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1. Summary

1.1 The current economic outlook

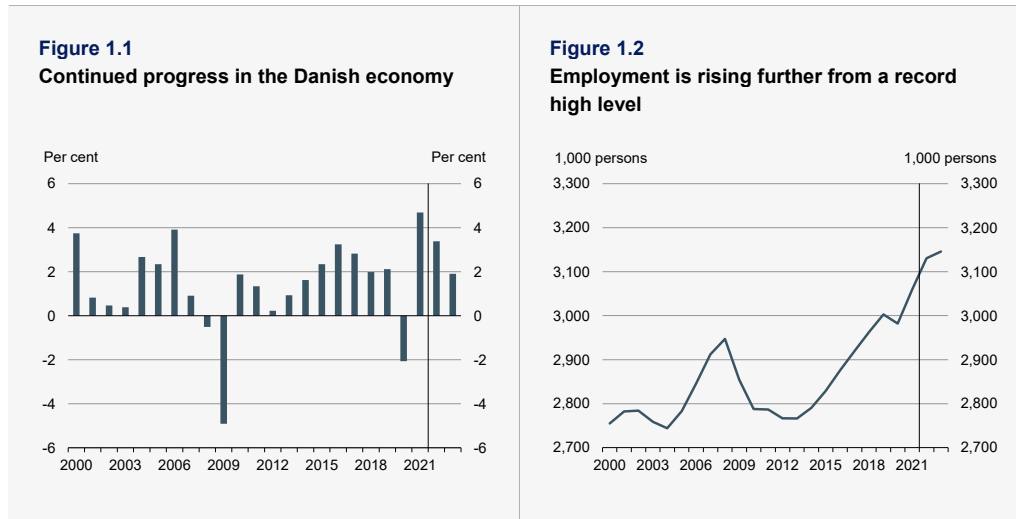
After a turbulent period during the corona pandemic, Russia's invasion of Ukraine has created new turmoil in the global economy. In particular, there have been restrictions and uncertainty about energy supplies from Russia, but also supplies and prices of other raw materials, food and intermediates are affected by the war as well as the sanctions imposed. The Danish economy will be affected, in line with other countries. Initially, many households are experiencing consequences in the form of price increases. This applies in particular to energy prices, which had already risen to high levels in the run-up to the war. The war will also have a number of other consequences in Denmark, including in the form of a large number of persons displaced from Ukraine, urgent efforts to ensure independence from Russian energy, as well as new demands for defense and security policy, which will also be associated with costs.

The Russian attack on Ukraine comes at a time where the Danish economy is in a strong economic boom. While the Danish economy's direct exposure to Russia and Ukraine is relatively limited, the increase in energy prices and prices of other goods will dampen activity in the Danish economy. Thus, inflation is expected to remain at an elevated level for the rest of the year.

Nevertheless, it is the assessment that the basis for continued growth in the Danish economy is present, although the level of activity is expected to stagnate or even fall in parts of 2022. However, activity is still expected to be above the level of normal capacity utilization, and the available economic resources will be under pressure. The projection of a continued high level of activity should be seen in the context of the extraordinarily large household savings during the corona pandemic. Thus, households should be able to maintain consumption despite the rising costs derived from higher inflation. At the same time, demand is supported by the historically high number of persons in employment as well as the robust financial position of Danish businesses, which should support hiring and investing.

The forecast assumes that supply disruptions resulting from the war in Ukraine will not escalate and that, *inter alia*, decisions in relation to energy transition in Europe will contribute to energy prices gradually falling from the current high level. In Denmark, the government has presented the reform proposal *Denmark Can Do More II*, which aims at ensuring independence from Russian gas as soon as possible and increases the speed of the green transition. However, a complete stop to the supply of gas from Russia could significantly increase the short-term economic consequences. Other factors also contribute to elevated uncertainty, and new shutdowns in China shows that the corona pandemic could continue to affect global supply chains.

The Danish economy ended 2021 with very high growth. This means that even with a slowdown in growth during 2022, the annual level of GDP should grow significantly from 2021 to 2022. On that basis, GDP is expected to grow by almost 3½ per cent in 2022, while growth in 2023 is expected to be in line with the gains seen in the years before the pandemic, *cf. figure 1.1*.



Note: Figure 1.1 shows real GDP growth. In figure 1.2, employment is including persons on leave.
Source: Statistics Denmark and own calculations.

The increase in activity will be sufficient for employment to continue to increase, and the level of employment is set to increase by around 85,000 persons from 2021 to 2023, *cf. figure 1.2*. Much of this employment growth has already taken place in the latter half of 2021 and also takes a projected temporary slowdown in the labour market this year into account. Employment is expected to rise again from the end of this year. The potential for employment growth is supported by a continued expansion of the workforce as a result of later retirement, the influx of foreign workers and new initiatives agreed with the reform package *Quicker to Work, a Stronger Labour Market, Investments in the Future and Innovative Businesses*. The agreement is part of the government's reform programme *Denmark Can Do More*, which over the next 10 years is set to make Denmark richer, greener and more skilled.

The estimated GDP growth this year in this forecast is significantly higher than in the three scenarios for the Danish economy in light of Russia's invasion of Ukraine, which were presented in March. The difference is mainly due to a stronger starting point as a result of stronger growth in 2021 than previously expected, *cf. box 1.1*.

Box 1.1**New data contribute to an upwardly revised GDP estimate for 2022 compared with previously presented scenarios for the Danish economy in light of Russia's invasion of Ukraine**

With the publication of the national accounts on April 1st, GDP growth in 2021 was revised up to 4.7 per cent. In particular, growth at the end of the year was greater than previously estimated.

The revised figures in 2021 affect the growth prospects for 2022. Due to the high growth through 2021, it will not take much before the annual growth rate for 2022 will be high. Even with zero growth in all quarters in 2022, the annual growth for 2022 will be 3.5 per cent (the so-called *growth carryover*).

In the numerical basis for the three scenarios¹⁾ the growth carryover was somewhat smaller at 2.0 per cent. The three scenarios showed different relative growth trends through 2022 and 2023. If the same relative trends are imposed on the latest national accounts figures, GDP growth in 2022 would, all other things being equal, be 1.5 percentage points higher. At the same time, momentum in the Danish economy is stronger, while a number of new initiatives and other factors have also been included, *cf. box 1.4*. Overall, somewhat higher growth is thus expected in 2021-2023 than in the model-calculated scenarios from March, *cf. table a*. Adjusted for the better starting point, the new forecast can generally be said to fall between the intermediate scenario and the mild scenario.

Table a
GDP growth in 2021-2023 in scenarios and current forecast

Per cent	Intermediate scenario	Harsh scenario	Mild scenario	Economic Survey, May 2022
2021	3.9	3.9	3.9	4.7
2022	1.6	0.0	2.2	3.4
2023	2.3	2.1	2.2	1.9

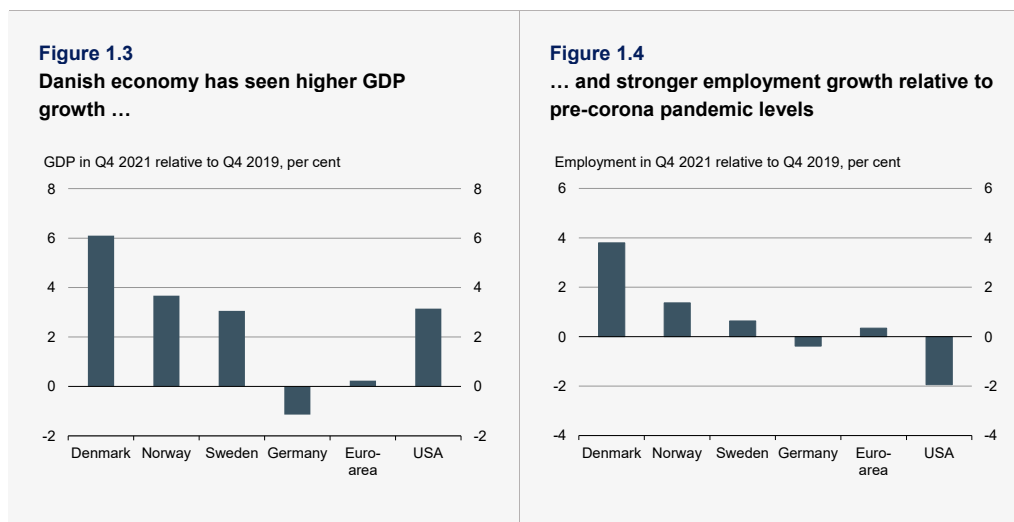
1) Ministry of Finance, *Scenarier for dansk økonomi som følge af Ruslands invasion af Ukraine*, March 21st 2022.
Source: Statistics Denmark and own calculations.

