

# Inflation is on track but some inflationary pressure persists

Inflation has fallen sharply and economic policy has so far succeeded in keeping inflation expectations well anchored. However, there is still some inflationary pressure from higher wages, which typically provides a more persistent inflationary pressure than energy and other commodities. Monetary and fiscal policy still need to curb inflationary pressures.

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## Growth slowdown in the Danish economy over the past year

The Danish and international economies have suffered a slowdown in growth and capacity pressure has eased, partly as a result of interest rate increases over the past two years. However, employment in Denmark continues to rise and there is still some inflationary pressure from wages, although inflation has fallen markedly over the past year.



## High wage growth contributes to some inflationary pressure

High wage increases are expected to contribute to some inflationary pressure in the coming years. Employment is expected to fall slightly as it adjusts to the slowdown in economic growth. As a result, labour market pressure is expected to ease towards 2025, which is expected to dampen wage growth and core inflation during 2025.



## Fiscal policy is currently appropriately aligned with the business cycle

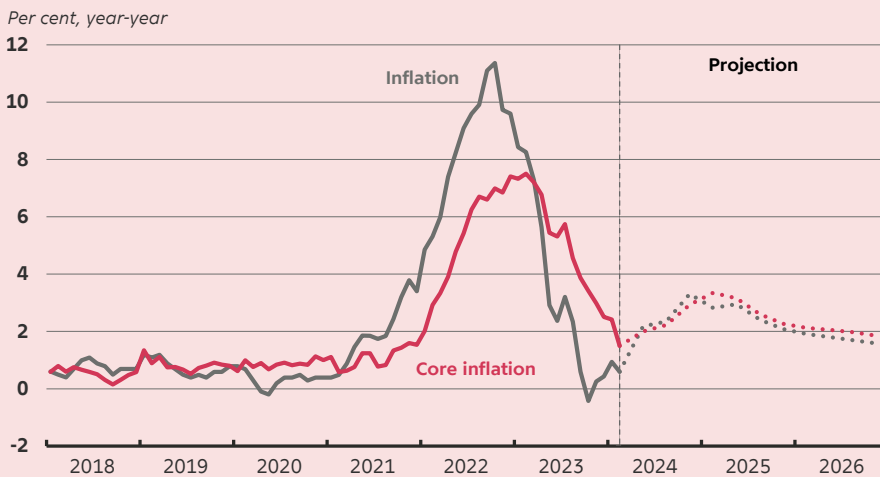
Monetary policy is making a significant contribution to curbing inflation in Denmark and the euro area, and there are no prospects of significant differences in either capacity pressures or wage and price developments. The planned fiscal policy in Denmark is assessed to be appropriately aligned with the business cycle.

## Why is it important?

Danmarks Nationalbank continuously monitors the Danish economy to fulfil our purpose of ensuring stable prices. Danmarks Nationalbank makes business cycle assessments and macroeconomic projections as a basis for assessing whether economic imbalances are building up. Because the Bank's interest rates are reserved for managing the exchange rate, it is important that the rest of economic policy is aimed at ensuring a stable economy. That is why we make recommendations for fiscal policy, for example.

This analysis is further supplemented by two thematic analyses that delve into the latest developments in the labour market<sup>1</sup> and the impact of central bank interest rate increases in Denmark.<sup>2</sup>

## Main chart: Inflation is expected to rise again in the coming year



Note: Core inflation excluding energy and unprocessed food.  
Source: Statistics Denmark and own calculations.

<sup>1</sup> See Andersen, Bonin, Borgensgaard, Dahl-Sørensen, Darougheh, Grenestam, Hansen, Hviid, Jensen, The pressure on the labour market has eased after a job-intensive expansion, *Danmarks Nationalbank Analysis*, no. 4, March 2024.

<sup>2</sup> See Andersen, Jørgensen, Kuchler, Larsen, Læssøe, Otte, Spange and Weissert, Effects of increases in monetary policy rates, *Danmarks Nationalbank Analysis*, no. 5, March 2024.



## Subjects

Danish economy

Inflation and price developments

International economy

Outlook for the Danish economy

Economic activity

Economic policy

# 01 Highlights



**Planned fiscal policy in Denmark is deemed to be appropriately aligned with the business cycle**

## Inflation has fallen

Inflation has fallen markedly, partly due to large drops in energy prices. Core inflation has also fallen, largely because firms' material costs, such as energy, have fallen. Conversely, high wage increases have started to increase firms' costs.

## Still inflationary pressure from wages

The high wage increases are also expected to impact inflation to some extent in the future, as companies generally hardly can absorb rising labour costs in their profits. Furthermore, tailwind from lower material costs is expected to abate.

## Real wage growth boosts consumption

Wage growth is once again outpacing inflation and consumption is on the rise. However, consumption growth is expected to remain subdued as higher interest rate expenses and lower employment dampen household income growth.

## Growth abroad boosts exports

Real wage growth abroad and less headwind from rising interest rate improve the outlook on Denmark's export markets. Growth in Danish export companies outside the pharmaceutical industry is therefore expected to gradually return.

## Continued growth slowdown ahead

The Danish economy has been growing at two speeds, with a growth slowdown in most parts of the economy, while growth is strong in the pharmaceutical industry. The slowdown in growth is expected to continue, but growth will pick up slightly as exports improve.

## Employment weakens slightly

Growth is expected to fall short of what is usually enough to sustain employment until late 2024. The small decline in employment is reinforced as the price of labour rises relative to other prices in the economy.

TABLE 1

### Key economic variables

Real growth relative to the previous year, per cent	2023	2024*	2025*	2026*
GDP (real), per cent	1,8	2,4	1,4	1,3
Employment, 1,000 persons	3.214	3.226	3.213	3.208
Gross unemployment, 1,000 persons	84	90	95	95
Balance of payments on current account, per cent of GDP	11,1	11,9	11,0	11,4
Government budget balance, per cent of GDP	4,6	2,7	2,8	2,2
House prices, per cent year-on-year <sup>1</sup>	-0,4	3,7	1,6	2,4
Consumer prices, per cent year-on-year	3,4	2,2	2,6	1,7
Core inflation, per cent year-year	5,2	2,3	2,8	2,0
Hourly wage (industry), per cent year-year <sup>2</sup>	4,2	5,6	4,0	3,4

1. Nominal prices of single-family houses.

2. Confederation of Danish Employers' (DA) pay statistics for manufacturing.

Note: \* indicates projection. The Government Budget balance and house prices in 2023 are also projection.

Source: Statistics Denmark and own calculations.

# 02 Overview and recommendations for economic policy



The Danish economy is expected to be in a broadly neutral cyclical position throughout the projection

Inflation in the Danish and international economies has fallen sharply over the past year. Energy prices have fallen markedly and sharp interest rate increases have curtailed growth and eased capacity pressures. Inflation expectations have remained well anchored around the central bank target both in the euro area and the US<sup>3</sup>. The fall in inflation comes after a few years of very high inflation due to large increases in energy prices following Russia's invasion of Ukraine and a large capacity pressure in the wake of the reopening after the pandemic. Capacity pressure has been greater in Denmark than in the euro area, but this has not led to higher wage and price increases.

## Continued growth slowdown in the Danish economy

Over the past two years, the Danish economy has been growing at two speeds, with a slowdown in growth in most parts of the Danish economy, while growth is strong in the pharmaceutical industry.

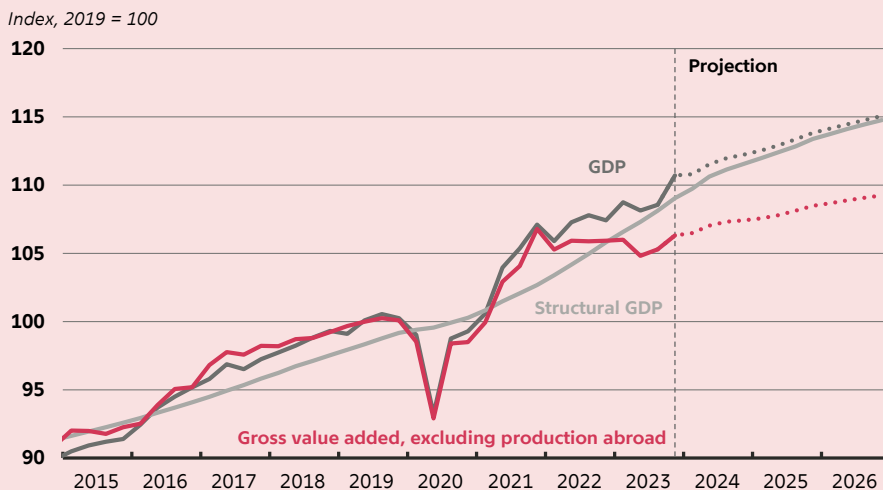
Growth in most parts of the Danish economy was initially dampened by the sharp rise in prices, and then by the sharp rise in interest rates. The slowdown in growth is evident in retail sales, construction and industrial production, excluding the pharmaceutical industry, and has significantly reduced capacity pressure over the past two years.

The growth in the pharmaceutical industry has largely been driven by production abroad under Danish ownership. Such production is included in the gross domestic product, GDP, in Denmark, even though many of the jobs associated with the production itself are located abroad. The growth in the pharmaceutical industry is therefore not assessed to contribute significantly to the capacity pressure in the Danish economy in the short term. Excluding production abroad under Danish ownership, gross value added, GVA, has been approximately unchanged since the end of 2021, see Chart 1. The calculation of GVA excluding production abroad under Danish ownership is not a more accurate statement of activity in Denmark, but the calculation is deemed to be more closely related to the development of employment in Denmark.

<sup>3</sup> See the section "Measures of inflation expectations suggest inflation close to 2 per cent going forward" in Danmarks Nationalbank, Monetary policy is tight and dampens inflation, *Danmarks Nationalbank Analysis (Monetary and financial trends)*, no. 3, March 2024.

CHART 1

**Significant growth slowdown over the past two years, when excluding production abroad under Danish ownership**



Note: *Structural GDP* is the long-term level of sustainable real output in the economy without creating inflationary pressures.  
Source: Statistics Denmark and own calculations.

However, the factors that have dampened growth over the past two years are beginning to ease. First and foremost, energy prices have fallen significantly, and real wages are now growing again. Furthermore, there is the prospect of less headwind from monetary policy as the contractionary effects on growth from the interest rate increases of recent years fade. This will strengthen household income and support private consumption and the housing market in Denmark and on many of Denmark's export markets.

Renewed growth on Denmark's export markets also provides the basis for growth to pick up among Danish export companies. Through 2024, growth in the Danish economy is expected to be slightly higher than in the past two years and gradually come in line with the estimated potential growth compatible with stable wage and price development, and the Danish economy is expected to be in a broadly neutral cyclical position throughout the projection period. The main scenario for this projection is therefore that the Danish economy will avoid a recession. For 2024, GDP growth is estimated at 2.4 per cent, which is due to a significant contribution of 1.6 per cent from production abroad and the reopening of the Tyra natural gas field.

**Prospects for a slight decline in employment**

Despite the slowdown in growth in large parts of the Danish economy, there is still growth in employment, low unemployment and noticeable pressure on the labour market. Employment growth since the beginning of 2022 has been strong compared to value added, and the latest expansion has been more job intensive than usual. The job intensive expansion partly reflects marked shifts in relative prices, with the price of labour rising more slowly than other prices in the economy, and a significant increase in structural employment.<sup>4</sup>

<sup>4</sup> See Andersen, Bonin, Borgensgaard, Dahl-Sørensen, Darougheh, Grenestam, Hansen, Hviid, Jensen, The pressure on the labour market has eased after a job-intensive expansion, *Danmarks Nationalbank Analysis*, no. 4, March 2024.

Going forward, employment is expected to decline slightly as growth is expected to fall short of, what is usually enough to sustain employment until late 2024. Wage increases in the private sector in Denmark have increased due to the high pressure on the labour market and high inflation, as in the rest of Europe and the US. High wage increases throughout the remainder of this collective agreement period imply that the price of labour will once again rise relative to other prices in the economy, and therefore employment is expected to adjust to the slowdown in growth that has taken place.

### **Inflation is curbed despite some inflationary pressure from wages**

The high wage increases are increasing companies' costs, and inflation is expected to rise to just above 3 per cent by the end of 2024. Danmarks Nationalbank assesses that companies, generally, hardly can absorb higher costs in their profits, and demand is not expected to be sufficiently weak to force companies to reduce their margins to maintain sales. In Denmark, wage growth in the private labour market is expected to slow down from 2025, when the current collective agreements expire, as labour market pressures and inflation are expected to be markedly lower than in the period leading up to the collective bargaining in spring 2023.

Inflationary pressures from global factors such as energy and other imported goods and services are presumed to remain subdued. This forms the background for an expectation that inflation measured by the EU Harmonised Index of Consumer Prices, HICP, will rise from 2.2 per cent in 2024 to 2.6 per cent in 2025 and then fall to 1.7 per cent in 2026. The expectation that inflation will be kept down without the Danish economy going into recession is based on the presumption of a similar scenario for the global economy as a whole, which is the main scenario in the projections from most international organisations.

### **The business cycle in Denmark and the euro area are broadly similar**

Overall, wage and price increases in the Danish economy have not deviated noteworthy from the euro area, and are expected to remain broadly similar throughout the projection. Danmarks Nationalbank estimates that capacity pressure in Denmark is now close to a neutral cyclical position measured by the difference between the actual and estimated potential level of GDP, which is compatible with stable wage and price increases. This is broadly in line with the assessment of international organisations of capacity pressures in the euro area. This assessment of capacity pressure is supported by the fact that other indicators such as capacity utilisation or labour shortages do not deviate significantly from the euro area. Furthermore, there are not prospects of capacity pressure deviating in the future, as growth in Denmark is expected to be in line with the euro area. Danmarks Nationalbank also assesses that there is no increased risk that the economic situation in Denmark will develop markedly differently from the euro area.

### **Monetary policy curbs inflation and fiscal policy is appropriately aligned with the business cycle in Denmark and the euro area**

Although inflation has fallen markedly and inflation expectations are well anchored, there is still some inflationary pressure in large parts of the Danish and international economy, and therefore fiscal and monetary policy still need to keep inflationary pressures down. Both in Denmark and abroad, inflationary pressures come from domestic factors such as wages, which are typically more persistent than inflationary pressures from, e.g. commodities and freight rates. Therefore, it typically requires a more persistently tight economic policy to reduce domestic inflationary pressures.<sup>5</sup>



**Overall, inflation is expected to rise to just above 3 per cent by the end of 2024 before falling back to around 2 per cent.**

<sup>5</sup> See, e.g. Martin Bodenstein, Christopher J. Erceg and Luca Guerrieri, Optimal monetary policy with distinct core and headline inflation rates, *Journal of Monetary Economics*, no. 55, 2008.

Monetary policy in Denmark and the euro area is currently making a substantial contribution to curbing inflation, and monetary policy is expected to continue to contribute to curbing inflation for some time yet.<sup>6</sup> In Denmark, fiscal policy is broadly neutral for capacity pressures going forward, while fiscal policy in the euro area is tightening slightly compared to recent years. However, the tightening of fiscal policy in the euro area comes after a few years when fiscal policy in Denmark contributed more to alleviating capacity pressures than fiscal policy in the euro area.

Danmarks Nationalbank assess that the planned fiscal policy is appropriately aligned with the current outlook for the business cycle in Denmark and the euro area given that the current cyclical positions is broadly similar.<sup>7</sup> Fiscal policy in Denmark should address deviations in the business cycle between Denmark and the euro area, as monetary policy in the euro area qua Denmark's fixed exchange rate policy, ensures stable wage and price development in the medium term when the business cycle is broadly similar.<sup>8</sup> Danmarks Nationalbank assess that there are no substantial differences in capacity pressure compared to the euro area and does not expect capacity pressure to deviate substantially from the euro area in the coming years. Therefore, Danmarks Nationalbank assess that the planned fiscal policy is appropriately aligned with the business cycle in Denmark and the euro area.

