that the progress in the manufacturing sectors total value added since 2019 is lower. However, for manufacturing sector excl. the pharmaceutical industry growth since 2019 has been higher than previously estimated.

Figure a Smaller growth contribution from the pharmaceutical industry in the new data

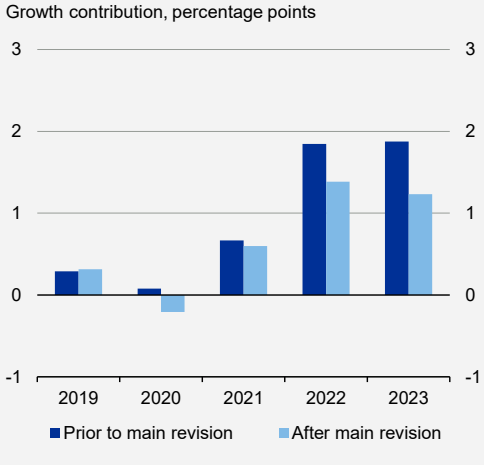
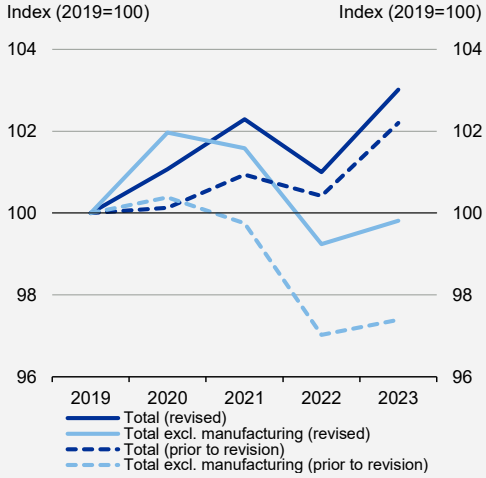


Figure b Hourly productivity since 2019 has been revised up – especially excl. manufacturing



Note: Growth contribution to real GDP in figure a. The growth contributions from the pharmaceutical industry before the main revision are based on a special extract of unpublished figures from Statistics Denmark, subject to greater uncertainty. Real GVA per working hour in figure b.
1) See Statistics Denmark:"Kvalitetsforbedring af de makroøkonomiske statistikker – Hovedrevision 2024", 28. juni 2024.
Source: Statistics Denmark and own calculations.

1.2 International and financial developments

Growth in the international economy has become more broadly based during the first half of 2024, with signs of slightly more uniform progress across regions. Thus there has been an increase in activity in the euro area with GDP growth of 0.3 per cent in both the first and second quarter after standstill in 2023. The US economy has continued to grow, but with signs of slowing growth in private consumption and public demand. The Chinese economy has also shifted down a gear with the decline in construction continuing and a weak development in private consumption.

Growth remains weak in both Sweden and Germany, which are important export markets for Denmark. In Sweden, GDP fell by 0.8 per cent in the second quarter of 2024 after an increase of 0.5 per cent in the first quarter, while the German economy has continued to be marked by stagnation in the first half of the year with approximately zero growth in both the first and second quarter.

Inflation has also slowed across countries, including in the euro area and the US. As a result, the European Central Bank (ECB), Sveriges Riksbank and the Bank of England have all started to reduce the monetary policy interest rate. The US central bank has signalled that an interest rate cut could come in September. Market expectations point to further monetary policy interest rate cuts in the second half of 2024 and throughout 2025 as a result of slowing inflation in both the euro area and the US.

Based on market expectations for monetary policy easing, short-term interest rates in the euro area and Denmark are assumed to fall by 1¼ percentage points towards the end of 2025, while long-term interest rates are assumed to remain approximately at current levels in 2025.

At the beginning of August, the financial markets were marked by major price fluctuations, with volatility on the stock markets in particular increasing sharply. The large price fluctuations must be seen, among other things, in the light of a previous period of relatively strong growth in share prices, and periods of sudden and significant price drops occur regularly. The latest fluctuations were triggered by economic indicators in the US that were worse than expected in the markets. At the same time, monetary policy tightening in Japan may have contributed to investors who have borrowed in the Japanese currency (yen) and invested in assets in the US and Europe selling out of their holdings due to the prospect of a stronger yen. This has reinforced the fluctuations on the stock markets and contributed to a strengthening of the exchange rate of the yen in relation to the dollar after a longer period with a tendency to weaken.

Volatility has subsided again, and the fluctuations on the stock markets at the beginning of August are also not considered to be an expression of a different macroeconomic picture compared to the latest forecasts from international organisations, including the OECD, the IMF and the EU Commission, which point to more or less unchanged growth in the world economy in 2024 and 2025 compared to 2023. In these forecasts, there is a prospect of a more evenly distributed growth across regions.

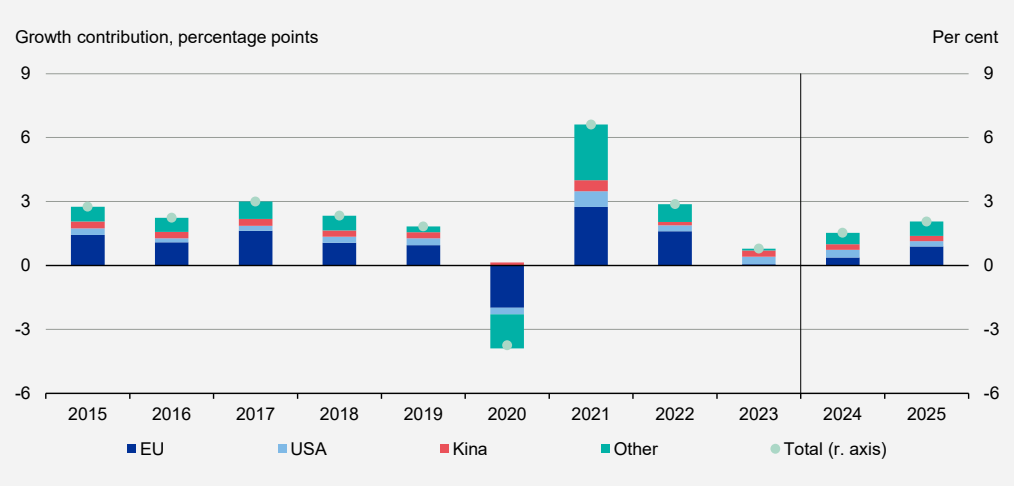
In the euro area, growth is expected to pick up gradually in 2024 and 2025. The progress is expected to be mainly driven by growth in private consumption in line with falling inflation,

which supports real income growth. At the same time, the manufacturing industries are expected to gradually make progress again after a decline through 2023, among other things as a result of the impact of the previous years' fluctuations in energy prices wearing off.

On the other hand, economic growth is expected to slow slightly in the USA and Japan. In the USA in particular, private consumption is expected to slow down slightly after relatively high growth in 2022 and 2023 in line with a slowdown in the labour market and lower public demand. There is also the prospect of gradually slowing growth in China, where declines in the construction and real estate sectors continue to weigh on the economy, but are partially offset by expansionary measures from the Chinese authorities.

Overall, growth abroad (calculated by trade-weighted GDP) is expected to pick up in the forecast period after low growth of 0.8 per cent in 2023 to 1.5 per cent this year and 2.1 per cent in 2025, *cf. figure 1.6*. Although overall there is a prospect of more momentum in the economies, growth rates are still low compared to the years before the corona pandemic.

Figure 1.6 International economic growth is set to accelerate during the forecast horizon



Note: The trade-weighted GDP is calculated as a weighted average of GDP growth in Denmark's 36 most important trading countries based on the countries' share of Danish exports.
Source: OECD Economic Outlook, May 2024, Statistics Denmark and own calculations.

1.3 Outlook for the Danish economy

The Danish economy in a moderate upturn

Improved economic prospects abroad are bolstering the sales opportunities for Danish export companies. Additionally, the pharmaceutical industry is expected to continue contributing to export growth, and increased exports of natural gas from the Tyra field in the North Sea are anticipated to further elevate exports, particularly in 2025. Overall, exports are projected to grow by 2.5 per cent in 2024, with slightly higher and more average growth expected at 4.1 per cent in 2025, *cf. figure 1.7*.

The relatively low export growth in 2024 primarily reflects a smaller contribution from service exports, which have seen significant growth in recent years following the COVID-19 pandemic. Maritime transport, a component of service exports, is expected to decline in volume in 2024 due to supply chain issues related to the current situation in the Red Sea and the Gulf of Aden.[2]

Figure 1.7 Outlook for lower export growth compared to previous years

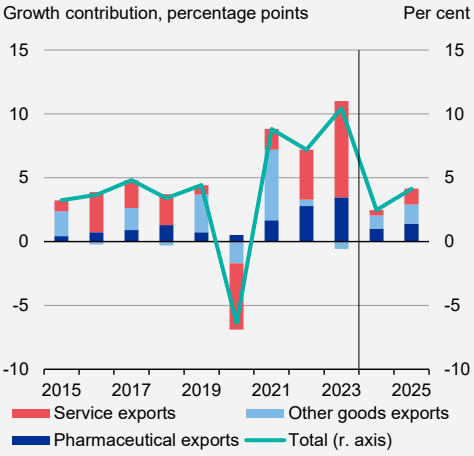
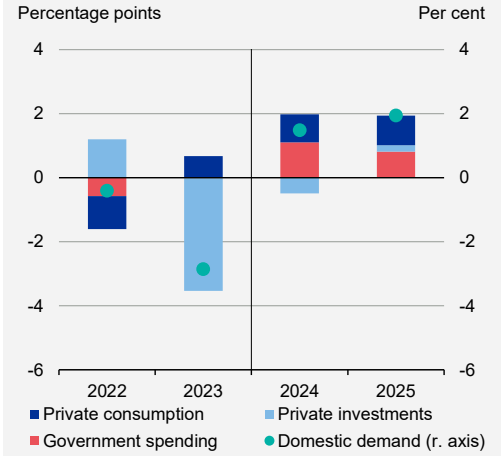


Figure 1.8 Domestic demand is expected to continue contributing to activity growth



Note: In figure 1.7, the pharmaceutical industry's growth contribution is estimated based on the sector's real output. The real growth contributions are illustrated in figure 1.8.
Source: Statistics Denmark and own calculations.

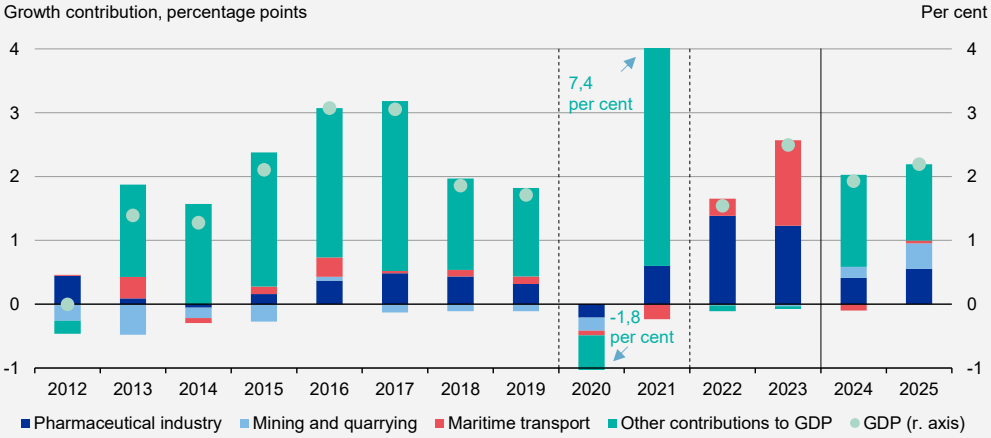
Following a decline over the past two years, domestic demand is anticipated to play a larger role in driving economic activity this year, *cf. figure 1.8*. A decrease in inflation and lower interest rates are expected to support private consumption and gradually stimulate investments in housing and business sectors. Government spending is also projected to contribute to growth this year, although its contribution is expected to be slightly smaller next year, as discussed in Chapter 2. The contributions from government spending are partly linked to increased government procurement related to defence.[3]

A rising domestic demand is expected to contribute to more broadly based growth across various sectors during the forecast period. This marks a shift from recent years, where value creation has been primarily driven by the pharmaceutical industry and, in 2023, by maritime transport. However, a prospect of a certain duality remains in the economy, with the pharmaceutical industry continuing to be a significant driver of overall growth. Additionally, GDP is expected to receive an extraordinary boost from increased activity in mining and quarrying, particularly in 2025, following the reopening of the Tyra field.

[2] See, for instance, Box 6.2 in the Economic Review, May 2024
[3] However, the import content of these expenditures is currently unknown, and the forecast uses a typical import content for public goods purchases and capital investments. The procurement of defense materials tends to increase the import content, which may result in an overestimation of the contribution from government spending. Nonetheless, this does not affect the overall assessment of economic activity in the Danish economy.

Based on the developments in exports and domestic demand, GDP is projected to grow by 1.9 pct. this year and 2.2 pct. in 2025. However, excluding contributions from mining and quarrying and the pharmaceutical industry, growth is expected to be more subdued, at 1.3 pct. and 1.2 pct., respectively, *cf. figure 1.9*.

Figure 1.9 GDP growth in 2024 and 2025 boosted by the Mining and Quarrying and Pharmaceutical Industry



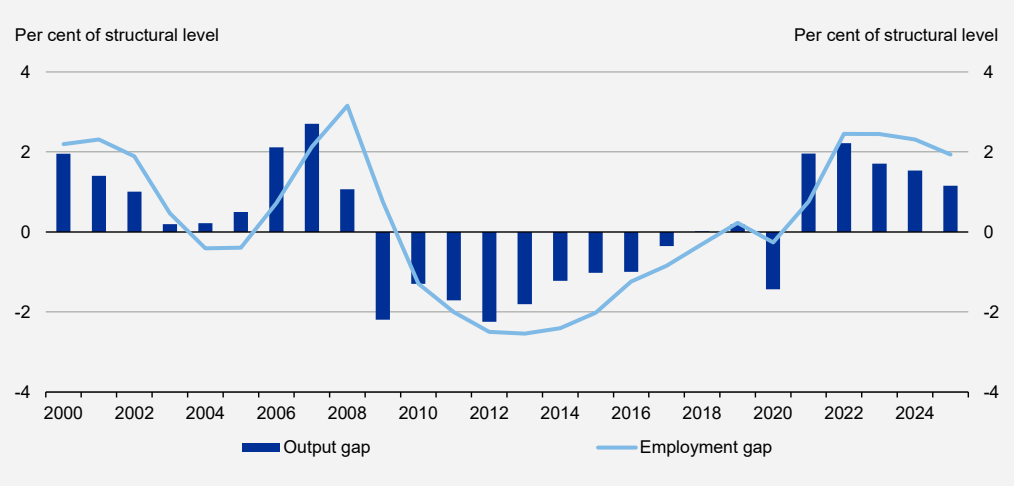
Note: The figure does not show the full fluctuations in GDP growth of -1.8 pct. and 7.4 pct. in 2020 and 2021, respectively, between the dashed lines. The growth contributions of the sectors to GDP are based on GVA growth.
Source: Statistics Denmark and own calculations.

Although the estimated annual GDP growth is higher in 2025 than in 2024, growth throughout 2025 is expected to be relatively weaker than in 2024. GDP is projected to grow by just under 1.5 per cent from the fourth quarter of 2023 to the fourth quarter of 2024, while growth from the fourth quarter of 2024 to the fourth quarter of 2025 is expected to be slightly lower, at just over 1.25 per cent.

Gradual slowdown in employment growth

The projected deceleration in GDP growth, excluding contributions from mining and quarrying and the pharmaceutical industry, is reflected in a slight narrowing of the output gap, though the activity level remains above typical normal capacity utilization, *cf. figure 1.10*. This indicates that the Danish economy will be in a moderate boom. This outcome is partly due to the fact that the estimated growth related to the pharmaceutical industry as well as mining and quarrying is expected to have only limited spill-over effects on the labour market as a whole, despite potentially playing a significant role locally, such as in Kalundborg, where Novo Nordisk is currently expanding production facilities.

Figure 1.10 Labour market pressure is gradually reduced following moderate overall growth



Note: The output gap is expressed as a percentage of GVA excluding mining and quarrying. The employment gap excludes leave.
Source: Statistics Denmark and own calculations.

In addition to more moderate activity growth, there are other factors indicating a slowdown in the labour market. One such factor is the recent productivity trends in certain sectors of the economy. Some of the decline in hourly productivity since 2021 can be attributed to labour hoarding by companies in response to recruitment challenges following the COVID-19 pandemic, as noted in the Economic Review, May 2024. Other factors that may have suppressed overall productivity growth include the fact that a portion of employment growth has been driven by individuals with weaker ties to the labour market and many who are new to their jobs still require training.

In 2025, a certain adjustment in employment is expected, which should lead to renewed productivity gains. However, the adjustment is anticipated to be relatively modest. As a result, hourly productivity outside the industrial sector is expected to remain below the trend observed during the period 2000-2019, while overall private-sector productivity is projected to return to trend in 2025, *cf. figure 1.11*.

Figure 1.11 Hourly productivity is expected to remain below trend outside the industrial sector in 2025

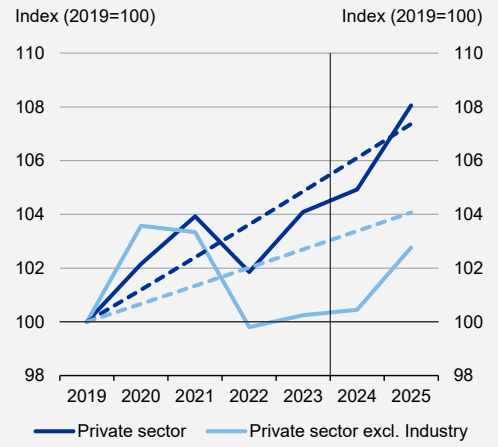
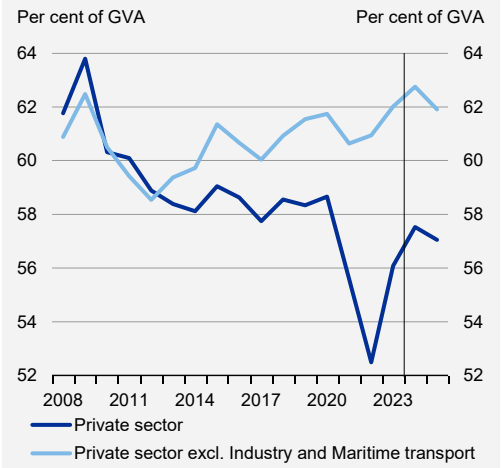


Figure 1.12 The wage share is relatively high in certain parts of the economy.



Note: In figure 1.11, hourly productivity is measured as real GVA per hour worked, with the dashed lines indicating the trend for the period 2000-2019. The wage shares in figure 1.12 are adjusted to account for the fact that self-employed individuals contribute to GVA but are not included in the wage sum.
Source: Statistics Denmark and own calculations.

Another factor indicating a potential need for adjustment among some companies is that the wage share in certain sectors of the economy was slightly higher in 2023 compared to recent years, *cf. figure 1.12*.[4] Additionally, higher interest rates have increased the cost of capital for businesses. Combined with significant wage increases throughout 2024, this could put downward pressure on profits for some companies. Given the substantial wage increases and the expected continued weak development in hourly productivity in 2024, the wage share is projected to rise further this year. However, with the anticipated adjustment in employment next year, the wage share is expected to decrease slightly in 2025.

Overall, the developments in the first half of 2024, along with expected trends in demand, capacity pressure, and the assessment of businesses' need for adjustment, suggest that employment on an annual basis is estimated to grow by 35,000 persons this year. A slight decline of 5,000 persons is expected from 2024 to 2025. Thus, a mild slowdown in employment growth is anticipated for the remainder of 2024 and into 2025, but employment will remain at a high level, with over 3.2 million persons employed, *cf. figure 1.13*. Unemployment is expected to rise slightly over the forecast period. Gross unemployment is estimated to reach 87,100 full-time persons in 2024, with a slight increase to 88,700 full-time persons in 2025, *cf. figure 1.14*. However, this remains below the 2019 level and is very low by historical standards.

[4] The wage share in the private sector as a whole has been declining over an extended period since around the financial crisis. This is partly attributed to very large industrial companies, many of which have M&P activities abroad where value added has significantly increased, as noted in, for example, the Economic Review, May 2024. Additionally, both the overall wage share in the private sector and the wage share excluding manufacturing and maritime transport are influenced by composition effects, involving shifts between sectors over the years.

Figure 1.13 Outlook for a mild slowdown in employment…

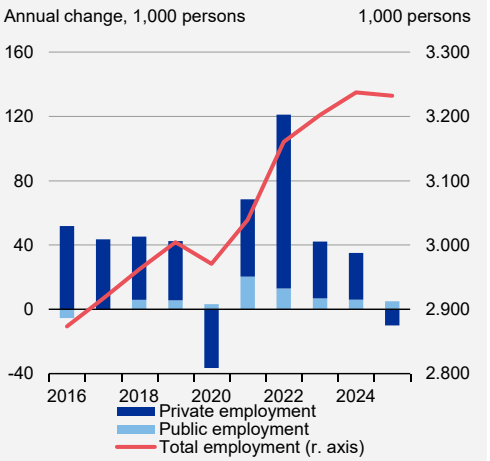
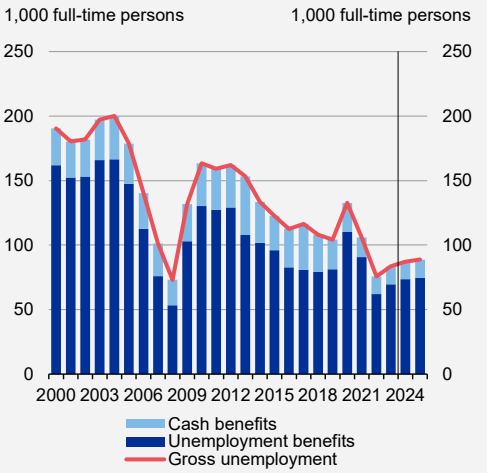


Figure 1.14 … and a slight increase in unemployment



Note: In figure 1.13 employment is measured including leave.
Source: Statistics Denmark and own calculations.

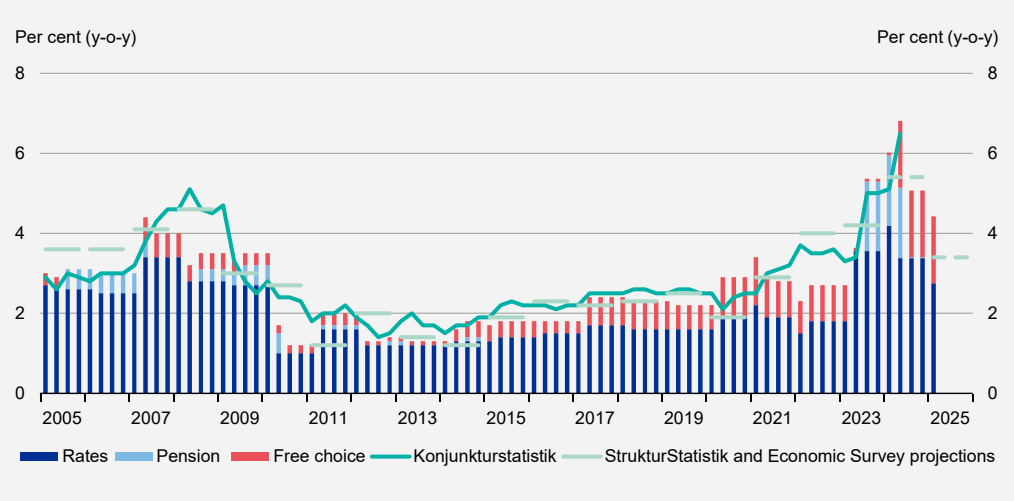
Wage growth and low inflation increase household purchasing power

The persistently high level of employment and low unemployment, together with high wage increases and low inflation, support household finances.

Inflation is estimated to remain at around 2 per cent during the forecast period. Inflation fell in July to 1.1 per cent, mainly because the price of electricity rose less significantly from June to July compared to the same period last year. Inflation is expected to rise again and temporarily reach between 2 per cent and 3 per cent in the latter part of 2024, as the fall in food prices last autumn, among other things, will no longer affect the inflation rate. At the same time, the price development of services, which is partly determined by wage developments, will contribute to keeping inflation up, especially in 2024.

The rate of wage growth in the private sector has increased in recent quarters, and in the second quarter of 2024, private wages increased significantly by 6.5 per cent on an annual basis. The increases should be seen in light of the collective labour agreements reached in the spring of 2023 (OK23), and in the second quarter the rate of increase reflects, among other things, the coincidence of agreed increases in employer pension contributions and free choice plans. For the rest of 2024, a lower wage growth rate is expected than in the first half of 2024 in accordance with OK23, *cf. figure 1.15*.