Strong momentum in the Danish economy and prerequisites for continued progress

The pace of the Danish economy is remarkably brisk. This is reflected, among other things, in a significantly larger increase in both GDP and employment in Denmark relative the level before the corona pandemic than in most other countries, *cf. figure 1.3 and figure 1.4*. The good position when compared to other countries should be seen in the context of a smaller setback during the pandemic and a rapid progress subsequently. It testifies to the great robustness and adaptability in the Danish economy as well as a successful health and economic crisis management in Denmark, *cf. chapter 2 in Economic Survey, December 2021*. At the same time, the strong demand following the reopening last spring has largely been met by increasing production via higher employment and reduced unemployment.

The spread of infection flared up again in the winter months with the new, infectious virus variant omicron. The health consequences have been shown to be less serious compared to previous virus variants, and the economic activity is assessed to have been affected for only a short time by behavioral

changes, restrictions and increased absenteeism due to illness and isolation requirements. Restrictions have now been lifted and corona infection does not currently pose a threat to public health and is no longer an obstacle to economic progress.



Source: Macrobond and own calculations.

On the other hand, Russia's invasion of Ukraine will inevitably have consequences that will propagate through the world economy and also put a damper on the growth of activity in Denmark. The direct effect of lower exports to Russia and Ukraine will probably be relatively limited, as these countries only make up a small part of Danish exports. In addition to the direct effect on trade with Russia and Ukraine, however, there will also be an impact through lower exports to countries that are more exposed to developments in Russia and Ukraine. These are, for example, a number of Eastern European countries as well as Germany, Finland, and Sweden.

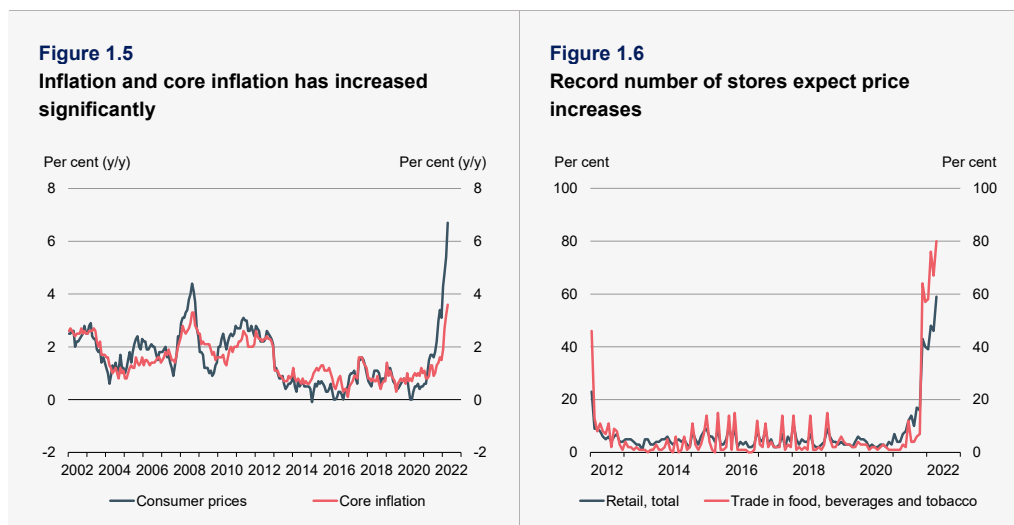
Russia is a major exporter of a variety of commodities, including in particular energy, metals, wheat, and fertilizer ingredients. Ukraine is also a major exporter of especially wheat and maize as well as steel and gases used in the manufacture of semiconductors. The prices of energy and a number of other raw materials have already risen significantly, and if deliveries of these raw materials are stopped or reduced very sharply, it may lead to additional supply difficulties, which could cause longer delivery times or shutdown of production for a period of time.

The largest and most direct impact on the Danish economy will take place through higher prices on energy and other commodities. Higher prices weaken household purchasing power and increase business costs. It will also affect Danish exports due to lower growth in export markets. Higher uncertainty could also affect the economy to the extent that businesses postpone investments and consumers show more restraint.

Even before Russia's invasion of Ukraine, inflation was rising, mainly due to developments in energy prices. Moreover, the war has led to further increases in energy prices from an already high level. At the same time energy prices are expected to remain at a higher level for a longer period. Energy

prices are usually quite volatile and have also previously had a major impact on the overall price development in both upward and downward directions. However, the current price increases are extraordinarily large.

The sales prices of businesses and the cost of imports have been rising for a long time as a result of increased production costs and freight costs and have thus reached a high level. Gradually, the derived consequences are seen, as businesses pass on the increased production costs in sales prices. This is reflected in the fact that core inflation, which measures inflation without energy and unprocessed foods, has risen in recent months, *cf. figure 1.5*.



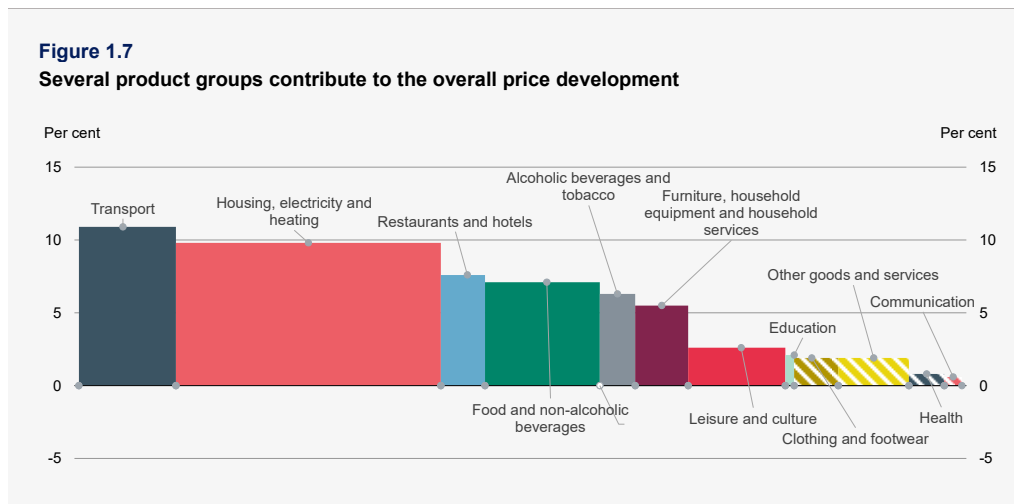
Note: In figure 1.5, core inflation indicates the increase in consumer prices excl. energy and unprocessed foods.

Figure 1.6 shows the share of stores that expect price increases over the next three months.

Source: Statistics Denmark and own calculations.

At the same time, an increasing share of businesses report increasing sales prices. This applies both to current developments and to expectations for the future. More than half of the retail stores expect increasing sales prices in the coming months, and for the grocery stores the share is even greater, *cf. figure 1.6*.

There are also signs that sharply increasing prices are spreading to other industries, including manufacturing and certain service industries. The increasing prices are already reflected in the fact that high inflation has become more broad-based across product groups, *cf. figure 1.7*.



Note: The height of the bars shows annual growth rates for the product groups, while the width of the bars reflects the weight in the consumer price index in 2022. The price development is from April 2021 to April 2022.

Source: Statistics Denmark and own calculations.

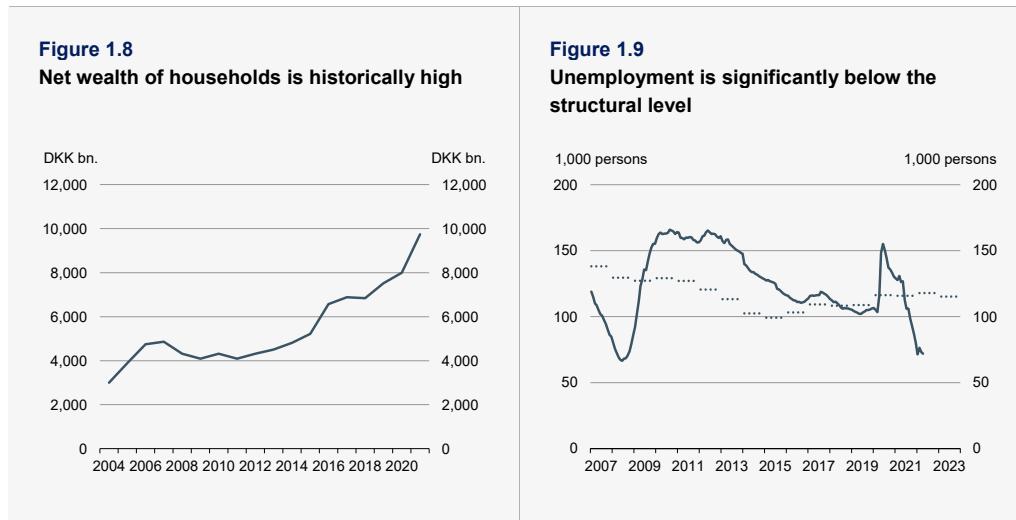
Energy-related product groups take up a lot of consumption expenditure and contribute a lot to total inflation, but the price increases for food, among other things, have also been relatively high, while food also makes up a relatively large share of total consumption.