The Government has proposed to increase spending further on the Danish defence and the so-called Ukraine-fond in the proposal *Håndtering af styrkelse af dansk forsvar og sikkerhed samt Ukraine-fonden*. The proposal weakens the government budget balance by up to 0.4 per cent of GDP in the year 2024-27. It is still uncertain, to what extent the proposal affects activity and inflationary pressures, as it depends on the exact implementation of the proposal. However, the Ministry of Finance expects some impact on activity. At the current junction, where there is still noticeable pressure on the labour market and some inflationary pressure from high wage increases after a period of very high inflation, fiscal policy should not increase aggregate demand. If the implementation of the proposal increases capacity pressure noteworthy, the proposal should be met by other initiatives, that ease capacity pressure elsewhere in the economy.

<sup>6</sup> See Danmarks Nationalbank, Monetary policy is tight and dampens inflation, *Danmarks Nationalbank Analysis (Monetary and Financial Trends)*, no. 3, March 2024.

<sup>7</sup> The Government's proposal *Håndtering af styrkelse af dansk forsvar og sikkerhed samt Ukraine-fonden* from 13 March 2024 is not included in the projection.

<sup>8</sup> See Morten Spange, Monetary and Fiscal Policy in Denmark, *Danmarks Nationalbank Analysis*, no. 12, October 2022.



**Danmarks Nationalbank's  
recommendations for economic policy**

Fiscal and monetary policy is needed to keep inflationary pressures down. Monetary policy is currently making a significant contribution to curbing inflation, and it looks as if monetary policy will also contribute to curbing inflation in the coming years.

Danmarks Nationalbank believes that the planned fiscal policy in Denmark is appropriately aligned with the outlook for the economic situation in Denmark and the euro area.

At the current junction, fiscal policy should not increase aggregate demand. New initiatives that increase capacity pressure should be met by other initiative , that ease capacity pressure elsewhere.

## 03

# High wage increases will contribute to a certain level of inflationary pressure in the coming years

Inflation in the Danish and international economies has fallen sharply over the past year, but inflationary pressures have not dissipated. Inflation has fallen primarily due to lower energy prices, which affect inflation through a direct contribution from consumer energy prices and an indirect contribution from companies' production costs for other goods and services. However, there are still large price increases in services, which are typically more affected by wage developments than by price increases in goods.

Wage increases in Denmark have increased in line with the collective agreements from spring 2023 and are expected to be above 5 per cent until the beginning of 2025, when new collective agreements will be negotiated in the private labour market. The high wage increases in Denmark will continue to create some domestic inflationary pressure in the coming years, as there are no signs that company profits can absorb higher labour costs in the long term.

### Inflation has fallen sharply

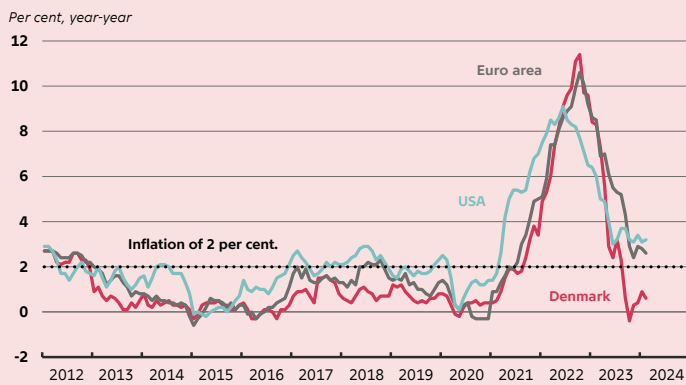
Inflation in the Danish and international economy has fallen sharply through 2023 due to lower inflationary pressures from global factors such as energy prices and freight rates. Inflation fell in Denmark from 11.4 per cent in October 2022 to 0.6 per cent in February, the euro area and the US have also seen large declines in inflation, see Chart 2. However, the fall in inflation has been greater in Denmark than in the euro area, mainly due to the fact that the pass-through from energy prices to consumer prices is faster in Denmark.<sup>9</sup>



**Overall inflation is forecast to be 2.2 per cent in 2024**

CHART 2

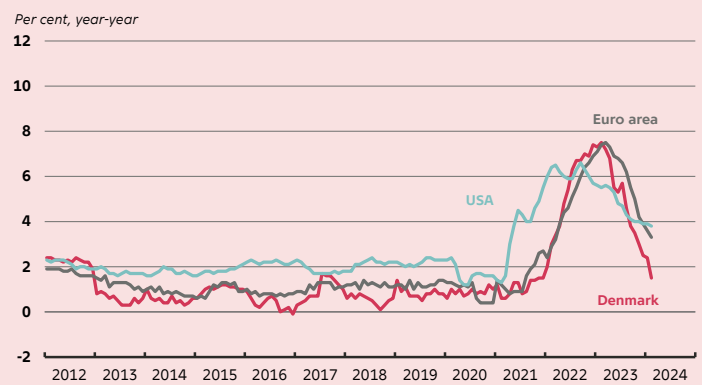
#### Big drop in inflation ...



Note: HICP inflation for Denmark and the euro area and CPI inflation for the USA. Last observation made in February 2024.  
Source: Macrobond.

CHART 3

#### ... and core inflation



Note: HICP core inflation, i.e. inflation excluding energy and unprocessed food, for Denmark and the euro area. For the USA, core CPI inflation is shown. Last observation made in February 2024.  
Source: Macrobond.

Lower inflation in Denmark and the euro area is largely due to the fact that energy prices have fallen significantly since autumn 2022. At the time, prices for electricity and gas in particular were unusually high due to the great uncertainty as to whether supplies of gas in particular would be sufficient to meet demand over the winter, causing a large build-up of gas stocks, which further increased demand.<sup>10</sup> Since then, the price of energy has fallen due to an increase in supply and a decrease in demand. In recent years, supplies of liquefied natural gas (LNG) have increased significantly, partially replacing supplies from Russia. Demand has also reduced as there has been a shift from gas to other forms of energy in businesses and households, while the slowdown in growth in the global economy is also reducing the demand for energy. Among other things, the economic downturn in the German economy is particularly noticeable in energy-intensive industries. In Denmark, consumer prices of energy in February had a negative effect on inflation of 0.7 percentage points.

### Core inflation is also suppressed by lower energy prices

Core inflation, i.e. consumer price increases excluding energy and unprocessed food, has slowed through 2023 in most of the world in common with overall consumer price increases, see Chart 3. The fall in core inflation has been

<sup>9</sup> See Chapter 4, "Inflation is on the wane", in Danmarks Nationalbank, Declining but still high inflation, *Danmarks Nationalbank Analysis (Outlook for the Danish economy)*, no. 4, March 2023.

<sup>10</sup> Two-thirds of the record-breaking increase in gas prices can be attributed to lower supply and increased inventories. See Adolfsen et al, Gas price shocks and euro area inflation, *ECB working paper series*, no. 2905, February 2024.

particularly pronounced in Denmark, but core inflation is also below 4 per cent in the euro area and the US.

Recent developments in core inflation show weak momentum, suggesting that core inflation, as measured by annualised rates of increase, is on a further downward path. The momentum of core inflation in Denmark has fallen gradually since mid-2022, in terms of so-called headline inflation and seasonally adjusted three-month growth rates, see Chart 4.<sup>11</sup> The momentum in core inflation in the euro area only peaked towards the end of 2022, but has also gradually declined since.

CHART 4

### Momentum in core inflation has fallen sharply



Note: Dark curves indicate current inflation. Light-coloured curves indicate seasonally adjusted three-month growth rates. Also see Box 1 in Danmarks Nationalbank, Persistently high inflationary pressures call for tight economic policy, *Danmarks Nationalbank Analysis (Outlook for the Danish economy)*, no. 13, September 2023 for more on momentum. Last observation made in February 2024.

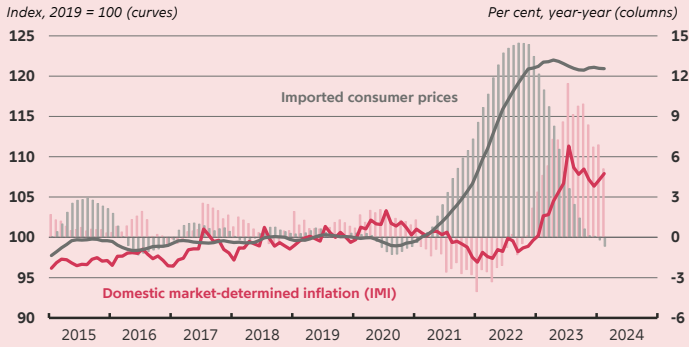
Source: Eurostat and own calculations.

Core inflation has fallen over the past year, mainly due to lower inflationary pressures from global factors such as energy prices and other imported goods and services. In Denmark, the lower inflationary pressure from global factors is reflected in Danmarks Nationalbank's target for imported consumer prices (excluding energy), which has remained more or less unchanged over the past year, see Chart 5. Lower energy prices also suppress core inflation by reducing companies' production costs on other goods and services, so-called indirect effects. The indirect effects from energy prices on core inflation cannot be observed, but several estimates show that they have decreased and may even be negative at present, see Chart 6. The estimated indirect effects suggest that core inflation excluding this effect has remained fairly constant at just over 4 per cent through 2023, and that there is thus still underlying inflationary pressure in the economy.

<sup>11</sup> See Box 1 in Danmarks Nationalbank, Persistently high inflationary pressures call for tight economic policy, *Danmarks Nationalbank Analysis (Outlook for the Danish economy)*, no. 13, September 2023.

CHART 5

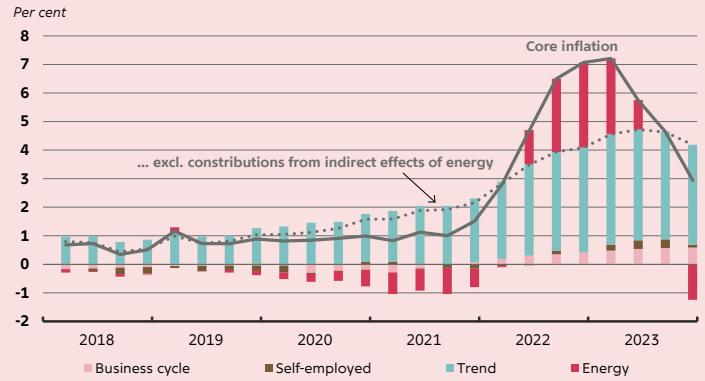
**Inflationary pressure in Denmark comes more from domestic factors**



Note: The lines indicate indices. The bars indicate annual growth rates on the right axis. Last observation made in February 2024.  
 Source: Statistics Denmark and own calculations.

CHART 6

**Indirect effects from energy contribute negatively to core inflation**



Note: For a more detailed description of the model, see Chapter 4, “Inflation is on the wane”, in Danmarks Nationalbank, Declining but still high inflation, Danmarks Nationalbank Analysis (Outlook for the Danish economy), no. 4, March 2023.  
 Source: Statistics Denmark and own calculations.

**Continued inflationary pressure from domestic factors**

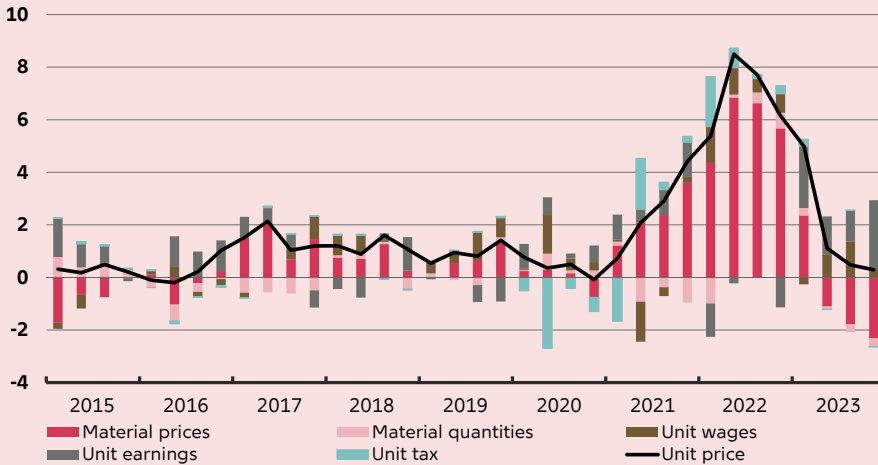
Inflationary pressures in Denmark from domestic factors in 2023 replaced those from global factors that drove the increase in 2022, contributing to underlying inflationary pressures in the economy. Inflationary pressure from domestic factors is reflected in Danmarks Nationalbank’s measure of domestic market-determined inflation, which excludes direct and indirect price increases on energy and imported goods and services, calculated in February at 5.1 per cent, see Chart 5. Domestic market-determined inflation has risen sharply since the end of 2022, driven by large wage increases and higher company profits. However, there are signs that domestic market-driven inflation has also peaked.

Inflationary pressures from domestic factors come mainly from high wage increases, and inflationary pressures from wage increases have increased over the past year. This can be measured by the contribution of unit labour costs, i.e. labour costs per unit produced, to Danish companies’ sales prices, see Chart 7.

CHART 7

**Companies' selling prices increased in 2023 due to higher wages and profit, while raw material costs decreased**

Per cent, year-year



Note: Decomposition of the deflator for production value in private non-agricultural industries excl. utilities and transport. This excludes agriculture, mining, utilities and transport, where price formation is characterised by reflecting domestic factors only to a modest extent, as well as the public sector, where the calculated price development is largely imputed and does not reflect market price formation.

Source: Confederation of Danish Industry, Confederation of Danish Employers and own calculations.

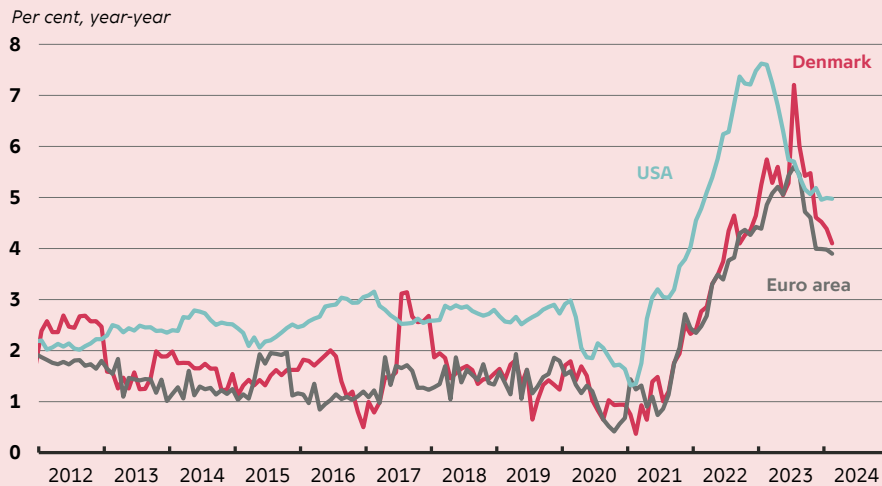
High wage increases are particularly reflected in high consumer price increases for services, as the production of services typically requires more labour input than the production of goods.<sup>12</sup> In Denmark, service price increases remain above 4 per cent in February in annualised terms, and in the euro area and the US, core inflation is also driven by service price increases of around 4 per cent, see Chart 8. However, service price increases have slowed over the past year, and current momentum (as measured by price increases over the past three months) suggests that they will slow slightly further in the coming months. In Denmark and the euro area, price increases in services are more persistent than price increases in goods, as labour costs typically change more slowly than prices of other production inputs.<sup>13</sup> This suggests that inflationary pressures, especially from wage increases, which are particularly evident in services, may take longer to bring down than inflationary pressures from global factors such as energy and other commodities.

<sup>12</sup> See Rasmus Mose Jensen and Nikolaj Mose Dreisig Hansen, Wage increases prolong period of high core inflation, *Danmarks Nationalbank Analysis*, no. 11, September 2023.

<sup>13</sup> See Danmarks Nationalbank, Declining but still high inflation, *Danmarks Nationalbank Analysis (Outlook for the Danish economy)*, No. 4, March 2023.

CHART 8

Price increases for services remain high



Note: Last observation made in February 2024.  
 Source: Macrobond.