Figure 1.15 Very high wage increases in 2024 in line with the collective agreement reference path in the DA/FH area, followed by more moderate increases in 2025



Note: The reference process consists of rates (including nuisance bonus etc.), pension and other, including the free choice plan, and is calculated on the assumption of full percentual pass-through, whereby it is assumed that employees on minimum wage agreements on average receive rate increases corresponding to the relative increase in the minimum wage rate. Free choice etc. includes housing supplements, free choice plans and maternity leave, among other things. The reference path is calculated on the basis of the Collective Agreement for Employees in Industry, the Collective Agreement for Building and Construction, the Collective Agreement for Shops, Fællesoverenskomsten and the Collective Agreement for Transport and Logistics. Wage increases are stated excluding nuisance bonuses. The Confederation of Danish Employees's (DA) StrukturStatistik is published annually and is based on wage information from all companies that report to DA, while the KonjunkturStatistik are published every quarter and is based on a representative sample. The two statistics generally follow each other in the long term, but there may be deviations in individual years due to differences in data basis and methodology.
Source: The Confederation of Danish Employees (DA), Danish Trade Union Confederation (FH) and own calculations.

A wage growth rate of 5.4 per cent is estimated for the private sector for 2024 as a whole. The high wage increases should be seen in the context of a tight labour market in recent years, and the fact that during collective bargaining in 2023 there was a strong focus on restoring real wages following the extraordinarily high consumer price increases in 2022 in particular. In 2025, more moderate wage increases are expected, which should be seen in light of the strong growth in 2024, and a slight easing of capacity pressure in the economy, including the labour market.

In the public sector, large wage increases are also expected in the forecast period based on the collective agreements concluded in spring 2024. The collective agreements (OK24) for municipal, regional and state employees entail agreed wage increases within a combined economic framework of 8.8% of salary in the period 1 April 2024 to 31 March 2026. In addition, the agreed wage increase under the tripartite agreement on pay and working conditions (December 2023) for a number of public employees has been implemented.

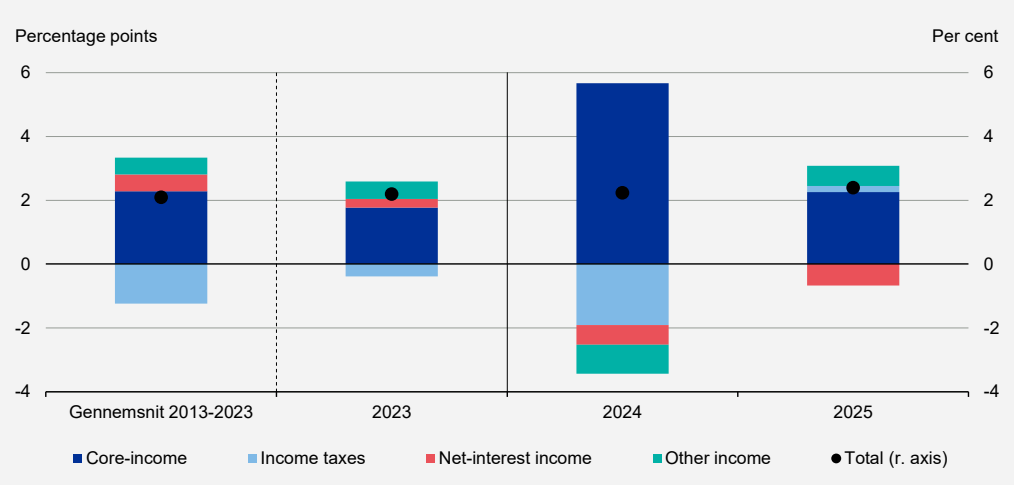
Transfer income recipients will have their incomes adjusted based on the wage rate adjustment, which is determined by the wage development in the DA area two years earlier. Transfer incomes are expected to increase in real terms in both 2024 and 2025, as the wage rate adjustment percentage is 3.2 and 3.6 in 2024 and 2025 respectively, thus exceeding the expected inflation rate.

High wage increases, combined with continued employment growth and the repayment of housing tax overpayments, contribute to a healthy increase in household disposable income, which is expected to grow by 2.2 per cent in real terms this year. Disposable income is the income available to households after deducting personal income taxes, interest and pension contributions.

Next year, reductions in personal taxes as a result of the tax reform from December 2023 will also help boost disposable income, which is estimated to grow by around 2.4 per cent in real terms, *cf. figure 1.16*. Total labour income will continue to increase, but less than in 2024, both because employment growth is somewhat more subdued and because wages increase less. In addition, there will be a lower contribution from the repayment of housing tax, which is estimated to be approximately DKK 2 billion less in 2025 than in 2024.

Higher net interest expenses will pull disposable income down in both 2024 and 2025. For homeowners with variable-rate loans, the higher interest rates will be reflected in the interest rate adjustments. Although interest rates are currently falling, there will still be homeowners who are likely to face higher interest costs in the upcoming interest rate adjustment. This applies, for example, to homeowners with F5 and F3 loans (mortgage-credit loans with an interest rate adjustment period of respectively 5 years and 3 years), where interest rates will be somewhat higher than at the last interest rate adjustment. Higher interest rates increase interest costs for households with loans.

Figure 1.16 Strong growth in labour income pushes up real disposable income growth

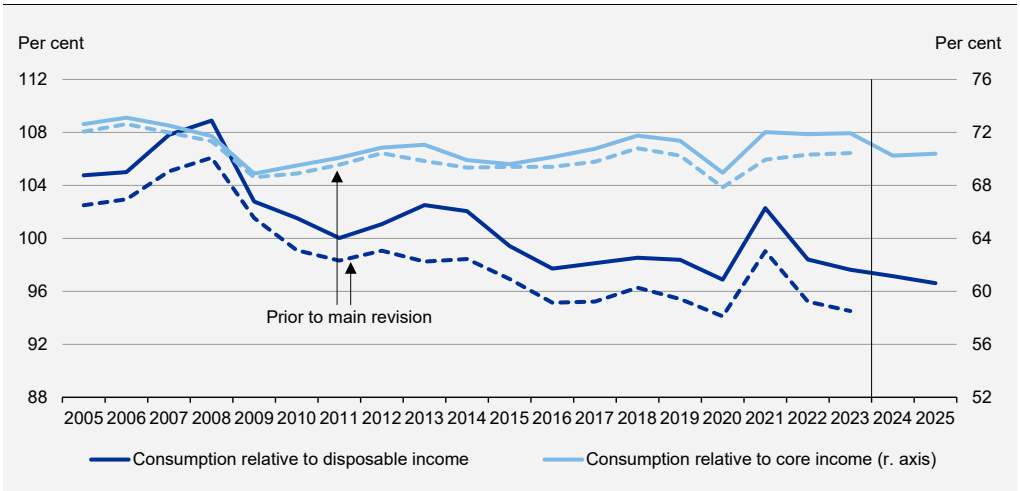


Note: Core income is wage income and transfer income. Other income includes stock dividends and pension contributions and payments. The expected negative contribution from income taxes in 2024 should be seen in the context of high wage increases and employment growth leading to an increase in both core income and income taxes.
Source: Statistics Denmark and own calculations.

The rise in incomes supports private consumption, which is expected to grow by 1.7 per cent in real terms this year and 1.8 per cent next year. Consumption growth is held back this year by an expected adjustment in car sales after a high level and a large growth contribution last year.

Consumption is thus expected to grow slightly less than disposable income in the forecast period. The consumption ratio thus decreases slightly, as has generally been the case over a number of years, *cf. figure 1.17*. The consumption ratio measured in relation to core income has developed more stably, but the historically high growth in core income this year is not expected to lead to an equally large increase in consumption, and the consumption ratio measured in relation to core income will therefore decrease this year as well.

Figure 1.17 The main revision to the national accounts results in a higher consumption ratio



Note: The Dashed lines depict the consumption ratio before the main revision to the national accounts.
Source: Statistics Denmark and own calculations.

The consumption ratio measured in relation to disposable income has been adjusted upwards by approx. 3 percentage points as a result of the main revision of the national accounts in June, and in 2023 consumption amounted to 97.6 per cent of disposable income. The consumption ratio measured in relation to core income has also been adjusted upwards, but to a lesser extent. Households therefore spend a larger proportion of their income on goods and services than was previously assumed. Correspondingly, a smaller proportion of the income has been saved.

The upward adjustment of the consumption ratio is a result of Statistics Denmark having revised private consumption up and incomes down, and the revision is largely linked to method changes and better data bases, *cf. box 1.2*. The higher consumption ratio is not considered to reflect a fundamental change in consumer behavior, nor does it change the overall picture that the consumption ratio has generally been decreasing since the very high level leading up to the financial crisis in 2008, *cf. chapter 2 of the Economic Survey, May 2024*. Consumption has thus continued to grow more slowly than incomes over a number of years.

Box 1.2 The main revision to the national accounts show higher consumption and lower incomes

The main revision of the national accounts published on 28 June this year has resulted in an upward adjustment of nominal private consumption of approx. 24 billion DKK in 2023, while households' disposable incomes have been adjusted down by approx. 18 billion DKK. This implies that the consumption quota has increased by approximately 3 percentage points in 2023, cf. figure a.

On the consumption side, it is, among other things, the consumption of residential use that has been adjusted upwards. In 2023, housing consumption will be approx. 12.7 billion DKK higher than previously calculated. In addition to actual paid rent, residential consumption consists of an imputed consumption for homeowners' payment of their own rent, and it is this item that has been adjusted upwards as a result of an update of the data basis for calculating imputed rent. In addition, there is also, for example, a significant rise in food consumption, car purchases and the consumption of other services, cf. figure b.

On the income side, the main reason for the lower level is a new method for calculating various current transfers, including a new data base. These transfers cover, among other things, quotas for trade unions and sports associations, church tax, endowments, fines, donations and transfers between households and to/from abroad. The net interest income has also been adjusted downwards, while, for example, income from share dividends etc. is adjusted upwards. The core income, which consists of wages and income transfers, has only been adjusted to a minor extent, and therefore consumption measured in relation to core income has been adjusted up less than consumption measured in relation to disposable income.

The revision has not significantly changed the development of the consumption quota, where a decreasing trend can still be seen since the very high level leading up to the financial crisis in 2008. The decline in the consumption quota since 2008 is roughly unchanged at just over 11 percentage points, while the decline since 2013 is approx. 1 percentage point higher in the revised national accounts and now amounts to just under 5 percentage points. It is therefore largely a question of a level shift in the consumption quota, which is based on new methods, knowledge and data bases.

Figure a Consumption ratio has been revised higher due to higher consumption and lower income

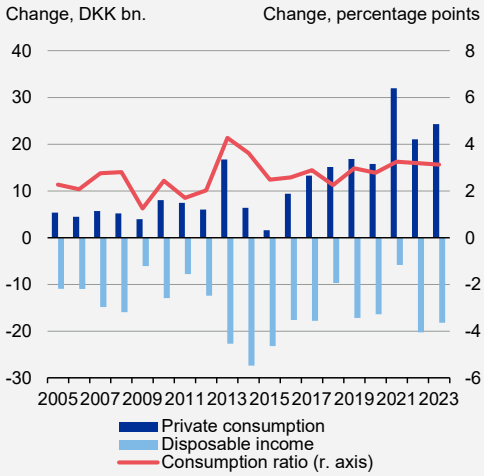
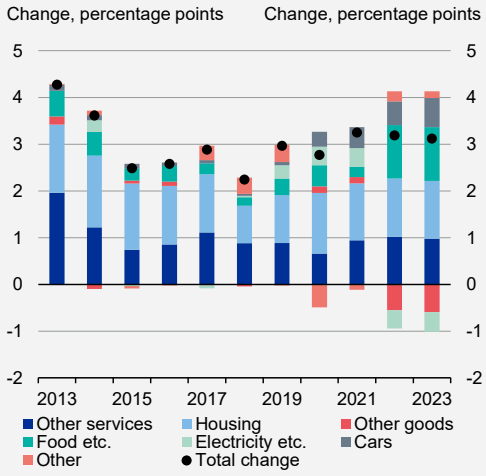


Figure b Consumption of housing services has been adjusted higher as a share of income in new national accounts



Note: Figure a shows the change in nominal consumption and disposable income in the revised national accounts compared to the previous version. Figure b shows the change in private consumption in relation to disposable income on sub-components.
Source: Statistics Denmark and own calculations.

Renewed advances in the housing market

Growth in household incomes will also have an activity-enhancing effect on the housing market, which has been affected by the higher interest rates that have dampened housing demand.

Mortgage rates on new home loans have decreased since the turn of the year, *cf. figure 1.18*. The development in interest rates thus contributes to renewed gains in the housing market, where the latest figures from Boligsiden indicate price increases in the second quarter of 2024 for both houses and owner-occupied apartments, *cf. figure 1.19*.

Figure 1.18 Mortgage rates are trending down

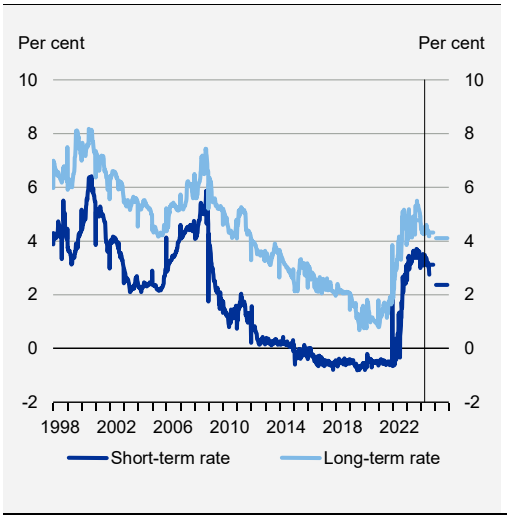
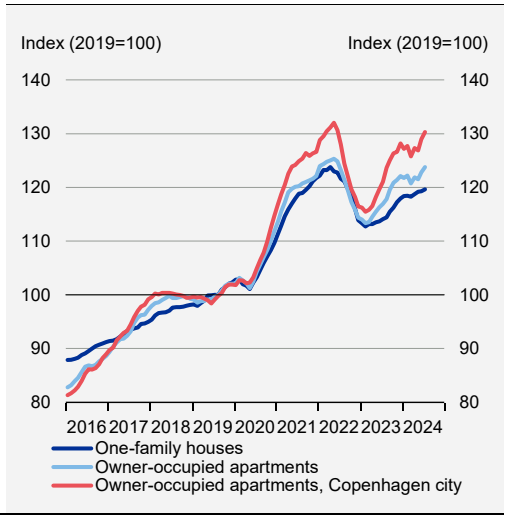


Figure 1.19 Increases in housing prices in the first half of 2024



Note: In figure 1.18 mortgage rates are reported by Finance Denmark as the effective interest rate that investors who purchase newly issued mortgage bonds have received.
Source: Finance Denmark, Boligsiden, Macrobond and own calculations.

Sales of both houses and owner-occupied apartments also increased in the second quarter. For houses, turnover has returned to a more normal level after significant fluctuations in recent years. The supply of housing for sale has risen in the first half of the year to levels reminiscent of the years before the coronavirus pandemic, *cf. figure 1.20*.

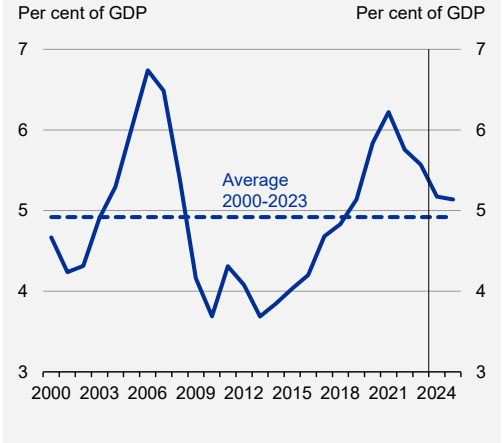
Short-term mortgage rates are expected to decline further in line with monetary policy interest rate cuts as a result of decreasing inflation, while long-term mortgage rates are likely to remain at a lower level than in 2023, with an effective interest rate of approximately 4.25 per cent (excluding fees) compared to an effective long-term rate of around 5.25 per cent in the autumn of 2023.

It is projected that house prices will increase with 2.7 per cent in 2024 and 3.0 per cent in 2025. House prices are supported by rising incomes and continued high employment, which, in combination with gradually lower interest rates, means that potential homebuyers have more disposable funds for purchasing property.

For owner-occupied apartments, price declines may still occur due to higher property taxes for new owners under the new property tax system. However, the development in the second quarter, with price increases for owner-occupied apartments in Copenhagen, suggests that the risk of significant price declines has diminished.

Figure 1.20 The housing market shows signs of stabilisation

Figure 1.21 Correction in housing investments from a high level



Note: Own seasonal correction in figure 1.20 based on data from Boligsiden.
Source: Boligsiden, Statistics Denmark and own calculations.

A lower influx of newly built homes is also supporting housing prices. After several years at a relatively high level, housing construction slowed significantly in 2022 and 2023. The reduced new construction is expected to contribute to a 5.7 per cent decline in housing investments in 2024, bringing housing investments down to a more normal level as a share of GDP, *cf. figure 1.21*. For 2025, modest growth is expected due to a turnaround in new construction, supported by the prospect of lower interest rates and an increase in housing prices. However, the level of construction costs remains high in light of the increases in previous years, which will continue to dampen housing investments.

Business investments are expected to develop at a slower pace

Business investments are also affected by the rising interest rates having noticeably increased the cost of financing. The businesses have generally been met by tighter credit terms in recent years, *cf. figure 1.22*. The expected interest rate cuts during 2025 will not be able to counteract this fully, which is why the financial conditions are still expected to put a damper on business investments.

Loan growth to businesses of 3½-4 per cent on an annual basis is also not significantly high, which may indicate that the appetite for a continued high level of investment is limited.

A lower investment quota is also hinted at due to many businesses across industries currently reporting a lack of demand, *cf. figure 1.23*. For manufacturing industries (excluding pharmaceuticals), the assessment of capacity pressure is not significantly high either.

On the other hand, business investments are supported by a number of publicly initiated investments, e.g. the Fehmarn Belt Fixed Link, as well as by the continued transition to green energy. Novo Nordisk's investments in Kalundborg, for example, also help to keep the overall level of investment up. Finally, it also contributes to keeping investment activity up, that during 2024 and 2025 there is a prospect of increasing growth on export markets.

Figure 1.22 Credit terms for businesses have generally tightened in recent years

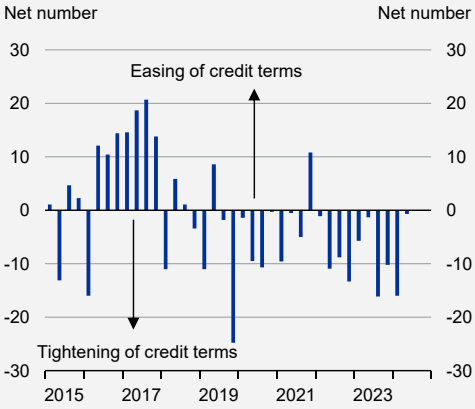
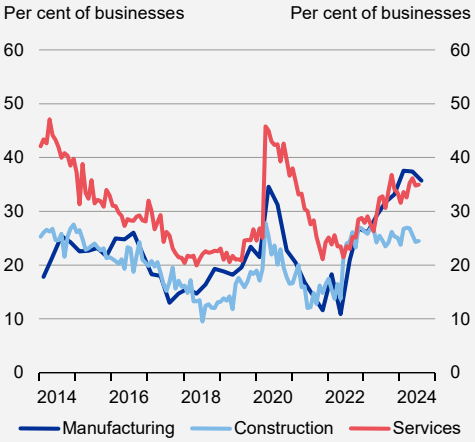


Figure 1.23 Relatively high lack of demand across industries



Note: Own seasonal adjustment in figure 1.23.
Source: Danmarks Nationalbank, Statistics Denmark and own calculations.

Overall, the expectation is that there is no prospect of significant progress in business investments. The investment quota is thus expected to fall somewhat in 2024 and a little further in 2025, *cf. figure 1.24*. It must also be seen in the light of the fact that the investment quota for large parts of the economy has been relatively high in 2022 and 2023. In addition, fluctuations in sea transport related to high freight rates led to a lower investment quota in 2022. The growing value creation from M&P activities outside the country also affects the investment quota negatively – although the effect from this is less one-sided.

Imports generally follow the development in overall demand, i.e. both exports and domestic demand. Exports are the part of demand that has the highest import content. As domestic demand is expected to drive a larger part of the growth in the Danish economy, import growth relative to demand growth is also expected to slow down. On the other hand, the import of manufacturing goods is expected to be supported by the expected growth in the manufacturing sector excl. pharmaceuticals, as the pharmaceutical industry has a somewhat lower import content in its products than the rest of the manufacturing sector as a whole. Overall, imports are estimated to grow by 1.9 per cent in 2024 and 4.0 per cent in 2025.

The expected development in imports, together with the expected development in exports, wage and asset income and transfers abroad, means that the surplus on the balance of payments will rise to 10.5 per cent of GDP this year and 10.2 per cent of GDP next year, *cf. figure 1.25*. The continued high surpluses on the balance of payments are mainly due to a large contri-

bution from the pharmaceutical industry. The net export of manufacturing goods alone contributed just over 10 per cent of GDP to the balance of payments in 2023 and is expected to be at a similar level in the forecast period.

Figure 1.24 The investment quota is expected to fall slightly

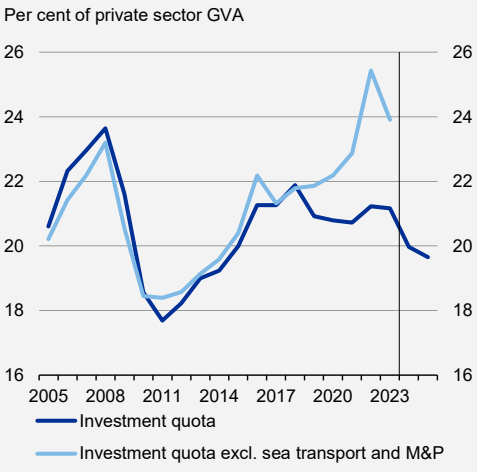
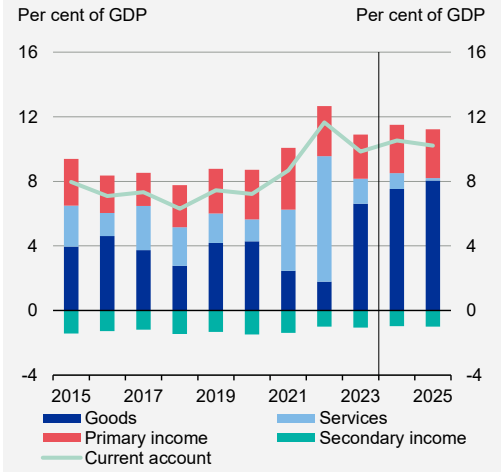


Figure 1.25 The surplus on the balance of payments is expected to remain high



Note: Own estimate of GVA associated with M&P in figure 1.24, *cf. box 4.1 in Economic Survey, December 2023*. GVA from M&P is subtracted from private sector GVA (excluding housing), while investments are not corrected. The correction shown for M&P in the investment quota is considered to be a higher bound estimate.
Source: Statistics Denmark and own calculations.

1.4 Risks to the outlook

There are still many risks concerning the global growth outlook. There is, for example, uncertainty regarding the strength of the recovery in the euro area. This is partly due to the struggles of the German manufacturing sector and that the German economy is currently not a strong driver of growth in the euro area. There is a risk that weak growth in Germany could affect other countries. Other Eurozone countries face challenges related to structural public deficits and high public debt, which could also potentially lead to weaker growth.

In the United States, the upcoming presidential election creates uncertainty regarding economic policy, including whether expansionary fiscal policy and protectionist measures could increase inflation. In Europe as well, various trade policy measures are being implemented and considered based on geo-economic considerations. These measures should be seen in the context of China's current gains in significant market shares in the global markets for electric vehicles, solar panels, and wind turbines, partly due to state-supported financing.

Trade and industrial policy measures should also be viewed in light of concerns about supply security and geopolitical tensions. For example, the dependence on gas supplies from Russia contributed to the surge in inflation in Europe in 2022. However, trade and industrial policy measures could lead to higher price increases due to higher tariffs or increased production costs.

Both abroad and domestically, there is uncertainty about the impact of the current large wage increases on companies' sales prices. It is not certain that companies can absorb the increased production costs and may therefore need to adjust either production or prices. In many countries, unemployment is low, and employment growth depends on the influx of international labour. Increased pressure on the labour market and potentially greater competition for international labour pose a risk of increased wage and price pressures.

In both the euro area and the United States, inflation remains slightly higher than the 2 per cent target. If inflation stays elevated for longer than expected, it could lead to higher interest rates than what is currently priced into the financial markets. This is primarily because the anticipated monetary policy rate cuts would be postponed, and investors might demand higher risk premiums on long-term bonds due to increased uncertainty about the interest rate level over the longer term.

Higher interest rates could lead to increased uncertainty and generally lower prices for financial assets, including lower bond and stock prices. At the same time, it would result in higher costs for businesses and households with significant debt, which could, in turn, affect business confidence and consumer spending.

It will also increase pressure on public finances in countries that already have high public debt and large structural deficits. There is already an expectation that interest expenses on public debt as a share of public revenues in several major economies will be significantly higher in 2024-2026 than just a few years ago, *cf. figure 1.26*.