The rising prices increase household expenditure, especially on consumption, which can be difficult to switch away from, such as heating homes. Thus, the price development is a factor in reducing real purchasing power of households, and for many households there are unexpected and quite significant increases in consumption expenditure. The government and several parties in the Parliament have adopted a heating subsidy to help households that have been hardest hit by price increases on residential heating. The government has proposed further assistance targeting especially low-income and low-wealth pensioners. The targeting of the aid helps to limit the risk of increased price pressure.

The higher prices of imports, including energy, fundamentally make Denmark less prosperous than otherwise. To the extent that import prices do not fall back, there will inevitably be a loss of real income for Danish citizens. This applies to both employees and business owners. The state can potentially mitigate some of this for a period of time for some selected population groups, but in the long run, an impact on real income cannot be prevented.

However, the potential for households to sustain consumption is supported by the fact that households have saved extraordinarily much during the corona pandemic, which is reflected in record high savings. The net wealth of Danish households is estimated to have grown by around DKK 1,800 bn. in 2021 to almost DKK 10,000 bn., *cf. figure 1.8*. The increase in net wealth per Dane corresponds to approx. DKK 300,000 on average compared to 2020. A part of this reflects increases in asset prices, but a part is also actual savings. Fewer consumption opportunities during the pandemic and the payment of frozen holiday pay are, in isolation, estimated to have increased the household's buffer extraordinarily by around DKK 100 bn., *cf. chapter 3*. Overall, Danish households are historically well to do financially, although there are of course large differences across family types, e.g. in relation to the

size and liquidity of wealth. At the same time, household consumption in relation to income is low, which also indicates that consumption could increase.



Note: See chapter 3 for the calculation of net wealth. In figure 1.9, dashed lines indicate the assessed level of structural unemployment.

Source: Statistics Denmark and own calculations.

Household income is also supported by record high employment. Already in May last year, employment reached the highest level ever and has since increased further. In total, employment has increased by 145,000 persons in the last three quarters of 2021, and employment has continued to increase into 2022. This has brought unemployment down to its lowest level in more than 13 years, *cf. figure 1.9*. Thus, unemployment is at about the same level as during the overheating prior to the financial crisis.

Unemployment is expected to increase slightly from the currently low level of 72,000 unemployed to an annual level of 86,000 for both 2022 and 2023 due to the expected slowdown in the labour market and the influx of persons displaced from Ukraine. However, unemployment is expected to remain significantly below the structural level, which is the level of unemployment that is compatible with stable price and wage developments. The structural level of unemployment has fallen somewhat since the boom of the mid-2000s, which indicates that the pressure in the labour market is currently not as great as it was then.

However, the reported shortage of labour is large across industries. There are a record number of vacancies, and for natural reasons unemployment cannot continue to fall quickly. A tight labour market and recruitment difficulties so far do not seem to have affected wages to any appreciable extent, apart from the cyclically sensitive construction sector. However, in combination with high inflation, this could happen.

Nevertheless, the risk of a harmful wage-price spiral is reduced by the fact that inflation expectations for the coming years remain well-anchored. This should also be seen both in the context of the fact that, according to market expectations, energy prices will fall again and that the price pressure

caused by disturbances in the global supply chains are also assumed to disappear gradually. In addition, the central banks are in the process of tightening monetary policy to ensure that inflation is brought back to the target of an inflation rate of around 2 per cent. Overall, the rate of wage increases is expected to rise from 3 per cent in 2021 to just over 3½ per cent in 2023, while inflation is expected to fall from a high level of just over 5 per cent in 2022 to almost 2 per cent in 2023. The latter would be in line with the increase in consumer prices in 2021. Thus, there is also an immediate prospect of a general increase in real wages in 2023.

The war in Ukraine will in itself also point in the direction of a more subdued development in economic activity and in the labour market. However, there are also effects of the war working in the opposite direction. The number of persons displaced who come to Denmark will be significant and will have an impact on macroeconomic developments through a number of ways. This applies, among other things, to labour supply, as the special law allows persons displaced from Ukraine to work. At the same time, the persons displaced will contribute to the total consumption and thus to the total demand in the economy, *cf. box 1.2*.

Box 1.2

Persons displaced from Ukraine and the Danish economy

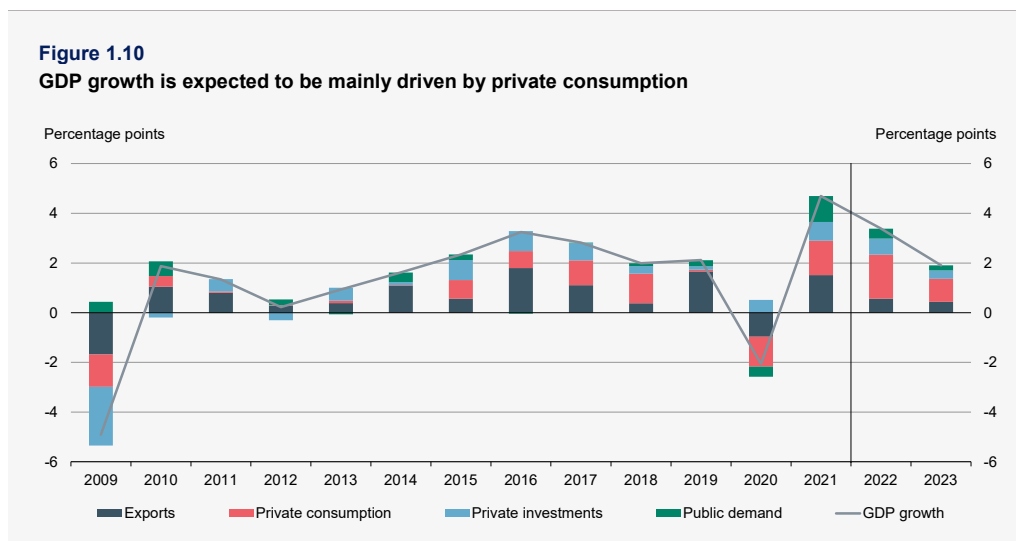
It is estimated that at the beginning of May 2022, more than 5 million persons from Ukraine had left as a result of Russia's invasion on February 24th 2022. In addition, there are almost 8 million persons internally displaced residing in Ukraine. In the forecast for *Economic Survey, May 2022*, it is assumed that during 2022 Denmark will receive 50,000 displaced Ukrainians divided into 30,000 adults and 20,000 children. In comparison, about 20,000 Bosnian war refugees came to Denmark during the Balkan wars in the 1990s, and Denmark received about 30,000 Syrian refugees and family reunified during the refugee crisis in 2015.

The actual number of persons who come to Denmark will, however, depend on the development of the war as well as the humanitarian conditions in Ukraine and the surrounding countries, which at present it is not possible to estimate. Thus, the assumption of 50,000 persons is not an expression of a concrete estimate – it is only a computational assumption. In the Special Act on persons displaced from Ukraine, it was technically assumed that 20,000 persons would be covered by the Act, but it was also noted that the development indicated that there could be a significantly higher number of persons. It was subsequently announced that the authorities are preparing for the arrival of up to 100,000 persons displaced from Ukraine. The state, the regions and the municipalities are thus preparing for a larger number of persons displaced from Ukraine to be received, while at the same time maintaining the welfare system as best as possible.

Displaced adults from Ukraine who come to Denmark must have the opportunity to enter the Danish labour market well and quickly. Danish businesses that want to employ newly arrived Ukrainians have – if relevant – the opportunity to use a so-called turbo assessment of the displaced persons' educational qualifications in the Agency for Higher Education and Science. The Agency's assessment and recognition of Ukrainian educational qualifications can also be used in relation to admission to higher education in Denmark.

The forecast assumes that at the annual level, 7,000 persons displaced from Ukraine will be employed in 2022, increasing to 12,000 persons in 2023, *cf. chapter 5*. Thus, the displaced persons from Ukraine will contribute to meeting the demand for labour. The significance for the development in the Danish economy will also be reflected in a slightly higher private consumption. Together with the associated public consumption expenditure, it will in isolation lead to greater demand in the economy.