Inflationary pressure from domestic factors has also been reflected in rising profit for companies over the past year. Among other things, unit profit, i.e. profit per unit produced, began to contribute positively to companies' sales prices in 2023, see Chart 7. However, the increase comes on the back of higher material costs, including energy prices, significantly reducing profit in 2022. Material prices, on the other hand, fell in 2023, allowing companies to increase profit without significantly raising their selling prices, despite rising labour costs.

Higher unit labour and profit are part of the economy's long-term adjustment to the large increase in material costs for businesses in 2022.<sup>14</sup> In the longer term, companies' selling prices are set as their marginal costs plus a mark-up percentage determined by the competitive situation. At the same time, the relationship between company profit and employee compensation is determined by how much capital and labour make up the companies' production input, which is typically relatively constant in the long run.

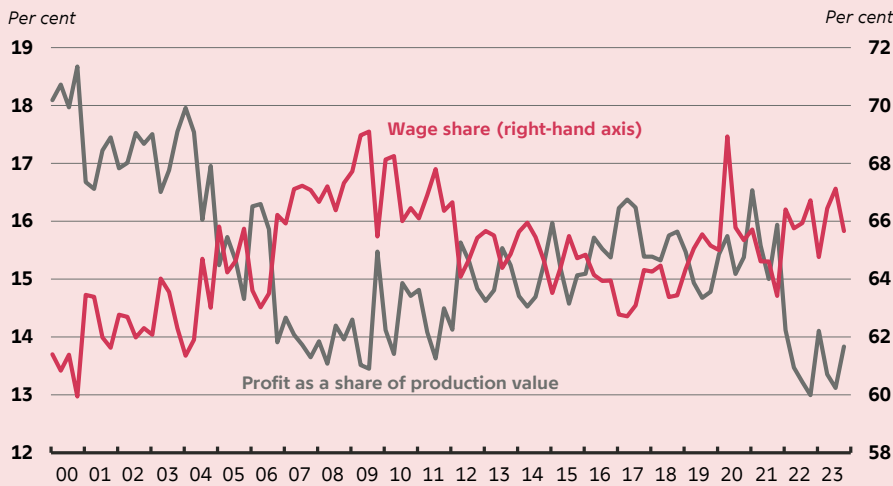
In the long term, wages and profit will likely need to increase further relative to companies' material costs in order to restore the relationship between company profit and labour and material costs. Profit margins achieved by companies cannot be observed directly, but profits in private urban industries are still low in relation to the production value, excluding the supply and transport industries and production abroad under Danish ownership, see Chart 9. The wage ratio in these industries is also slightly higher than before the pandemic. The reason why profits are low, even though unit profit now contributes positively to companies' sales prices, is because their labour and material costs have increased even more. Low profits and a wage ratio slightly above a long-term average suggest that companies in Denmark have little room to absorb higher labour and material costs into their profits in the short term, and that sooner or later

<sup>14</sup> See Morten Spange and Christoffer Jessen Weissert, Corporate profits and inflation, *Danmarks Nationalbank Analysis*, no. 10, September 2023.

companies will increase their selling prices relative to their costs to restore their profit margins. In the euro area, on the other hand, the European Central Bank (ECB) believes that high profits made by companies in the euro area can absorb high wage increases in the coming years.<sup>15</sup>

CHART 9

**Company profits are low when excluding supply and transport and production abroad under Danish ownership**



Note: Private non-agricultural industries excl. utilities, transport and production abroad under Danish ownership.  
Source: Statistics Denmark and own calculations.

**Expect high salary increases in the coming years**

Wage increases in Denmark have increased significantly after collective bargaining in the private labour market in the spring of 2023 and are expected to remain high for the next year. In the private sector, wage growth in Q4 2023 was 4.9 per cent, as measured by the Danish Employers Confederation’s wage index, and has increased significantly compared to the first half of 2023. Wage increases are highest in construction, which was also the case during the previous collective agreement period.

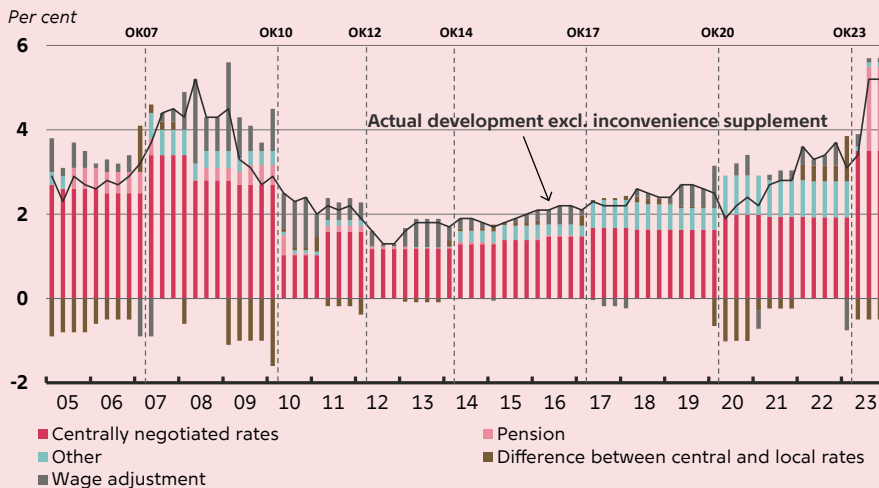
Wage trends largely follow the course agreed in the collective bargaining negotiations in spring 2023, see Chart 10. Local wage negotiations in companies have resulted in slightly lower wage increases than the centrally agreed minimum rates in the industry.<sup>16</sup> Local wage negotiations in companies provide the opportunity to adjust wage development to the economic development within a collective agreement period, but nevertheless the actual wage development in Denmark largely follows the development of the agreed wage increases on average. Wage increases in the private labour market in Denmark are expected to largely follow the course of the collective agreements for the rest of this collective agreement period, which runs until Q1 2025.

<sup>15</sup> See ECB, *ECB staff macroeconomic projections for the euro area*, March 2024.  
<sup>16</sup> See Andersen, Bonin, Borgensgaard, Dahl-Sørensen, Darougheh, Grenestam, Hansen, Hviid, Jensen, *The pressure on the labour market has eased after a job-intensive expansion*, *Danmarks Nationalbank Analysis*, no. 4, March 2024.



CHART 10

**Wages generally follow the agreed paths in the collective bargaining negotiations**



Note: Actual wage growth is for the manufacturing industry. The central rates are an average of the agreed rates in the minimum wage and normal wage areas (the reference course), i.e. the rates agreed in the Industrial Collective Agreement for Labourers, the Building and Construction Collective Agreement, the Shop Collective Agreement, the Joint Collective Agreement and the Transport and Logistics Collective Agreement. The rates reflect an average of the companies' costs and should be seen as a framework for what companies can agree on at a local level. However, local rates can be higher and lower than the central rates. Local rates reflect the agreed increases for hourly wage earners in the minimum wage area. Wage adjustment is calculated as the difference between the actual wages and the locally and centrally negotiated rates including pensions and "other", including the free-choice scheme.

Source: Confederation of Danish Industry, Confederation of Danish Employers and own calculations.

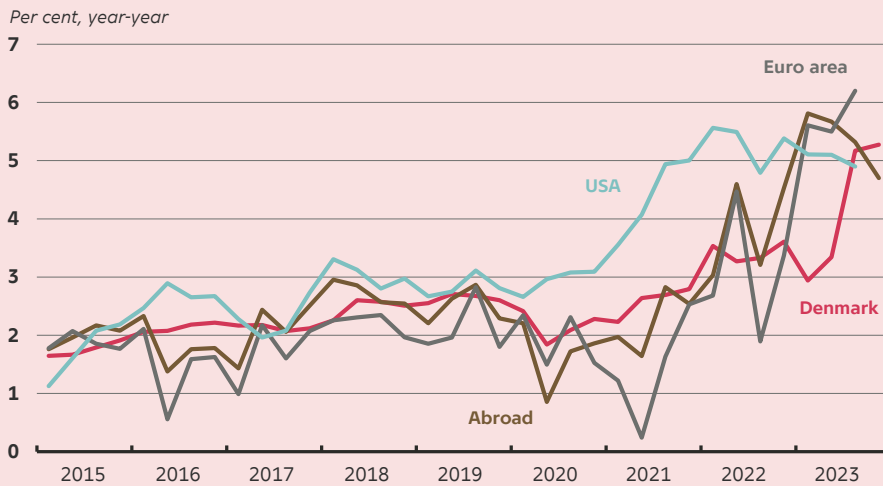
In Denmark, wage growth in manufacturing remains lower than abroad, where wage growth accelerated somewhat faster on the back of the pandemic, see Chart 11. Wage growth in the US picked up sharply already in 2021 due to strong labour market pressures. In the euro area, wage growth picked up during 2022 as energy prices accelerated, reflecting an automatic indexation to inflation for some countries.<sup>17</sup>

In the private labour market in Denmark, wage increases are expected to be lower towards the end of 2025, when new collective agreements will be negotiated, see Table 2. Pressure on the labour market is expected to be significantly lower than in the collective bargaining negotiations in 2023 when collective agreements are negotiated in 2025, while inflation is expected to have come down significantly. Finally, it looks as if wage increases abroad will also be lower at that time, which particularly affects wage formation in many export-oriented industries such as manufacturing, which typically sets the tone for the private labour market as a whole.

<sup>17</sup> See, e.g. Gerrit Koester and Helen Grapow, The prevalence of private sector wage indexation in the euro area and its potential role for the impact of inflation on wages, *ECB Economic Bulletin*, issue 7, 2021.

CHART 11

**Wage growth in Denmark is now on par with other countries**



Note: *Foreign* indicates an index for Denmark's 27 largest trading partners weighted together with exchange rate weights.

Source: Confederation of Danish Employers and own calculations.

Economy-wide wage growth in Denmark is expected to be higher than in the euro area and the US (measured by payroll per employee) in 2024 and 2025, with the prospect of wage growth in the public sector picking up in 2024. In the public sector, a collective agreement has been reached that provides wage increases of 8.8 per cent for the period March 2024 to March 2026. The wage increases in the public sector will help to further increase wage growth for the whole economy in the coming years. Between 2022-26, wage growth is expected to be similar in Denmark and the euro area.

TABLE 2

**Wages are expected to rise more in Denmark than in the euro area in 2024 and 2025**

	2023	2024*	2025*	2026*
Wage index, industry	4,2	5,6	4,0	3,4
Wages per employee, non-agricultural sector	2,9	6,2	3,9	3,2
Wage index, public sector	2,5	4,9	3,9	2,0
Wages per employee, whole economy	2,6	6,1	4,6	2,4
Wages per employee, euro area	5,3	4,5	3,6	3,6
Wages per employee, USA	4,6	3,9	3,5	3,5

Note: \* indicates projection.

Source: Statistics Denmark, Confederation of Danish Employers, ECB, Congressional Budget Office and own calculations.

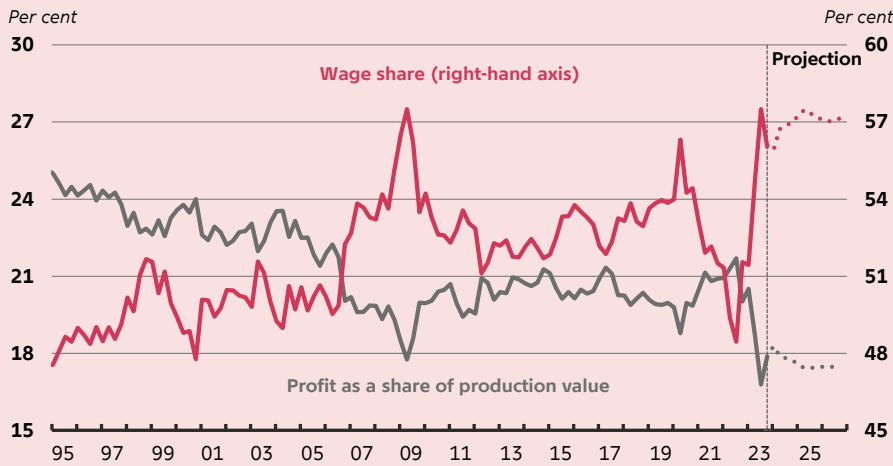
**High wage increases will create a certain level of domestic inflationary pressure in the coming years**

Inflation in Denmark is expected to continue to be driven by domestic inflationary pressures in the coming years, while global inflationary pressures are expected to remain more subdued. This means that inflation is expected to be 2.2 per cent in 2024.

The high wage increases on the Danish labour market are expected to be reflected in higher selling prices in companies, which are then expected to find their way into core inflation. According to Danmarks Nationalbank, companies generally do not have much room to absorb higher costs in their profits, and demand is not expected to be sufficiently weak to force companies to reduce their margins to maintain sales. Going forward, the same tailwinds from lower material costs, including energy costs, are not expected to materialise, and demand in the Danish economy is not expected to be weak enough to force companies to reduce their margins. Danmarks Nationalbank therefore expects higher wages to be reflected to some extent in companies’ sales prices, but that the wage ratio (excluding production abroad under Danish ownership) will remain higher than the average in the years before the pandemic, see Chart 12. Inflationary pressure from domestic factors is reflected in the projection by the Bank’s target for domestic market-driven inflation is expected to be around 3.5 per cent until the second half of 2025, before easing slightly in 2026.

CHART 12

**Company profits is expected to remain low as a share of their production value**



Note: Private sector excl. production abroad under Danish ownership. Production value in the projection is projected with the assumptions that companies material costs in terms of volumes follow the growth in real GVA and that the price index for material costs follows the development in the deflator for goods imports.

Source: Statistics Denmark and own calculations.

Conversely, inflationary pressure from global factors is assumed to remain subdued, although its contribution to inflation is expected to increase as the negative contribution from energy prices fades by the end of 2023. Electricity, gas and oil futures prices, i.e. the prices of contracts for future delivery, remain around current levels during the projection period, and under this assumption, consumer energy prices are expected to remain approximately unchanged throughout the projection period. Indirect effects from energy are also expected

to help curtail core inflation in 2024, but are not expected to affect core inflation significantly from 2025 onwards.

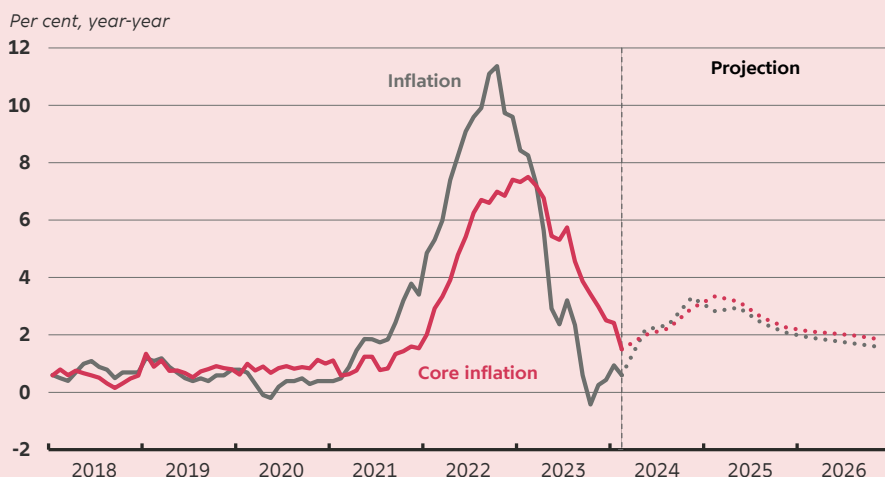
In addition, subdued inflationary pressures from global factors are also reflected in the fact that imported consumer price increases (excluding energy) are also expected to be curtailed, although they are expected to rise slightly from the current near-zero level. This expectation is based on the assumption of an increase of around 2 per cent in the weighted export price in the countries from which Denmark imports goods and services, see the appendix.

Overall, inflation is expected to rise to around 3 per cent in early 2025 before falling back to around 2 per cent, see Chart 13. The increase up to the beginning of 2025 reflects that the negative contribution of indirect effects of energy to core inflation is gradually fading away. From the beginning of 2025, inflation will fall again as wage increases will not fuel inflation to the same extent. Overall inflation is estimated to be 2.2 per cent in 2024, 2.6 per cent in 2025 and 1.7 per cent in 2026, and core inflation is expected to remain broadly the same.