Fiscal policy challenges also influence sentiment in the financial markets and interest rate developments. For example, uncertainty about economic policy in France, in light of the parliamentary election over the summer, has led to a widening of the spread between the yields on French and German 10-year government bonds by about 0.2 percentage points. However, there is no indication that this has had a significant impact on the yield spreads for other countries in the euro area, including, for instance, Italy, where the spread remains lower than at the turn of the year.

The higher volatility in the financial markets at the beginning of August was partly caused by weaker key indicators for activity in the U.S. economy. Although unemployment remains low from a historical perspective, it has shown an upward trend over the past year. Historically, periods of rapidly rising unemployment have been an indicator that the economy is slowing down and a recession is on the way, *cf. figure 1.27*. However, the current increase in unemployment in the United States is primarily due to an influx into the labour force rather than an increase in layoffs, which is typically observed during recessions.

Figure 1.26 Rising interest expenses are pressuring public finances in several countries

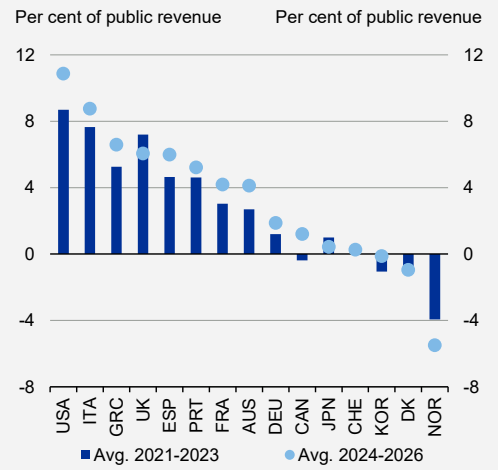
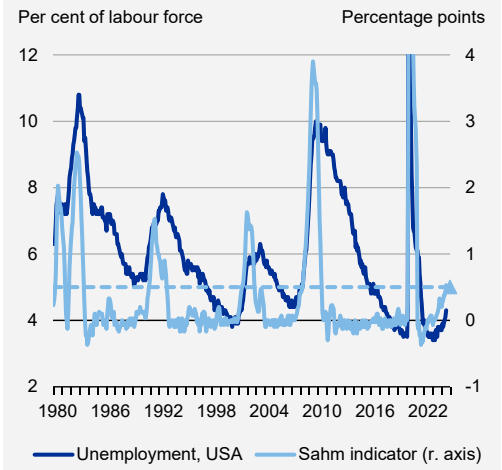


Figure 1.27 Increased focus on the risk of a slowdown in the United States



Note: In figure 1.27, the right axis is truncated and does not display the full increase during the coronavirus pandemic to enhance the visibility of the most recent developments. The dashed line represents the threshold value for the Sahm indicator, which is a rise in unemployment of 0.5 percentage points or more over three months from the lowest level within the past 12 months. Historically, when the Sahm indicator exceeds this threshold, it has coincided with a recession in the USA, *cf. Claudia Sahm, "Direct Stimulus Payments to Individuals," Brookings Institution, May 2019.*
Source: Institute of International Finance, Macrobond and own calculations.

Growth forecasts for the Danish economy have been repeatedly revised upwards, and the timing of a turnaround in the labour market has been postponed. Future development could continue to deliver positive surprises. The forecast includes relatively cautious households, and there is potential for a stronger increase in private consumption.

As part of the Economic Survey, the accuracy of estimates for the economic growth in Denmark are assessed regularly. There are generally significant forecast deviations, especially during major economic downturns due to external factors. However, the accuracy of the GDP growth estimate in the Economic Survey is on par with other forecasters, *cf. box 1.3.*

Compared to the most recent forecast in May, the estimates for GDP growth have been revised downwards for this year and upwards for 2025, although the overall growth outlook remains largely unchanged. Employment has continued to grow, and a slowdown is now expected to occur later, *cf. box 1.4.*

Box 1.3 The accuracy of forecasts in the Economic Survey is on par with other forecasters

The Economic Survey by the Ministry of Economic Affairs aims, among other things, to estimate the development of GDP and other national economic key figures for the coming years. Economic forecasts are inherently uncertain and, at best, represent the most likely development at a given time. A more accurate forecast provides a better basis for economic policy decisions. Therefore, the accuracy of the forecasts in the Economic Survey is regularly evaluated, including in comparison to the accuracy of estimates made by other organisations. A central focus of these evaluations is the estimates for GDP growth, which is the most widely used and comprehensive measure of economic development.

For the period 1980-2023, the accuracy of GDP estimates in the Economic Survey is among the better ones when compared to other forecasters, although this comparison is made with the caveat that different forecasts are prepared at different times of the year, *cf. Ministry of Economic Affairs (2024): Hvor godt rammer prognosen for BNP i Økonomisk Redegørelse?* There are generally significant forecast deviations, *cf. figure a*. The largest forecast deviations are observed around major downturns, such as the onset of the coronavirus crisis in 2020. The forecast deviation for 2020 (the difference between the GDP estimate for 2020 in the December 2019 Economic Survey and the first estimate of GDP growth in 2020) was the largest in the period 1980-2023.

The challenge of predicting economic developments during periods of very high or low growth and economic turning points is common to all forecasters. This should be understood in the context that the forecasts for the Danish economy by various institutions are largely based on the same data sources and the same fundamental economic understanding and methodology. Moreover, there is no evidence of systematic forecast deviations in the GDP growth estimates in the Economic Survey.

The Danish economy is highly influenced by developments abroad, and there is a clear correlation between the size of forecast deviations for the international economy — measured by the forecast deviation in the European Commission's estimates for the euro area — and the forecast deviation in the Economic Survey for the Danish economy, *cf. figure b*. This illustrates the significant impact of external and unforeseen factors on the accuracy of the forecasts.

Figure a Actual GDP growth and forecasts in Economic Survey, December

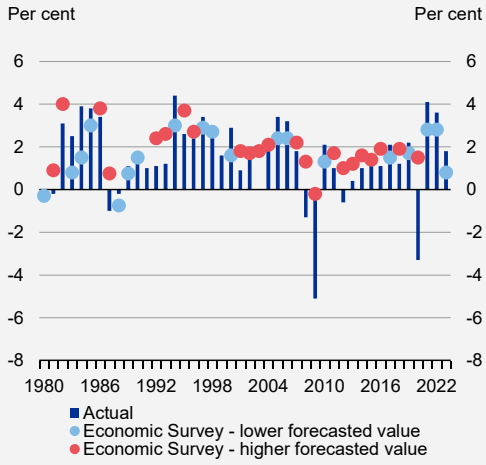
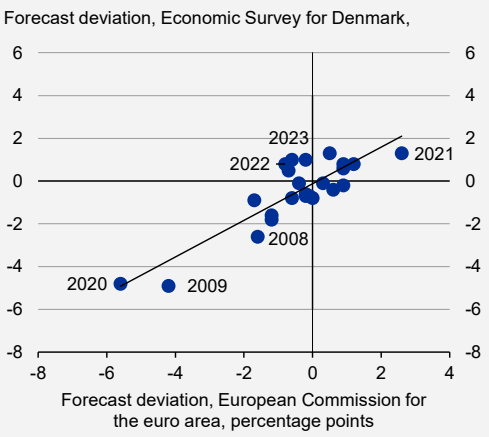


Figure b Correlation between the accuracy of forecasts for the Danish and international economy



Note: Figure a shows the GDP growth according to Statistics Denmark's first preliminary estimate and the GDP estimate in the December version of Economic Survey of the previous year. Thus, the first preliminary estimate of GDP growth in 2022 is compared with the estimate in Economic Survey, December 2021. For 2023 the comparison is made with the Economic Survey of August, as there was no Economic Survey in December 2022. Each point in figure b shows the deviation for one year, of which selected years appear explicitly. The forecast deviations for the euro area are calculated in the same way as the forecast deviations in Economic Survey for Denmark, but are based on the European Commission's estimate for the euro area in the autumn forecasts.

Source: Eurostat, European Commission, Statistics Denmark, various editions of Economic Survey/Economic Review as well as Ministry of Economic Affairs (2024): Hvor godt rammer prognosen for BNP i Økonomisk Redegørelse?, which is published on the website of the Ministry of Economic Affairs: www.oem.dk

Box 1.4 Forecast basis and changes since Economic Survey, May 2024

The forecast is based on the majorly revised national accounts up to the first quarter of 2024, along with a range of other indicators, some of which extend into July for the most high-frequency data. The national accounts for the second quarter, published on 20 August, were released after the forecast was finalised.

Since the assessment in May, new data on economic activity, employment, and inflation have been released. Weaker-than-expected GDP growth in the first quarter of 2024, as well as lower growth throughout 2023 than previously reported, has affected the annual growth rate from 2023 to 2024 and is the primary reason for the downward revision of the 2024 growth estimate from 2.7 per cent to 1.9 per cent, *cf. figure a*. The downward revision for the 2024 annual growth rate is broadly based across demand components. Employment has continued to grow, and a slowdown is now expected to occur later, *cf. figure b*. Inflation in the second quarter of 2024 was lower than expected, but it is still anticipated, in line with the May assessment that inflation will rise during the second half of 2024 before returning to around 2 per cent in 2025.

Figure a GDP growth

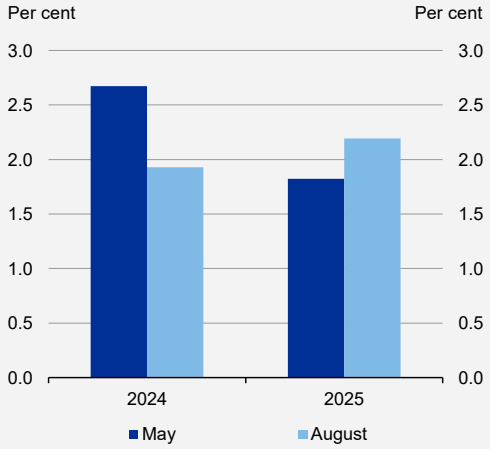
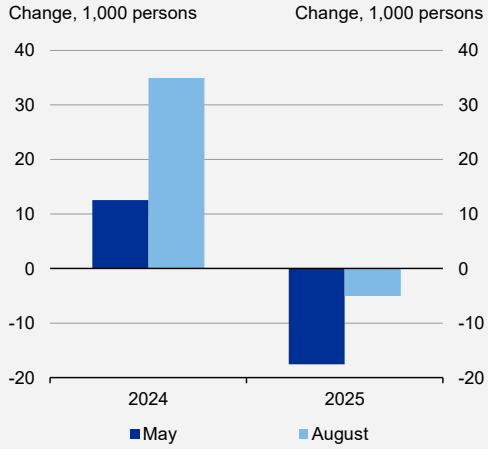


Figure b Change in employment



Note: Employment including persons on leave in figure b.
Source: Statistics Denmark and own calculations.

1.5 Annex table

Table 1.1 Key figures from the August 2024 survey and comparison with the May 2024 survey

	2023	2024		2025	
		May	Aug.	May	Aug.
Real growth, percent					
Private consumption	1.4	1.9	1.7	1.6	1.8
Total public demand	0.0	4.7	3.6	2.0	2.9
- of which public consumption	-0.2	4.5	3.3	1.7	2.5
- of which public investments	-1.2	5.8	5.9	3.9	6.1
Housing investment	-12.4	-1.5	-5.7	2.4	1.8
Business investment	-5.3	-2.1	-2.8	0.5	0.5
Inventory changes (growth contribution)	-1.7	0.0	0.3	0.0	0.0
Total domestic demand	-2.9	1.9	1.5	1.6	1.9
Exports	10.4	7.0	2.5	3.9	4.1
- of which manufacturing exports	8.8	6.0	4.1	5.0	5.0
Total demand	3.0	4.1	1.9	2.6	2.9
Imports	3.7	6.5	1.9	3.8	4.0
- of which imports of goods	-4.2	4.3	1.0	3.2	3.7
GDP	2.5	2.7	1.9	1.8	2.2
Gross value added	3.0	2.8	2.0	1.8	2.2
- of which in non-farm private sector	2.5	2.9	2.4	2.0	2.2
Change in 1,000 persons					
Labour force, total	50	17	37	-12	-4
Employment, total	42	13	35	-18	-5
- of which in the private sector	35	7	29	-23	-10
- of which in public administration and services	7	6	6	5	5
Gross unemployment	8	5	4	6	2
Business cycle gap, per cent					
Output gap	1.7	1.5	1.5	0.9	1.2
Employment gap	2.4	2.2	2.3	1.4	1.9
Gross unemployment gap	-1.2	-0.7	-0.8	-0.4	-0.6

Note: Public consumption is calculated using the input method and includes depreciation and public investments.
Source: Statistics Denmark and own calculations.

Table 1.1 (continued) Key figures from the August 2024 survey and comparison with the May 2024 survey

	2023	2024		2025	
		May	Aug.	May	Aug.
Change, per cent					
House prices (single-family houses)	-2.6	3.2	2.7	3.0	3.0
Consumer price index	3.3	2.1	1.8	2.1	2.0
Hourly wage in the private sector	4.2	5.4	5.4	3.4	3.4
Real disposable income, households	2.2	2.5	2.2	1.3	2.4
Hourly productivity in private non-farm sector	1.4	2.5	1.1	3.1	2.8
Percent p.a.					
Interest rate, 1-year adjustable-rate mortgage	3.4	3.2	3.1	2.7	2.4
Interest rate, 10-year government bond	2.6	2.5	2.4	2.5	2.3
Interest rate, 30-year mortgage bond	4.8	4.3	4.3	4.3	4.1
Public finances					
Actual public balance, billion DKK	93	48	56	21	31
Actual public balance, per cent of GDP	3.3	1.7	1.9	0.7	1.0
Structural public balance, per cent of GDP	1.1	0.6	0.6	0.3	0.2
EMU debt, per cent of GDP[1)]	33.6	28.6	32.8	27.4	31.4
Labour market					
Labour force (including leave), 1,000 persons	3,285	3,314	3,322	3,302	3,319
Employment (including leave), 1,000 persons	3,202	3,227	3,237	3,209	3,232
Gross unemployment, 1,000 full-time persons	84	89	87	95	89
Gross unemployment, per cent of labour force	2.5	2.7	2.6	2.9	2.7
External assumptions					
Trade-weighted international GDP growth, per cent	0.8	1.5	1.5	2.0	2.1
Export market growth (industrial goods), per cent	-0.6	1.3	0.9	3.1	3.0
Exchange rate, DKK per dollar	6.9	6.9	6.9	7.0	6.9
Oil price, dollars per barrel	82.5	86.4	82.4	85.8	80.5
Balance of payments					
Current account balance, billion DKK	276	325	307	332	310
Current account balance, per cent of GDP	9.8	11.2	10.5	10.9	10.2

1) Statistics Denmark's main revision in 2024 means that the EMU debt has been calculated differently between the Economic Survey of May 2024 and the Economic Survey of August 2024. This is particularly due to the reclassification of KommuneKredit to public administration and services, which has affected the EMU debt.

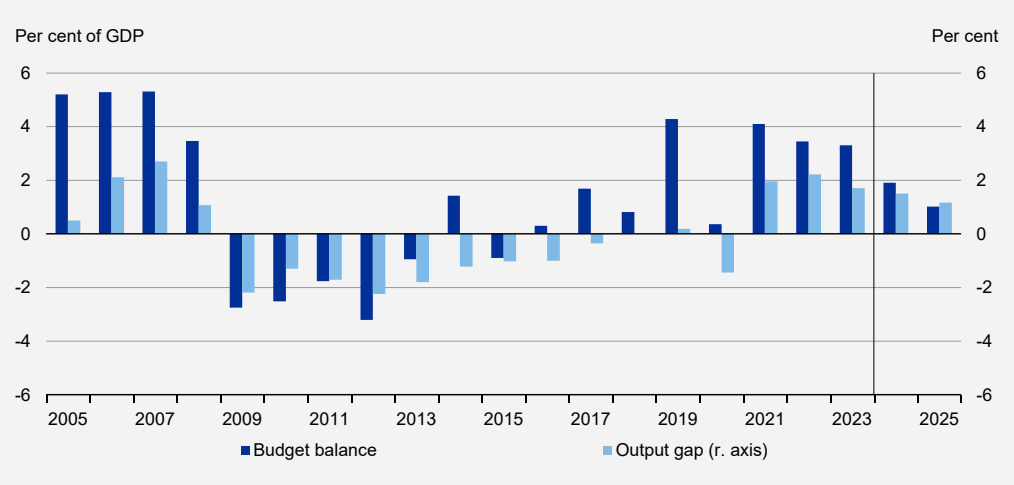
Source: Statistics Denmark, OECD, Macrobond, Confederation of Danish Employers and own calculations.

2. Public finances and Fiscal policy

Public finances are strong both in a historical and an international comparison, with Denmark having recorded the largest average surplus among EU countries over the past five years. In 2023, the surplus on the actual public balance amounted to DKK 92.7 billion – equivalent to approximately 3.3 per cent of GDP, roughly in line with the surplus in 2022. These large public surpluses reflect, among other factors, that the Danish economy is in a favourable situation with high activity and historically high employment, in addition to an underlying structural surplus that has been built up over several years. In recent years, which have been characterized by high inflation and significant capacity pressures, fiscal policy has been tightened considerably. In the coming years, continued surpluses on the public balance are expected, although they are estimated to diminish as capacity pressures ease and fiscal policy becomes less tight.

The economic upturn is also evident in the labour market, where employment is above its structural level and unemployment remains low. Labour market pressures have eased since the peak in 2022 and are expected to decrease further in the coming years. Actual employment is estimated to decline slightly from 2024 to 2025, while structural employment is expected to continue to grow. The increase in structural employment reflects, among other things, implemented reforms, including the personal income tax reform from December 2023, as well as inflows of international labour. The growing structural employment contributes to a projected reduction in the output gap from 1.7 per cent in 2023 to 1.2 per cent in 2025, *cf. figure 2.1.*

Figure 2.1 Public surpluses are expected to decrease as capacity pressures ease



Note: The output gap is a measure of how much production (excluding raw material extraction) deviates from the structural level.
Source: Statistics Denmark and own calculations.

As capacity pressures ease, fiscal policy can be relaxed from its current tight level. Compared to

2019, the year before the COVID-19 pandemic, the multi-year fiscal impact is estimated at -0.2 percentage points in 2025, indicating that fiscal policy will overall contribute to dampening the economic boom. The government plans to ease fiscal policy in 2025 with its budget proposal, as the forecast points towards a soft landing with a gradual reduction in capacity pressures. Monetary policy in the euro area and Denmark is similarly expected to be relaxed from the current tight level, based on market expectations.

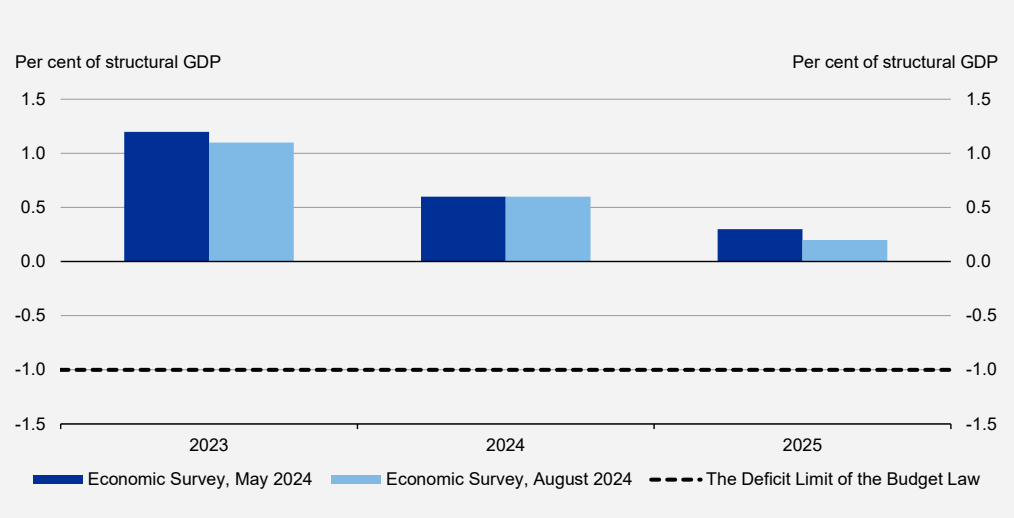
With the planned fiscal policy for 2025, there is room for increased spending on Danish defence and security, as well as for significant boosts to the budgets of municipalities and regions, along with other important societal priorities, as detailed in the Government's proposal for the 2025 budget.

Continued structural surpluses in 2024-2025

The structural public balance is expected to continue showing a surplus. However, over the forecast period, fiscal policy is planned with decreasing structural surpluses relative to the large structural surpluses of recent years, as shown in Figure 2.2. This reflects among others that fiscal policy is planned so the structural balance gradually moves towards the medium-term target of -0.5 per cent of GDP in 2030.

Compared to the May forecast, the estimate for the structural balance remains unchanged for 2024 but is lowered by 0.1 per cent of GDP in 2025. The reduction is primarily related to the easing of fiscal policy by DKK 4.1 billion (in 2024 prices) for 2025-2027, which was decided following an estimated permanent underlying improvement in public finances in the *Updated Medium-Term Projection, May 2024*. Additionally, the updated estimates for the structural balance include a range of opposing movements, which are further detailed in *Appendix A. The public finances and fiscal policy* (available in Danish only), which can be found on the Ministry of Economic Affairs' website along with the rest of the Economic Survey.

Figure 2.2 Structural surpluses in 2023-2025



Source: Statistics Denmark and own calculations.

Fiscal policy still dampens capacity pressures in 2025 but becomes less tight

Capacity pressures have been high in recent years, and fiscal policy has been tightened significantly, as reflected in the one-year fiscal effect, estimated at -1.7 percentage points and -1.3 percentage points for 2022 and 2023, respectively. This has contributed to reduced capacity pressures and bringing inflation relatively quickly down to a normal level. For 2024, fiscal and structural policies are expected to have an approximately neutral impact on economic activity, with the one-year fiscal effect estimated at 0.1 percentage points. Hence, the tight fiscal stance of 2023 will essentially be maintained in 2024.

With the budget proposal for 2025 and related measures, fiscal policy is planned to be eased, allowing for increased spending on Danish defence and security, as well as boosts to the budgets of municipalities and regions. The one-year fiscal effect in 2025 is estimated at 0.5 percentage points.

Although fiscal policy is being eased this year and next, fiscal and structural policies overall contribute to dampen capacity pressures in the Danish economy. Compared to 2019, the year before the COVID-19 pandemic, the multi-year fiscal effect is estimated at -0.7 percentage points in 2024 and -0.2 percentage points in 2025, as shown in Figure 2.3. Without the implemented economic policies, capacity pressures would have been correspondingly higher, as illustrated in Figure 2.4. A less restrictive fiscal policy this year and next helps the Danish economy to move towards a soft landing. Estimates of the fiscal effects are further detailed in *Appendix A. The public finances and fiscal policy*.

Figure 2.3 One-year and multi-year fiscal effects

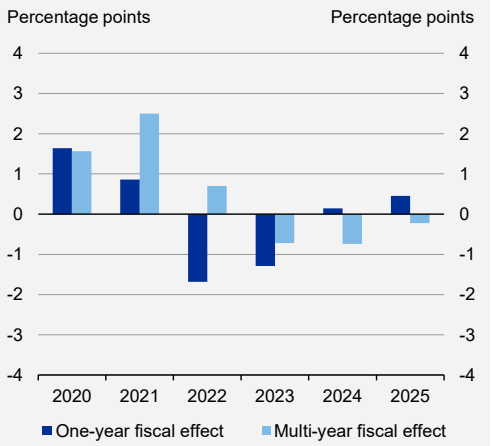
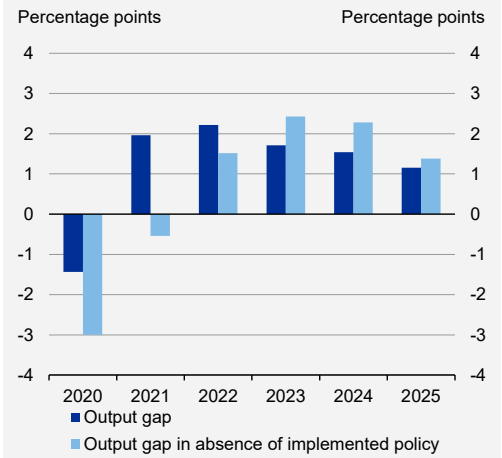


Figure 2.4 Fiscal policy eases capacity pressures in 2023-2025



Note: The effect on the output gap, as shown in Figure 2.4, is presented as the multi-year fiscal effect, which describes the overall level impact of fiscal and structural policies relative to 2019.
Source: Own calculations.