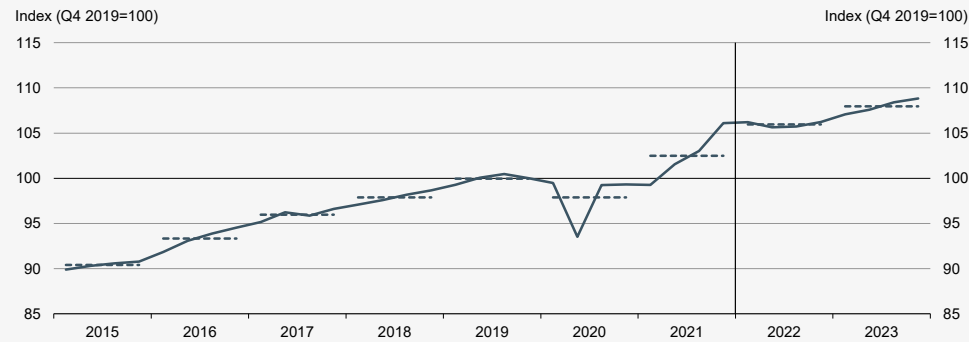
The overall assessment is that the growth in the Danish economy will continue with private consumption as the most important driving force for aggregate demand, *cf. figure 1.10*. Exports and private investment also contribute positively to overall growth, but to a slightly lesser extent than last year. Among other things, this must be seen in light of downgraded expectations for the world economy. Growth prospects are particularly deteriorating for countries with relatively high dependence on Russian energy and exposure to supply chain problems. Furthermore, the contribution from public demand is somewhat smaller, including as a result of the end of extraordinary corona efforts.



Note: The figure shows contributions to GDP growth. The growth contributions have been adjusted for imports.
Source: Statistics Denmark and own calculations.

The increase in GDP from 2021 to 2022 covers the fact that a slowdown in activity growth is expected during 2022, *cf. figure 1.11*. This will also be reflected in employment, which has otherwise increased steadily since the beginning of 2021. The expectation of an increase in GDP at the annual level must be seen in the context of the sharp increase in GDP in Q4 2021, which brought GDP to a high level and thus significantly improved the starting point for annual GDP growth in 2022. Zero growth through 2022 would result in an increase in GDP from 2021 to 2022 of 3.5 per cent. The expected slowdown is only likely to be temporary, and so GDP is expected to increase again later in the year.

Figure 1.11
Slowdown in growth during 2022



Note: The figure shows a stylized quarterly trend based on the projected annual levels of GDP. The dotted lines show average annual levels.

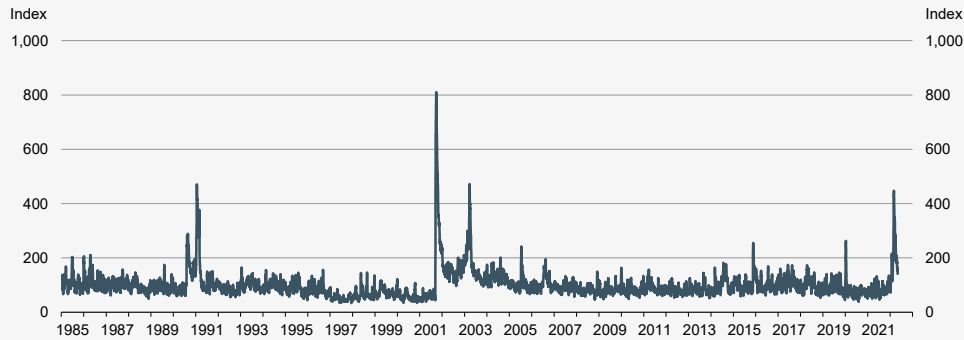
Source: Statistics Denmark and own calculations.

High geopolitical uncertainty

Russia's invasion of Ukraine has led to the greatest geopolitical tensions since the Iraq war in 2003, *cf. figure 1.12*. In recent decades, a significantly higher level of the shown global indicator was only seen after the terrorist attacks of September 11 2001. During the Gulf War in 1991, geopolitical uncertainty was also high.

Uncertainty can generally contribute to increased restraint among both consumers and businesses. However, developments in the financial markets indicate that, following a strong reaction immediately after the invasion, markets have been calmer. This may be a sign that markets are judging scenarios that involve large declines to be less likely than at first. However, this does not change the fact that significant price increases for energy and other commodities, as well as disruption of trade flows, have a direct negative effect on economic activity. Furthermore, these factors constitute significant downward risks.

Figure 1.12
The russian invasion of Ukraine has led to considerable geopolitical uncertainty



Note: The index is calculated globally on the basis of newspaper articles that mention geopolitical tensions. The figure covers until May 2nd 2022, and data are shown as a seven-day moving average. Data is retrieved on May 9th 2022 from: <https://www.matteoiacoviello.com/gpr.htm>.

Source: Caldara, Dario and Matteo Iacoviello (2022), "Measuring Geopolitical Risk," *American Economic Review*, April, 112(4), pp. 1194-1225.

The forecast assumes that supply difficulties resulting from the war in Ukraine will not escalate and that decisions in relation to security of supply will contribute to energy prices gradually declining somewhat from the current high level.

However, there are larger economic consequences in a more negative scenario, where the supply of gas from Russia is shut down, *cf. box 1.3*.

Box 1.3**Risk of a more negative scenario where the supply of gas from Russia may be shut down**

Russia's invasion of Ukraine will clearly have negative consequences for the world economy and also for the Danish economy. However, there is great uncertainty associated with the further course of the war and the derived consequences for energy supply and energy prices. If supply difficulties escalate, there is a risk that the Danish economy will be harder hit than the assessment in the forecast in *Economic Survey, May 2022*.

Previously, different scenarios have been presented for the Danish economy, which have illustrated possible developments under different assumptions, cf. the note *Scenarier for dansk økonomi som følge af Ruslands invasion af Ukraine, March 2022*. The main conclusion was that GDP growth could be reduced in the range of ½-3 percentage points compared to the expected growth of 2.8 per cent in 2022 according to *Economic Survey, December 2021*.

In the following, a downside scenario is presented that basically follows the assumptions behind the *harsh scenario* in the above-mentioned note, but builds on the new forecast for the Danish economy in this *Economic Survey*. The scenario is based on a risk of an escalation of supply difficulties, including as a result of a halt to Russian gas supplies to Europe. Key assumptions for oil and gas prices as well as growth in the export markets are changed by the same difference as between the *harsh scenario* and the *intermediate scenario* in the aforementioned note. Compared to the forecast in *Economic Survey, May 2022*, this corresponds to setting the oil price 20 dollars higher to a level of around USD 120 per barrel and even larger increases in gas prices. At the same time, export market growth in 2022 will be reduced by 2.4 percentage points. Among other things, Germany, which is an important export market for Denmark and heavily dependent on Russian gas, is hit particularly hard by a gas supply halt.

The downside scenario implies that GDP growth will be reduced by approximately 1½ percentage points this year, employment growth will be reduced by 24,000 persons, and that inflation will increase by almost 1 percentage point, cf. *table a*. The decline must be seen in relation to the baseline in the forecast, where the level of activity and employment is expected to remain at a relatively unchanged level through 2022. The risk scenario thus implies that in 2022, there will be periods with a clear decline in activity, and that inflation will rise further from the current high level.

Since the preparation of the mentioned note, the starting point for the *harsh scenario* has changed as a result of a higher level of GDP and employment at the beginning of 2022. This means that at the annual level there will continue to be positive growth in GDP and employment. It is noted that the external assumptions regarding energy prices in the forecast for *Economic Survey, May 2022* are generally in line with the intermediate scenario, while the assumptions regarding export market growth based on the latest international forecasts are closest to the mild scenario. This has already taken into account the effects of part of the rise in oil prices and the deteriorating outlook for the rest of the world, which is a consequence of Russia's invasion of Ukraine. The downside scenario is thus not an expression of the effect of the war, but rather a further aggravation in the event of an escalation. It is also noted that the forecast in *Economic Survey, May 2022* includes a number of other consequences which derive from the war and higher energy prices. This applies, for example, to assumptions about increased public expenditure and higher interest rates, as the latter reflects increased expectations of monetary policy tightening.

These are still very uncertain assessments. The uncertainty is underlined, among other things, by the fact that estimates of the impact on GDP in Germany in the event of a full gas and oil embargo range between a fall of 0.5 per cent and 5.1 per cent, cf. Bachmann et al. (2022) and the Bundesbank (2022). An assessment from the IMF indicates that a 10 per cent reduction in Russian oil and gas exports in 2022 together with higher prices for energy, metals and food, worsening supply chain problems, higher inflation expectations and tighter credit conditions will have an impact on GDP in the euro area of 1.2 per cent in 2022.