Inflation in Denmark is generally expected to be slightly higher than what the ECB expects in the euro area in the coming years. The ECB's projection from December shows average inflation of 2.3 per cent in 2024, 2.0 per cent in 2025 and 1.9 per cent in 2026. The difference between the projection for the euro area and Denmark is mainly to be found in the estimates for core inflation, where the ECB expects 2.6 per cent in 2024, 2.1 per cent in 2025 and 2.0 per cent in 2026.

CHART 13

**Inflation is expected to rise again in the coming year**



Note: The latest current figures are February 2024.  
 Source: Statistics Denmark and own calculations.

## 04

# Employment is expected to adjust to the slowdown in growth as real wages rise

The Danish economy has divided into two over the past two years, with the majority of the economy experiencing a slowdown in growth, while the pharmaceutical industry has been booming. The growth of the pharmaceutical industry is largely driven by production abroad under Danish ownership, which is included in the calculation of Danish GDP. Despite the underlying slowdown in growth, employment has risen sharply during this period, partly because the price of labour has risen more slowly than other prices in the economy and because demand has been directed towards service industries, where labour is a bigger factor of production than in goods-producing industries.

Going forward, the overall demand in the Danish economy is expected to increase and the underlying growth in the Danish economy will be slightly stronger than in the past two years. However, growth is not expected to align with what is normally sufficient to sustain employment until 2024. Employment is also expected to adjust to the slowdown in growth in recent years, as high wage growth increases the price of labour relative to other prices in the economy. Unemployment is expected to rise and pressure on the labour market will ease further.

### Continued growth slowdown in the next year expected

GDP growth in the coming year is expected to continue to be characterised by the current division into two of the economy, with strong growth driven by the pharmaceutical industry and the reopening of the Tyra field, while growth in the rest of the economy is expected to be slow.

Underlying growth in the Danish economy is expected to gradually pick up pace in 2024 and is expected to be in line with potential growth in the following years. Private consumption is already picking up as a result of renewed real wage growth and is expected to contribute to growth in aggregate demand throughout the rest of the projection period, see Chapter 5. Total demand will be curtailed in the short term by weak exports in the majority of Danish industry, while higher interest rates put a damper on business investment, see chapter 6. Exports are expected to gradually improve as growth in export markets also picks up pace. However, the growth in total demand is supported by large exports of medicine and energy and an assumption of strong growth in public demand, see the appendix. Total demand is expected to increase by 3.9 per cent in 2024. However, imports are expected to cover a large part of the increase in demand, partly due to high transit trade in gas and support for Ukraine. GDP growth is thus expected to be weaker than growth in aggregate demand, rising 2.4 per cent in 2024, see Table 3 and Chart 14.



**Excluding the contributions from production abroad under Danish ownership and the reopening of the Tyra field, growth in Denmark is expected to be 0.8 per cent in 2024**

TABLE 3

### Weak growth in value added without production abroad under Danish ownership and reopening of the Tyra field

	2023	2024*	2025*	2026*
GDP	1,8	2,4	1,4	1,3
GVA excl. production abroad under Danish ownership	-0,1	1,4	0,9	0,9
... and raw material extraction	-0,2	0,8	0,8	0,9

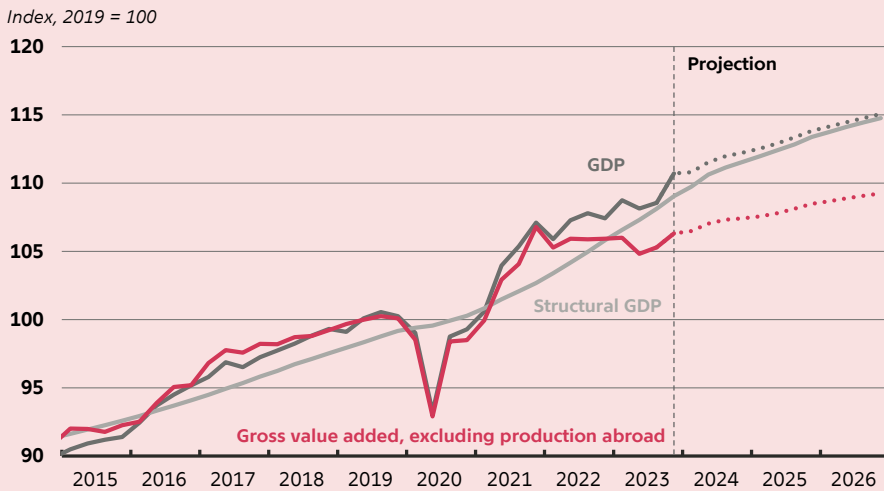
Note: \* indicates projection.

Source: Statistics Denmark and own calculations.

The pharmaceutical industry is expected to continue to contribute significantly to GDP growth. This expectation is based on the expectations of equity analysts for revenue in the largest Danish pharmaceutical companies and an assumption that the pharmaceutical industry's growth will be equally divided between factories in Denmark and production abroad under Danish ownership. These assumptions imply that production abroad under Danish ownership is also expected to contribute relatively strongly in the coming years with 1.1, 0.5 and 0.4 percentage points to GDP growth in 2024, 2025 and 2026. In addition, a large contribution to growth is also expected from the reopening of the Tyra field, which is assumed to boost GDP growth by 0.5 percentage points. Excluding the contributions from production abroad under Danish ownership and the reopening of the Tyra field, growth in Denmark is expected to be 0.8 per cent in 2024, which is roughly in line with OECD's expectations to the euro area.

CHART 14

**The Danish economy is expected to be in an approximately neutral cyclical situation for the rest of the projection**



Note: *Structural GDP* reflects the level of production that the economy can achieve without creating price pressure in the long term.  
Source: Statistics Denmark and own calculations.



**Employment is expected to fall by almost 20,000 people from 2024 to 2026**

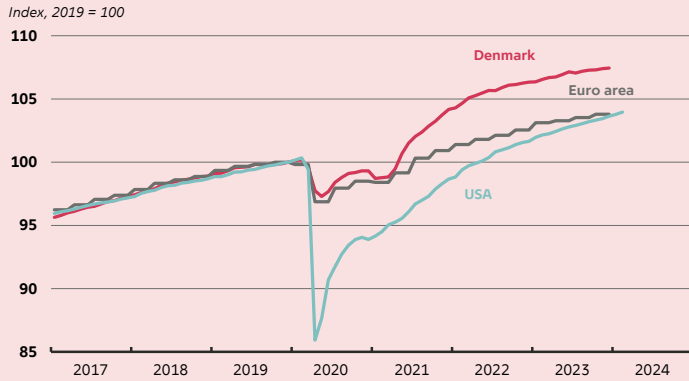
**Employment has continued to rise despite the slowdown in growth**

Employment in Denmark is still rising, despite the fact that the growth in value creation over the past two years has generally been weaker than what is normally required to maintain employment. Employment growth was particularly strong in the wake of the reopening after the pandemic, but has gradually slowed down.

It is not a uniquely Danish phenomenon that the growth in employment in relation to GDP over the past two years has been stronger than before. The same is true in the euro area and the US, but employment growth in Denmark has been stronger than in the euro area and the US since 2019, see Chart 15. Employment is also still growing in the euro area and the US, albeit less strongly than immediately after the reopening, and labour markets in areas are characterised by low unemployment. For example, the current unemployment rate is the lowest in the euro area since the year 2000.

CHART 15

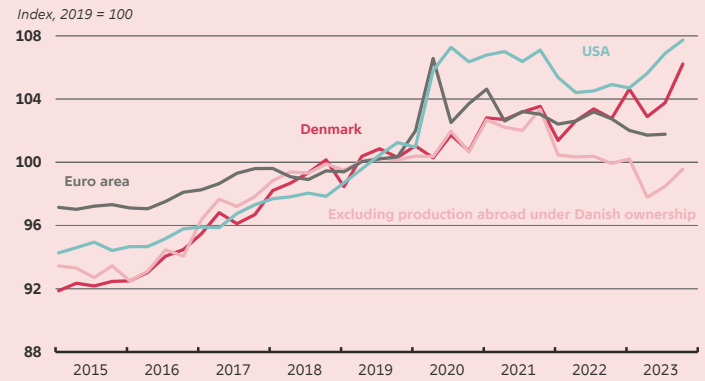
Employment in Denmark, the euro area and the US



Note: The latest observation is December 2023 for Denmark, February 2024 for the US and Q4 2023 for the euro area.  
Source: Macrobond.

CHART 16

Private sector productivity has been weak in Denmark compared to the euro area and the US



Note: The latest observation is Q4 2024.  
Source: Statistics Denmark, Eurostat, Bureau of Labor Statistics and own calculations.

Employment has increased in Denmark by 3.2 per cent since the end of 2021, and during the same period, value added has decreased by 0.4 per cent when excluding production abroad under Danish ownership, where employees at factories abroad are not included in Danish employment. It is not unusual for employment to fall with a lag when value added increases less than potential productivity growth.<sup>18</sup> The impact has taken longer than usual to materialise, but the slowdown in growth has been relatively moderate without a major drop in activity. This means that value added per hour worked has decreased by 3.7 per cent in the private sector since the end of 2021, see Chart 16. This is somewhat more than in the euro area and the US, although productivity growth also here has been weak the past two years.<sup>19</sup>

The strong employment growth in Denmark is supported by the fact that the price of labour has risen slower than other prices in the economy since the end of 2020.<sup>20</sup> This applies to companies' sales prices and other production factors such as materials, machinery and buildings. Lower labour prices can amplify some of the channels that often lead to weak GDP per employee growth at the peak of an economic boom: It is less costly to hoard labour, more low-productivity jobs are profitable to create, and it is more advantageous to substitute from other production inputs to labour to the extent possible. Finally, there are also signs that shifts in consumption towards low-productive services, as a result of the large increases in goods prices, have contributed to making the recovery more work intensive than before.

The growth in employment in Denmark since the end of 2019 has mainly been driven by a significant expansion of the labour force. The increase in the labour force is part of a general trend over the past 10 years with a large influx of

<sup>18</sup> See Andersen, Bonin, Borgensgaard, Dahl-Sørensen, Darougheh, Grenestam, Hansen, Hviid, Jensen, The pressure on the labour market has eased after a job-intensive expansion, *Danmarks Nationalbank Analysis*, no. 4, March 2024.

<sup>19</sup> Production abroad under domestic ownership in the euro area is not similarly accounted for. In the US, production abroad under domestic ownership is not included in GDP.

<sup>20</sup> See Andersen, Bonin, Borgensgaard, Dahl-Sørensen, Darougheh, Grenestam, Hansen, Hviid, Jensen, The pressure on the labour market has eased after a job-intensive expansion, *Danmarks Nationalbank Analysis*, no. 4, March 2024.



foreign nationals into employment and later taking of early retirement and pensions. Some of the increase in labour may be temporary in nature, as low increases in transfer payments may have increased the incentive for people outside the labour market to find employment.<sup>21</sup> Unemployment has fallen by 22,000 people since the end of 2019, but has risen slightly since mid-2022.

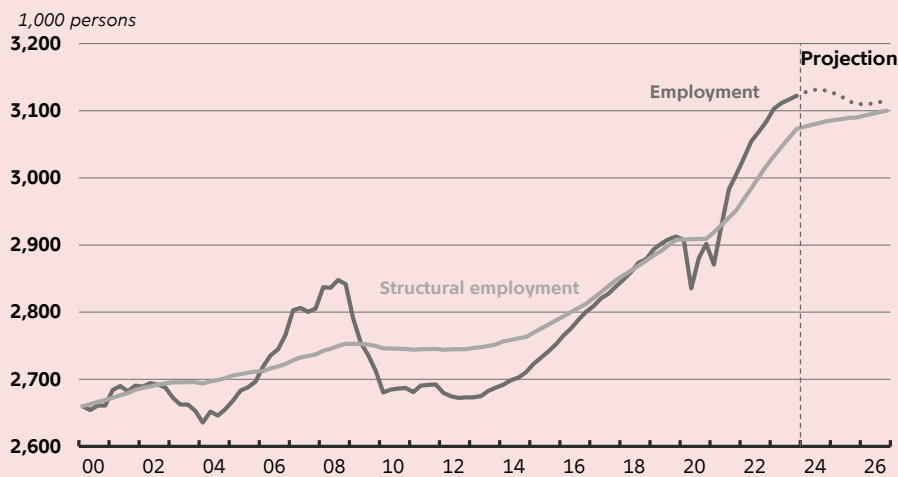
Many indicators suggest that employment growth is slowing down further. The number of job vacancies is now on par with the pre-pandemic years, companies' reported labour shortages have decreased and they expect to reduce their workforces. The rise in employment is therefore expected to turn into a slight decline during 2024. This expectation is further reinforced by the fact that high wage increases again make labour more expensive compared to other factors of production.

**Lower employment as the price of labour increases**

Employment is expected to fall by almost 20,000 people from 2024 to 2026, see Chart 17. This is primarily due to the fact that growth is not strong enough to support employment growth. However, to the extent that lower labour prices relative to other prices in the economy have contributed to employment growth, high wage increases are expected to curtail employment in the future. As the price of labour increases, it becomes less profitable to retain people with weak labour market attachment in employment or to hoard labour, which is expected to be temporary in any case, and it becomes less advantageous to substitute labour from other production inputs. The weakening of employment over the next few years means that unemployment is expected to rise by just under 10,000 people by mid-2025.

CHART 17

**The increase in employment is partially met by an increase in structural employment**



Note: *Employment* excludes activated unemployment benefit recipients. *Structural employment* is the estimated potential level that is compatible with a stable wage and price development in the medium term.

Source: Statistics Denmark and own calculations.

<sup>21</sup> See Andersen, Bonin, Borgensgaard, Dahl-Sørensen, Darougheh, Grenestam, Hansen, Hviid, Jensen, The pressure on the labour market has eased after a job-intensive expansion, *Danmarks Nationalbank Analysis*, no. 4, March 2024.

Towards the end of the projection, the decline in employment is expected to moderate as employment adjusts to the slowdown in growth that has taken place and the price of labour relative to other factors of production returns to its pre-pandemic trend. However, expected growth in the structural labour force is weaker than it has been since 2015, as early retirement and retirement ages will not increase in the coming years.

### **The Danish economy is expected to be in a neutral cyclical situation in the coming years**

Capacity pressure in the Danish economy is deemed to have eased considerably in recent years, and Danmarks Nationalbank estimates that the Danish economy is close to being in a neutral cyclical situation, see Chart 14. Measured by the estimated output gap, capacity pressure has decreased from above 3 to under 1 per cent of GDP and is expected to be below 1 per cent throughout the projection horizon. The high GDP growth in recent years has been offset by an even higher increase in the estimated potential production level, which has increased by around 4 per cent from production abroad under Danish ownership. Production abroad under Danish ownership, together with the reopening of the Tyra field, will continue to contribute to high growth in potential production in 2024. The high growth in potential production helps close the gap between GDP and the potential production level during 2024, despite relatively high GDP growth.

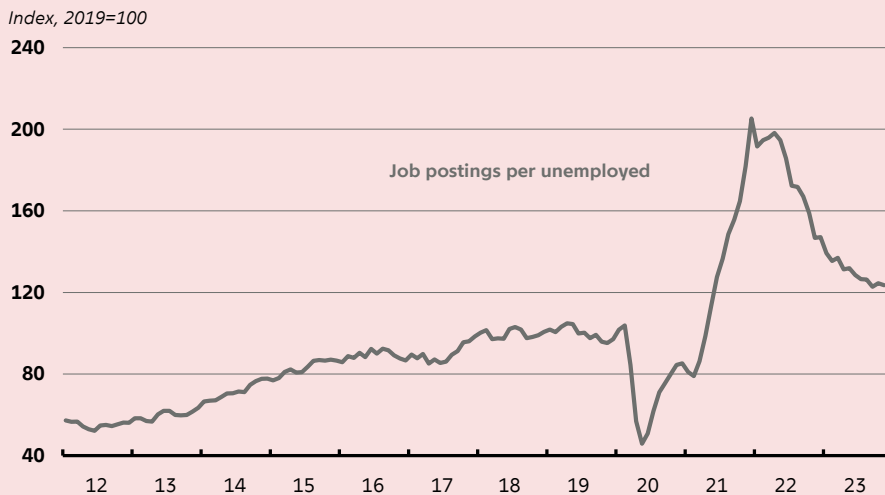
However, the work intensive recovery means that there is still some pressure on the labour market. Since 2019, employment has grown more than the structural employment and employment is currently estimated to be around 50,000 people higher than the estimated structural level, see Chart 17. This is on par with the period leading up to the financial crisis. The fact that the overall economy is estimated to be close to a neutral cyclical situation, while employment is deemed to be somewhat higher than the estimated structural level, is due to the fact that productivity is deemed to be lower than the estimated potential productivity level.