It should be noted that the estimated fiscal effects are likely to represent an upper-bound estimate. This is because purchases of military equipment typically have a high import content, which exceeds the import content assumed in the calculated fiscal effects, resulting in a lower

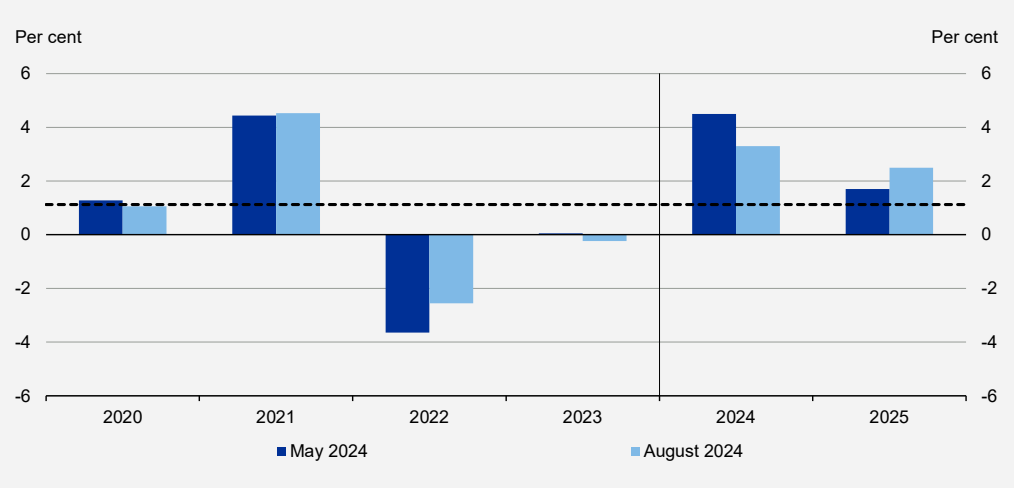
domestic activity impact. The actual impact on domestic activity will depend on the concrete implementation.

High public consumption growth, but continued net wealth and lower debt

With the budget proposal for 2025, real growth in public consumption is estimated at 2.5 per cent in 2025. This in part reflects increased room for new initiatives in 2025 following the decision in the spring to ease fiscal policy for 2025-2027. The easing in 2025 is allocated among other things to expenditures within public consumption, including an increase in the budgets of municipalities and regions.

While real growth in public consumption in 2025 is estimated to be higher than in the May survey, real growth for 2024 is assessed to be lower than previously estimated, partly due to revised historical data for 2023. However, for both 2024 and 2025, the real growth in consumption is significantly higher than the long-term historical average since 2000, which is around 1.1 per cent, as shown in Figure 2.6. In addition to prioritizing public services, this growth should be considered in light of increased defense spending, including Denmark's support through the Ukraine Fund.

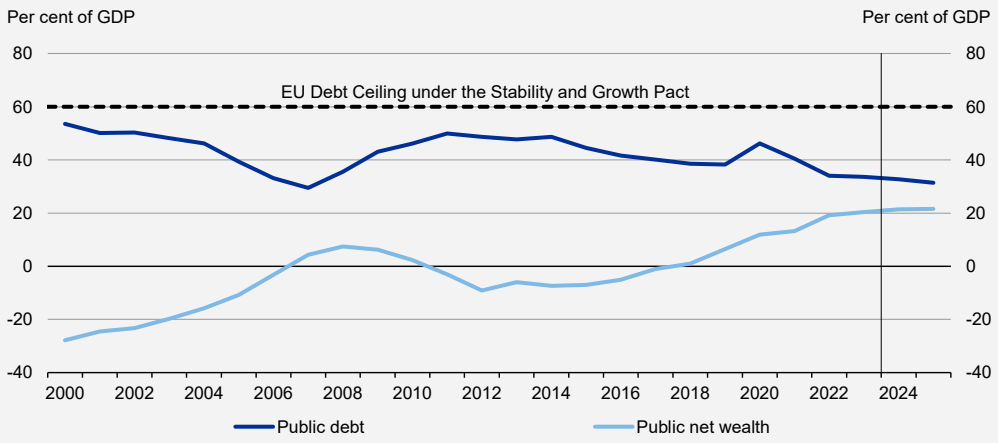
Figure 2.5 Real growth in public consumption



Note: Public consumption is measured using the input method and includes depreciation. The dashed line represents the average annual real growth from 2000 to 2023. In 2020-2023, growth in public consumption has been significantly influenced by extraordinary expenditures, including efforts related to the COVID-19 pandemic.
Source: Statistics Denmark and own calculations.

With continued surpluses expected in the coming years, public debt is expected to decline further in 2024 and 2025. The public net financial wealth is projected to increase from approximately 20½ per cent of GDP at the end of 2023 to over 21 per cent of GDP in 2024 and 2025, as shown in Figure 2.6.

Figure 2.6 Public debt and net wealth



Source: Statistics Denmark and own calculations.

Key figures for public finances for the period 2023-2025 are presented in Table 2.1. A more detailed assessment of the public finances is provided in *Appendix A. The public finances and fiscal policy (available in Danish only)*.

Table 2.1 Key estimates regarding the fiscal policy

	2023	2024	2025
Structural budget balance, per cent of GDP	1.1	0.6	0.2
Budget balance, per cent of GDP	3.3	1.9	1.0
Real growth in public consumption, per cent.[1)]	-0.2	3.3	2.5
Multi-year fiscal effect, level, percentage points[2)]	-0.7	-0.7	-0.2
One-year fiscal effect, percentage points[3)]	-1.3	0.1	0.5
Output gap, per cent.[4)]	1.7	1.5	1.2
Employment gap, per cent.[4)]	2.4	2.3	1.9
Public debt, per cent of GDP	33.6	32.8	31.4
Public net wealth, per cent of GDP	20.4	21.5	21.6

1) The estimated public consumption growth is calculated assuming the same method for both input and output approaches. For 2023, the growth in public consumption is shown using the input method.
2) The multi-year fiscal effect measures how changes in fiscal and structural policies impact the output gap (level effect relative to 2019).
3) The one-year fiscal effect measures how much the planned fiscal and structural policies contribute to changes in the output gap in a given year.
4) Calculated targets for how much production and employment deviate from structural levels. When gaps are positive, it indicates that there are scarce resources in the economy relative to a normal economic situation.

Source: Statistics Denmark and own calculations.

3. International labour has a big impact on the economy

International labour has had a significant and growing impact on the economy and labour market over the past decades. Especially during the economic upturn from 2021 to now, international labour has contributed to employment growth and helped alleviate recruitment challenges for businesses, as well as ease pressure on the labour market. Nevertheless, the share of international labour in Denmark remains below the EU average.

This theme chapter investigates how international labour affects the economy, including the volume of work, productivity growth, and prosperity, as well as its impact on economic fluctuations. Additionally, it examines the characteristics of international labour, including the types of jobs held by foreign workers, their wages, educational backgrounds, and the types of companies that employ international labour.

The main conclusions of the chapter are:

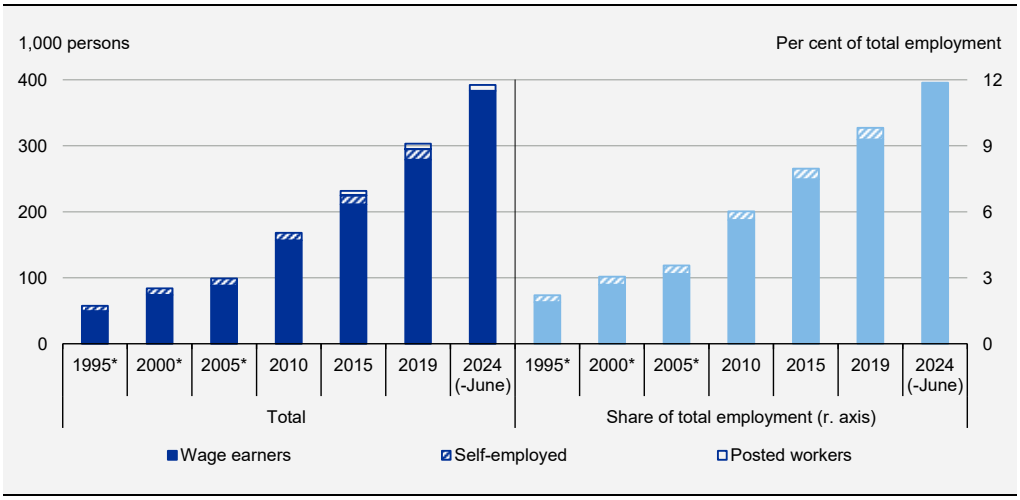
- The diversity of qualifications among the international labour helps meet different types of demand across businesses. This is reflected in the fact that international labour is utilised in all parts of the country, as well as across industries, company sizes, and in the public welfare – albeit to varying extents and in different forms.
- International labour is estimated to have contributed up to 40 per cent of the growth in the economy (GVA) since 2015 through an increased labour supply and higher productivity. This corresponds to 7-8 percentage points out of a total GVA growth of approximately 21 per cent over the period. International labour is also estimated to have increased structural employment and the fiscal space.
- The influx of international labour – and accompanying family members – also means that value creation and prosperity is shared among more persons. GDP per capita in Denmark has increased by 16 per cent since 2015 – roughly in line with the United States, which has also experienced a significant influx of international labour. In EU countries as a whole, both the influx of international labour and the growth in GDP per capita have been smaller than in Denmark and the United States. This largely reflects weaker productivity growth.
- International labour is more responsive to economic cycles than the rest of the workforce and thus helps to smooth out economic fluctuations. This has been particularly important in recent years, when businesses have faced significant recruitment challenges. International labour also plays a major role in meeting demand related to seasonal fluctuations and large infrastructure projects, such as the Fehmarn Belt tunnel.
- International labour is a diverse group, coming from all parts of the world and staying in Denmark for different reasons and varying lengths of time.
- Foreign nationals are more likely to have either a short or a long educational background and are more often found at either the lower or higher end of the wage distribution. Thus, there is a greater variation in the distribution of international labour compared to Danish wage earners.

3.1 International labour supports the economy and Danish businesses

In recent decades, the international economy and international labour have become increasingly important. Labour, capital, goods, and services move more freely across borders, and companies are increasingly operating across countries and continents. More persons are seeking job opportunities across borders, and businesses are increasingly recruiting labour from abroad. This is also the case in Denmark, where international labour has had a significant and growing impact on the Danish labour market and the Danish economy as a whole over recent decades.

There are currently almost 400,000 international wage earners working in Denmark, *cf. figure 3.1*. This is nearly double the amount in 2015 and more than seven times the amount in 1995. In addition, there are approximately 9,000 posted employees in Denmark and around 18,000 self-employed foreign nationals, according to the most recent figures from 2022. The definition and scopre of international labour are described in box 3.1.

Figure 3.1 International labour has increased significantly and constitutes a growing share of employment



Note: The amount of international labour in the figure is based on several different registers to get the most comprehensive coverage. In 1995, 2000, and 2005, the number of employees is based on the AKM register, and from 2008 onwards, the source is Jobindsats' estimate from the BFL register. There is a minor discrepancy between the two estimates, with an average deviation of 2 per cent in overlapping years. The number of self-employed individuals is based on the AKM for all periods. The AKM register is available up to 2022, which is why the number of self-employed individuals is not included in the 2024 observation. Posted workers (based on the RUT register) are not included in the share of employees, as they are not part of the total employee estimate, *cf. box 3.5.* The RUT register only covers data from 2011 onwards. Shares are calculated relative to employment, including persons on leave, in the national accounts. Own seasonal adjustment for international labour has been applied for the latest observation from the first half of 2024.
Source: Statistics Denmark, Jobindsats and own calculations.

Over the past three decades, the growth in international labour has been higher than the overall employment growth. This means that the share of international employees in total employment has increased from just under 2 per cent in 1995 to nearly 12 per cent in the first quarter of 2024. Since 2015, international labour has accounted for around 40 per cent of the total increase in employee employment.

Box 3.1 Definition of international labour

In this theme chapter, international labour is defined as foreign nationals in wage earner employment, which follows the standard definition used by agencies such as the Danish Agency for Labour Market and Recruitment (STAR). The data sources include the population register (BEF), the wage earner employment register (BFL), and the labour classification register (AKM). With this definition, international labour includes both individuals who move to Denmark as foreign nationals, as well as foreign nationals born in Denmark or who have lived in the country for many years. Individuals who change their citizenship during the period under review will either enter or exit the population accordingly. Foreign nationals who are self-employed or posted workers (as described in box 3.5) are only broadly described due to limited data coverage.

International commuters are defined as employees not appearing in the population register and who have never been listed as Danish citizens.

For cross-sectional analyses of international labour, this analysis uses data from 2023, except for company data extractions, where 2021 has been used, as it is the most recent year available in the company financial statistics (FIRE).

The increase in international labour is both due to the arrival of new international workers and the fact that a larger proportion of foreign nationals in Denmark have entered employment. Since 2015, around two-thirds of the growth in international labour has been the result of more persons coming to the country, while roughly one-third is due to foreign nationals in Denmark having strengthened their overall intregration with the labour market, *cf. figure 3.2*. The latter group primarily includes non-Western immigrants, including refugees and family reunifications, who have seen a significant rise in their employment rate, from 44 per cent in 2015 to 61 per cent by the end of 2023.[1]

International labour has not only contributed with more hands to the economy. The average working hours for international employees have also increased, particularly since 2019, *cf. figure 3.3*. This development is partly due to a composition effect, as many workers on employment permits – who generally work more hours than international labour on other types of residence permits – have entered the workforce. Overall, international employees still work slightly fewer hours on average than Danish employees, but the gap has narrowed. From the end of 2019 to the end of 2023, international labour has contributed to just under half of the total increase in average working hours for employees, from 30.5 hours to 30.7 hours per week.[2]

[1] Measured as the share of employees relative to all 15-64-year-olds in the group.
[2] Implicitly calculated based on registry data.

Figure 3.2 The growing international labour force is a result of both an increase in new arrivals and a higher proportion of foreign residents in employment

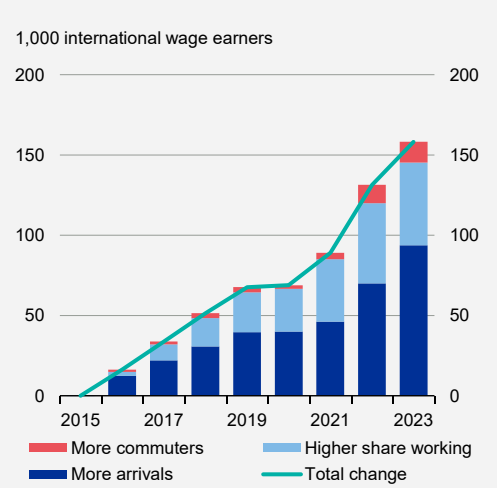


Figure 3.3 Significant increase in the average working hours for international employees

Note: Own seasonal adjustment of international labour. Implicit average working hours are calculated based on the ratio between full-time employees and the total number of employees.
Source: Statistics Denmark and own calculations.

International labour is utilised across the economy

The importance of international labour varies across the economy, but it is generally used in all parts of the country, in different types of businesses, and within public welfare services.

International labour is widely distributed across the country's municipalities, *cf. figure 3.4*. However, there are significant differences, as international employees make up between approximately 5 per cent and 35 per cent of the total number of employees in individual municipalities. Municipalities in Southern Denmark and the Greater Copenhagen area generally have a relatively high proportion compared to the rest of the country, partly due to commuters from Germany and Sweden. Additionally, municipalities such as Billund, Kerteminde, and Lolland also have a relatively large share of international employees, which can be attributed to specific factors, including many jobs in industry and construction. In Lolland municipality, the construction of the Fehmarn Belt connection also represents a relatively large share, *cf. below*.[3]

International labour is also used across all industries, *cf. figure 3.5*. The proportion of international employees is particularly high in agriculture, forestry, and fishing, which can be partly attributed to seasonal workers who stay in the country for shorter periods. At the same time, international employees make up a significant share of the workforce in the service sectors, especially in transport, hotels and restaurants, as well as operational services, which includes cleaning. In terms of numbers, the largest sectors are industry, operational services, trade, and health and social care.

[3] In Kerteminde, the high proportion is partly due to the construction of Odense harbour, while the high proportion in Billund is linked to a relatively large share of industrial jobs in the municipality.

Figure 3.4 International labour is employed in all parts of the country…

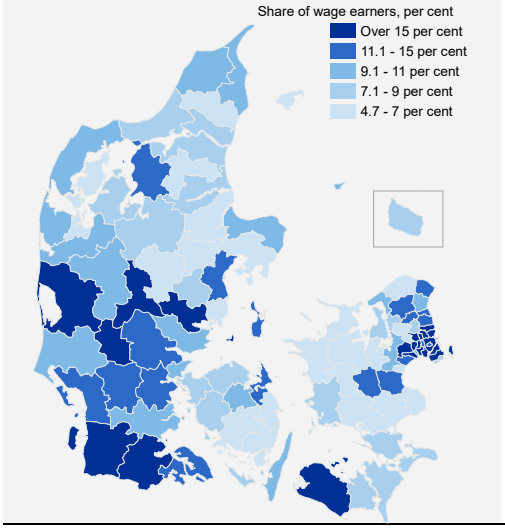
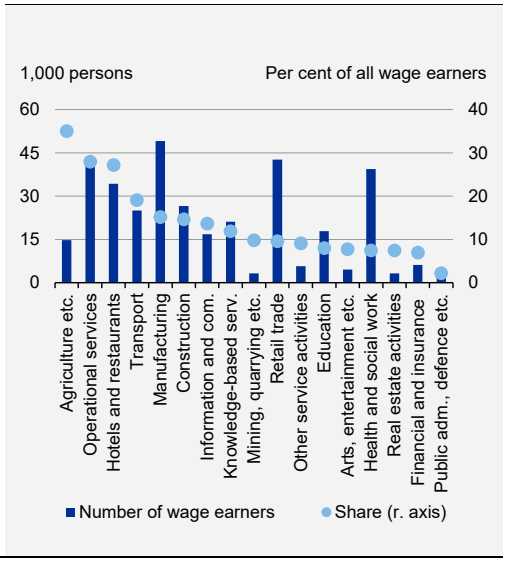


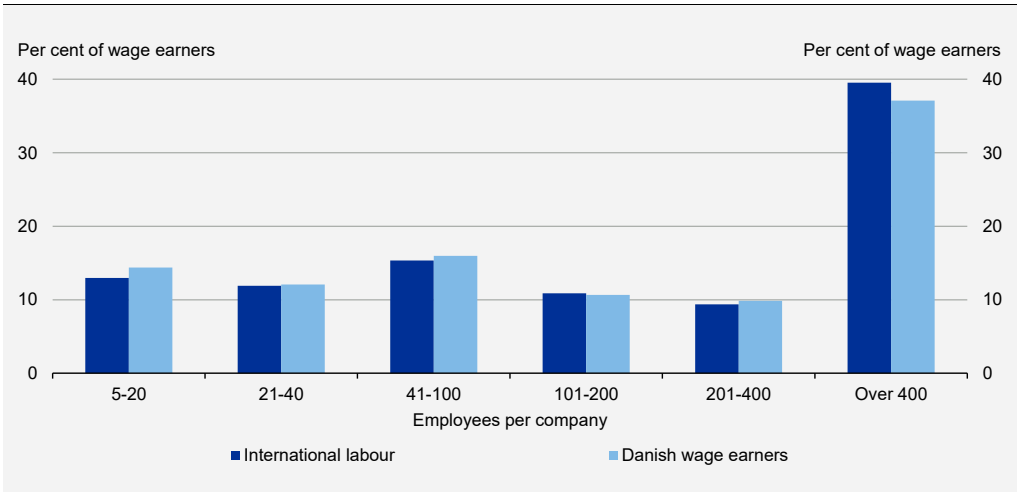
Figure 3.5 … and across industries



Note: Measured for 2023.
Source: Statistics Denmark and own calculations.

International labour is also widely represented across companies of different sizes, with a distribution similar to that of Danish employees, *cf. figure 3.6*. International labour is employed in companies ranging from small to large, but a significant portion – just under 40 per cent – of international employees work in larger companies with more than 400 employees.

Figure 3.6 International labour, like Danish employees, is employed in both small and large companies.



Note: Measurement is based on the number of employees per CVR number.
Source: Statistics Denmark and own calculations.

International labour contributes significantly to economic growth

The contribution of international labour to economic activity depends both on the total number of hours worked and their contribution to value creation per hour worked (productivity) – both their own and that of their colleagues. The contribution to the total number of hours worked in the Danish economy is relatively simple to calculate, *cf. above*, but the productivity effects related to the employment of international employees are more difficult to measure. Several international and Danish studies find that the influx of international labour has positive productivity effects, both in the short and long term. [4]

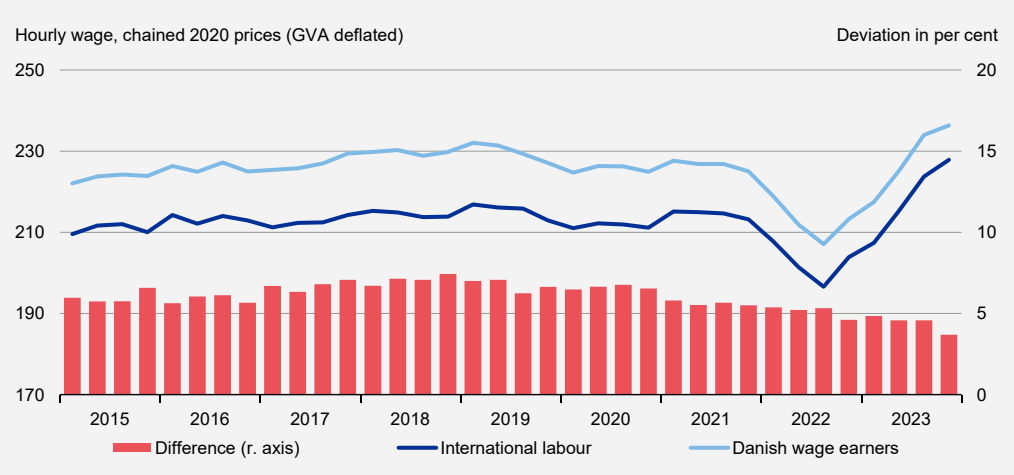
Productivity effects can arise through various channels, both directly and indirectly, as well as in the short and long term. All else being equal, highly specialised and well-educated international labour will directly increase the average productivity level in the economy, while less specialised workers and those with a looser connection to the labour market reduce average productivity. Additionally, there is an indirect effect, insofar as international labour can supplement and complement Danish labour, thereby improving the allocation of skills within the workforce and promoting specialisation among the domestic workforce. [5] For example, IMF (2016) finds that the influx of both low- and highly-educated international labour can have a positive effect on average productivity when such effects are taken into account.[6]

In addition to level effects on productivity, international labour will also influence productivity growth. The impact will depend both on the composition of the ongoing flows of international labour as well as other factors, such as e.g. steeper learning curves for international employees due to initial language barriers.

Productivity and wages roughly follow each other, and therefore overall wage development can serve as an proxy for relative productivity levels and trends. In general, the average real wages for Danish employees and international labour have followed the same trend since 2015, though the gap between the two has narrowed slightly over the period, *cf. figure 3.7*. This narrowing can partly be attributed to the composition effect, as more international employees have entered the workforce on employment permits during the period, including under the Pay Limit scheme (beløbsordningen), which requires relatively higher wages. The upward trend during the period and the narrowing of the gap indicate, all else being equal, rising productivity for both Danish and international employees.

[4] See, for example, Malchow-Møller, Munch & Skaksen (2011): Do Foreign Experts Increase the Productivity of Domestic Firms?, IMF (2020): *World Economic Outlook, April 2020*, Chapter 4: The Macroeconomic Effects of Global Migration, and Campo, Forte & Portes (2018): The Impact of Migration on Productivity and Native-Born Workers' Training.
[5] For example, Foged & Peri (2016) find that the influx of low-skilled international labour during the period 1991-2008 led low-skilled domestic workers to seek less manually intensive jobs, which had a positive impact on their wages, employment, and job mobility, *cf. Foged & Peri (2016): Immigrants' Effect on Native Workers: New Analysis on Longitudinal Data, American Economic Journal.*
[6] IMF (2016): Impact of migration on income levels in advanced economies.

Figure 3.7 Narrowing of wage differences between Danish and international labour



Anm.: The wages in figure 3.7 are calculated based on the wage sum per hour worked in own registry extraction, using the broad wage concept that includes A-income, employee benefits, and ATP contributions. Own seasonal adjustment. Both hourly wages are deflated using the GVA deflator.
Source: Statistics Denmark and own calculations.

When considering the link between international employees and the average productivity level in the companies where they are employed, there is generally large variation, *cf. figure 3.8*. Generally, international employees work in companies with slightly lower value added per hour worked compared to Danish employees, when adjusted for differences in the composition of Danish and international employees across industries. This can reflect several factors, such as relatively low-productivity companies having a higher demand for the qualifications that international labour provides, or that international employees are, as a whole, slightly less productive than Danish employees due to language barriers, training, or similar factors. The picture is reversed for the group of international employees who are in Denmark for business purposes (e.g., from the EU based on freedom of movement rules or through the Pay Limit/Fast Track schemes), where the proportion of employees working in companies with relatively high productivity is fairly large. This highlights the diversity in the types of employees that different companies employ, including in terms of educational background and job functions, *cf. section 3.2*.