Box 1.3 (continued)**Risk of a more negative scenario where gas from Russia may be shut down****Table a****Change in key estimates for 2022 in a more negative scenario**

	Forecast	Risk scenario
GDP, real change, per cent	3.4	2.0
Change in employment, 1,000 persons	70	46
Inflation, per cent	5.2	6.1

Source: Ministry of Finance: Scenarier for dansk økonomi som følge af Ruslands invasion af Ukraine, March 2022. Bachmann et al.: What if? The Economic Effects for Germany of a Stop of Energy Imports from Russia, March 2022, Bundesbank: War against Ukraine: energy embargo could significantly weaken German economy, April 2022, IMF: World Economic Outlook, April 2022.

There are also a number of other factors that can affect the economy, and mostly in a downward direction. Globally, the corona pandemic is not over, and many countries are currently experiencing a sharp increase in infection with the omicron sub variant BA.2, which hit Denmark earlier this year. Among other things, this has led to new shutdowns in China, which will affect the global supply chains at a time when many companies are still experiencing a shortage of materials. The shortage includes microchips used in a wide range of products from kitchen appliances to cars. In addition, sanctions against Russia will contribute to increased pressure on global supply chains. Longer delivery times or rising prices for deliveries could lead to production restrictions and thereby dampen the overall activity in the economy.

Even before the corona pandemic, there was a tendency in many countries towards less economic openness and protectionism after a number of years in which gains from international trade and cross-border investment had been paramount. The pandemic has shown vulnerabilities in the global supply chains, and Russia's invasion of Ukraine calls into question the economic dependence on countries that do not necessarily share the values of Western democracies. That globalization can go into reverse must also be seen in the context of the increasing rivalry between the United States and China. While reduced dependence on potentially adversarial countries may increase future security of supply in the West, diminished global integration may at the same time reduce prosperity gains in the long run.

The rise in inflation is generally expected to be a temporary phenomenon, but a relatively long period of high inflation in itself entails a risk that inflation expectations will rise and result in higher wages and renewed price increases. Price increases and higher wage demands, which are not justified by productivity increases, could mutually reinforce each other and initiate a price-wage spiral that will help keep inflation at a high level. The rise in inflation is already reflected in rising interest rates based on an expected tightening of monetary policy. This can contribute to a reduced appetite for investment, which can ultimately lead to higher unemployment and lower activity.

The economic consequences of the war in Ukraine and the high energy prices in Denmark could take the brunt of the boom, but activity will remain above the level that is compatible with a stable price

and wage development. At the same time, unemployment is assessed to be somewhat below the structural level, and there are limits to how much unemployment can continue to fall. If the demand for goods and labour increases faster than supply, it will increase the pressure on prices and wages, and ultimately there will be a risk that the labour market will overheat, leading to unsustainable wage increases and a significant loss of competitiveness.

Overall, a number of factors can lead to a more negative course for the Danish economy. However, it is also the assessment that the risk of a major setback and a long subsequent recovery period is limited. This must be seen in the light of the fact that there are currently no signs of the build-up of significant imbalances that could exacerbate a possible setback.

Box 1.4**The basis for the forecast and changes since last forecast**

The forecast is based on preliminary national accounts figures, which are available until Q4 2021, as well as a number of other indicators that, for the most high-frequency, reach into April. In addition, a number of policy decisions since the most recent assessment in December 2021, including the agreement on the reform package *Quicker to Work, a Stronger Labour Market, Investments in the Future and Innovative Businesses* (January 2022), *Agreement on Targeted Heating Check and Phase out of Black Heating* (February 2022), and *National Compromise for Danish Security Policy* (March 2022). The war in Ukraine also changes a number of assumptions for the development of the Danish economy, and the forecast is based, among other things, on technical assumptions about the number of persons displaced from Ukraine in Denmark and their employment rate, etc.

Since the assessment in December, new figures for economic activity and employment have been released. GDP growth in Q4 2021 was noticeably stronger than expected, and for 2021 as a whole, annual growth was 4.7 per cent against the expected 3.9 per cent, *cf. figure a*. This also raises the starting point for GDP growth in 2022, which has been adjusted upwards from 2.8 per cent in December to 3.4 per cent despite an expectation of a growth pause during 2022 as a result of the war in Ukraine. The upward adjustment of GDP growth in 2022 is also reflected in a slightly higher estimate for employment.

The estimate for inflation has been raised considerably in 2022. This is primarily because energy prices have increased further from an already high level and are now expected to remain at a higher level for a longer period. The annual average of the oil price in 2022 is now expected to be USD 104 per barrel, which is an upward adjustment from approx. USD 74 in the December forecast. Energy prices are expected to fall gradually, but derived price increases on other goods will help to keep inflation up, and for 2022 as a whole, inflation is expected to be 5.2 per cent, *cf. figure b*.

The forecast does not change the fact that the Danish economy is still expected to be in a cyclical situation where capacity utilization is greater than normal.

Figure a
GDP growth

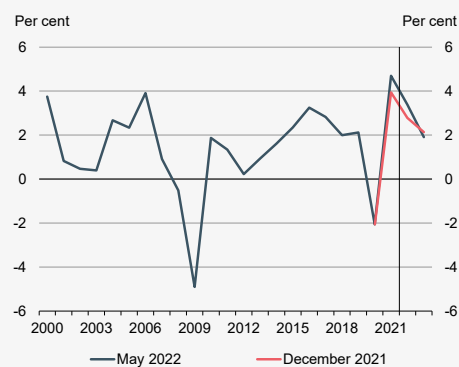
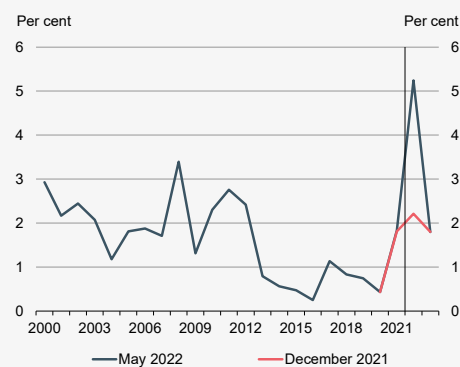


Figure b
Inflation



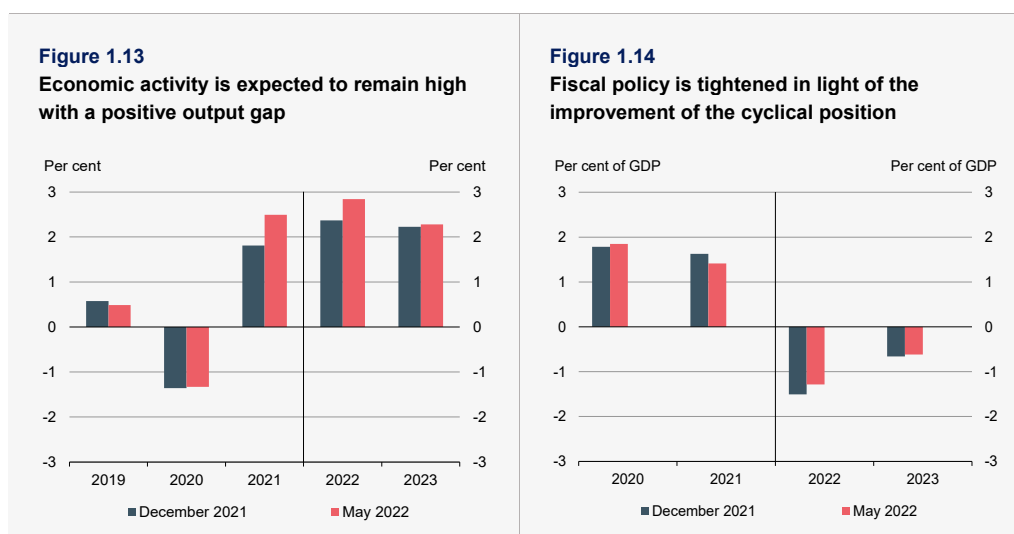
Source: Statistics Denmark and own calculations.

1.2 Fiscal Policy and Public Finances

During the Covid crisis, fiscal policy has been expansionary. The fiscal policy has contributed to reducing the setback of the economy and ensuring a rapid rebound in the Danish economy through compensations schemes, payment of frozen holiday funds and stimulus measures. The development in economic activity was greater than expected throughout the winter when the third wave of Covid hit, as it did not halt the rapid growth in production and employment.

This means that – despite the halt in growth that follows from the war in Ukraine – economic activity is expected to remain high. Due to the strong starting point, the output gap, which is a measure of the capacity pressure in the economy, is now estimated with considerable uncertainty to be slightly higher this year than the estimate from December, *cf. figure 1.13*. The economic upturn is expected to continue in 2023, where both the output gap and the employment gap are expected to exceed 2 per cent.

Given the strong economic expansion during 2021, fiscal policy is tightened in 2022. The one-year fiscal effect – which measures how much changes in the fiscal and structural policy in a given year affect GDP compared to the previous year – is estimated to be -1.5 per cent of GDP in 2022 and -0.7 per cent of GDP in 2023. The negative fiscal effect reflects a gradual normalization of fiscal policy and a phasing out of Covid related compensation schemes, *cf. figure 1.14*.