However, other indicators paint a picture that the pressure on the labour market has not increased quite as much compared to the years before the pandemic. The number of job postings per unemployed is only slightly higher than before the pandemic when correcting for companies' increased use of online advertising, see Chart 18. The same goes for hiring and job switching rates, the employment rate among 25-54 year olds, and companies' difficulties with recruitment and their reported labour shortages. Overall, these indicators paint a picture that the pressure on the labour market is only slightly higher than before the pandemic and that it has eased considerably since mid-2022.

CHART 18

**The number of job postings per unemployed has decreased over the past two years**

The development in the number of job postings per unemployed



Note: The chart shows a chain index for the number of job postings in relation to the development in the number of unemployed. The index for the number of job postings is chained at the company level, so that the growth in postings from month to month is based on the same group of companies in both months.

Source: Jobindex, Statistics Denmark and own calculations.

Going forward, pressure on the labour market is expected to ease as employment declines in the coming years. The fall in employment means that unemployment at the end of the projection is expected to be close to the estimated structural unemployment rate of 100,000 people.

**Prospects for slightly lower public finance surpluses as employment weakens**

There have been large surpluses in the public balance sheet due to the strong growth in the Danish labour market, but the surplus is expected to be slightly lower in the coming years. The surplus in 2023 is expected to be 4.6 per cent of GDP. This is an increase compared to 2022, reflecting an increase in pension yield tax revenues. Denmark has had the largest public finance surplus in the EU every year since 2020.

In the coming years, government surpluses are expected to gradually decline to around 2 per cent of GDP. This is due to the fact that lower employment weakens personal income tax revenues, pension yield tax revenues are assumed to be lower, while higher public wage increases and the indexation of transfer incomes increase public expenditure. Based on the planned fiscal policy, public consumption is also assumed to increase relatively strongly, partly as a result of large donations to Ukraine, see appendix. However, the surpluses are expected to be higher than the structural balance throughout the projection, reflecting a positive contribution from the economic situation.

The Ministry of Finance expects the structural budget surplus to gradually decline from 0.6 per cent in 2023 to 0.1 per cent in 2026, partly due to the large donations to Ukraine. The donations to Ukraine are expected to have a relatively small activity effect, and the Ministry of Finance estimates that the activity effect

of fiscal policy is approximately neutral for capacity pressures despite the weakening of the structural balance. Fiscal policy in Denmark does not contribute to further suppressing capacity pressures in contrast to the euro area, but this comes after a few years where fiscal policy in Denmark has contributed more to suppressing capacity pressures than fiscal policy in the euro area, see Chapter 6 and a further description in Box 2.

05

# Prospect for improvements in Danish households' economic situation

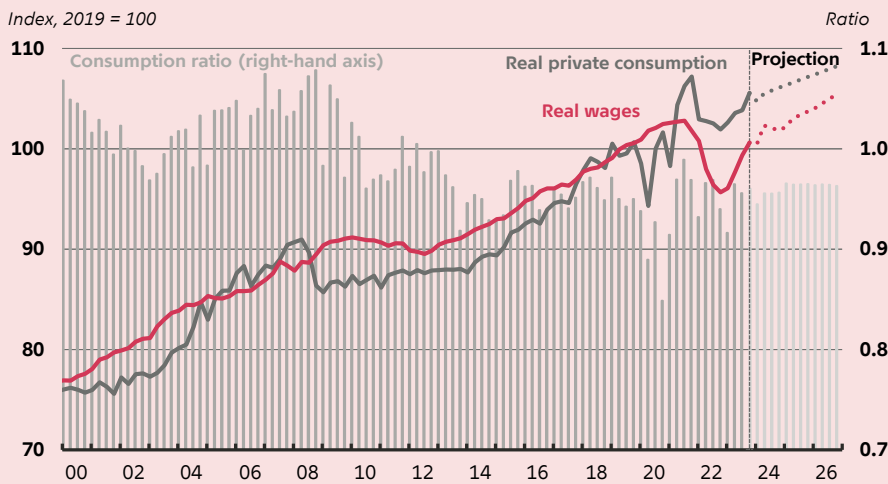
Danish households are once again experiencing growth after a few years of declining purchasing power. Rising real wages are fuelling continued growth in consumer spending and house prices. The recent years' interest rate increases continue to dampen growth, but market expectations suggest that nominal interest rates have peaked.

**Private consumption increasing as real wages rise**

Household consumption increased during 2023. Consumption has increased as real wage growth and increased employment have boosted household income. The consumption ratio, which shows the relationship between consumption and disposable income, has also increased from a low starting point in early 2023 and is now in line with the pre-pandemic years, see Chart 19.

CHART 19

**Private consumption is expected to increase along with real wages**



Note: Consumption ratio is calculated as private consumption as a percentage of disposable income. The latest observation for consumption and wages is Q4 2023 and Q3 2023 for the consumption ratio.  
 Source: Statistics Denmark and own calculations.

In an international context, Danish private consumption has increased at a slower pace than in the euro area and the US since the end of 2021. This is largely due to a drop in consumption through 2022 in Denmark, while the development during 2023 has been better than in the euro area and the US. In the US, private consumption has risen sharply in recent years as a result of significant increases in real wages and savings that Americans built up during the pandemic.

Rising interest rates pull consumption down through the *intertemporal substitution channel* and the *net interest payment channel*.<sup>22</sup> The *intertemporal substitution channel* works through higher interest rates incentivising savings, making it less attractive to consume today rather than later. The *net interest payment channel* works as the interest rate increases actually hit household budgets, causing their current interest expenses to rise. This happens, for example, when variable-rate mortgages are given a new interest rate. Calculations of interest payments across Denmark indicate that higher interest expenses through the net interest payment channel could have kept consumption down by Kr. 9 billion in 2023, corresponding to just under 1 per

<sup>22</sup> For an elaboration of interest rate pass-through and its channels, see Box 1 in Andersen, Jørgensen, Kuchler, Larsen, Læssøe, Otte, Spange and Weissert, Effects of increases in monetary policy rates, Danmarks Nationalbank Analysis, no. 5, March 2024.

cent of total private consumption.<sup>23</sup> The impact of higher interest costs compared to 2022 and 2023 is expected to continue to contribute to curtailing consumption growth during 2024.<sup>24</sup>

In the coming years, rising incomes are expected to lead to increases in private consumption. Income rises as a result of wage growth, while declining employment forces it down slightly. Income is also affected by the repayment of overpaid housing tax, which will force consumption up in 2024.<sup>25</sup> From 2025, the upcoming tax reform will also help to increase consumption. In addition to income growth, the housing market is expected to contribute positively to consumption. There will also still be extra savings from the period of lockdowns during the pandemic that can be converted into consumption, although the effect is estimated to be limited, see Box 1. Based on rising wealth, including from house prices, and generally well-off Danish households, private consumption is expected to increase in line with real disposable income despite a decline in employment. The consumption quota is therefore roughly unchanged in the projection period, see Chart 19.

#### BOX 1

##### Limited effect of additional savings on consumption in the coming years

Danish households saved more than usual during the pandemic due to low consumption, relatively high income growth and one-off payments during the pandemic such as frozen holiday funds (here measured in relation to the average savings ratio in the period from 2016 through 2019). These additional savings grew further at the end of 2022 and through 2023 in a period when households' purchasing power simultaneously fell and their cost of living rose, which would otherwise suggest lower savings. Accumulated additional savings from Q1 2020 to Q3 2023 amount to around 7 per cent of (annual) disposable income, see Chart A. Potentially, high additional savings support growth in household consumption in the coming years.

##### Also important to view savings from the asset side

However, in relation to household consumption options, it is also important to look at the type of assets in which additional savings are invested, as value adjustments can have a significant impact on household assets. In addition to ongoing savings, value adjustments have thus contributed to large asset movements in recent years, see Chart B. For example, share price increases in 2020 and 2021 meant that household assets grew. Subsequently, however, it has declined to some degree. The value increases during the pandemic mean that the additional savings in Danish households are still significantly higher if assessed from the asset side (e.g. by comparing the current asset ratio with its historical average) rather than from the accumulated current savings as in Chart A. Regardless of how exactly the additional assets are calculated, Danish households overall still have significantly higher liquid assets than before the pandemic, suggesting that they are well equipped to cope with a period of rising living costs without having to drastically reduce consumption. This is true even though some of the extra assets may be less liquid in the short term, e.g. some of the equity (and pension assets not included in the liquid assets considered here), and therefore not immediately realisable for consumption.

Continues ...

<sup>23</sup> See the section "Consumption effect from interest rate increases confirmed by an econometric model" in Andersen, Jørgensen, Kuchler, Larsen, Læssøe, Otte, Spange and Weissert, Effects of increases in monetary policy rates, *Danmarks Nationalbank Analysis*, no. 5, March 2024.

<sup>24</sup> See the section "Tight monetary policy has a dampening effect on growth in 2024" in Danmarks Nationalbank, Monetary policy is tight and dampens inflation, *Danmarks Nationalbank Analysis (Monetary and financial trends)*, no. 3, March 2024.

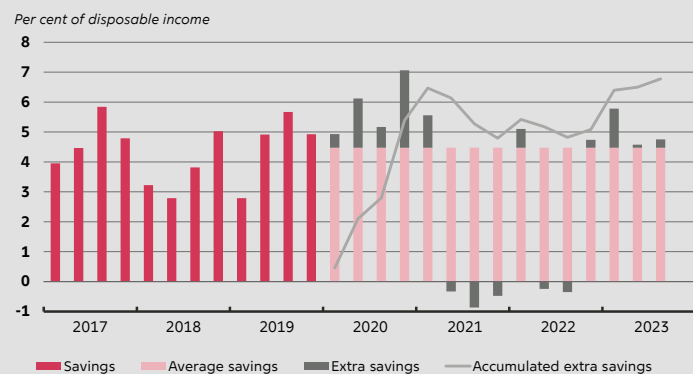
<sup>25</sup> By the end of 2023, approximately Kr. 3 billion in overpaid property taxes had been refunded. At the beginning of 2023, the Ministry of Taxation expected a total repayment of Kr. 13.5 billion. The repayment of approx. Kr. 4 billion has been postponed from 2023 to 2024, see Ministry of Economic Affairs, *Economic Survey*, December 2023.

... continued

CHART A

**Accumulated additional savings have increased through 2023**

Current and accumulated savings in Danish households



Note: Average savings is the mean value of the current savings in Q1. 2016 – Q4. 2019.  
 Source: Statistics Denmark and own calculations.

**High-income groups account for a large share of additional savings**

When estimating the development of total household consumption, the distribution of the increase in wealth is of great importance. The increase in wealth in 2020 and 2021 occurred especially among the groups with the highest income, see Chart C. The 30 per cent of the population with the highest income saw an increase in liquid assets of 21 per cent from the end of 2019 to the end of 2022, which is the latest period for which register data is available. The corresponding figure for the rest of the population was 8 per cent. The difference is due to the fact that higher income groups saved a larger proportion of their income during the pandemic than those with lower incomes, and that they are more likely to own shares that increased significantly in value during 2020 and 2021 in particular. However, the high-income groups also account for the majority of the decline in value in 2022. char

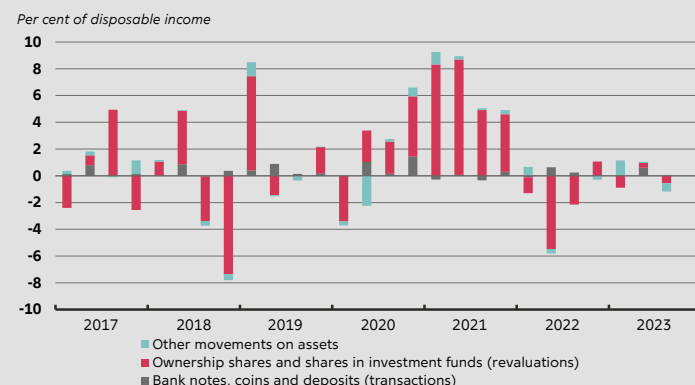
As high-income groups generally have a lower marginal propensity to consume than other income groups, the development has probably contributed to the limited consumption reaction so far.<sup>1</sup> The distribution of additional wealth and the fact that the value of shareholdings has fallen significantly since the peak in 2021 are expected to contribute to the effect of additional savings on consumption in the coming years also being limited.

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CHART B

**Changes in the value of ownership shares have caused large fluctuations in household liquid assets**

Movements in Danish households' holdings of liquid assets



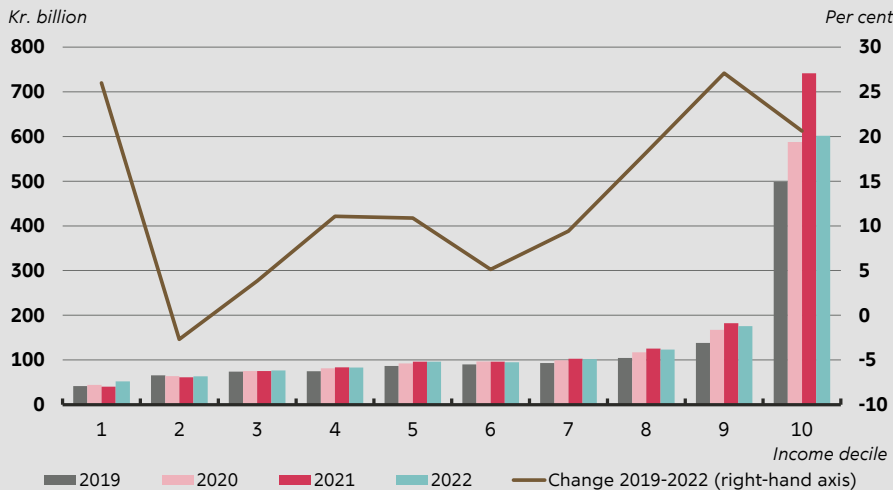
Note: Liquid assets consist of banknotes, coins and bank deposits, shares and units in investment funds and debt securities.  
 Source: Statistics Denmark and own calculations.



... continued

**CHART C**

**Excess wealth is particularly high among higher income groups**



Note: The Chart shows liquid assets (bank deposits, mortgages, bonds and shares and investment fund units in custody) by personal income deciles. The chart includes all people aged 18-80 who live in Denmark and have an income of at least Kr. 25,000 in the year in question.

Source: Own calculations based on register data from Statistics Denmark.

<sup>1</sup> This is supported by the fact that a similar picture to Chart C is seen when households are categorised according to how many liquid assets they have in relation to their income. The households with the highest liquidity account for the majority of the increase in liquid assets. Numerous microeconomic studies have shown that households with high liquidity have a lower marginal propensity to consume.

**Prospects for lower house price increases**

The housing market has rebounded strongly on the back of high inflation and interest rate increases. In Q3 2023, single-family house prices nationwide had increased 4.1 per cent compared to when prices bottomed out in Q4 2022. This leaves nominal prices just 2.2 per cent lower than before they started falling at the beginning of 2022, see Chart 20. House price figures from the Danish property website Boligsiden point to a further increase in Q4 2023 and flattening out in early 2024. The price development has occurred as sales of single-family homes have increased by around 40 per cent since they bottomed out in the autumn of 2022. The supply of houses for sale and selling time has increased modestly during 2023 and is now also close to pre-pandemic levels.