Employment growth for the period 2015-2021 has been relatively evenly distributed across companies with different levels of productivity growth, and there is no significant difference between the distribution of international and Danish employees, *cf. figure 3.9*. However, if we look only at the employment growth of individuals on work permits from third countries, including the Pay Limit and Fast Track schemes, this growth has been more concentrated in companies with either high or very high productivity growth, but also in companies with relatively low productivity growth. The increased influx of employees on work permits into companies with high productivity growth may suggest that these individuals have contributed to improving company productivity during the period, although it may also reflect that companies experiencing significant growth in activity have needed to attract international labour.

Figure 3.8 International labour is utilised in companies across levels of productivity

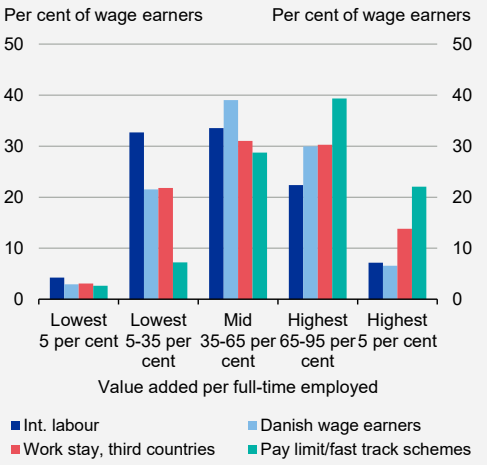
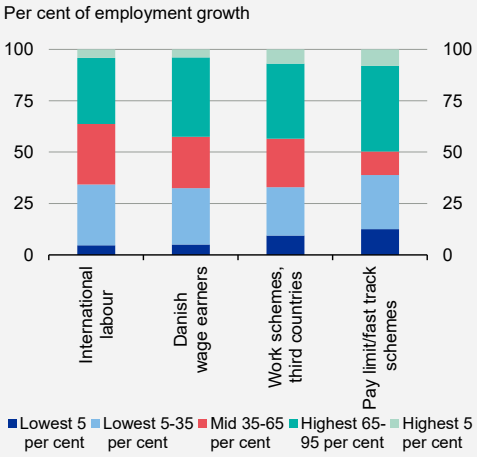


Figure 3.9 Employment growth has been relatively evenly distributed among companies with different levels of productivity growth



Note: The figures are based on data merged from the BFL register and the company financial statistics (FIRE). In figure 3.8, the distribution of employee groups across companies is shown, divided by value added per full-time employee within each industry. The analysis includes only companies that had at least five full-time employees in the given year and where the company's annual results, assets, equity, revenue, value added, and gross profit were all either submitted to Statistics Denmark or obtained from other sources, including SKAT. In figure 3.9, the distribution of employment growth for different groups from 2015 to 2021 is shown across companies grouped in the same way as in figure 3.8, but based on the change in value added per full-time employee over this period. The *Pay Limit/Fast Track schemes* include both the Pay Limit scheme and all tracks under the Fast Track scheme and are a subdivision of *Work schemes, third countries*.
Source: Statistics Denmark and own calculations.

As a whole, it is estimated that international labour has contributed to the growth in economic activity both through an increased volume of work and higher productivity. In total, value creation from international labour may have contributed up to 40 per cent of the growth in gross value added (GVA) since 2015, *cf. box 3.2*.

The significant increases in international labour in recent years are also believed to have raised structural employment, and consequently, the structural balance and the estimated fiscal space.[7]

[7] In the government's latest 2030 plan, it was estimated that international labour has contributed approximately one-third of the 20 billion DKK increase in fiscal space by 2030 since the government took office, *cf. Danish Ministry of Finance (2023): DK2030, Danmark rustet til fremtiden.*

Box 3.2 International labour may have contributed nearly 40 per cent of GVA growth since 2015

It is estimated that international labour contributes significantly to overall economic activity, although there is considerable uncertainty about the exact size of the contribution. This uncertainty largely stems from the measurement of the productivity of international labour, which is not directly observable. The following calculations are based on the national accounts' estimates of GVA and hours worked, with the number of hours worked divided between international employees and Danish labour based on registry data. The contribution of hourly productivity is estimated using the following four methods:

- Equal productivity: Assumes that international and Danish labour have the same hourly productivity.
- Wage correction: Assumes a difference in productivity contribution based on the relative implicit hourly wage of Danish and international employees.
- Industry correction: Assumes that international and Danish employees have the same hourly productivity within each industry (national accounts measurement).
- Value added correction: Assumes that each employee's hourly productivity reflects the average value added per hour worked in the employee's company (based on link with company financial statistics).

The four estimates all point to a significant contribution to GVA from international labour. It is estimated that international labour contributed 12-14 per cent of GVA in 2023, equivalent to approximately 290-300 billion DKK (in 2020 prices), *cf. figure a*. This is roughly double the contribution from 2015, when the estimated contribution was 140-160 billion DKK, corresponding to 7-8 per cent of total GVA. The contribution is greatest when assuming that productivity is the same as for Danish employees. The other estimates, particularly the wage and value-added adjustments, suggest a slightly smaller contribution, indicating that, on average, international labour is relatively less productive than Danish labour overall. Looking at GVA growth from 2015 to 2023, there has also been a significant contribution from international labour. Of the total growth of just over 21 per cent, it is estimated that international labour may have contributed between 7.6 and 7.9 percentage points, equivalent to nearly 40 per cent of the growth, *cf. figure b*. The majority of the growth contribution to GVA is believed to come from the increased work volume of international labour, driven by the substantial rise in the number of international employees during the period. This is estimated to have accounted for approximately 6.5 percentage points of the growth alone. A rising average productivity for international labour has also contributed positively, though to a lesser extent.

Figure a Estimated annual contribution to GVA from international labour

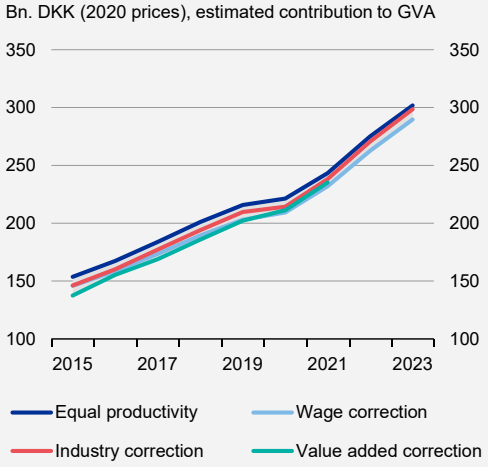
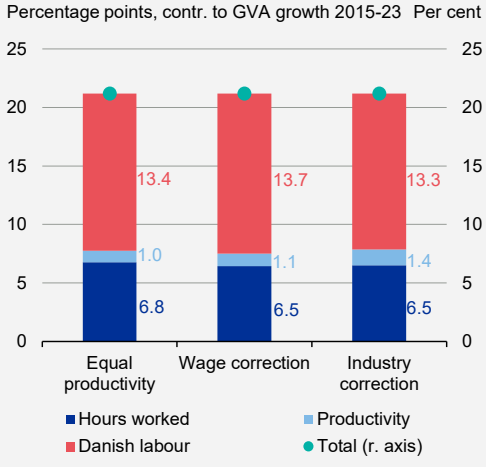


Figure b International labour's estimated contribution to GVA growth from productivity and working hours



Note: The residual from the contribution to GVA growth in figure b has been evenly distributed across the specified growth contributions. The value-added adjustment has been calculated for all companies except those in the mining and utilities sector. It is assumed that the deflator is the same for both the international and Danish contributions to GVA.
Source: Statistics Denmark and own calculations.

The influx of international labour, along with any accompanying family members, means that value creation and prosperity is shared among more persons. Looking at GDP per capita, the development has not been as strong as the overall GDP growth since 2015, *cf. figure 3.10*. Particularly in recent years, GDP per capita growth has been weaker than overall GDP growth, partly due to high population growth and relatively weak overall productivity growth, *cf. chapter 1*.

A more modest growth in GDP per capita (adjusted for purchasing power) has also been seen elsewhere in the world. For example, the United States has experienced significant population growth – partly due to a strong increase in international labour – which has supported the country's total production. In the EU, the influx of international labour has been smaller, resulting in weaker population growth and GDP development, *cf. figure 3.11*. GDP per capita growth has also been weaker in the EU. Thus, it is not only population growth that has driven differences in GDP growth, but also stronger productivity growth in the United States and Denmark compared to the EU. Developments within the EU vary significantly across countries though, with GDP per capita growth ranging from -1 per cent (Luxembourg) to 39 per cent (Ireland) during the period.[8]

Figure 3.10 GDP per capita has grown less than GDP as a whole

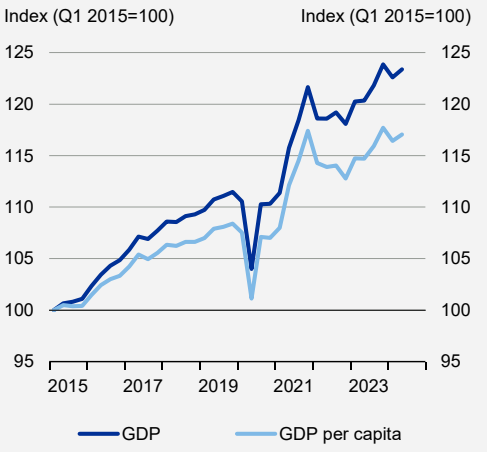
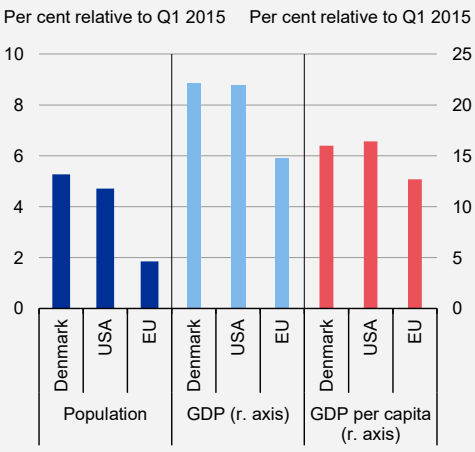


Figure 3.11 Population growth has supported GDP more in the USA and Denmark than in EU



Note: In figure 3.11, GDP and GDP per capita are measured in purchasing power adjusted US dollars for the first quarter of 2024, and are seasonally and calendar adjusted.
Source: Statistics Denmark, OECD and own calculations.

Persons on employment-based residency schemes contribute positively to public finances

In addition to contributing to GVA and income generation in Denmark, international labour also increases public revenues through tax and fee payments. This is offset to varying degrees by the use of public services, including by any accompanying family members. A person's net

[8] The high growth in Ireland is however a special case due to the activities of large multinational companies..

contribution to public finances depends on several factors, including employment status, salary, and use of public benefits. Therefore, the net contribution is influenced by factors such as age and educational background. Since individuals on employment schemes are of working age and their residency is conditional on employment, this group tends to have a relatively high net contribution. On average, individuals on work permits contribute approximately 150,000 DKK per person annually to public finances, *cf. figure 3.12*. The average net contribution is lower for individuals with residency for study purposes and negative for individuals with residency for asylum and family reunification. This is because these groups include a larger proportion of children, elderly, and individuals with a weaker attachment to the labour market.

Figure 3.12 Individuals on employment-based residency schemes contribute positively to public finances.

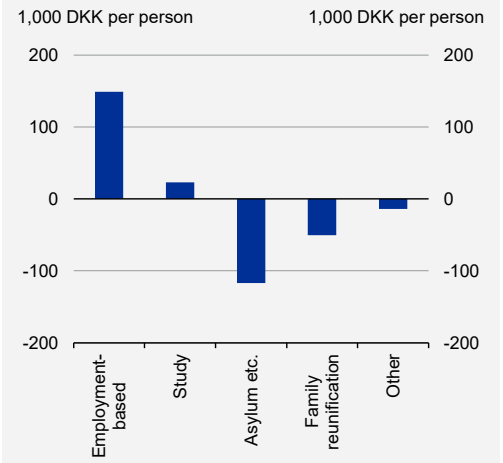
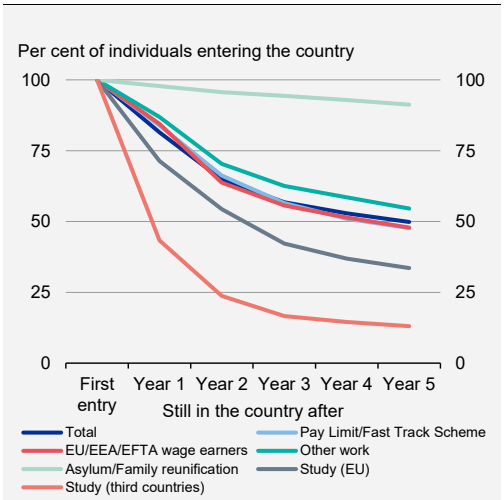


Figure 3.13 Approximately half of the individuals who enter the country return home within five years



Note: In figure 3.12, the average net contribution for immigrants in 2019 is shown, which is the most recent year for which the calculation has been made. The net contribution has subsequently been adjusted to 2022 levels. The survival curves in figure 3.13 show the proportion of individuals on a given residency scheme who first entered in 2018 and remained in the population in the following years.

Source: Danish Ministry of Finance (2023): Indvandreres nettobidrag til de offentlige finanser i 2019, revideret udgave, *Økonomisk Analyse* (adjusted to 2022 levels), Statistics Denmark and own calculations.

The length of stay for individuals entering the country varies significantly depending on their residency basis. Foreign nationals on asylum or family reunification schemes tend to remain in Denmark for longer periods, whereas, for example, foreign nationals on study permits are more likely to leave the country again, *cf. figure 3.13*. As a whole, approximately half of those who enter Denmark have left again after five years. Around 90 per cent of those on asylum and family reunification permits are still in Denmark after five years, while this is the case for half of those on work permits and only a quarter of those on study permits. The differences in net contributions are due to the fact that individuals on different residency schemes come to Denmark for various reasons. For example, individuals on employment-based residency schemes come to Denmark to work for a shorter period, are typically of working age, and draw only to a small degree on public services, such as healthcare. However, there are differences in contributions across the various employment-based residency schemes, *cf. box 3.3*.

Box 3.3 Contributions to public finances vary across employment-based residency schemes

Individuals with residency based on employment include both persons from the EU/EEA/EFTA who come to Denmark to work and individuals from third countries with residence permits under the employment-based residency schemes of the Danish Aliens Act.

The standard Pay Limit scheme and the Pay Limit track of the Fast Track scheme are some of the arrangements that allow individuals from third countries to obtain residence and work permits if they are to work for a Danish company or institution. The central requirement of the standard Pay Limit scheme is that the individual must be offered an annual salary of at least 487,000 DKK in 2024. Among the various employment-based residency schemes, individuals on the Pay Limit and Fast Track schemes contribute the most to public finances, with an average of 408,000 DKK per person, while the net contribution from individuals on other employment-based schemes from third countries and EU workers is lower, at around 159,000 DKK, *cf. figure a*. The Supplementary Pay Limit scheme, introduced in 2023, is not included in this calculation.

In general, individuals on employment-based residency schemes contribute positively to public finances, even when considering any accompanying family members who may draw on public spending for education, healthcare, etc.

Just over 85 per cent of individuals who is granted residency under the Pay Limit scheme receive a salary above 0.5 million DKK, and just over 23 per cent earn more than 1 million DKK, *cf. figure b*. Individuals on the Pay Limit scheme generally fall higher in the salary distribution compared to individuals from the EU/EEA/EFTA with employment-based residency. This is also reflected in the average salary, where individuals on the Pay Limit scheme had an average income of 816,000 DKK in 2022. This is more than double the average salary for individuals from the EU/EEA/EFTA with employment-based residency, which was 398,000 DKK in 2022.

The relatively higher salary for foreign nationals on the Pay Limit scheme should be viewed in the context that individuals on this scheme must, by definition, be employed at a salary that meets at least the Pay Limit threshold. In contrast, there is free movement of labour within the EU/EEA/EFTA, and foreign nationals from these areas can work in Denmark under the free movement rules of the EU Residence Directive (Directive 2004/38/EF) without needing to apply for a residence and work permit.

Figure a Average net contribution for individuals on employment-based residency schemes, 2022

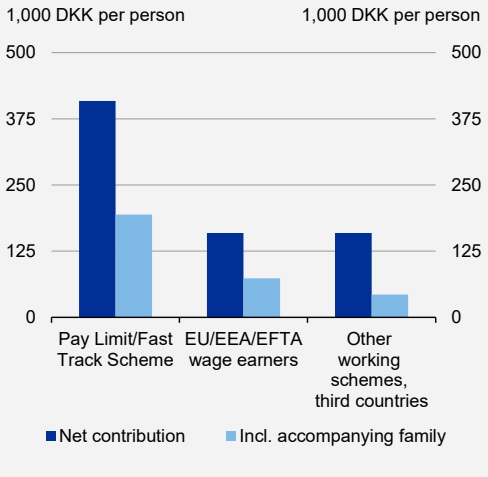
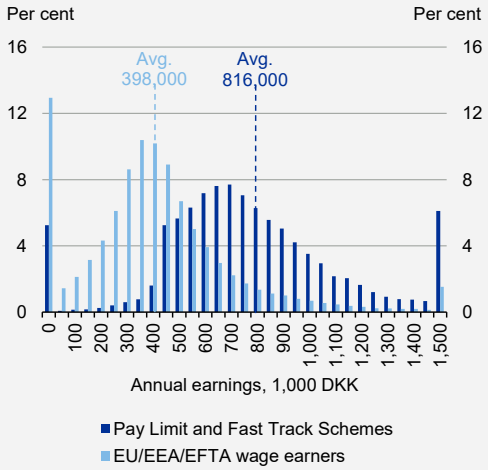


Figure b Salary distribution for individuals with employment-based residency, 2022



Note: Figure a shows the average net contribution in 2019, which is the most recent year for which the calculation has been made. The net contribution has subsequently been adjusted to 2022 levels. Individuals are categorised based on their most recent residency basis in 2019, unlike figure 3.13, where individuals are grouped according to their initial residency basis. Salary income includes pension contributions but excludes employee benefits, such as free phone, free car, etc.
Source: Statistics Denmark and own calculations.

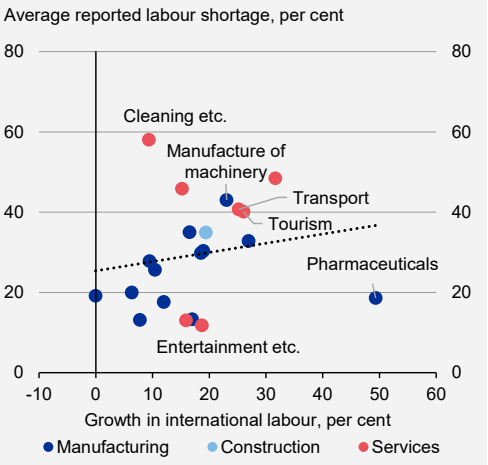
International labour helps alleviate labour shortages and stabilise fluctuations in the economy

The importance of international labour has been particularly pronounced in recent years, with widespread reports of labour shortages among companies and strong pressure on the labour market. For most industries, much of the growth in the number of employees has therefore consisted of new international employees, *cf. figure 3.14*. This has been particularly pronounced in trade and transport as well as construction, where international labour has accounted for around 90-100% of the increase in employment, but international labour has also accounted for around half of the increase in employment in manufacturing, business services and public administration, health and education.

There also appears to be some correlation between the extent of perceived recruitment difficulties (labour shortages) and the increase in international labour within individual industries, *cf. figure 3.15*. Some industries stand out slightly, such as the pharmaceutical and service industries, which may be related to the recruitment conditions for the labour in demand, such as salary requirements. For lower paid jobs, there is less access to labour from third countries. In addition, there is possible variation in the international availability of the labour in demand and international competition in relation to attracting international labour, *cf. section 3.3*.

Figure 3.14 International labour accounts for almost all of the employment growth in trade and transport since December 2021

Figure 3.15 Industries with high labour shortages have also typically relied more heavily on international employees



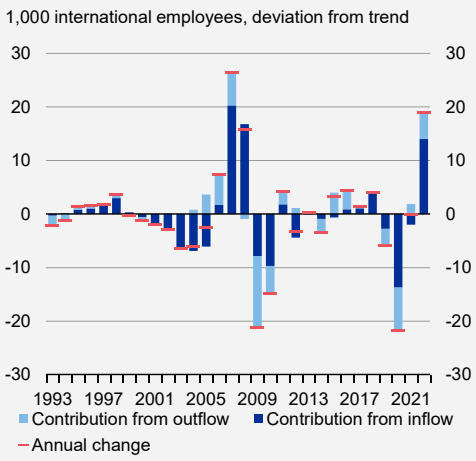
Note: In figure 3.15, the average reported labour shortage is measured for the second half of 2021, while the growth in international labour is measured for the second half of 2021 to the second half of 2023.
Source: Jobindsats, Statistics Denmark and own calculations.

A larger influx of international labour has also been seen during previous periods of pressure on the labour market, and international labour generally helps to dampen economic fluctuations, *cf. box 3.4*. The employment of international employees thus tends to be four times as sensitive to economic cycles as that of Danish citizens, *cf. figure 3.16*. The movements are due to both entry and exit patterns, with relatively more persons entering employment and fewer leaving during an economic boom, while the opposite is true during recessions, *cf. figure 3.17*.

This is partly due to the fact that international labour is relatively more likely to be employed in more cyclical industries such as construction.

Figure 3.16 International labour is four times more cyclical than Danish labour…

Figure 3.17 … which reflects both fluctuations in inflows and outflows in employment



Note: The trend deviations in the figures are based on an HP filter with λ set to 6.25. The trend is estimated to be partly influenced by changes in levels during the period, partly as a result of ongoing EU enlargements. The relative ratio in fluctuations for international labour may therefore be an over-estimate. In figure 3.17, the contribution from departures should be interpreted with the sign reversed, so that a positive contribution means that relatively fewer persons are leaving employment, while a negative contribution means that relatively more persons are leaving compared to the trend.
Source: Statistics Denmark and own calculations.

International labour is not only stabilising in a cyclical context. International labour also helps to meet seasonal fluctuations in demand in Denmark, as well as when there is extraordinary demand for labour due to e.g. major building and construction projects..

Fluctuations in production opportunities and demand mean that employment varies over the seasons. Overall, employment is typically higher during summer and autumn, while it is lower in winter. International labour helps to meet the fluctuating demand for labour over the seasons. This is evident in the fact that the seasonal fluctuations in international labour are significantly higher than for total employment, *cf. figure 3.18*. This means that international labour helps to alleviate the seasonal pressure on the labour market.

Figure 3.18 Larger seasonal fluctuations in the international labour force

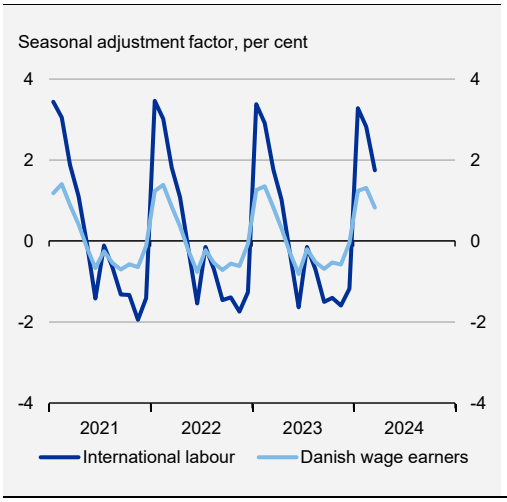
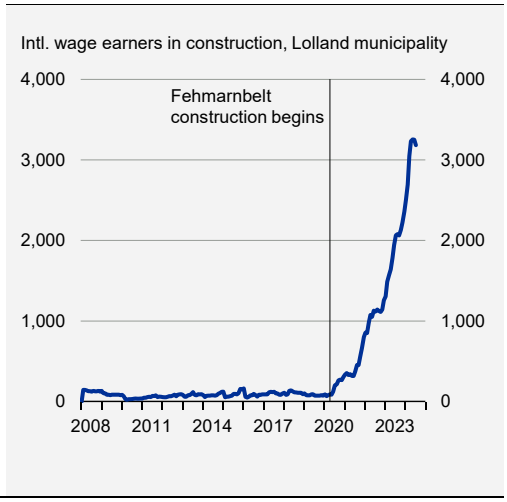


Figure 3.19 International labour is used for large construction projects such as the Fehmarnbelt tunnel in Lolland municipality



Note: Seasonal correction factor in figure 3.18 is based on own seasonal correction by X-13ARIMA-SEATS method.
Source: Statistics Denmark and own calculations.

International labour is also an important source of recruitment when there is an extraordinary need for labour in connection with major stand-alone projects, such as large construction projects. This has been the case in connection with the construction of the Fehmarnbelt tunnel on Lolland, where there has been a sharp increase in the number of international employees in the building and construction industry since construction began in May 2020, *cf. figure 3.19*. The number of international employees in the industry on Lolland has thus increased by approximately 3,000 persons since the beginning of 2020. Overall, the number of international employees in the municipality has increased by 3,700 persons, corresponding to a growth of 350 per cent since May 2020. A large proportion of these are employed by foreign service providers, *cf. box 3.5*. Similar large increases in the use of international employees in the construction industry have been seen in Copenhagen and Frederiksberg in connection with the metro construction and in Kalundborg in connection with the expansion of production facilities at Novo Nordisk.