Source: *Economic Survey*, December 2021.

In 2021, the fiscal effect on economic activity is estimated to be unchanged compared with the December 2021 survey. This reflects an upwards adjustment of temporary compensations schemes, that are offset by lower public expenditure in other areas. The increased expenditure for compensation schemes in 2021 will, in isolation, tighten the fiscal effect in 2022. On the other hand, political agreements in the wake of the Russian invasion of Ukraine affect the fiscal effect in the opposite direction, *cf. box 1.4*. From this, the one-year fiscal effect is estimated to be -1.5 per cent of GDP in 2022, the same level as in the December 2021 survey.

Box 1.5**Central agreements in the light of the Russian invasion of Ukraine**

- **National Compromise on Danish Security Policy.** A defense reserve of DKK 3.5 bn. is set aside yearly in 2022 and 2023 in light of the war in Ukraine. The increase in defense expenditure in 2022 and 2023 is financed by loosening fiscal policy. Furthermore, the agreement includes a goal for Denmark to be independent of Russian gas. In a coming defense agreement, Denmark's defense and security expenditure will be increased permanently to 2 per cent of GDP before the end of 2033. A gradual phase-in of the 2 per cent goal ensures that the strengthening of the Danish military happens in the most appropriate manner. The increase in defense expenditure to 2 per cent of GDP will be financed within the limits of fiscal policy, including that fiscal policy remains sustainable. The government will, at the latest in the third quarter of 2022, present a 2030-plan and the parties included in the National Compromise note that for medium term planning, it is most appropriate to aim for a public deficit of around 0.5 per cent of GDP. The Budget Law is revised such that the limit for the structural deficit in the Budget Law is changed from 0.5 to 1 per cent of GDP.
- **Agreement on Targeted Heating Check and Phase out of Black Heating.** With the latest increase, the heating check amounts to DKK 6,000 tax-free in 2022. The heating check is for one year and is paid out to households with heating that is primarily based on gas and that have a household income of less than DKK 650,000. Funds are set aside to cover the increase in municipal expenditures for personal supplements to challenged households that are affected by price increases. Finally, funds are set aside to secure a quicker phase-out of fossil-based heating sources and to support, amongst other things, greener district heating.
- **Agreement on Legislation for Displaced Ukrainians.** In the Economic Survey, May 2022, it is technically assumed that Denmark during 2022 will receive 50,000 displaced persons from Ukraine, 30,000 adults and 20,000 children, *cf. box 1.2*. There is substantial uncertainty with this estimate of the number of displaced persons from Ukraine.

Despite the increased expenditure related to the Russian invasion of Ukraine, the structural budget balance is expected to improve slightly in 2022 and be unchanged in 2023, compared to the December survey. Thereby, the structural deficit is estimated to be -0.1 per cent of GDP in both 2022 and 2023, *cf. table 1.1*.

The practically unchanged structural budget balance in 2022 and 2023 despite new expenditures should be seen in light of lower expenditure on PSOs, higher revenue from the sale of CO₂-quotas along with an increased structural employment compared to the December projection, partially from the fact that some of the displaced Ukrainians are assumed to enter the labour force. Along with this are amongst other things higher structural revenue from capital income taxation. Based on Statistics Denmark's breakdown of the public finances in 2021, the estimates for last year are adjusted from a structural deficit of 0.3 per cent of GDP to a structural surplus of 0.2 per cent of GDP.

Table 1.1
Key figures relating to fiscal policy

	2021	2022	2023
Structural budget balance, per cent of structural GDP	0.2	-0.1	-0.1
Actual budget balance, per cent of GDP	2.3	0.6	0.2
Net public debt, per cent of GDP	-11.1	-11.2	-11.1
EMU debt, per cent of GDP	36.7	33.3	32.5
Public consumption growth, per cent ¹⁾	3.7	0.8	-0.3
One-year fiscal effect, per cent of GDP ²⁾	1.7	-1.5	-0.7
Multi-year fiscal effect, per cent of GDP ³⁾	3.7	2.2	1.3
Output gap, per cent ⁴⁾	2.5	2.8	2.3
Employment gap, per cent ⁴⁾	1.7	2.8	2.6

- 1): Public consumption is calculated using the input method including depreciations. The estimated growth in public consumption is technically assumed to be the same using the input and output method. The estimated growth rates in the forecast years are strongly affected by extraordinary expenditures related to Covid-19.
- 2): The one-year fiscal effect is a measure of how changes in the fiscal and structural policy in a given year affects GDP compared to the previous year.
- 3): The multi-year fiscal effect is a measure of how changes in the fiscal and structural policy in a given year affects GDP (level effect compared to 2019). The effect is including contributions from temporary compensation schemes, payment of frozen holiday allowances and public initiated investments etc.
- 4): Calculated measure of how far production and employment are from their structural levels. When the gaps are positive, it indicates more scarce resources in the economy than under normal cyclical conditions.

Source: Statistics Denmark and own calculations.

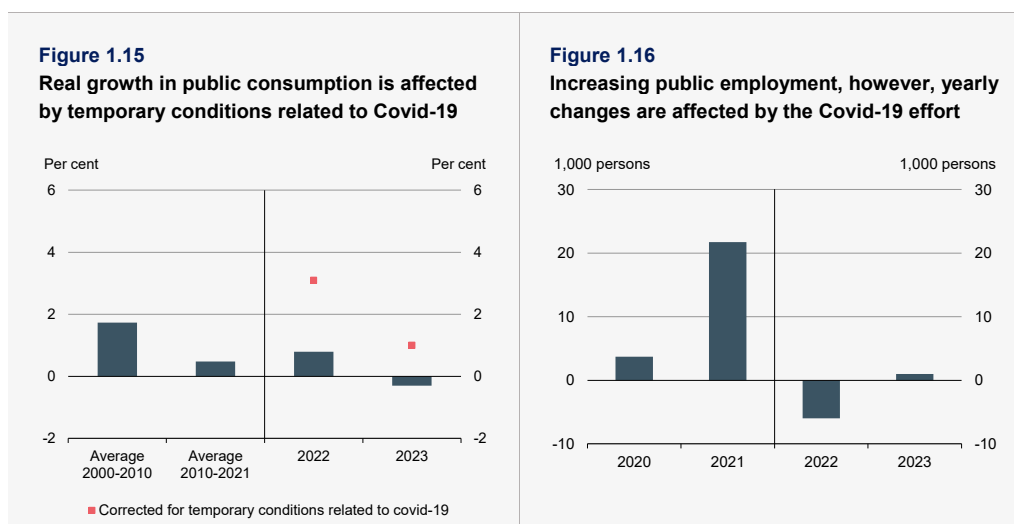
The uncertainty related to the estimated structural budget balance is in the current situation larger than normal. This is especially due to the high inflation that follows in part from the high energy prices caused by the war in Ukraine. Higher inflation and wage increases can imply a short-run increase in nominal revenue from taxes and duties compared to nominal expenditures. This can imply that the development of nominal revenue and expenditure do not follow developments in business cycles as they usually do.

With a structural deficit of -0.1 per cent of GDP in both 2022 and 2023, there is still a good distance to the Budget Law's previous deficit limit of ½ per cent of GDP and to the loosened deficit limit of 1 per cent of GDP as agreed upon in *National Compromise for Danish Security Policy*. Furthermore, expenditure directly related to the extraordinary circumstances that the situation in Ukraine entails can be exempt from the deficit limit in the Budget Law, *cf. box 8.1 in chapter 8*.

The real growth in public consumption is expected to amount to 0.8 per cent in 2022 and -0.3 per cent in 2023. This corresponds to an upwards adjustment of 2.2 percentage points in 2022 and 0.1 in 2023. In 2022 this upwards adjustment is connected with the higher public consumption expenditure from the defense reserve and the public consumption expenditure related to displaced persons from Ukraine. In addition, public consumption last year was lower than estimated in December, which by itself contributes to a higher real growth in 2022.

In the past years, the growth in public consumption has been affected by extraordinary expenditures related to the Covid-pandemic. Accounting for these temporary conditions, the growth in public consumption is estimated at 3.1 per cent in 2022 and 1.0 per cent in 2023, *cf. figure 1.15*. After correcting for temporary conditions related to the Covid-pandemic, the real growth in public consumption in 2022 and 2023 is larger than the growth in the demographic pressure, which is estimated to be around 0.5 per cent annually. These figures are not corrected for extra expenditures related to security and persons displaced from Ukraine in 2022 and 2023.