The price increases have occurred despite the fact that interest rates are still significantly higher than they have been in recent years, although the trend in recent months has seen a drop in long-term mortgage rates.<sup>26</sup> The significant Danish house price increases in recent quarters, coupled with higher interest rates, have led to an increase in the so-called housing burden, i.e. Danish home buyers generally spend a larger proportion of their income on buying a home compared to recent years, see Chart 20.

<sup>26</sup> See the section "Lower market rates on corporate and mortgage bonds" in Danmarks Nationalbank, Monetary policy is tight and dampens inflation, *Danmarks Nationalbank Analysis (Monetary and financial trends)*, no. 3, March 2024.

It is not a Danish phenomenon that house prices are rising despite higher interest rates, although house prices in Denmark are rising faster than those in our close neighbours, see Chart 21. In most countries, the price drops since mid-2022 have been replaced by stable prices or small increases. Over the same period, housing investment has fallen in virtually all advanced economies.

In Denmark, the market for owner-occupied flats has also seen growth. By Q3 2023, prices had risen 4.2 per cent since the low in the beginning of the year, and were just 2.1 per cent below their peak in 2022. As with the development of single-family houses, the price development has been in line with increased market activity, while the supply of owner-occupied flats has remained largely unchanged over the past year. Prices for owner-occupied flats in Copenhagen have risen the most, with price figures from Boligsiden pointing to an increase of almost 10 per cent through 2023.

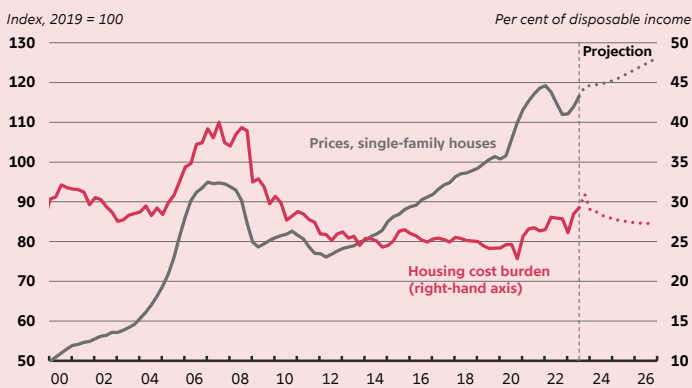
These significant price increases may be a consequence of homebuyers wanting to buy before the new property tax system came into effect on 1 January 2024 to get a permanent nominal tax rebate. Especially the price increases during 2023 for owner-occupied flats are noteworthy, considering that the change in the housing tax should generally result in a fall in the price of owner-occupied flats as a result of higher tax payments. Conversely, the new tax system gives a boost to single-family home prices. Price figures from January point to significant price drops for owner-occupied flats, especially in Copenhagen City. The new tax system is not fully in place, as there are still assessments for a number of homes are still lacking, but it is positive and important that there is once again a correlation between house prices and taxes. This helps to eliminate future house price fluctuations to the benefit of the Danish economy.



**For 2024 as a whole, single-family house prices are expected to increase by 3.7 per cent, while in 2025 and 2026 they will increase by 1.6 per cent and 2.4 per cent respectively.**

CHART 20

**House prices are expected to rise slower than income**

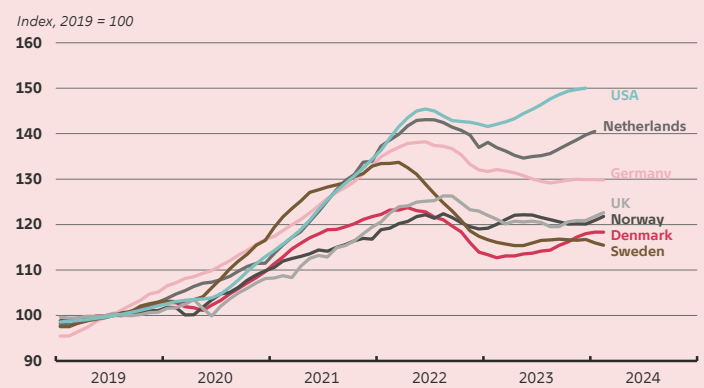


Note: Nominal house prices of single-family houses nationwide. The housing burden for Denmark is a stylised calculation of the financing costs, including property taxes, of buying a single-family house as a share of average disposable income. The financing costs are calculated on a 30-year fixed rate loan with amortisation, including administration margins and brokerage fees, plus a bank loan for the share that cannot be financed by a mortgage loan. From 2024, housing taxes in the housing burden are expected to follow the development of house prices. The projection is Danmarks Nationalbank's projection from March 2024 and covers expectations for house prices, income and interest rates. The projection is based on Statistics Denmark's price statistics, with the latest observation being Q3 2023.

Source: Statistics Denmark and own calculations.

CHART 21

**House price decline has stopped in several countries**



Note: Danish single-family house prices from Boligsiden. House prices of both owner-occupied flats and single-family houses for Germany, the Netherlands, Norway, the UK and the USA. Swedish house prices.

Source: Macrobond and Boligsiden.

Going forward, rising household incomes are expected to push house prices even higher. Despite the recent drop in interest rates, interest rates are still higher than they have been in recent years. Real interest rates for the euro area suggest that interest rates will continue to curtail activity even with the rate cuts that the market expects during 2024.<sup>27</sup> This helps to put a damper on house price development. Single-family house prices are therefore expected to rise at a slower pace than incomes, which is particularly reflected in a flat trend through 2024, see Chart 20. Curbing house price increases will lead to a decreasing housing burden, although it will remain at a slightly higher level than during the 2010s, when falling interest rates helped keep it at a low level. For 2024 as a whole, single-family house prices are expected to increase by 3.7 per cent, while in 2025 and 2026 they will increase by 1.6 per cent and 2.4 per cent, respectively.

<sup>27</sup> See the section "Monetary policy remains restrictive" in Danmarks Nationalbank, Monetary policy is tight and dampens inflation, *Danmarks Nationalbank Analysis (Monetary and financial trends)*, no. 3, March 2024.

## 06

# Improved outlook abroad leads to growth for Danish export companies

Growth in Denmark's export markets has been curtailed over the past two years as large increases in energy prices eroded household purchasing power and central banks raised interest rates sharply to bring inflation down. The slowdown in growth in Denmark's export markets has led to a significant economic downturn in many Danish export industries, but strong growth in the Danish pharmaceutical industry means that Danish production and exports overall continue to rise.

Inflation in the global economy is expected to be brought down without the global economy going through a recession in the coming years, and growth is expected to be roughly unchanged compared to recent years. However, this development masks partly the fact that growth is picking up in a number of Denmark's largest export markets, including the euro area and other neighbouring markets, as a result of renewed real wage growth, and partly that the contractive effects of the interest rate hikes of recent years are fading. Renewed growth on Denmark's export markets is expected to support Danish exports, which will also be boosted by continued strong growth in the pharmaceutical industry.

### Growth in Danish export markets is expected to pick up slightly

Throughout 2023, growth in the euro area and Denmark's other neighbouring markets was close to zero, while it was high in the US. By 2025, growth in these countries is expected to gradually return to pre-pandemic levels. Overall, international projections point to increasing growth for the Danish export market in the coming years.

The low growth in the euro area and in Denmark's neighbouring markets is partly due to weakened household purchasing power as a result of energy price increases, and a slowdown in interest-sensitive parts of the economy such as business investments and parts of the manufacturing industry. Over the coming year, the same drivers are expected to reverse: Rising real wages and the prospect of falling real interest rates are expected to drive a recovery in growth despite tighter fiscal policy in most countries.

Growth in the euro area economy stalled in 2023, but is expected to start picking up from mid-2024. The expectation of low growth in early 2024 is supported by the latest data from the Purchasing Managers' Index, PMI. According to the OECD's February report, growth in the euro area will be 0.6 per cent in 2024 and 1.3 per cent in 2025, see Chart 22. However, these figures mask a recovery in growth as early as 2024. Germany lags behind significantly in the first part of the projection, but catches up with the rest of the euro area over the projection horizon.

Growth was also relatively weak in Denmark's neighbouring markets outside the euro area in 2023, and recovery over the coming years is expected to be slower than in the euro area. Sweden's economic growth in 2023 was negative and is not expected to really pick up again until 2025, according to the latest projections from the Swedish National Institute of Economic Research. In its latest analysis, Norges Bank expects Norwegian mainland growth to remain low in 2024 and most of 2025, following 2023 with close to zero growth. In the UK, the economy grew weakly during 2023 and the OECD projection points to a slow recovery over the next two years.

The US has seen solid growth in 2023, largely due to rising private consumption as a result of broad-based real wage increases and high employment. According to the OECD's February projection, US growth will slow to 1.7 per cent by 2025, see Chart 22. These annual growth rates cover a decline from exceptionally strong growth through 2023 of just under 3 per cent to a level in line with pre-pandemic growth.

In China, overall growth was high in 2023, but slowed somewhat in Q4. This was partly due to a continued decline in the property sector, which led to a drop in construction activity and overall investment. The downturn in the property market has also had a negative impact on consumer confidence and private consumption, with housing-related purchases of goods and services in particular falling. For these and other reasons, growth is expected to slow down over the next few years.

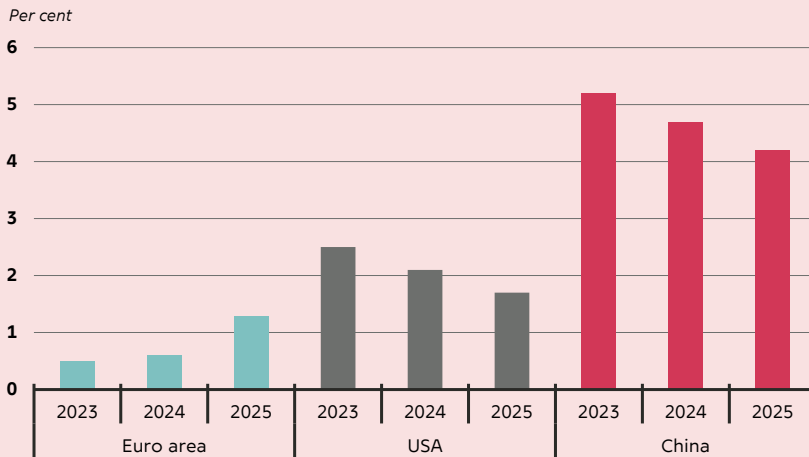


**Danish industrial exports are estimated to increase 4.4 per cent in 2024**

—

CHART 22

**Prospects for higher growth in the euro area and lower growth in the US and China**



Note: The Chart shows annual GDP growth rates in real terms.  
Source: OECD

Both the US and euro area countries are planning to tighten fiscal policy over the next few years. The European Commission expects the euro area countries’ fiscal policy to be moderately tightened in 2024, as it was in 2023. However, tightening should be seen in the light of a relatively relaxed starting point in 2022, when many countries incurred expenses related to energy relief packages, see Box 2. According to the Congressional Budget Office, CBO, the immediate plan in the US is to tighten fiscal policy by 1 per cent of GDP in 2024. However, it can be expected that the tightening will be somewhat diluted during the year.<sup>28</sup>

**BOX 2**

**Euro area fiscal policy is expected to tighten in 2024**

Euro area fiscal policy in recent years has been characterised by high public spending in the wake of the energy price increases in 2022 and the pandemic in the years before. Such measures resulted in an expansionary fiscal policy, and their phasing out now tightens the overall fiscal policy significantly. The phasing out of tax cuts, energy subsidies and public transfers from 2022 tightens the euro area’s fiscal policy from mildly expansionary in 2024 to a tightening of 0.5 percentage points.

Fiscal tightening is largely driven by the euro area’s largest economies. Germany, France and Italy all tightened in 2023 and are expected to tighten again in 2024, see Chart A. The biggest tightening will come in the countries that eased the most during the pandemic and later the energy crisis.

Germany’s public budgets for 2024 were ruled illegal by a Supreme Court judgement on the country’s so-called “debt brake”. According to the judgement, funds borrowed for the energy crisis could not be spent on the regular budgets in 2024, and the government had to find other funding. This resulted in higher taxes among other things. The new budgets are likely to be around EUR 16 billion tighter than previously assumed, equivalent to 0.4 per cent of Germany’s GDP, which is not included in Chart A.

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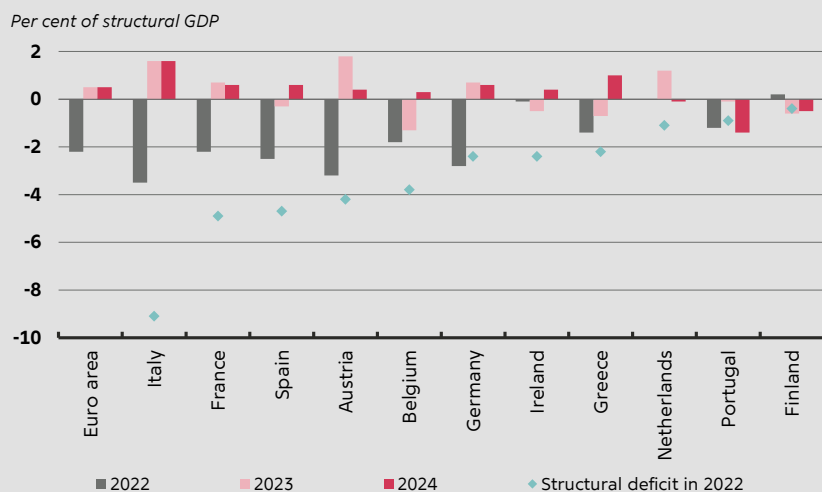
<sup>28</sup> As with all budget calculations, only enacted changes are included, which distorts the picture as fiscal policy in the US is relatively discretionary. Most tax cuts and government spending are introduced as temporary measures, which are then often extended before they expire. Therefore, there tends to be an increase in net spending compared to the budgets published by the CBO. The tense political situation with a divided Congress in an election year may mean that new, large-scale net spending cannot be realised.

... continued

Italy's structural deficit increased to almost 10 per cent of GDP in 2022, which caused concern among euro area countries and contributed to the Italian debt being downgraded by Moody's rating agency at the end of 2023. This immediately raised the interest rate on the debt, which in the long run worsens the deficit. In this way, the higher interest rate environment and increased debt following the Covid pandemic and energy crisis means that more countries can no longer postpone reducing their current account deficits without the risk of debt increases becoming self-reinforcing.

**CHART A**

Changes in fiscal policy in 2022-2024 and the structural deficit in 2022



Note: The bars show the change in the primary deficit from last year. The blue diamonds show the states' structural deficits in 2022.

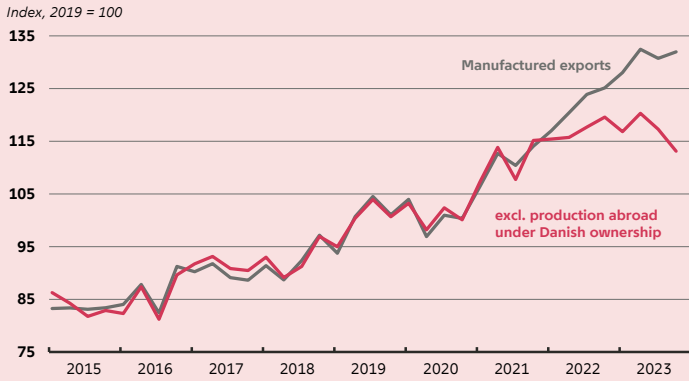
Source: European Commission.

**Significant economic downturn in large parts of Danish industry looks set to reverse in 2024**

Danish manufacturing companies have suffered a significant economic downturn over the past year and a half as a result of the slowdown in growth in Denmark's export markets. Industrial production has increased slightly since September, but is still 10 per cent below the level in June 2022, when excluding the pharmaceutical industry, and industrial exports have been roughly unchanged since the beginning of 2022 when excluding production abroad under Danish ownership, see Chart 23. The weak development is due to the fact that the slowdown in growth in the international economy has been particularly evident in some of Denmark's important neighbouring markets, such as Germany, Sweden and the UK. Since 2019, industrial production excluding pharmaceuticals in Denmark has largely developed in line with the US, the euro area and most neighbouring markets, but the economic downturn over the last 18 months is more pronounced in Denmark.