Box 3.4 International labour reduces cyclical fluctuations

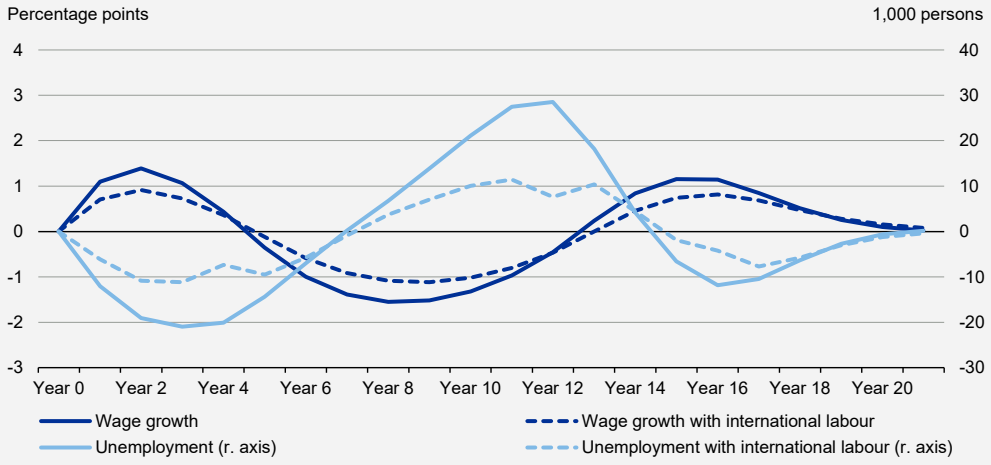
The countercyclical effect of international labour can be illustrated by creating two versions of a stylised business cycle in the economic model MAKRO. Common to both scenarios is a business cycle where fluctuations in foreign demand result in a boom and subsequent recession of approximately ±2 percentage points in the output gap relative to the base scenario.

The first scenario is the model's immediate reaction to the shock, while the second scenario introduces a cyclical pattern of immigration and emigration to illustrate the effect of flexible international labour. International labour is illustrated by introducing a cyclical variation in population growth across the board, and thus does not take into account socio-economic or age distribution, for example. The size of the fluctuations in population is calibrated to the cyclical sensitivity of international labour (see figure 3.16) and the amount of international and total employment respectively. The immigration and emigration pattern is calibrated so that approximately 44% of a cyclical fluctuation in employment is estimated to be met by international labour:[1]

$$Share = (4.4 - 1) \cdot \frac{Employment_{intl}}{Employment_{total}} = 44\ per\ cent$$

In the scenario with international labour, the fluctuations in wage growth are reduced by around 0.5 percentage points compared to the scenario without international labour, corresponding to about a third of the fluctuation. The fall in unemployment in the boom is reduced by around 10,000 persons, while the increase in unemployment in the recession is reduced by around 16,000 persons, corresponding to around 50 and 60 per cent of the fluctuation in the scenario without international labour, respectively.

Figure a International labour reduces cyclical fluctuations in wage growth and unemployment



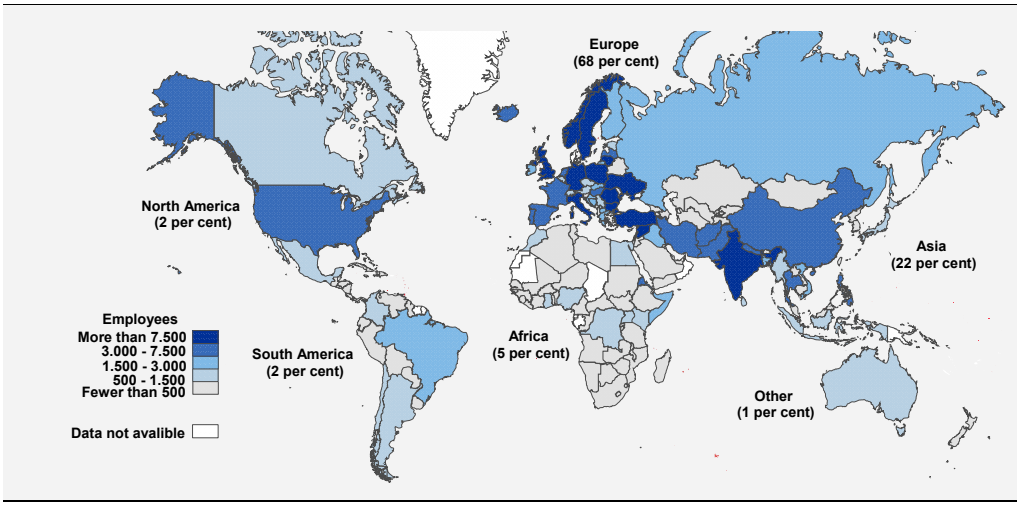
1) In line with Kraka (2018): Udenlandsk arbejdskraft er stabiliserende for dansk økonomi.
Source: MAKRO and own calculations.

3.2 International labour is a diverse group

International labour includes many different persons from widely different parts of the world who are in Denmark for varying reasons and brings a broad range of qualifications.

There is relatively wide variation in where international labour comes from. The majority are either from Europe or Asia, accounting for 68 per cent and 22 per cent, of all international wage earners in Denmark, respectively, *cf. figure 3.20*. For Europe, workers from the EU make up 47 percentage points of the international labour force, while the remaining 21 percentage points are from non-EU countries, including Ukraine and the United Kingdom. Five per cent of employees come from Africa, while North and South America, along with Oceania, together contribute another five per cent. Relative to population sizes, Europe and Asia are similarly overrepresented, which should be seen in relation of other factors, particularly the free movement of labour within the EU, as well as geographic proximity, types of labour, relative economic conditions, culture, language, politics, and regulations, *cf. section 3.3*.

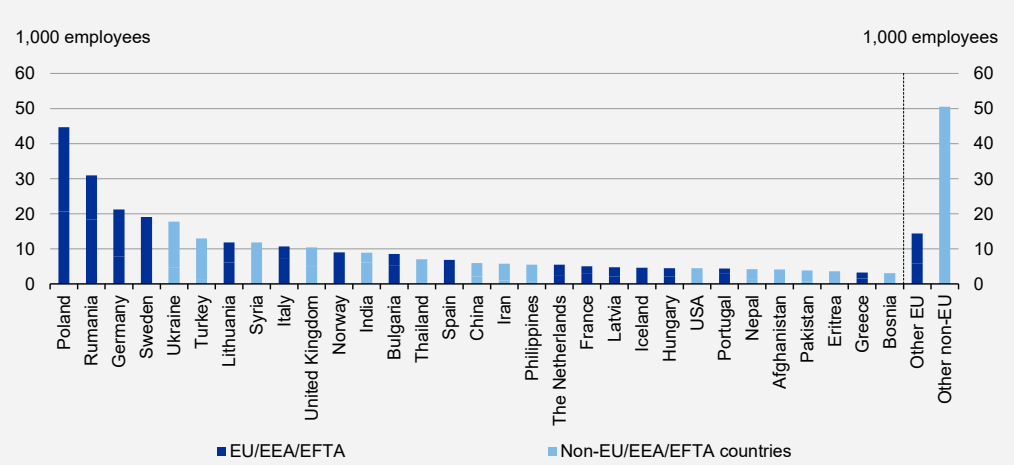
Figure 3.20 The majority of the international labour in Denmark comes from Europe and Asia



Note: Continents are based on Statistics Denmark's categorisation. Based on data for 2023.
Source: Statistics Denmark and own calculations.

Eastern Europe, particularly Poland, Romania, and Ukraine, contributes a significant portion of the international labour in Denmark, *cf. figure 3.21*. The latter is especially due to the fact that nearly 13,000 displaced Ukrainans have found jobs in Denmark. Additionally then, a large part of the international labour comes from neighboring countries, such as Germany and Sweden, where approximately one-third and half of employees, respectively, are commuters. Beyond these countries, there is generally a wide variation in where international labour comes from.

Figure 3.21 Eastern Europe and neighboring countries make up the largest share of international labour in Denmark



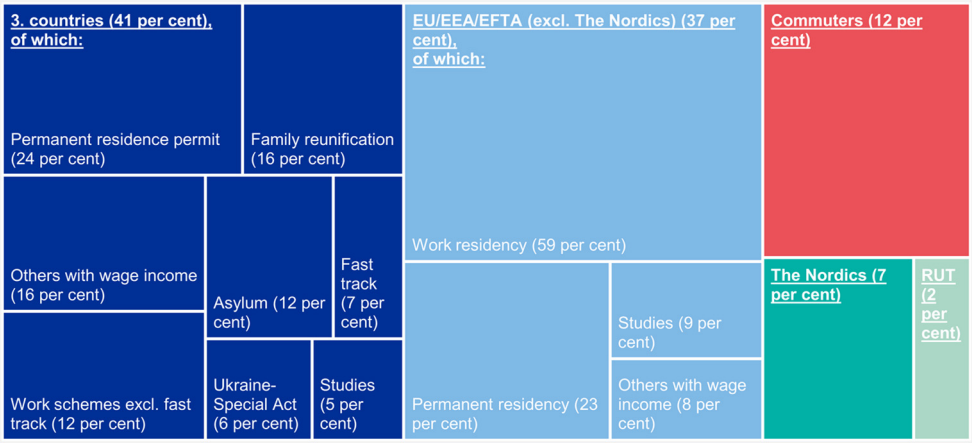
Note: 2023-average.
Source: Jobindsats.dk and own calculations.

International employees can be in Denmark for a wide variety of reasons. Some have been hired by a company in Denmark and have obtained a work residence permit. Some have fled from war or similar situations and have found their footing in the danish labour market, hereunder displaced ukranians. Others have come to Denmark for studies or family reasons and have found work here.

Nearly 60 per cent of international employees from the EU/EEA/EFTA are in Denmark on a work residence permit, while about a quarter have permanent residency, *cf. figure 3.22*. In addition, there are international students, which are working, often in part-time jobs, as well as others with wage income. For non-EU countries, there is greater variation in the basis for residency. Approximately a quarter of employees from non-EU countries hold permanent residency, while nearly one-fifth are in Denmark on a work residence permit. This group also includes asylum recipients who are employed, as well as displaced ukrainans.

Commuters make up 12 per cent of the international employees, which primarily includes persons from Germany and Sweden who commute across the border, but also includes many persons from Eastern Europe, particularly in construction, who are in Denmark temporarily. There is additionally a significant number of persons in the construction industry posted by a foreign service provider. However, they are not included in the figures for wage employment, *cf. Box 3.5*.

Figure 3.22 Many different reasons for residing in Denmark



Note: RUT covers employees working for foreign service providers, *cf. box 3.5*. Commuters and RUT are separated from the other residence- and country classifications. Others with wage income refer to individuals who have not had a reported residence for work, study, asylum, family reunification, or permanent residency since 2004. Nordic citizens do not require a residence permit to be employed in Denmark. Rounding means that the stated per centages do not sum to 100.
Source: Jobindsats.dk and own calculations.

Box 3.5 Register of Foreign Service Providers (RUT)

Foreign companies that temporarily have employees performing work in Denmark are required to report this to the Register of Foreign Service Providers (RUT) under the Danish Business Authority. In 2023, there were around 32,500 foreign individuals temporarily working in Denmark, spread across nearly 7,000 foreign companies. Posted workers are not included in the employment statistics compiled by Statistics Denmark.

The number of employees in foreign companies registered in RUT is particularly large in the construction and manufacturing sectors. This could be related to the fact that self-employed without employees are only required to register in RUT if they perform work within construction or installation and repair of machinery and equipment. Around 75 per cent of individuals and 78 per cent of companies in the register, respectively, are associated with construction and manufacturing.

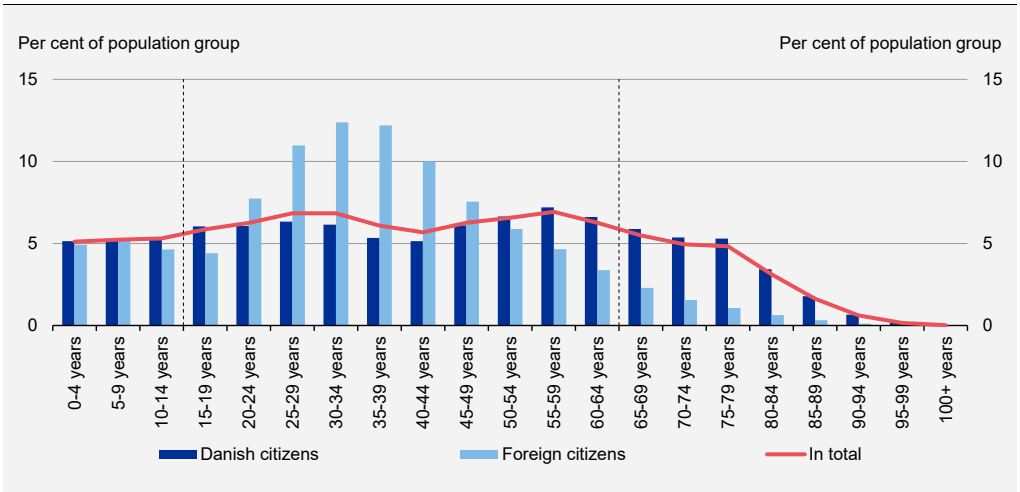
In addition to larger municipalities such as Copenhagen, Aarhus, and Odense, a significant number of persons in RUT are found in the municipalities of Esbjerg, Hillerød, and Kalundborg. This reflects the fact that these municipalities have a relatively high concentration of industry, and that expansions of production capacity in manufacturing have led to increased demand for construction workers.

Source: Danish Business Authority, Jobindsats and own calculations.

Foreign citizens contribute to a younger workforce

Foreign citizens residing in Denmark are predominantly of working age. Thus approximately 80 pe rcent of foreign citizens are between 15 and 64 years old, compared to just under 62 per cent for Danish citizens. The most common age groups for foreign citizens are 25-39 years, whereas Danish citizens are generally more evenly distributed across age groups, *cf. figure 3.23*. Thus, foreign citizens contribute to a younger workforce in Denmark.

Figure 3.23 Foreign citizens are more likely to be of working age.



Note: Shares are calculated for the 2. quarter of 2024.
Source: Statistics Denmark and own calculations.

Some foreign citizens reside in Denmark for many years, but a significant portion only stays in the country for a limited time period. In general, about one-third of foreign citizens who enter Denmark leave again after two years, *cf. Figure 3.24*. Of those who, for example, entered in 2016, around half were still in the country in the first quarter of 2024. Especially within the first two years after entry, is there a particularly higher propensity for foreign citizens to leave, while the likelihood of departure gradually decreases thereafter. This is also reflected in the huge variation in how long international labour has stayed in the country, *cf. Figure 3.25*. For example, half of the international labour have been in Denmark for more than nine years, while a large portion has also arrived within the last few years.

Figure 3.24 A third of foreign citizens have left the country after two years

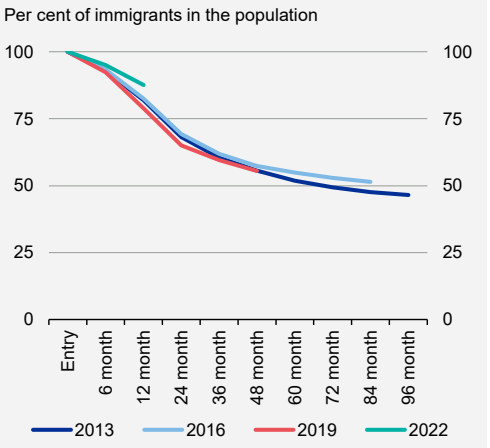
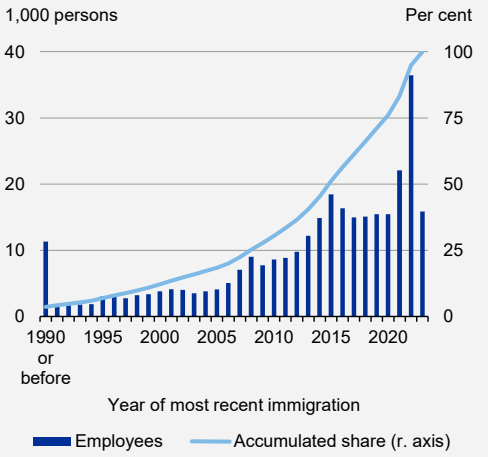


Figure 3.25 Half of international labour has been here for nine years or more



Note: Figure 3.24 includes all entering foreign citizens, regardless of their employment status. In Figure 3.25, the *accumulated share* represents the proportion of employees in 2023 who immigrated in or before the given year.
Source: Jobindsats, Statistics Denmark and own calculations.

Wide variation in educational levels, job functions, and wages

The huge differences across international employees are also reflected in their educational backgrounds and their position in the income distribution.

Among international labour, there is a slightly larger proportion with relatively little or no education compared to Danish employees, but there is also a relatively larger proportion who have completed higher education or a Ph.D. as their highest level of education, *cf. figure 3.26*. However, when looking across both employees from the EU and work permit holders from third countries, the trend is that education levels are generally higher than those of the average Danish employee.

The varying educational backgrounds of international labour help meet different demands for labour. Across sectors, the qualifications of international labour is used in very different ways, *cf. figure 3.27*. For example, the trade and transport, as well as the culture and leisure sectors, tend to utilize international labour with relatively shorter educations more frequently, while the finance and insurance, as well as the information and communication sectors, rely more on international labour with advanced degrees or a Ph.D.

Additionally, there are foreign citizens who are pursuing an education in Denmark, with students enrolled in advanced degree programs making up the majority, *cf. box 3.6*.

Figure 3.26 International labour tends to have either very short or very long educational backgrounds

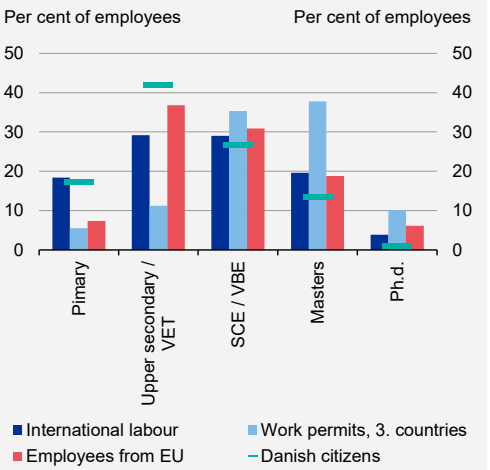
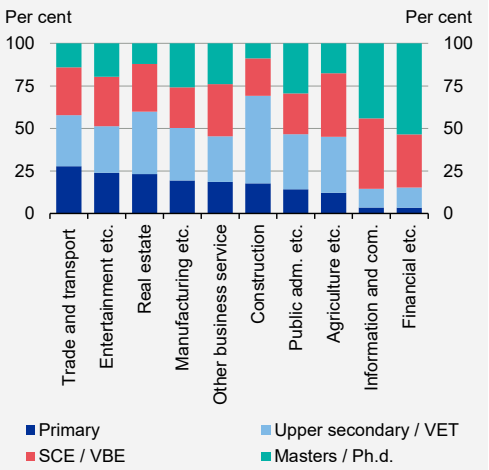


Figure 3.27 Sectors use international labour with different educational backgrounds.



Note: VET, SCE og VBE stands for Vocational Education and Training, Short cycle higher education and Vocational bachelors educations respectively. For 3.5 per cent of international employees, their education level is not recorded, which is only the case for 0.4 per cent of Danish employees. The education level of international labour is recorded with some uncertainty, as the educational background for some individuals is imputed.
Source: Statistics Denmark and own calculations.

Box 3.6 Many international students in Denmark

A significant portion of foreigners in Denmark are enrolled in higher education or vocational training. In total, there were over 30,000 international students in 2023, which is nearly a doubling of the number since 2008, *cf. figure a*. However, since 2016, the number of international students has decreased by approximately 5,000 persons.

Throughout the entire period there has been a rising number of international students pursuing master's, bachelor's, or Ph.D. degrees. Conversely, the number of students in Short cycle higher education and Vocational bachelors educations has significantly declined, from making up 17% of the student body in 2016 to just under 10% in 2023. The most common fields of study for international students are business, law, and social sciences (31%), engineering, technology, and industrial production (21%), natural sciences and IT (19%), and health and social care (9%).

Relatively many international students leave Denmark after completing their studies. Approximately one-quarter of international students (using the current definition) have left Denmark one year after completing a qualifying education, while about half have left after four years, *cf. figure b*. However, there are differences across different types of education. There is a higher tendency to leave among bachelor's students and those in Short cycle higher education, whereas students in Vocational education and Training generally have a stronger attachment to Denmark. However, the group of students in Vocational education and Trainingis currently quite small.

Figure a International students and distribution of educational programmes

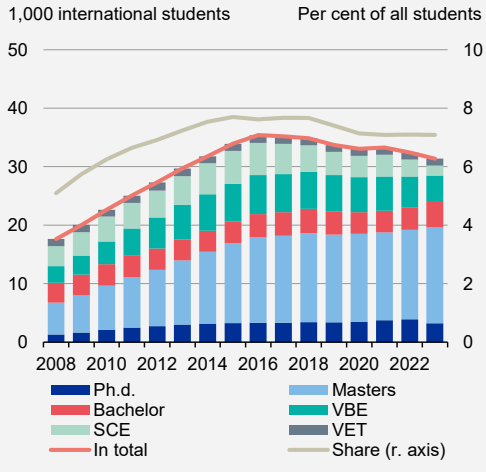
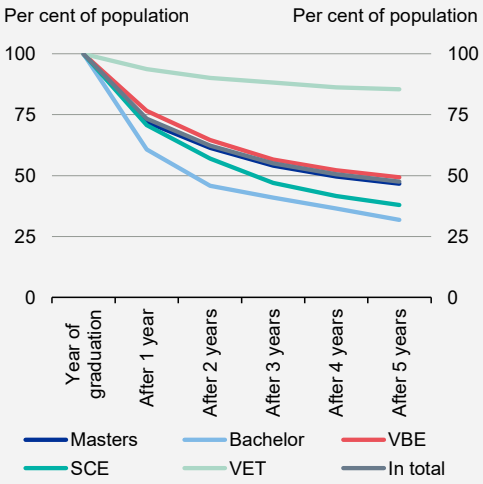


Figure b Duration of stay for graduates

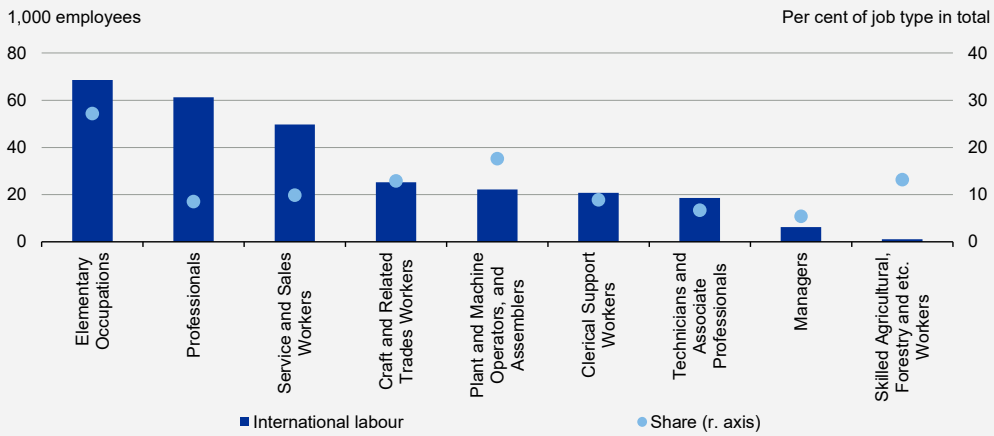


Note: International students is here defined as students with a nationality and country of origin other than Danish, who entered Denmark no earlier than one year before beginning their first education in Denmark, which is not primary or secondary school. If the student has taken multiple programs within a year, each program will be counted equally. Figure a also includes exchange students.

Source: Statistics Denmark, Ministry of Higher Education and Science (2017): Offentlige indtægter og udgifter ved internationale studerende and own calculations.

The diverse educational backgrounds are reflected in the very different types of tasks performed by international labour. The most common job type is *elementary occupations*, which includes work within cleaning and waste management, while the second most common job type is *professionals*, *cf. figure 3.28*.

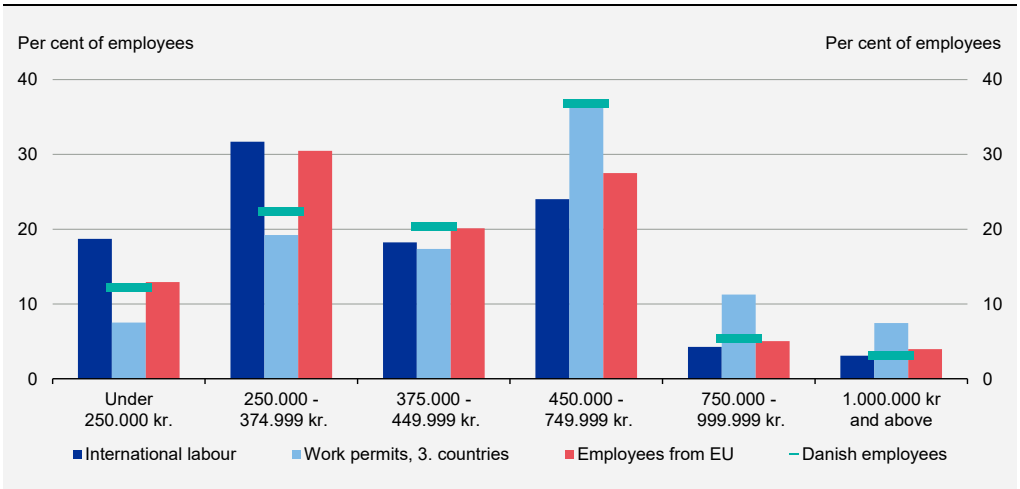
Figure 3.28 The ten most common job types for international labour highlight the diversity of international labour



Source: Statistics Denmark and own calculations.