Public employment has increased by around 25,000 persons from 2019 to 2021, *cf. figure 1.16*. This is due to both a temporary increase in employment related to the testing, contact tracing effort and vaccinating as well as a general increase in public employment, which stems from demographic developments and initiatives on minimum personnel requirements for day care and more nurses. The dismantling of the Covid-effort means that public employment in total is estimated to decrease by around 6,000 persons in 2022, whereafter it is expected to increase by 1,000 persons in 2023. At the same time, structural employment is estimated to increase by around 74,000 persons from 2019 to 2023 due, amongst other things, to the retirement reform and the entry of foreign labour. This means that public employment as a share of total structural employment is estimated to decrease in both 2022 and 2023.



Note.: Public consumption is calculated using the input method including depreciations. In figure 1.15, the real growth in public consumption is corrected for temporary measures related to Covid-19.

Source: Statistics Denmark and own calculations.

Already this year an agreement was reached: the *Agreement for a New Growth Package for the Danish Economy*, which will strengthen the Danish economy and increase structural employment by around 12,000 persons towards 2025, *cf. box 1.5*.

Box 1.5**A New Reform Agreement for the Danish Economy (January 2022)**

The government and a majority of the parties in the Danish parliament have reached an agreement for the reform package *Quicker to Work, a Stronger Labour Market, Investments in the Future and Innovative Businesses*. The reforms in the package are altogether expected to increase structural employment by around 12,000 persons in 2025 and 2030 and increase potential GDP by about 0.7 per cent in 2030 amounting to around DKK 17.5 bn. The agreement includes amongst other things the following policies:

- **Investments in research, education, the green transition and an increased employment deduction:** The agreement sets aside DKK 0.8 bn. for a permanent increase in tax deduction R&D expense of 130 per cent, DKK 1 bn. for the green transition, DKK 1.2 bn. to increase the maximum employment deduction and DKK 1.3 bn. to raise the quality of education. Amongst other things, three climate vocational schools are established for select education programs, the education lift of 110 per cent of unemployment benefits is made permanent and a lift of the welfare education programs is prioritized. The policies are financed by remediating business support for about DKK 3.5 bn. yearly. An expert group for the future of business support is established, which is tasked with proposing models for how to remediate business support. The remediation of the business support and the policies that go along with it are carried out as the financing is established.
- **Quicker to work for graduates:** Unemployment insurance for non-dependents under 30 that just graduated is decreased after three months of receiving benefits. Furthermore the period in which graduates receive benefits is reduced from two years to one year. This is estimated to create a stronger bond between education and employment. Furthermore, the agreement increases the monthly deductible that students can earn alongside their student grants by DKK 4,000 per month.
- **Investment in unemployment benefits:** The agreement strengthens the unemployment benefit system by increasing income security for long-term employed workers who are temporarily unemployed. They will receive a subsidy to their unemployment benefits in the initial three months of unemployment.
- **A more well organized labour market:** The parties behind the agreement have agreed on a range of initiatives that strengthen the organized part of the labour market. A permanent council for the future of the labour market is established, the maximum deduction for labour union fees is increased and a requirement for apprenticeship is created in connection with public contracts.
- **Getting more people to work and a decrease of the electricity tax:** The agreement includes a removal of the deduction of labour income in public pensions for both the pensioner and their partner. This creates a greater incentive for seniors to contribute actively on the labour market. Furthermore, a temporary job bonus for persons receiving unemployment benefits of DKK 5,000 kr. is established. Moreover, the regular electricity tax is decreased towards 2030 and the green check for non-pensioners is removed, but it remains and is increased for children.
- **Strengthen innovation:** The government established the Partnership for Knowledge and Growth, which will provide recommendations for how knowledge and research is spread out to businesses.
- **Danish Export and Investment Fund:** The Growth Fund, EKF and the Danish Green Investment Fund is merged to one fund, the new Danish Export and Investment Fund, which will secure the international competitiveness in the public financing of Danish businesses.
- **Digital tools to ease running a business:** The parties behind the agreement agree to establish two initiatives *Automatic Business Reporting* and *SMV-Friendly Digital Contract System*, to make it easier to run a business through digital tools.

Box 1.5 (continued)**A New Reform Agreement for the Danish Economy (January 2022)**

- **Local business partnerships to ensure the future of Danish strengths in business:** Eight local business partnerships are established to focus on developing a number of future Danish strength positions within the green transition, robot technology and welfare technology.
- **Strengthened social contract through public procurement:** The public sector purchases in the order of DKK 380 bn. a year. The Public Procurement Law will be updated to ensure more efficient processes and social responsibility.

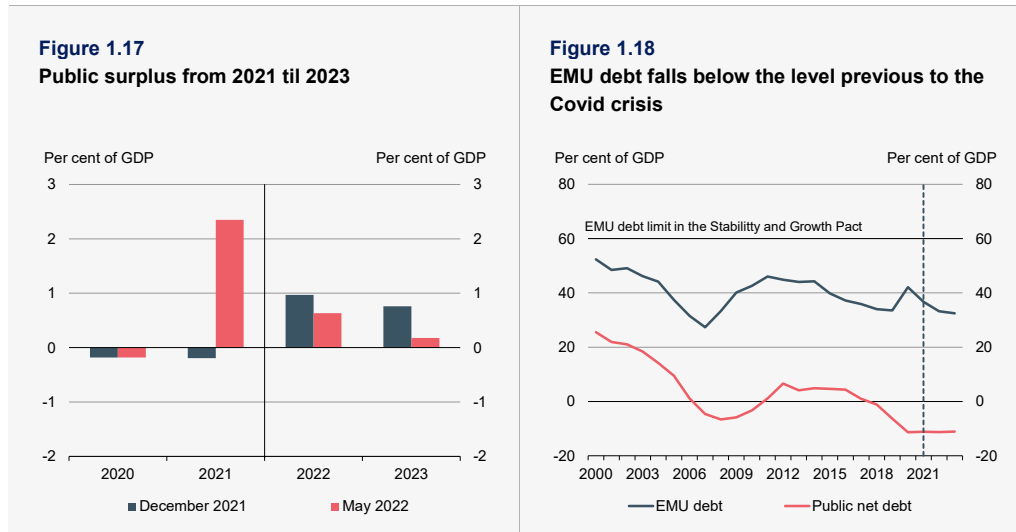
Beyond the policies in the reform package, the government and a number of parties in the Danish parliament have proposed a new temporary and supplementary Pay-Limit scheme, which is intended to accommodate the labour shortage in the coming years.

Public Surplus and Lower Public Debt

According to preliminary accounting figures for 2021 from Statistics Denmark, the actual budget balance is projected to show a surplus of 2.3 per cent of GDP. This is an improvement of 2.5 per cent of GDP compared to the December survey, *cf. figure 1.17*. The surplus of the actual budget balance reflects the increased revenue from the pension yield tax, VAT, and corporate taxation due to the increase in economic activity. On the expenditure side, the improvement is down to a range of developments in lower public consumption, public investments and subsidies compared to the December estimates.

The actual budget balance is projected to show a surplus of 0.6 per cent of GDP in 2022 and a surplus of 0.2 per cent of GDP in 2023. This is a downwards adjustment compared to the December survey, which reflects new expenditure priorities relating to the war in Ukraine and a lower estimate of revenue from the pension yield tax due to the outlook of increasing interest rates.

Due to the Covid crisis, the gross general government debt (measured by the EMU debt) rose to approximately 42 per cent of GDP by the end of 2020 compared to approximately 34 per cent of GDP by the end of 2019, i.e. prior to the Covid crisis, *cf. figure 1.18*. The improvement of the Danish economy and the projected surpluses on the actual budget balance are estimated to reduce the EMU debt to about 33 per cent of GDP by the end of 2023. Thus, the EMU debt is expected to approach the level from before the Covid crisis during the forecast years. Denmark's EMU debt is low in an international perspective and remains well below the limit of 60 per cent of GDP in the EU's Stability and Growth Pact.



Source: Statistics Denmark, *Economic Survey, December 2021* and own calculations.

The public net debt includes publically owned financial assets, including the state's deposits at the Danish National Bank, re-lending and stocks in a range of companies e.g. Ørsted. The net debt is the central debt figure in terms of assessing the sustainability of fiscal policy. In 2019 – prior to the Covid crisis – the net debt was negative, which implies that the public sector had a net wealth amounting to around 6 per cent of GDP. In light of the business cycle developments and expected surplus on the budget balance, the public net wealth is estimated to grow to around 11 per cent of GDP at the end of 2023. Thus, the public financial net wealth is expected to be larger than the previous peak in 2008.