CHART 23

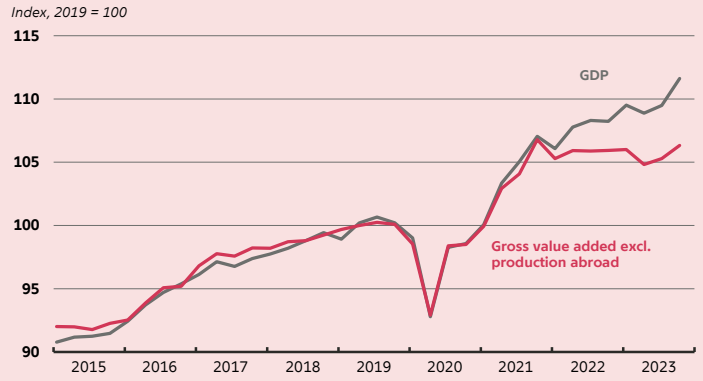
Stagnation in Danish exports ...



Note: The latest observation is from Q4 2023.  
Source: Statistics Denmark and own calculations.

CHART 24

... and decline in value added excl. production abroad under Danish ownership



Note: The latest observation is from Q4 2023.  
Source: Statistics Denmark and own calculations.

Going forward, Danish export industries will be supported by renewed growth in export markets. Growth abroad is improving, especially in some of the neighbouring markets that are most important outside the pharmaceutical industry. The wage competitiveness of Danish companies is generally good, and Danish export companies are therefore in a good position to capitalise on the renewed recovery, see Box 3. However, weak export order backlogs in large parts of the manufacturing sector suggest that it may take some time for the recovery in exports to materialise, see Chart 25.

CHART 25

Export order backlog is weak in most parts of Danish industry



Note: The latest observation is from Q1 2024.  
Source: Statistics Denmark and own calculations.



BOX 3

### Denmark's wage competitiveness remains strong

Denmark is a small, open economy that benefits from trade with the outside world. The ability of Danish companies to compete in international markets is therefore crucial to ensure growth and prosperity in the economy.

As a small, open economy, Denmark's wage competitiveness is a key adjustment mechanism for labour market pressures. When wage competitiveness deteriorates, demand for goods produced in Denmark weakens and pressure on the labour market is suppressed. Measurements of wage competitiveness are therefore important indicators of whether imbalances are building up in the Danish economy.

There are many ways to measure wage competitiveness. This Box uses three metrics: the relative wage ratio, the relative unit labour costs and the relative wage development.<sup>1</sup> The relative wage ratio, which describes the relationship between labour costs and value added at current prices in Denmark relative to other countries, reflects relative changes in productivity, wages and terms of trade and is the most nuanced of the three measures. Relative unit labour costs compare labour costs to value added in real terms and therefore do not reflect changes in the terms of trade. Finally, relative wage development only measures the difference in the development of hourly wages, but does not take into account developments in productivity and terms of trade.

During the Covid pandemic, the interpretation of wage competitiveness became blurred due to varying wage compensation schemes across countries. The phasing out of the schemes has once again enabled a true and fair assessment.

#### A deterioration in the terms of trade has weakened the relative wage ratio

Over the past few years, productivity growth in manufacturing has been particularly strong. This is linked to increased production abroad under Danish ownership, referred to as 'merchandising and processing', especially in the pharmaceutical industry. On the other hand, the price increases on Danish exports have been significantly lower than abroad, i.e. the terms of trade have weakened. The weakening of the terms of trade can largely be attributed to significant falls in the prices of Danish pharmaceutical exports. Overall, the relative wage ratio has weakened in recent years, but overall, Denmark still has strong wage competitiveness, see Chart.

Wage competitiveness has improved significantly since the financial crisis, both in terms of relative unit labour costs and the relative wage ratio. Some of that improvement can be attributed to increased production abroad under Danish ownership.<sup>1</sup>

... continues

... continued

Chart

A deterioration in the terms of trade has weakened the relative wage ratio



Note: The three metrics show development abroad in relation to Denmark. If relative wage development, unit labour costs or the wage ratio increases, it is a sign of improved competitiveness. All three metrics are for the industry alone. Unit labour costs and the wage ratio are adjusted for sole traders. The dotted lines indicate periods with wage compensation programmes in connection with the Covid pandemic. Differences in wage compensation schemes across different countries can make the three metrics of wage competitiveness less accurate in the period in question.

Source: Bureau of Economic Analysis, Bureau of Labor Statistics, Statistics Denmark and own calculations.

<sup>1</sup> For an elaboration of the individual measures of wage competitiveness, see Pedersen, Schmith and Sørensen, Globalisation affects measures of wage competitiveness, *Danmarks Nationalbank Analysis*, no. 27, December 2019.

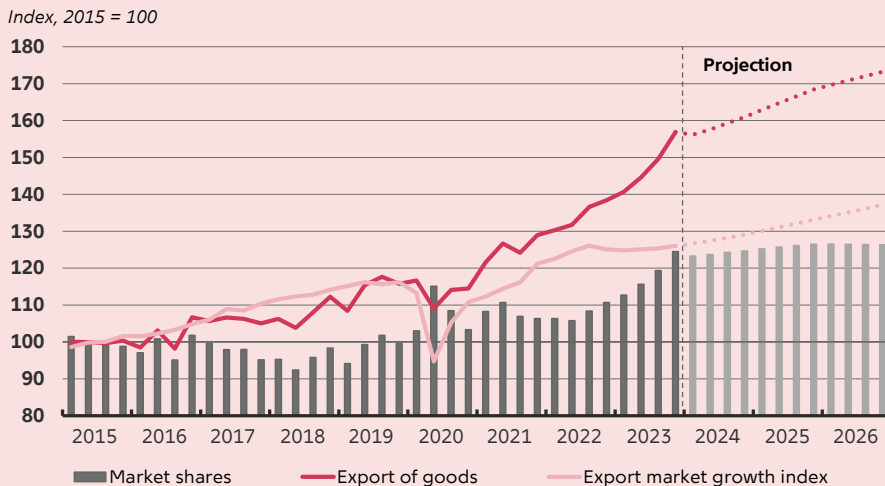
### The pharmaceutical industry and the reopening of the Tyra field boost Danish exports and value added

While large parts of the Danish economy have suffered a slowdown in growth, the production and export of pharmaceuticals continues to grow strongly. A large part of the pharmaceutical industry’s production is carried out by subcontractors abroad, which is recognised in Danish exports and value added, as production takes place under Danish ownership. Growth in Denmark has been stronger than what the financial statements of the largest Danish pharmaceutical companies show, suggesting that it has been particularly strong among subcontractors. However, excluding production abroad under Danish ownership, there has been a significant slowdown in growth in the Danish economy since the end of 2021, see Chart 24.

The growth in the pharmaceutical industry is expected to continue in the coming years based on equity analysts’ expectations for revenue in the largest Danish pharmaceutical companies. Overall, Danish industrial exports are estimated to increase 4.4 per cent in 2024, which is somewhat stronger than the weighted imports in Denmark’s export markets, due to continued strong growth in the pharmaceutical industry, see Chart 26.

CHART 26

**Danish industrial exports outpace growth in export markets due to continued strong growth in pharmaceutical exports**



Note: The export market growth index is a weighted estimate of Danish trading partners' imports. The latest observation is from Q4 2023.  
Source: Statistics Denmark and own calculations.

Danish exports and value added are also expected to get a boost from the reopening of the Tyra natural gas field. Energy exports are expected to increase by more than 40 per cent in 2024 and will also be boosted by increased transit trade in gas following the opening of the Baltic Pipe gas pipeline in 2023 from Norway through Denmark to Poland. The reopening of the Tyra field will increase GDP growth by 0.5 percentage points in 2024, whereas transit trade in gas will increase imports correspondingly, thereby not affecting GDP.

Overall, exports are estimated to increase relatively strongly by 7.2 per cent in 2024. In addition to the strong growth in exports of goods, this reflects subdued growth in export of services in line with growth in Denmark's export markets.

**Business investments will be curtailed by interest rate increases in the coming year**

The slowdown in growth in large parts of the Danish economy and central bank interest rate increases are expected to curtail business investment in Denmark in 2024. These conditions are expected to gradually ease in the following years with renewed growth in business investment.

Business investment typically responds with a lag to interest rate increases, so the rate increases implemented by central banks since 2022 are expected to dampening investment in 2024 as well. This lag reflects the fact that companies often have a longer planning horizon for their investments and that it can take time from decision to implementation of the investment.

The slowdown in growth in large parts of the economy is also offset to some extent by large investments in the pharmaceutical industry. For example, Novo Nordisk has announced investment plans totalling Kr. 42 billion over the next 5

years in Denmark and will likely increase commercial construction first.<sup>29</sup> Such one-off business investments can help to keep a lid on investment in years when non-residential construction is underperforming, but are more likely to crowd out other investment projects and lead to large price increases in years when construction capacity is under pressure, as has been the case in recent years.

Business investments are estimated to fall 3.4 per cent in 2024, but are expected to rise again in 2025 and 2026 as the contractionary effects of recent years' interest rate increases are fully realised and growth in Danish export industries picks up again.

### **Production abroad under Danish ownership contributes to large balance of payment surpluses**

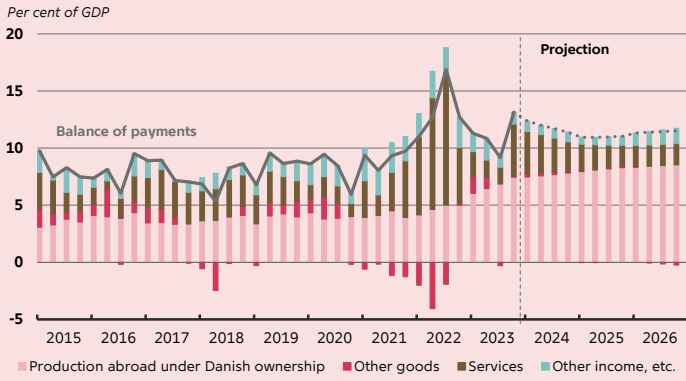
The balance of payment surplus was once again high in 2023, and large surpluses are also expected in the coming years. The surplus in 2023 was 11.1 per cent of GDP, which is lower than in 2022. This reflects lower profits on trade in services due to a large drop in freight rates, while profits on trade in goods increased significantly due to the surge in production abroad under Danish ownership, see Chart 27.

The surplus on trade in goods is expected to increase further over the next few years due to continued growth in production abroad under Danish ownership and increased energy exports from the reopening of the Tyra field. The surplus on trade in services is also expected to remain roughly unchanged compared to the end of 2023. The balance of payment surplus is expected to remain above 11 per cent of GDP. This is significantly higher than the years before the pandemic and reflects higher revenues from production abroad under Danish ownership. Higher balance of payment surpluses from increased production abroad under Danish ownership are also reflected through higher savings surpluses made by companies, see Chart 28. However, households and the public sector are also expected to have savings surpluses, which contribute to the balance of payments surplus.

<sup>29</sup> Only new investments are included under investments in the national accounts, whereas the purchase of existing capital stock such as land is not included.

CHART 27

**Production abroad under Danish ownership contributes significantly to increasing the balance of payments surplus ...**

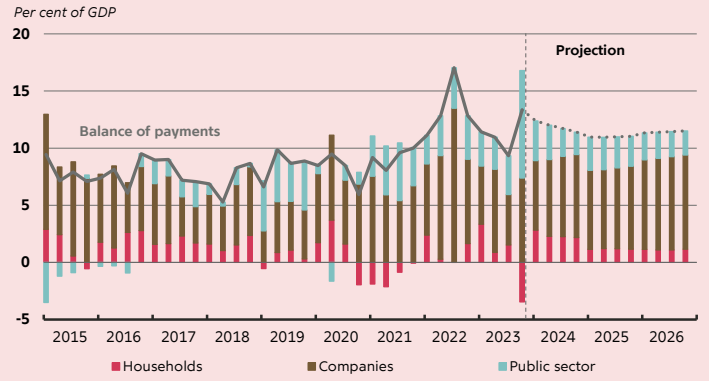


Note: *Other goods* covers exports of goods excluding purchases and sales of goods related to production abroad under Danish ownership. *Services* are calculated excluding processing services included in production abroad under Danish ownership.

Source: Statistics Denmark and own calculations.

CHART 28

**... and the savings surplus in companies**



Source: Statistics Denmark and own calculations.

## 07

# The balance of risk is particularly linked to geopolitics and the impact of higher interest rates

The risk picture for the Danish and international economy shows uncertainty about the impact of monetary policy and geopolitical tensions. Uncertainty about the impact of recent interest rate increases and shifts in expectations of future interest rate levels may change the assumptions for international projections. An escalation of the conflict in the Middle East or further trade restrictions between China, the US and the EU could slow growth and raise inflation, and Russia's invasion of Ukraine could develop unpredictably, affecting energy prices and overall consumer and business confidence.

As a rule, such factors do not affect the economic situation in Denmark differently compared to the euro area, and therefore do not give reason to adjust fiscal policy in Denmark as long as fiscal policy is not adjusted in the euro area.<sup>30</sup> The risk of the economic situation developing differently is related to the fact that employment in Denmark, contrary to expectations, is not adapting to the slowdown in growth that has taken place.

<sup>30</sup> See Morten Spange, Monetary and Fiscal Policy in Denmark, Danmarks Nationalbank Analysis, no. 12, October 2022.

### **Risks to the global economy largely stem from interest rate pass-throughs and the development of inflation**

International organisations estimate that the global economy is well on its way to a soft landing, with inflation brought down without the world economy having to go through a recession and where the risk of a major downturn has diminished. Nevertheless, uncertainty about the aftermath of recent years' interest rate increases still poses a significant risk to the outlook for the Danish and international economy.

On one hand, the interest rate pass-through to the real economy could be greater than expected and slow growth significantly. This will bring the world economy closer to a 'hard landing', where a recession follows the fall in inflation. On the other hand, inflation can fall faster than current projections suggest without further slowing growth. This could lead to larger or earlier interest rate cuts than expected, stimulating the economy and boosting growth.

The tense geopolitical situation also creates uncertainty in international projections. The conflict in the Middle East already means that shipping via the important shipping route through the Red Sea is close to impossible, and if the conflict in Gaza spreads regionally, it could affect over 30 per cent of the world's oil supply and 14 per cent of gas supply, see Box 4. Trade barriers between China and the US could escalate into a trade war, with barriers between the EU and the US in particular having major consequences for growth and inflation in the euro area and Denmark. Russia's invasion of Ukraine could develop suddenly and unpredictably. This could raise energy prices in Europe, as Russia still accounts for just under 10 per cent of EU natural gas imports, and lead to a drop in consumer and business confidence, which could lead to a decline in private consumption, investment and trade.

#### **BOX 4**

### **An escalation of the conflict in the Middle East could increase inflation**

The conflict in the Middle East has the potential to negatively impact the economies of Denmark and the euro area. The Middle East accounts for only a small share of Denmark's and the euro area's direct trade, but increased energy prices and freight rates can have a relatively large impact on economic development. As it stands, the price of containerised shipping has already increased significantly, while energy markets are relatively stable.

15 per cent of the world's shipping cargo normally sails through the Red Sea and is thus directly affected by the new hazards on the route. There are also signs that freight rates on routes elsewhere in the world are starting to increase. The danger in the Red Sea means that most ships now sail south of Africa instead, which, for example, extends the sailing route between Europe and China by approx. 30-50 per cent. This results in higher costs per trip, among other things due to higher time and fuel consumption per trip, which can be seen in the freight rates. For example, the price of shipping a container from Rotterdam to Shanghai has increased by more than 200 per cent compared to the autumn, see Chart A. However, the trip from Shanghai to Los Angeles, on the other side of the world, has also increased by more than 100 per cent compared to the autumn. This may be due to stronger competition for cargo ships, as more ships are now needed to maintain the same flow of goods between China and Europe than in the autumn. Other routes are less affected, which may be due to local demand and shipping capacity. Overall, global freight rates as measured by the World Container Index have increased by more than 150 per cent since the autumn, but has since fallen slightly.