The greater dispersal among international labour in relation to job types is also reflected across the income distribution, partly due to differences in qualifications and educational backgrounds. Overall, a larger proportion of international labour falls into the lower and upper ends of the income distribution compared to Danish workers, *cf. figure 3.29*. This is less pronounced for individuals on work permits, especially for employees from third countries, who are more likely to be in the higher end of the income distribution. This is partly due to the salary requirements for residence under the Pay Limit Scheme, which sets a lower limit for income. This influences the type of employees who come to the country under the scheme, *cf. box 3.7*.

Figure 3.29 Overall, the international labour is more frequently in the lower end of the income distribution.



Source: Statistics Denmark and own calculations.

Box 3.7 Types of labour under the Pay Limit Scheme depend on the income requirements.

In order for individuals from non-EU countries (third countries) to come to Denmark under the Pay Limit Scheme in 2024, they must be offered an annual salary of at least 487,000 DKK, while the threshold for the supplementary Pay Limit Scheme is set at 393,000 DKK. These income thresholds are designed to attract qualified labour to Denmark under reasonable wage conditions. In May 2024, there were 15,500 and 1,300 employees in the two schemes, respectively. Of these, about two-thirds were employed within manufacturing (23%), knowledge-based services (17%), information and communication (16%), or wholesale and retail trade (9%). Conversely, relatively few were employed in service-oriented sectors such as arts, entertainment and etc. (0.8%) or public administration, education, and health (0.7%). This reflects the fact that different sectors have varying access to labour through the Pay Limit Schemes, partly due to differences in wage levels.

Both the amount and type of labour that will come to the country through these schemes largely depend on the salary thresholds. Looking at the total number of employees in Denmark, the most common job types in 2023 (the latest full year with data) in the salary range just above the threshold (approximately 465,000 DKK in 2023) were either Professionals or Technicians and Associate Professionals, *cf. figure a*. The remaining half is roughly equally divided between service-oriented and manual labour. For employees from the EU, a similar pattern is observed, although manual labour accounts for a larger share.

In lower salary ranges, services and sales work make up an increasing proportion of jobs when looking at the total number of employees, while elementary occupations, show a greater increase for employees from the EU. In the range of yearly salaries of 300,000-375,000 DKK, 33% of employees worked in services and sales jobs, whereas the biggest share of employees from the EU worked within elementary occupations, such as cleaning or waste management. In this salary range, between 13% and 21% of the jobs are professionals or technicians and associates. For employees from the EU, work within cleaning, clerical, and caregiving jobs are the most common job types in the salary ranges below the threshold of the supplementary Pay Limit Scheme, *cf. figure b*. Conversely, are there relatively few employees in fields such as engineering and software development that has salaries below that threshold.

Figure a Types of job functions in different salary ranges across employees in 2022

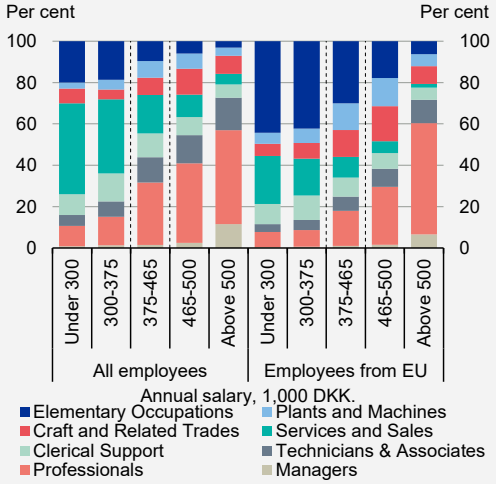
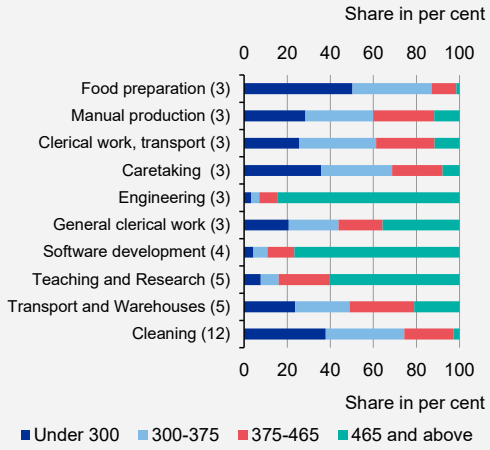


Figure b The ten most common job types and their distribution across employees from the EU



Note: Figure a and b show data from 2023 based on numbers drawn from national registries. The dashed lines in figure a represent the thresholds for the supplementary pay limit scheme and the regular pay limit scheme. The thresholds in 2024 are set at an annual salary of DKK 393,000 and DKK 487,000, respectively. Numbers in parentheses in figure b indicate the number of 1,000 employees with the given job type.

1) New residence permits under the supplementary pay scheme can be granted if the average seasonally adjusted gross unemployment rate over the past three months exceeds 3.75% At the same time, the parties behind the agreement can limit the scheme if the number of persons on the scheme exceeds 15,000.

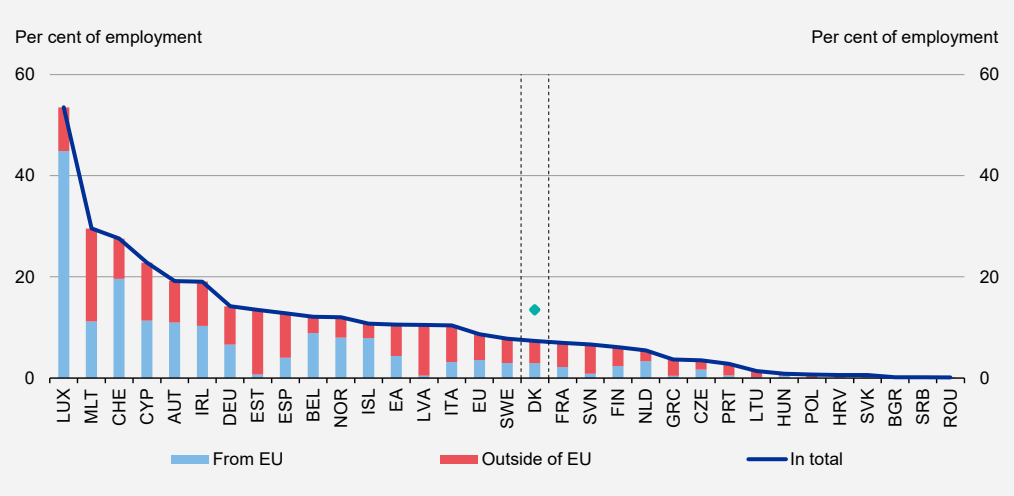
Source: Statistics Denmark and own calculations.

3.3 The flow of international labour depends on many factors

The development in international labour depends on both the level of domestic demand for labour and the ability to attract the international labour compared to other countries. There is generally great variation in how extensively countries employ international labour, influenced by factors such as relative wage conditions, job opportunities, regulations, geographic proximity, and cultural aspects like language.

The proportion of international labour in Denmark is not far from the EU average, *cf. figure 3.30*. However, there is significant variation across EU countries, with some countries employing much more international labour compared to Denmark, while they only constitute a very small share in other countries. Smaller countries such as Luxembourg, Malta, and Cyprus have a high share of international labour, which can be attributed to factors such as the countries' size, as well as geographic, historical, and cultural conditions. Denmark's neighboring countries—Germany, Sweden, and Norway—also have a slightly higher share of international labour compared to Denmark.

Figure 3.30 Denmark's share of international labour is slightly below the EU average



Note: For international comparability, this assessment of international labour is based on the Labour Force Survey (LFS), which is questionnaire-based and therefore not directly comparable to register-based assessments. The green dot indicates share of international labour calculated using the AKM register, and shows a higher share of international labour in Denmark.
Source: Eurostat, Statistics Denmark and own calculations.

For EU countries, there generally seems to be a correlation between the net influx of persons during the period from 2015 to 2021 and the wage levels in the respective countries, *cf. figure 3.31*. The level of wages are relatively high in countries like the Nordic nations and Germany, which may create a greater economic incentive for individuals from lower-wage countries, such as those in Eastern Europe, to move to these countries. Similarly, there is a general weak tendency for lower unemployment rates to encourage a greater net influx, *cf. figure 3.32*. This likely reflects both that companies in countries with low unemployment may need to search internationally for qualified labour, while persons in countries with high unemployment have an incentive to leave their home country to find work.

Several studies also suggest that language and culture play a significant role in international migration. The OECD has shown that labour mobility is approximately six times greater between U.S. states compared to mobility across EU countries, and about four times greater across Australian states. Similarly, Adsera et al. (2015) find that countries with a common language, compared to those without any linguistic connection, will have 12% to 17% higher migration between them, all else being equal.[9]

Figure 3.31 Relative wages play a significant role in immigration and emigration patterns...

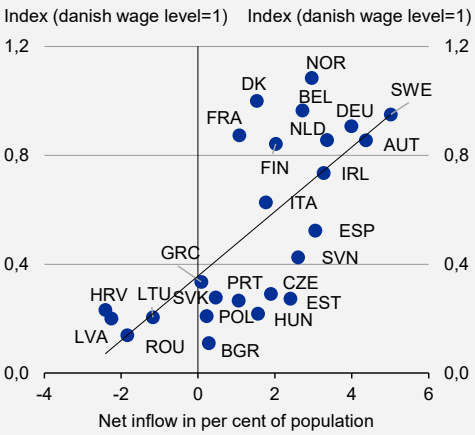
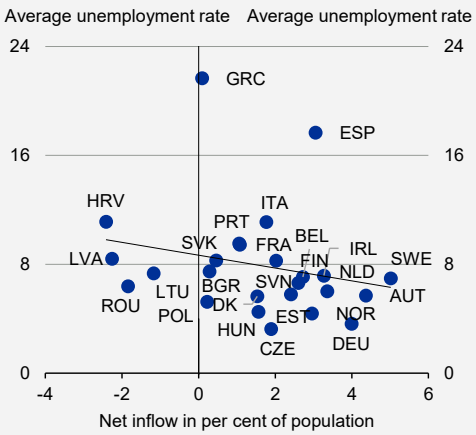


Figure 3.32 … while unemployment also appears to influence international migration patterns.

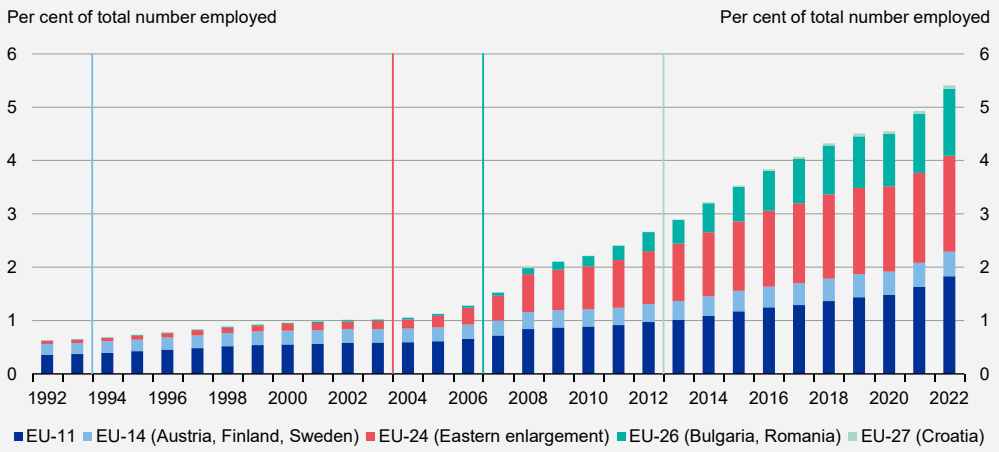


Note: Net inflow, average wage and unemployment levels are measured for the period 2015-2021. The most recent years are excluded, as displaced persons from Ukraine have disproportionately affected the scale of immigration across countries. Wage level is measured based on the Confederation of Danish Employers' wage index for the manufacturing industry.
Source: Eurostat, Confederation of Danish Employers and own calculations.

Regulation, including the ability to work across countries, also plays a significant role for international labour. Particularly, the free movement within the EU has had a crucial impact on the volume of international labour in Denmark, *cf. box 3.8*. The arrival of international labour from new EU countries has been substantial over the years, with individuals from the countries that joined the EU in 2004 and 2007 increasing from making up 0.2% of employment in 2003 to more than 3% of employment in 2022, *cf. figure 3.33*.

[9] Adserà & Pytlikovà (2015): The role of language in shaping international migration, *The Economic Journal*.

Figure 3.33 EU expansions have had a significant impact on the employment trend in Denmark



Note: The EU is calculated excl. the United Kingdom. The Eastern enlargement includes Cyprus, Estonia, Latvia, Lithuania, Malta, Poland, Slovakia, Slovenia, the Czech Republic, and Hungary. Data is based on the AKM and BEF-registers.
Source: Statistics Denmark and own calculations.

Box 3.8 EU makes a large supply of labour available for the Danish labour market

The free movement of labour within the EU is important for the overall labour supply in Denmark. This is highlighted by the development in the number of international employees in Denmark from countries that have joined – and the country that has left – the EU over the years. For example, Croatia became a member of the EU in 2013, and since then, the number of Croatian employees in Denmark has increased by 2,200 persons. Compared to the trend in the number of employees from Croatia before joining the EU, this is an additional increase of 1,800 employees, corresponding to an additional increase of nearly 290%, *cf. figure a*. The opposite is the case for the UK, which officially left the EU in 2020. In relation to this, there was a significant decline in the number of British employees in Denmark, and relative to the trend prior to their exit, the number of British employees is now 1,900 lower, equivalent to a 15% decrease, *cf. figure b*.

Figure a Employees from Croatia in Denmark

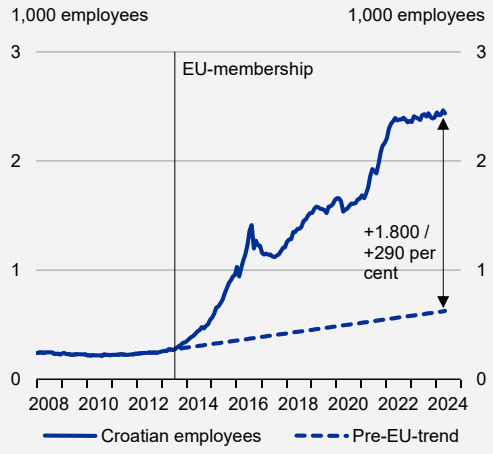
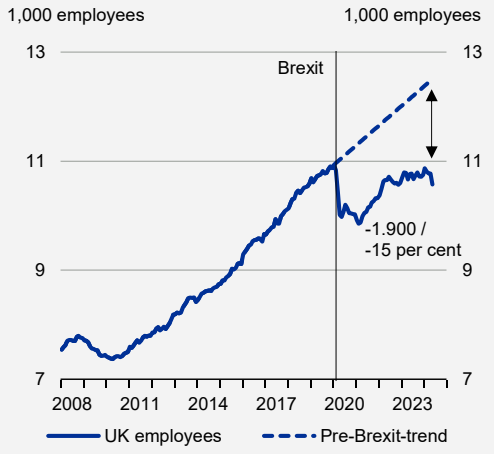


Figure b Employees from the UK in Denmark



Note: Projected trends are based on an exponential smoothing method (ETS).
Source: Jobindsats and own calculations.

Annex Tables

Table B.1 Demand, imports and production

	2023	2024	2025	2023	2024	2025	2023	2024	2025
	DKK bn.			Volume, per cent			Prices, per cent		
Private consumption	1,299	1,346	1,398	1.4	1.7	1.8	2.9	1.8	2.0
Public consumption[1)]	636	682	725	-0.2	3.3	2.5	1.7	3.8	3.6
Public investments[2)]	89	97	106	-1.2	5.9	6.1	3.5	3.2	2.8
Residential investment	156	151	156	-12.4	-5.7	1.8	8.9	2.4	1.5
Business fixed investment	389	380	387	-5.3	-2.8	0.5	3.0	0.6	1.5
Domestic demand excl. inventory investment	2,573	2,662	2,776	-1.0	1.2	1.9	3.0	2.2	2.3
Inventory investment[3)]	3	7	8	-1.7	0.3	0.0			
Total domestic demand	**2,576**	**2,669**	**2,784**	**-2.9**	**1.5**	**1.9**	**3.1**	**2.1**	**2.3**
Exports of goods and services	1,906	1,936	2,030	10.4	2.5	4.1	-14.0	-0.9	0.7
Total demand	4,482	4,605	4,815	3.0	1.9	2.9	-4.9	0.8	1.6
Imports of goods and services	1,677	1,688	1,782	3.7	1.9	4.0	-6.8	-1.2	1.5
Gross domestic product	**2,805**	**2,917**	**3,033**	**2.5**	**1.9**	**2.2**	**-3.8**	**2.0**	**1.7**
Taxes on products, net	318	335	352						
Gross value added	2,487	2,582	2,681	3.0	2.0	2.2	-3.7	1.8	1.6
- Non-farm private sector[4)]	1,738	1,826	1,902	2.5	2.4	2.2	4.7	2.5	2.0
Gross national income	2,885	3,007	3,128						

Note: The division into volume and price components is made based on a fixed price calculation in the previous year's prices.
1) The change in volume for public consumption is calculated using the output method. For 2023-2025, growth in public consumption using the input method is assumed to equal growth using the output method.
2) Public investments exclude general government net purchases of buildings, and therefore the figures will deviate from public investments in table B.7.
3) The volume figures reflect changes in inventories compared to GDP.
4) Non-farm private sector consists of manufacturing, construction and private service excluding shipping.
Source: Statistics Denmark and own calculations.

Table B.2 Interest rates, oil price, exchange rates and external assumptions

Interest rates, per cent		2021	2022	2023	2024	2025
USA	Federal Funds Target Rate	0.3	1.9	5.2	5.4	4.6
	3-month LIBOR	0.2	2.4	5.4	5.4	4.2
	10-year government bond	1.4	3.0	3.8	4.2	4.1
Euro area	Main Refinancing Operations Rate	0.0	0.6	3.8	4.3	3.3
	3-month EURIBOR	-0.8	0.8	3.6	3.7	2.8
	10-year government bond (Germany)	-0.4	1.1	2.4	2.3	2.3
Denmark	Certificates of deposit rate	-0.6	0.0	2.9	3.4	2.4
	3-month CIBOR	-0.2	0.6	3.5	3.6	2.6
	1-year adjustable mortgage rate	-0.5	0.9	3.4	3.1	2.4
	10-year government bond	-0.2	1.4	2.6	2.4	2.3
	30-year mortgage interest rate	1.5	3.7	4.8	4.3	4.1
	Average interest rate	-0.2	1.4	2.8	3.3	2.9
Oil price						
Dollar per barrel		70.7	100.8	82.5	82.4	80.5
DKK per barrel		444.4	713.1	568.2	568.3	552.2
Exchange rate						
DKK per 100 dollar		628.7	707.6	689.0	689.3	686.4
DKK per 100 euro		743.7	744.0	745.1	745.9	746.2
Effective Krone Rate Index (1980=100)		103.9	101.9	104.7	105.1	105.6
		Real growth rate, per cent				
External assumptions						
Export market growth[1], per cent		10.2	7.2	-0.6	0.9	3.0
Trade weighted GDP-growth[2], per cent		6.6	2.9	0.8	1.5	2.1

Note: The projections are based on data through July 31st 2024. Annual averages are own calculations. For monetary policy interest rates, the interest rate estimate is based on an assessment of the latest announcements by central banks and market expectations. For money market rates and the yield on 10-year government bonds, estimates are based on market expectations, which are based on the prices of swap interest rates. For the 1-year and 30-year mortgage rate bonds, data is Finance Denmark's bond rates and estimates are based on spreads to the 3-month money market rate and the 10-year government bond rate respectively. Estimates for exchange rates are calculated technically by assuming that the exchange rate for the remaining forecast period corresponds to the average during the last ten days prior to the estimation. Estimates for the oil price are based on the International Energy Agency, World Energy Outlook. October 2023, as well as futures prices.

1) Calculated as the weighted average of import growth in Denmark's 36 most important trade partners. The weights reflect the countries' share of Danish manufacturing exports in 2022.

2) Calculated as the weighted average of the GDP-growth in Denmark's 36 most important trade partners. The weights reflect the countries share of Danish export of goods and services in 2022.

Source: Macrobond. Nordea Markets, The International Energy Agency, OECD Economic Outlook May 2024 and own calculations.

Table B.3 Population and labour force

	2021	2022	2023	2024	2025
1,000 persons					
Total population	5,857	5,890	5,919	5,943	5,962
- Labour force	3,144	3,235	3,285	3,322	3,319
- Total employment	3,039	3,160	3,202	3,237	3,232
- Ordinary employment[1)]	2,944	3,057	3,096	3,127	3,119
- Subsidised employment[2)]	96	103	106	110	113
- Gross unemployment (incl. activation)[3)]	106	76	84	87	89
- Net unemployment	94	65	72	71	73
- Outside the labour force	2,713	2,655	2,634	2,620	2,643
- Recipients of unemployment benefits outside the labour force	85	80	75	78	75
- Early retirement pensioners outside the labour force	198	204	212	219	227
- Senior pensioners outside the labour force	11	18	24	27	29
- Voluntary early retirement	52	47	34	26	20
- Persons under 15 years	947	943	936	930	925
- Pensioners outside the labour force	978	963	979	1,002	1,017
- Others outside the labour force	442	400	374	339	350

Note: Recipients of education assistance benefit, the special education benefit and other temporary benefits (kontantydelse) are included as cash benefit recipients.
1) Calculated as the difference between employment as determined in the national accounts and subsidised employment, which is based on data from AMFORA. Due to differences in the definition of employment in the two sources, the data is subject to a degree of uncertainty
2) Includes persons in employment with wage subsidies (including flex jobs and light duty jobs)
3) The number of unemployment benefit recipients in activation and labour-market-ready cash benefit recipients includes persons in subsidised employment.
Source: Statistics Denmark and own calculations.

Table B.4 Employment by industry including leave

	2021	2022	2023	2024	2025
1,000 persons					
Employment, total	3,039	3,160	3,202	3,237	3,232
- Service industries	1,595	1,677	1,702	1,722	1,716
- Construction	203	211	211	212	209
- Manufacturing	304	318	325	332	331
- Agriculture	65	66	65	66	66
- Public sector	853	866	873	879	884

Note: The industry division is based on the division in the ADAM model, which is not identical to the division in the national accounts. The employment levels for oil refineries etc. and housing are not shown in the table.
Source: Statistics Denmark and own calculations.

Table B.5 Unemployment

	2021	2022	2023	2024	2025
1,000 persons					
Gross unemployment	106	76	84	87	89
- per cent of workforce	3.4	2.3	2.5	2.6	2.7
Net unemployment	94	65	72	71	73
LFS unemployment (per cent)	5.1	4.5	5.1	6.0	6.1

Note: Differences in the definition of the labour force between the Ministry of Economic Affairs and the Ministry of Finance on one side and Statistics Denmark on the other means that the gross unemployment rate in per cent of the workforce is estimated at a lower level.
Source: Statistics Denmark and own calculations.

Table B.6 Benefit recipients etc.

	2021	2022	2023	2024	2025
1,000 persons					
Unemployment benefits (excl. activation)	82	55	63	63	64
Cash benefits (excl. activation)	75	64	61	60	57
Recipients of unemployment benefits and cash benefits in activation[1)]	22	21	20	28	27
Holiday benefit	2	2	2	2	2
Early retirement pensioners[2)]	219	226	234	241	250
Senior pension	12	19	26	30	32
Resource assessment benefit	33	38	37	36	36
Voluntary early retirement	52	47	34	26	20
Early retirement	0	7	12	13	14
Flex job scheme benefit	3	3	2	1	1
Disablement rehabilitation benefit[3)]	2	2	1	1	1
Sickness benefit[4)]	86	86	79	79	78
Maternity leave	54	53	50	50	53
Benefit for unemployed	16	13	15	16	16
Self-support, home-travelling and transitional benefits[5)]	10	14	14	12	13
Total	**667**	**650**	**650**	**658**	**664**
Student grant (SU)[6)]	312	297	287	295	296
Total, including SU	**980**	**947**	**937**	**953**	**960**
Pensioners	1,118	1,102	1,120	1,143	1,160
Total, including SU and pensioners	**2,098**	**2,049**	**2,057**	**2,096**	**2,120**
Subsidised employment[7)]	96	103	106	110	113
Total, including SU, pensioners and subsidised employment	**2,194**	**2,152**	**2,163**	**2,206**	**2,233**

Note: Recipients of education assistance benefit, the special education benefit and other temporary benefits (kontantydelse) are included as cash benefit recipients. From mid-2025, the new cash benefits system will come into effect. The new system abolish educational benefits and self-support, home-travelling and transitional benefits. Self-support, home-travelling and transitional benefits will be replaced by a minimum rate, which is included in the calculation with half-yearly effect in 2025.