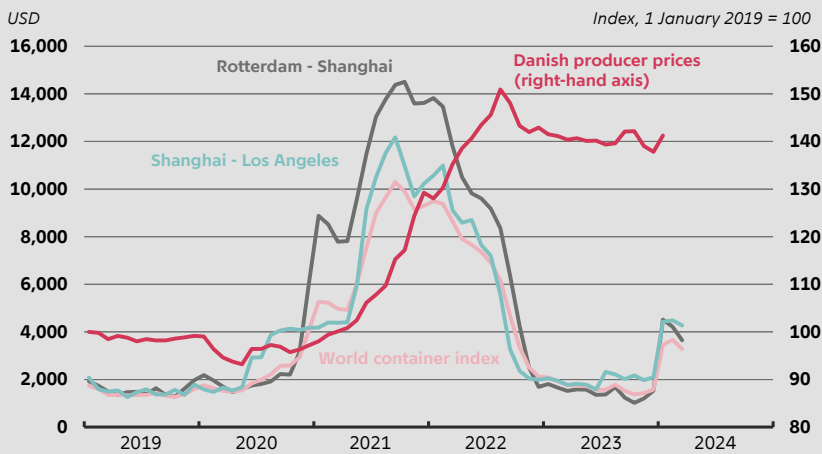
The impact of freight rates on the Danish and European economy is partly direct through higher consumer prices for imported goods and partly through higher input prices in the manufacturing industry, which can lower profits and raise output prices. Looking at Danish producer prices, i.e. the price at which Danish companies sell, there are no major increases to be seen yet, see Chart A. However, it may take time before input prices in production are reflected in higher selling prices in companies and later in consumer prices. The risk of freight rates increasing further due to the danger in the Red Sea is limited by the fact that most ships are already travelling the long route south of Africa.

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**CHART A**

Global freight rates have increased as a result of the Red Sea unrest

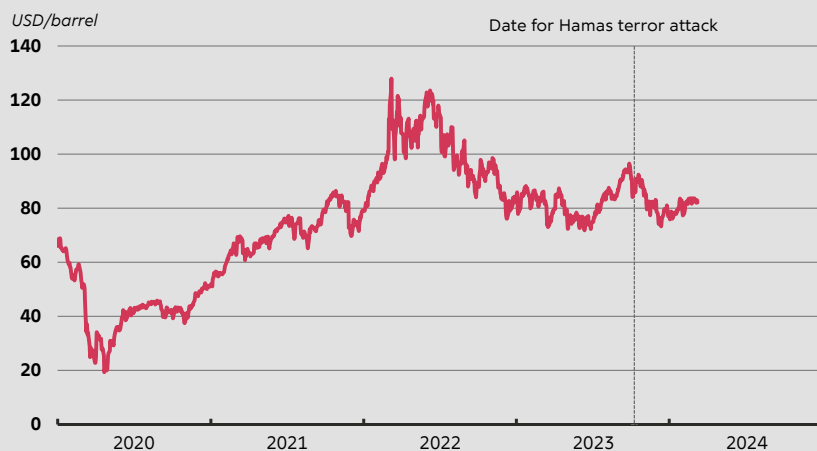


Note: The *World Container Index* is a weighted average of the cost of shipping a standard container on eight of the world's major shipping routes calculated by Drewry  
 Source: Drewry and Statistics Denmark.

The conflict in the Middle East does not seem to have had a lasting effect on energy markets. However, the region accounts for over 30 per cent of the world's oil production, so a spreading conflict could easily affect global energy prices. The price of crude oil is currently similar to the level in autumn 2023 when the conflict began. The ECB has estimated the effects of sudden large energy price increases: In its December projection, the ECB described a risk scenario in which a 64 per cent increase in weighted energy prices (natural gas and oil) would lower euro area growth by 0.7 percentage points in 2024 and increase average inflation in the same year by almost one percentage point. The risk scenario assumes that the shipment of oil and natural gas through the Strait of Hormuz drops by a third. This would result in an increase in oil and natural gas prices of 57 per cent and 74 per cent respectively.

**CHART B**

Oil prices have fallen marginally since the unrest in the Middle East began



Note: Oil prices are shown here as Brent Crude Oil.  
 Source: Intercontinental Exchange, ICE.



High debt in a number of euro area countries could make it harder for states to mitigate the effects of future negative shocks, increasing the risk of a major economic downturn. This is because some euro area countries are building up so much debt that their fiscal room for manoeuvre may not be enough to support their economies if necessary. As described in Box 2, the costs associated with the pandemic and the energy crisis in the euro area have greatly increased the debt of many countries, while high interest rates make debt servicing more expensive. Countries that had already built up high levels of debt before the pandemic may find it more difficult to mitigate the effects of negative shocks than countries that had lower levels of debt. A given negative shock to the euro area economy could therefore end up causing a greater downturn now than it would in a situation with lower debt to begin with.

An economic recovery in China is a prerequisite in global growth projections. If Chinese growth is weaker than expected, it could therefore have major consequences for global and Danish growth.<sup>31</sup> Chinese key figures and business confidence point to a difficult and uncertain recovery. The property sector showed weakness again earlier this year when a Hong Kong court ordered Evergrande, one of the largest companies in the industry, to be liquidated. Although the judgement can still be overturned on the mainland, it's just one in a long line of signs of weakness from the sector.

The commercial property sector in several countries is under pressure from higher interest rates, which lowers commercial real estate prices. In the US, commercial property prices have fallen by 11 per cent since 2022, which, in addition to higher interest rates, is also due to lower demand for, e.g. office properties as a result of working from home.<sup>32</sup> The potential risk of a struggling commercial property market materialises through losses in banks and mortgage lenders, which can cause stress in the financial markets and spread to the rest of the economy.

### **The risk of greater capacity pressure in Denmark than in the euro area is related to employment not adjusting to the slowdown in growth that has taken place**

The risk factors mentioned above do not generally affect the economic situation in Denmark differently than the economic situation in the euro area. Danmarks Nationalbank also believes that there is no increased risk that the economic situation in Denmark will develop significantly differently from the euro area.

The risk of greater capacity pressure and higher wage and price increases is mainly related to employment not picking up, contrary to expectations. Such a risk scenario is primarily linked to the fact that the factors that have created the work intensive recovery are of a more permanent nature, but could also arise from demand in the Danish economy becoming stronger compared to the euro area. For example, an improvement in consumer confidence combined with high savings and high home equity can lead to a sharp increase in private consumption in Denmark.

Higher capacity pressure in Denmark than in the euro area implies a risk that wage increases will be higher in Denmark than in the euro area during the next collective bargaining period, which will further prolong the period of high inflation. However, Danmarks Nationalbank believes that currently there is limited risk of a scenario in which higher wage and price increases give rise to a sudden, large loss of wage competitiveness.

<sup>31</sup> See Amy Y. Zhuang, Casper W.N. Jørgensen and Mikkel Bess, A downturn in China will reduce growth in Denmark significantly, *Danmarks Nationalbank Analysis*, no. 8, June 2023.

<sup>32</sup> See, for example, IMF, Commercial Real Estate Sector Faces Risks as Financial Conditions Tighten, *IMF Blog, Chart of the Week*, September 2022.

Finally, there are also a number of factors that can affect the course of GDP and employment, but which only to a limited extent affect capacity pressure and wage and price developments. These factors include the assumptions made about production abroad under Danish ownership and the reopening of the Tyra field, which mainly affect GDP, and the influx of foreign labour, which can affect GDP and employment.

## Key economic variables

TABLE 4

Real growth relative to the previous period, per cent	2023						
	2023	2024*	2025*	2026*	Q2	Q3	Q4
GDP	1.8	2.4	1.4	1.3	-0.6	0.4	2.0
Private consumption <sup>1</sup>	1.3	1.6	1.1	1.0	0.9	0.2	1.7
Public consumption	0.0	3.0	1.9	1.5	0.2	-0.4	0.3
Residential investments	-10.2	-0.2	2.1	2.0	-3.1	-0.5	0.6
Public investments	0.9	2.9	1.7	1.2	-2.3	2.4	-2.7
Corporate investments	-4.3	-3.4	0.2	1.2	3.6	4.9	-9.5
Inventory investments etc. <sup>2</sup>	-1.9	0.1	0.0	0.0	-1.0	0.2	-1.3
Exports	12.5	7.2	3.5	3.2	3.6	4.9	5.7
Manufactured exports	7.6	4.4	5.7	4.4	3.4	-1.3	1.0
Imports	7.7	6.3	3.7	3.4	4.9	6.8	1.1
Employment, 1,000 persons	3,214	3,226	3,213	3,208	3,214	3,217	3,218
Gross unemployment, 1,000 persons	84	90	95	95	83	84	86
Balance of payments on current account, per cent of GDP	11.1	11.9	11.0	11.4	10.8	9.2	13.1
Government budget balance, per cent of GDP	4.6	2.7	2.8	2.2	2.8	3.4	-
House prices <sup>3</sup> , per cent year-on-year	-0.4	3.7	1.6	2.4	1.6	2.3	-
Consumer prices (HICP), per cent year-on-year	3.4	2.2	2.6	1.7	3.6	2.0	0.1
Core inflation, per cent year-year	5.2	2.3	2.8	2.0	5.8	4.7	3.0
Hourly wages <sup>4</sup> (manufacturing), per cent year-on-year	4.2	5.6	4.0	3.4	3.3	5.2	5.3

1. Includes both households and non-profit institutions serving households (NPISH).

2. Contribution to GDP growth (this item comprises inventory investments, valuables and statistical discrepancy).

3. Nominal prices of single-family houses.

4. Confederation of Danish Employers' (DA) pay statistics for profits including inconvenience supplements for manufacturing.

Note: \* indicates projection.

Source: Statistics Denmark and own calculations.

# 08

## Appendix: Assumptions in and changes of projection for the Danish economy

The projection is prepared using Danmarks Nationalbank's macroeconomic model, MONA, and is based on available economic statistics, including Statistics Denmark's quarterly national accounts for Q4 2023. The projection is based on published statistics up to and including 12 March 2023. However, the revised balance of payments statement for 2023 is not included, as it is not possible to ensure consistency with the national accounts' net lending abroad. The projection also includes a number of assumptions concerning the international economy, financial conditions, labour force developments and fiscal policy.

### International economy

Export market growth is assumed to be 2.0 per cent in 2024, 2.9 per cent in 2025 and 3.1 per cent in 2026, see Table A1. Wage growth abroad is assumed to gradually decline from 3.8 per cent in 2024 to 3.3 per cent in 2026. Price increases on imported goods and services are assumed to decline sharply and stabilise at around 2 per cent. The assumptions are based on the latest OECD projection from December, which includes explicit assumptions of Denmark's export market growth and competition prices abroad, and adjustments based on other international organisations' projections and economic data since then.

### Interest rates, currency and energy prices

Developments in short-term and long-term interest rates in the projection are based on the expectations of future developments that can be derived from the yield curve in the financial markets. Against this background, the 3-month money market interest rate measured by the Cita swap rate is assumed to fall until the end of 2025, after which it flattens out at around 1.9 per cent.

In the projection, the effective krone rate and the dollar rate are assumed to remain constant at their current levels.

Energy prices are generally expected to follow the development in oil prices, which are assumed to follow futures prices during the projection period. Due to the large fluctuations in energy prices, the oil price in the projection is determined based on an average of futures prices for six days prior to the finalisation of the data. The oil price was at this point around 82 dollars per barrel and is predicted to gradually fall to just below 72 dollars per barrel by the end of 2026.

Given the special developments in gas and electricity prices in recent years, this projection also takes into account gas and electricity price developments, as in Danmarks Nationalbank's previous projections. As with oil prices, gas prices are assumed to follow the futures price going forward, rising for the rest of 2024 to around Kr. 230 per MWh from the current level of just below Kr. 200 per MWh and then ending at around Kr. 220 per MWh by the end of 2026. Electricity prices are assumed to follow futures prices for the first five months, but because few contracts are traded for delivery more than five months ahead, electricity prices are subsequently assumed to follow futures prices of gas. Against this background, the price of electricity is assumed to remain more or less stable at

around Kr. 450 per MWh. Therefore, the price of electricity and gas is assumed to remain higher than in 2019.

### Fiscal policy assumptions

The projections are based on the preliminary estimates from the national accounts of consumption and investments in the public sector, as well as the Finance Bill agreement in the *Economic Report*, December 2023, and the medium-term scenario in the *Updated 2030 scenario*, August 2023. Against this background, real public consumption is assumed to increase by 3.0 per cent in 2024, 1.9 per cent in 2025 and 1.5 per cent in 2026. Public consumption is technically boosted by donations to Ukraine, but these donations are not assumed to have an activity effect. The activity effect is offset in the projection by increased imports. The Governments proposal *Håndtering af styrkelse af dansk forsvar og sikkerhed samt Ukraine-fonden* from 13 March 2024 is not included in the projection. Public investments are assumed to increase by 2.9 per cent in 2024, 1.7 per cent in 2025 and 1.2 per cent in 2026.

### Revisions in relation to the previous projection

The GDP growth estimate is revised upwards by 1.1 percentage points in 2024 and 0,1 per cent in 2025, see Table A2. Changed estimates for export market growth contribute to lower growth in years, while interest rate developments contribute to higher growth. The upward revision in 2024 reflects other factors, mainly reflecting that the contribution to GDP growth from production abroad under Danish ownership and the reopening of the Tyra natural gas field currently appears to be larger than assumed in September. Excluding production abroad under Danish ownership and the reopening of the Tyra field, growth in 2024 has also been revised upwards, which covers the fact that growth at the end of 2023 provides a larger overhang into 2024.

The estimate for the rate of increase in consumer prices, HICP, is revised downwards by 0.8 percentage points in 2024 and unchanged in 2025. Changed assumptions on oil prices and foreign wages and prices contribute to a downward revision of the inflation estimate in 2024. The negative contribution from other factors in 2024 partly reflects assumptions of lower electricity and gas prices. Other factors also come into play, as electricity and gas prices have developed more than the normal oil price pass-through suggests.

TABLE A1

### Overview of projection assumptions

	2023	2024	2025	2026
<b>International economy</b>				
Export market growth, per cent, year-on-year	0.6	2.0	2.9	3.1
Foreign price, per cent, year-on-year <sup>1</sup>	-1.2	2.0	2.1	2.0
Export market growth, per cent, year-on-year	5.6	4.0	3.8	3.3
<b>Financial conditions etc.</b>				
3-month money market interest rate, per cent, p.a.	3,3	3,4	2,5	2,2
Average bond yield, per cent, p.a.	3,5	3,2	3,2	3,2
Effective krone rate, 1980 = 100	104,7	104,8	104,8	104,8
Dollar exchange rate, DKK per USD	6,9	6,9	6,9	6,9
Oil price, Brent, USD per barrel	82,8	80,4	76,1	73,3

**Fiscal policy**

Public consumption, per cent year-on-year	0,0	3,0	1,9	1,5
Public investments, per cent, year-on-year	0,9	2,9	1,7	1,2
Public-sector employment, 1,000 persons	872	874	879	883

- 1 Weighted import price for all countries to which Denmark has exports. The projection assumes the same growth rates for the weighted export prices in the countries from which Denmark receives imports.

TABLE A2

Changes in the projection

Per cent, year-on-year	GDP			Consumer prices, HICP		
	2023	2024	2025	2023	2024	2025
Projection from September	1,7	1,3	1,3	3,8	3,0	2,6
<b>Contribution to revised forecast from:</b>						
Export market growth	0,0	-0,4	-0,2	0,0	0,0	0,0
Interest	0,0	0,1	0,1	0,0	0,0	0,0
Exchange rates	0,1	0,0	0,1	0,0	0,0	0,0
Oil prices	0,0	0,0	0,0	-0,1	-0,1	0,0
Foreign prices and wages	-0,2	-0,1	0,1	-0,2	-0,1	-0,1
Other factors	0,3	1,5	-0,1	-0,2	-0,6	0,1
This projection	1,8	2,4	1,4	3,4	2,2	2,6

Note: Rounding may mean that the transition from the latest to the current projection does summarise

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