1) The data does not cover persons in subsidised employment and thereby differs from other register-based data and table B.3. Furthermore, both labour market ready and non-labour market ready cash benefit recipients are included in the group of recipients of unemployment benefits and cash benefits in activation schemes.
2) Early retirement and retirement pension include pensioners living abroad as well as pensioners, who are employed.
3) Excl. persons on disablement rehabilitation with wage support.
4) The number of sickness benefit recipients does not reflect the total absence due to illness. It includes the part of the sickness absence, which is not covered by the employer. Specifically, this covers sickness absences longer than 30 days as well as sickness among the unemployed.
5) The number of self-support and home-travelling as well as transitional benefits are calculated excl. recipients of wage subsidies
6) The number of SU recipients are calculated as a simple average based on quarterly data and may differ from other figures due to adjustments made to avoid double counting.
7) Includes persons in employment with wage subsidies (including flexi-jobs and sheltered jobs).

Source: Statistics Denmark, DREAM and own calculations.

Table B.7 Gross investments

	2023	2021	2022	2023	2024	2025
	DKK bn.	Real growth rate, per cent				
Gross fixed capital formation	633	9.8	2.8	-6.6	-2.0	1.5
Divided into groups:						
- Construction investments	323	10.2	-0.5	-4.5	-2.5	1.7
- Tangible and intangible investments	310	9.4	6.1	-8.6	-1.5	1.3
Divided into groups:						
- Residential investments	156	14.7	-7.5	-12.4	-5.7	1.8
- Public investments[1)]	88	-2.1	1.8	-1.8	8.4	4.8
- Total business investments	389	10.9	7.9	-5.3	-2.8	0.5
- Construction investments	120	11.5	13.1	4.8	-4.8	0.0
- Tangible and intangible investments	269	10.6	6.0	-9.2	-2.0	0.7

1) Public investments are incl. public acquisitions of buildings, which is why numbers differ from what is stated in table B.1.
Source: Statistics Denmark and own calculations.

Table B.8 Balance of payments

	2021	2022	2023	2024	2025
DKK bn.					
Goods exports	887	1,056	1,106	1,157	1,226
Goods imports	824	1,005	921	938	982
Goods balance, total	**63**	**51**	**185**	**219**	**244**
Service exports	623	951	800	779	805
Service imports	526	730	756	751	800
Service balance, total	**97**	**221**	**43**	**29**	**5**
Balance of goods and services	160	272	229	248	249
- Per cent of GDP	6.2	9.6	8.2	8.5	8.2
Investment income from abroad, net	113	106	97	107	112
Wage income from abroad, net	-15	-17	-20	-20	-21
EU payments, net	-16	-12	-13	-11	-13
Other current transfers from abroad, net	-20	-17	-17	-18	-18
Net transfers from abroad, total	63	60	47	59	61
Current account, total	223	332	276	307	310
- Per cent of GDP	8.7	11.7	9.8	10.5	10.2
Net assets against other countries	1,851	1,647	1,641	2,249	2,829
- Per cent of GDP	72.1	57.9	58.5	77.1	93.3

Source: Statistics Denmark and own calculations.

Table B.9 Exports and imports

	2023	2021	2022	2023	2024	2025
	Mia. kr.	Real growth rate, per cent				
Exports						
Goods, total	1,106	11.8	5.6	5.5	3.5	4.9
- Agricultural goods etc.	147	6.7	-7.5	-6.5	1.6	2.1
- Industrial goods (excl. ships etc.)	864	12.0	8.5	8.8	4.1	5.0
- Other goods[1)]	95	21.2	1.5	-1.5	1.2	8.2
Services, total	800	4.2	9.5	15.9	1.0	3.1
- Sea transport	349	4.2	-2.0	9.0	0.0	4.2
- Other services	380	4.0	15.8	30.2	2.7	1.8
Total	**1,906**	**8.8**	**7.2**	**10.4**	**2.5**	**4.1**
Imports						
Goods, total	921	12.6	-0.8	-4.2	1.0	3.7
- Agricultural goods etc.	114	7.9	1.4	-7.1	0.5	3.6
- Industrial goods (excl. ships etc.)	582	15.0	-1.7	-8.0	2.4	5.4
- Other goods[2)]	225	7.3	0.7	5.5	-2.4	-0.9
Services, total	756	4.9	12.5	14.7	2.9	4.4
Total	**1,677**	**9.5**	**4.4**	**3.7**	**1.9**	**4.0**
Memo		Nominal growth rate, per cent				
Export of basic goods[3)]	1,046	11.2	14.7	8.4	5.1	5.6
Export prices		Change, per cent				
Goods, total	887	1.7	12.8	-0.7	1.0	1.0
Services, total	623	19.7	39.3	-27.4	-3.5	0.2
Total	**1,510**	**8.4**	**23.9**	**-14.0**	**-0.9**	**0.7**
Import prices						
Goods, total	824	7.5	23.0	-4.4	0.8	1.0
Services, total	526	7.0	23.2	-9.6	-3.5	2.1
Total	**1,350**	**7.3**	**23.1**	**-6.8**	**-1.2**	**1.5**

1) Raw materials, energy and ships etc.
2) Raw materials, energy, cars and ships etc.
3) Export of basic goods consists of export of goods excluding energy, ships and airplanes.
Source: Statistics Denmark and own calculations.

Table B.10 Private consumption

	2023	2021	2022	2023	2024	2025
	DKK bn.	Real growth rate, per cent				
Total consumption	**1,299**	**6.8**	**-2.1**	**1.4**	**1.7**	**1.8**
Retail trade	415	7.9	-3.7	-4.0	0.9	1.8
- Food, drinks and tobacco	203	9.7	-0.2	-3.8	-2.0	1.5
- Other goods	212	6.5	-6.6	-4.2	3.6	2.0
Purchase of vehicles	64	4.4	-8.1	28.5	-10.0	4.0
Electricity, fuels and gas	57	4.4	-19.5	-2.1	0.8	0.5
Gasoline and similar	34	2.6	3.8	4.4	-0.4	-0.2
Housing	291	1.7	0.8	2.1	1.4	1.4
Other services	462	7.7	6.6	2.6	3.5	2.5
Tourist expenditures	46	61.3	20.3	20.1	6.0	3.5

Source: Statistics Denmark and own calculations.

Table B.11 Net lending by sectors

	2021	2022	2023	2024	2025
DKK bn.					
Private sector, total	119	235	173	244	273
- Households	-69	-22	-9	51	67
- Corporations	189	257	182	193	207
- Non-financial corporations	108	96	-2	49	70
- Financial corporations	81	160	184	144	136
General government	105	98	93	56	31
Total	**225**	**333**	**266**	**300**	**304**

Note: Net lending of general government corresponds to the general government budget balance. The total (except for the typically small net capital transfers from abroad) corresponds to the current account balance, cf. table B.8.
Source: Statistics Denmark and own calculations.

Table B.12 Gross value added (GVA)

	2023	2021	2022	2023	2024	2025
	Share, per cent	Real growth rate, per cent				
Total GVA	**100**	**7.3**	**2.4**	**3.0**	**2.0**	**2.2**
Public sector	19	3.6	0.4	1.1	1.3	1.4
Private sector	81	8.2	2.9	3.4	2.1	2.4
Private sector excl. mining and quarrying	80	8.3	2.9	3.5	1.9	1.9
Non-farm private sector[1)]	70	10.0	3.1	2.5	2.4	2,2

1) Non-farm private sector consists of manufacturing, construction and private services excluding shipping.
Source: Statistics Denmark and own calculations.

Table B.13 Hourly productivity in selected industries

	Avg. 2004-2023	2021	2022	2023	2024	2025
Real growth rate, per cent						
Total	**1.0**	**1.2**	**-1.3**	**2.0**	**0.8**	**2.4**
Public sector	0.4	-1.3	0.1	0.7	0.6	0.4
Private sector	1.2	1.7	-2.0	2.2	0.8	3.0
Private sector excl. mining and quarrying	1.5	1.8	-2.0	2.3	0.6	2.4
Non-farm private sector[1)]	1.5	3.0	-1.9	1.4	1.1	2.8

Note: Hourly productivity is defined as gross value added in constant prices relative to the total number of hours.
1) Non-farm private sector consists of manufacturing, construction and private services excluding shipping.
Source: Statistics Denmark and own calculations.

Table B.14 Contributions to growth in households' real disposable income[1)]

	2021	2022	2023	2024	2025
Real growth rate, per cent					
Disposable income	1.2	1.8	2.2	2.2	2.4
Contribution, percentage points					
Compensation of employees[2)]	3.7	-0.4	1.7	4.6	1.4
Social benefits	-0.5	-2.3	0.1	1.0	0.8
Income taxes	-2.2	1.7	-0.4	-1.9	0.2
Net interest income	0.6	0.9	0.3	-0.6	-0.7
Dividend etc.[3)]	0.3	1.3	1.4	-0.9	0.2
Pension contribution	-0.7	1.4	-1.0	-1.0	-0.3
Payment from pension schemes[4)]	-0.6	0.3	-0.2	1.1	0.4
Others[5)]	0.6	-1.2	0.3	0.0	0.3

1) The household sector in the Economic Survey includes Non-Profit Institutions Serving Households (NPISH).
2) Covering only employees residing in Denmark.
3) Incl. dividends from investment funds.
4) Occupational pensions etc. (but not individual pension schemes in banks, etc.).
5) Including the self-employed.
Source: Statistics Denmark and own calculations.

Table B.15 Households' net lending[1)]

	2021	2022	2023	2024	2025
DKK bn.					
Disposable gross income	1,161	1,266	1,331	1,385	1,447
Private consumption	1,188	1,246	1,299	1,346	1,398
Gross investment[2)]	140	163	153	149	153
Net capital transfers[3)]	-2	8	5	7	6
Direct net lending	**-168**	**-135**	**-116**	**-103**	**-98**
Adjustment for the change in pension entitlements[4)]	99	113	108	154	165
Net lending[5)]	**-69**	**-22**	**-9**	**51**	**67**
Per cent of disposable gross income					
Direct net lending	-14.5	-10.7	-8.7	-7.4	-6.8
Net lending	-6.0	-1.7	-0.6	3.7	4.6

1) The household sector in the Economic Survey includes Non-Profit Institutions Serving Households (NPISH).
2) Households' gross investments include investments in owner-occupied housing and investments in buildings and materials by sole proprietors.
3) Net capital transfers in 2022 include property taxes refunded to owner-occupied property owners, funds for specific challenges as a result of covid-19 and further stimulants as well as reimbursement of contributions to the voluntary early retirement scheme.
4) Net payments to and returns (excl. tax on pension yield) on household capital in life insurance companies and pension funds.
5) Households' (net) acquisition of financial assets (incl. shares) in other sectors.

Source: Statistics Denmark and own calculations

Table B.16 Real estate market and housing construction

	2021	2022	2023	2024	2025
Per cent					
Change in the price of traded single-family houses	12.0	1.9	-2.6	2.7	3.0
Housing gross investment (real growth)	14.7	-7.5	-12.4	-5.7	1.8

Source: Statistics Denmark and own calculations

Table B.17 Labour wage ratio, wage increases and computational preconditions

	2021	2022	2023	2024	2025
Labour wage ratio, per cent					
Private sector	55.6	52.5	56.1	57.5	57.0
The entire economy	60.7	57.8	60.9	62.2	61.9
Wage increase, per cent					
Private sector					
- Hourly earnings (excl. nuisance bonus)	2.9	4.0	4.2	5.4	3.4
Public sector					
- Hourly earnings (excl. nuisance bonus)	1.1	2.5	2.4	-	-
- Budgetary impact	1.3	1.9	2.4	5.0	4.1
Wage adjustment rate, per cent	2.0	1.2	2.7	3.2	3.6

Note: The labour income ratio is calculated as aggregate labour income relative to the GVA (gross value added) and adjusted for the number of self-employed. The hourly wage increases in the private sector in 2021-2022 are published by The Confederation of Danish Employers. The hourly wage increases in the public sector are a weighted average of wage indices for the state, the municipalities and the counties, all reported by Statistics Denmark. No estimates are made on the development in public sector hourly earnings. The budgetary impact is based on the contractually agreed wage increases including contributions from the adjustment scheme (reguleringsordningen) but excluding any residual increases. The hourly wage increases for the private and public sectors are not comparable.
Source: The Confederation of Danish Employers, Statistics Denmark, and own calculations.

Table B.18 Price developments and explanatory factors

	2021	2022	2023	2024	2025
Change, per cent					
Net price index	1.5	7.7	4.0	0.9	1.8
Tariffs and housing benefits, contribution	0.4	0.1	-0.8	0.9	0.2
Consumer price index	1.9	7.7	3.3	1.8	2.0

Note: The contribution from tariffs and housing benefits is computed as the difference between the consumer price inflation and the net price inflation. Changes in the prices of taxed goods such as energy can therefore influence the contribution from taxes, even though the tax level remains unchanged.
Source: Statistics Denmark and own calculations.

Table B.19 Public finances

	2021	2022	2023	2024	2025
DKK bn.					
Public consumption	613.5	624.5	636.4	682.5	725.0
Income transfers[1)]	388.6	387.9	399.8	421.4	441.7
Investments	82.6	87.1	89.1	97.4	106.2
Interest expenditures	12.7	20.3	18.6	21.5	22.1
Subsidies	63.4	39.9	36.0	42.0	43.1
Other expenditures[2)]	86.0	91.1	106.0	108.7	103.5
Total expenditure[3)]	**1,246.8**	**1,250.8**	**1,285.8**	**1,373.5**	**1,441.6**
Personal income taxes, etc,[4)]	545.0	570.3	593.5	622.3	630.0
Labour market contributions	112.5	117.1	120.7	130.2	134.5
Pension yield taxation	63.4	11.2	13.0	13.4	28.2
Corporate taxes	102.1	94.3	106.1	109.5	108.4
VAT	251.3	266.0	259.2	273.5	286.2
Other duties	147.0	143.1	132.4	131.5	136.6
Other taxes[5)]	3.7	2.3	2.2	1.0	1.0
Interest revenues	23.4	29.9	42.2	43.7	42.6
Other revenues[6)]	107.4	119.0	112.9	107.8	108.9
Tariffs etc. to the EU	-3.7	-4.6	-3.6	-3.7	-3.9
Total revenue[7)]	**1,352.0**	**1,348.7**	**1,378.6**	**1,429.1**	**1,472.4**
General government budget balance	**105.2**	**97.9**	**92.7**	**55.6**	**30.8**
Net interest expenditure	-10.7	-9.6	-23.7	-22.2	-20.5
General government primary balance[8)]	94.5	88.3	69.1	33.4	10.3

1) Income transfers exclude other regular transfers to households such as mileage allowance and index supplement.
2) Other expenditures include capital transfers, transfers to the Faroe Islands and Greenland and the Danish EU-contributions.
3) Total expenditure differs from Statistics Denmark's equivalent. Total expenditure is calculated from a definition of the total expenditure, where all sub-elements of public consumption – e.g. imputed expenditure from depreciation and revenue from sales of goods and services – are defined as expenditures.
4) Personal income taxes include withholding taxes, tax on imputed income from owner-occupied dwellings, specific taxes from households, tax on estates of deceased persons and other personal taxes.
5) Other taxes include media license and mandatory pension payments for civil servants.
6) Other revenues include profits from public enterprises, current and capital transfers from other domestic sectors and the EU, and imputed (calculated) revenues such as contributions to civil servants' earned pension. Moreover, revenues from oil and gas explorations in the North Sea, duty on pipelines, and the hydrocarbon tax are included in other revenues.
7) Total revenue differs from Statistics Denmark's equivalent, where the sales of public goods and services are counted as revenue and not – like here – counted as a part of the total expenditures. Furthermore, total revenue here includes a revenue-counterpart to the imputed depreciation expenditures included in public consumption.
8) The general government primary balance states the balance of the general government finances before net interest expenditures.

Source: Statistics Denmark and own calculations

Table B.20 Taxes and tax burden

DKK bn.	2021	2022	2023	2024	2025
Indirect taxes	**394.6**	**404.6**	**387.9**	**401.2**	**418.8**
- VAT	251.3	266.0	259.2	273.5	286.2
- Registration tax	16.4	11.5	10.7	9.0	9.1
- Excise duties	71.0	68.4	57.5	64.0	67.3
- Energy (incl. PSO)	37.6	38.4	27.5	34.4	36.2
- Environmental	3.7	3.7	3.5	3.5	4.4
- Tobacco and spirits etc.	13.2	11.3	12.0	11.4	11.4
- Others	16.4	14.9	14.4	14.8	15.2
- Property taxes	32.4	33.1	33.5	27.4	27.5
- Motor vehicle tax paid by businesses	4.2	4.2	4.1	4.0	5.7
- Other indirect taxes	19.3	21.4	22.9	23.4	23.1
Direct taxes	**817.5**	**785.5**	**826.6**	**869.1**	**895.8**
- Withholding taxes[1)]	523.2	547.4	570.6	600.2	609.1
- State tax	182.8	188.6	197.7	209.6	218.6
- Bottom-bracket tax	160.0	164.0	172.8	182.8	190.3
- Top-bracket tax	20.5	22.0	22.4	24.9	26.2
- Health contributions	0.0	0.0	0.0	0.0	0.0
- Limited tax liability	2.3	2.6	2.5	1.9	2.0
- Total municipal tax	278.6	282.6	297.1	318.2	325.5
- Property value tax	14.2	14.4	14.4	14.3	13.7
- Other withholding taxes[2)]	47.5	61.8	61.4	58.0	51.3
- Pension yield tax	63.4	11.2	13.0	13.4	28.2
- Corporate tax	102.1	94.3	106.1	109.5	108.4
- Other personal taxes	8.0	8.4	9.1	8.7	8.7
- Media license	1.2	0.0	0.0	0.0	0.0
- Motor vehicle tax paid by households	7.1	7.1	7.1	7.1	6.9
- Labour market contributions	112.5	117.1	120.7	130.2	134.5
Social security contributions[3)]	2.5	2.3	2.2	1.0	1.0
Capital taxes	6.6	7.4	6.7	6.2	5.3
Customs and import duties (collected by the EU)	3.7	4.6	3.6	3.7	3.9
Total taxes	**1,224.9**	**1,204.4**	**1,227.1**	**1,281.2**	**1,324.8**
GDP	2,567.5	2,844.2	2,804.7	2,917.1	3,033.1
Total taxes, share of GDP	**47.7**	**42.3**	**43.8**	**43.9**	**43.7**

1) For 2020-2022, the distribution of withholding taxes to the state and municipalities is from Statistics Denmark. For 2023-2025, an estimate is used based on the Ministry of Finance's tax base forecast.
2) Includes equity income tax, tax on estates of deceased persons and revenue from the Danish business scheme etc.
3) Includes mandatory pension payments for civil servants in public enterprise etc.
Source: Statistics Denmark

Table B.21 Development in the tax base for municipalities

	2021	2022	2023	2024	2025	2021	2022	2023	2024	2025
			DKK bn.					Per cent		
Aug. 2020	1,044.9	-	-	-	-	-0.9	-	-	-	-
Dec. 2020	1,070.7	1,087.2	-	-	-	0.7	1.5	-	-	-
May 2021	1,070.3	1,085.6	-	-	-	0.9	1.4	-	-	-
Aug. 2021	1,075.5	1,081.7	-	-	-	1.6	0.6	-	-	-
Dec. 2021	1,094.1	1,104.2	1,153.8	-	-	2.8	0.9	4.5	-	-
May 2022	1,102.1	1,105.9	1,148.2	-	-	3.5	0.3	3.8	-	-
Aug. 2022	1,136.4	1,122.8	1,148.8	-	-	6.8	-1.2	2.3	-	-
Mar. 2023	1,132.9	1,154.2	1,185.7	1,233.2	-	6.4	1.9	2.7	4.0	-
May 2023	1,132.9	1,160.9	1,193.6	1,230.1	-	6.4	2.5	2.8	3.1	-
Aug. 2023	1,132.9	1,140.0	1,195.7	1,249.2	-	6.4	0.6	4.9	4.5	-
Dec. 2023	1,132.9	1,140.0	1,203.3	1,265.4	1,310.3	6.4	0.6	5.5	5.2	3.6
May 2024	1,132.9	1,140.0	1,193.2	1,280.9	1,300.8	6.4	0.6	4.7	7.3	1.6
Aug. 2024	1,132.9	1,138.0	1,197.0	1,285.9	1,315.0	6.4	0.5	5.2	7.4	2.3

Note: Rows show the time of the budgeting of the municipal tax base. The columns show the tax base in the year concerned.
Source: Statistics Denmark and own calculations.

Table B.22 Income transfers

	2021	2022	2023	2024	2025
DKK bn.					
Unemployment benefits (excl. activation)	17.7	11.7	13.7	14.2	14.7
Cash benefits[1] (excl. activation)	26.9	27.8	29.4	31.3	33.4
Vacation allowance	0.6	0.5	0.5	0.4	0.5
Anticipatory pensions[2]	46.3	47.7	51.2	54.0	57.9
Resource rehabilitation allowance	5.8	6.6	6.5	6.4	6.8
Early retirement benefit	8.9	7.8	5.7	4.5	3.6
Rehabilitation benefit	0.5	0.4	0.3	0.3	0.5
Sickness benefit	16.2	16.5	14.8	15.5	15.8
Maternity pay	12.1	12.0	11.9	12.0	13.0
Rent benefit	15.5	15.6	16.0	17.2	17.8
Child and youth benefit	14.9	14.9	15.8	16.3	16.8
Other transfers[3]	22.5	24.6	23.3	22.4	24.1
Student grants (SU)	21.0	20.0	19.9	20.6	21.1
Public pension scheme[4]	146.2	145.2	151.7	165.2	173.0
Other pension schemes[5]	33.5	36.5	39.0	40.9	42.7
Total[6]	**388.6**	**387.9**	**399.8**	**421.4**	**441.7**
Total, excl. public and other pensions	**208.9**	**206.2**	**209.1**	**215.3**	**226.0**
Total, excl. education grants, public pensions and other pensions	**187.9**	**186.2**	**189.2**	**194.7**	**204.9**

Note: The expenditures to income transfers is not directly equivalent to the number of benefits recipients in table B.6.
1) Taxable and non-taxable benefits incl. the integration benefit.
2) Incl. early retirement benefits to retired citizens in foreign countries.
3) Activation benefits, dependent child allowance, subsidy for childcare, unemployment benefits, special education benefit, green check and pay scheme for holders of flexi-jobs etc.
4) Incl. differentiated allowances and heating allowance for pensioners. Incl. pension schemes for citizens in foreign countries.
5) Civil servants in public enterprises and part-time early retirement scheme etc.
6) Income transfers exclude other regular transfers to households such as mileage allowance and index supplement.
Source: Statistics Denmark and own calculations.

Table B.23 Key figures estimated at different times

	Mar. 2023	May 2023	Aug. 2023	Dec. 2023	Maj. 2024	Aug. 2024
2022						
GDP (real growth rate, per cent)	3.6	3.8	2.7	2.7	2.7	1.5
Gross unemployment (1,000 persons)	76	76	76	76	76	76
Consumer prices (change, per cent)	7.7	7.7	7.7	7.7	7.7	7.7
Balance of payments (DKK bn.)[1)]	371	367	383	379	379	332
Actual budget balance (DKK bn.)	82	93	97	95	95	98
2023						
GDP (real growth rate, per cent)	0.2	0.6	1.2	1.2	1.9	2.5
Gross unemployment (1,000 persons)	93	91	85	84	84	84
Consumer prices (change, per cent)	3.9	4.3	3.8	3.4	3.3	3.3
Balance of payments (DKK bn.)[1)]	269	232	266	300	304	276
Actual budget balance (DKK bn.)	45	51	56	77	87	93
2024						
GDP (real growth rate, per cent)	1.5	1.4	1.4	1.4	2.7	1.9
Gross unemployment (1,000 persons)	97	97	94	97	89	87
Consumer prices (change, per cent)	2.8	3.0	3.0	2.8	2.1	1.8
Balance of payments (DKK bn.)[1)]	264	243	287	347	325	307
Actual budget balance (DKK bn.)	24	16	29	44	48	56
2025						
GDP (real growth rate, per cent)	-	-	-	1.0	1.8	2.2
Gross unemployment (1,000 persons)	-	-	-	101	95	89
Consumer prices (change, per cent)	-	-	-	2.1	2.1	2.0
Balance of payments (DKK bn.)[1)]	-	-	-	339	332	310
Actual budget balance (DKK bn.)	-	-	-	23	21	31

1) Show current amount on the balance of payments.
Source: Statistics Denmark and own calculations

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