1.3 Annex table

Table 1.2
Key figures from the May survey and comparison with estimates in the December survey

	2021	2022		2023	
		December	May	December	May
Real change, per cent					
Private consumption	4.2	3.8	2.6	1.9	2.0
Total government demand	3.8	-1.5	0.3	1.3	1.5
- of which government consumption	3.7	-1.4	0.8	-0.4	-0.3
- of which government investments	4.3	-2.5	-3.5	13.6	14.3
Housing investment	6.1	3.9	2.0	2.1	2.3
Business fixed investment	5.9	4.7	3.7	3.0	4.5
Inventories (cont. to GDP-growth)	0.3	0.0	0.1	0.0	-0.2
Total domestic demand	4.7	2.3	2.2	1.9	2.0
Exports	7.8	5.4	5.1	3.7	3.7
- of which manufacturing exports	12.8	3.7	3.1	1.8	1.5
Total demand	5.8	3.5	3.3	2.6	2.6
Imports	8.2	4.9	3.1	3.5	4.0
- of which imports of goods	12.0	3.4	1.9	2.1	3.2
GDP	4.7	2.8	3.4	2.1	1.9
Gross value added	4.5	2.9	3.7	2.0	1.8
- of which non-farm private sector	5.6	3.7	4.4	2.5	1.9
Change in 1,000 persons					
Labour force, total	51	35	51	10	16
Employment, total	78	64	70	11	15
- of which private sector	56	67	76	12	14
- of which public sector	22	-3	-6	-1	1
Gross unemployment	-28	-29	-19	-1	0
Cyclical developments, per cent					
Output gap	2.5	2.4	2.8	2.2	2.3
Employment gap	1.7	2.7	2.8	2.5	2.6
Unemployment gap	-0.3	-1.1	-1.0	-1.0	-0.9

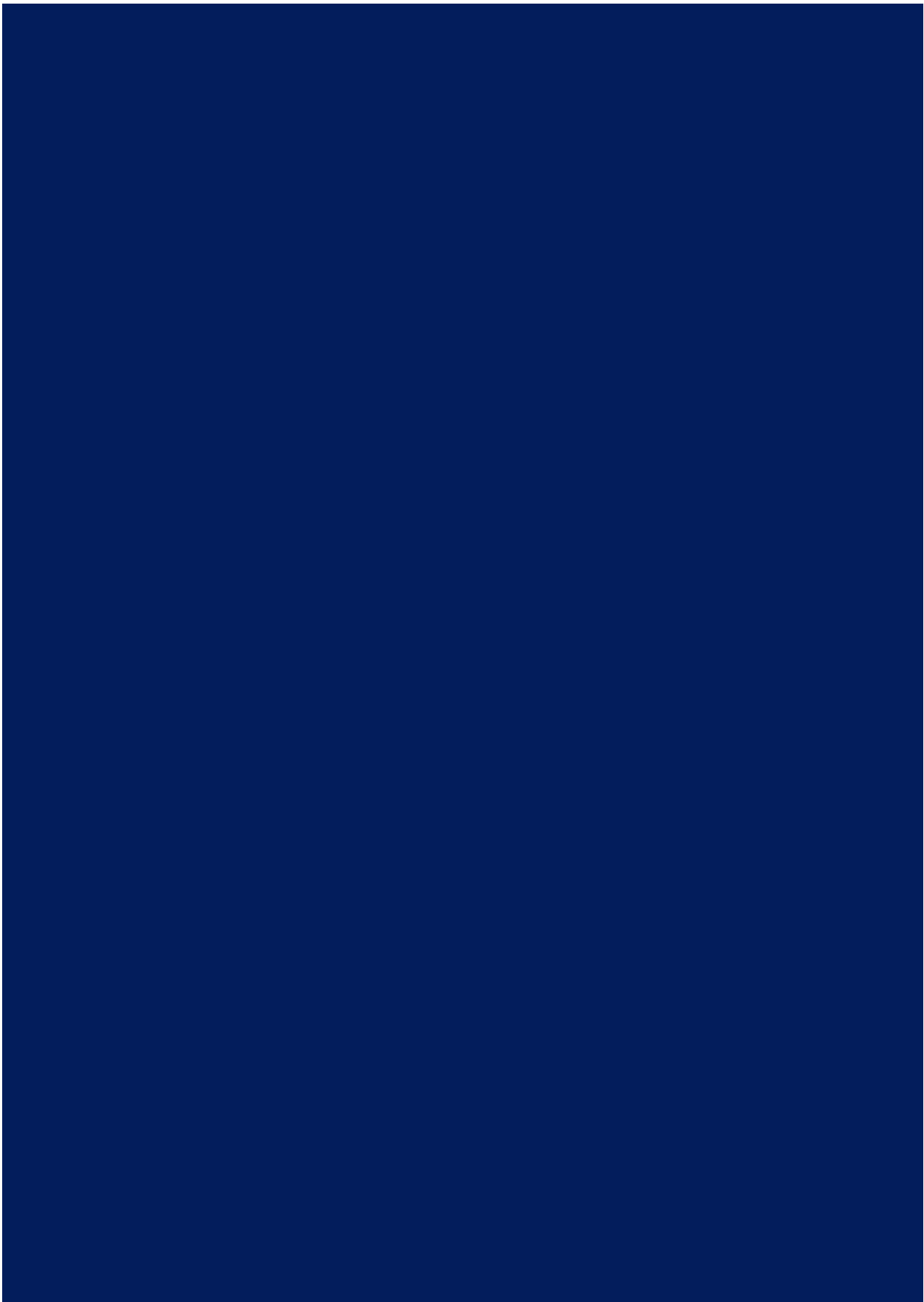
Note: The change in volume for public consumption is calculated using the output method.

Source: Statistics Denmark and own calculations.

Table 1.2 (continued)
Key figures from the May survey and comparison with estimates in the December survey

	2021	2022		2023	
		December	May	December	May
Change, per cent					
House prices (single family homes)	10.6	3.3	4.8	2.8	0.9
Consumer prices	1.9	2.2	5.2	1.8	1.8
Hourly earnings in the private sector	3.0	3.4	3.7	3.4	3.6
Real disposable income, households	2.8	2.7	1.6	2.3	2.2
Productivity in the private non-farm sector	1.5	1.1	1.3	2.2	1.4
Per cent p.a.					
1-year rate loan	-0.5	-0.4	0.1	-0.2	1.2
10-year government bond	-0.1	-0.1	1.0	0.0	1.3
30-year mortgage credit bond	1.3	1.7	2.5	1.9	3.5
Public finances					
Actual public balance (DKK bn.)	58.7	25.0	16.6	20.2	4.8
Actual public balance (per cent of GDP)	2.3	1.0	0.6	0.8	0.2
Structural public balance (per cent of GDP)	0.2	-0.2	-0.1	-0.1	-0.1
Gross debt (per cent of GDP)	36.7	34.1	33.3	34.9	32.5
Labour market					
Labour force, total (1,000 persons)	3,164	3,201	3,215	3,212	3,231
Employment, total (1,000 persons)	3,060	3,125	3,130	3,136	3,146
Gross unemployment (yearly average, 1,000 persons)	106	78	86	77	87
Gross unemployment (per cent of labour force)	3.3	2.4	2.7	2.4	2.7
External assumptions					
Trade-weighted international GDP-growth, per cent	5.0	4.0	3.0	2.5	2.5
Export market growth (manufactured goods)	9.8	6.1	5.5	4.0	4.5
Exchange rate (DKK per USD)	6.3	6.6	6.7	6.6	6.8
Oil price, dollars per barrel	70.7	74.4	103.5	73.7	98.6
Balance of payments					
Current account balance (DKK bn.)	206	186	170	174	160
Current account balance (per cent of GDP)	8.3	7.2	6.5	6.5	5.9

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



2. Household finances in light of high inflation

Consumer price inflation has increased to an unexpected degree during 2021 and through the first months of 2022. The rate of inflation has increased from 0.6 per cent in January last year to 6.7 per cent in April of this year. Especially rising energy prices are driving overall inflation. For the past six months, the direct contribution of energy prices to aggregate inflation has been near 1½-3 percentage points. Additionally, indirect effects of increasing energy costs account for a significant share of the remaining inflation.

In the past, developments in energy prices have also had a major impact on the overall development of prices in both a positive and a negative direction. However, the current increases in energy prices are extraordinarily large. They are due to a number of factors, including normalisation from very low levels during the pandemic, weather conditions and, most recently, the major consequences of Russia's invasion of Ukraine. The rising inflation also reflects increases in the price of other goods. For instance, the price of food has increased by 7.7 per cent during the past year, while the price of household furniture has increased by 11.6 per cent.

Many of the causes of the high inflation are common to many countries. For instance, inflation in the euro area is high as well, and considerably higher than in Denmark in a number of countries. In April 2022, inflation in Denmark was roughly in line with inflation in the euro area.

This chapter investigates how inflation affects the finances of Danish households. Some of the conclusions are:

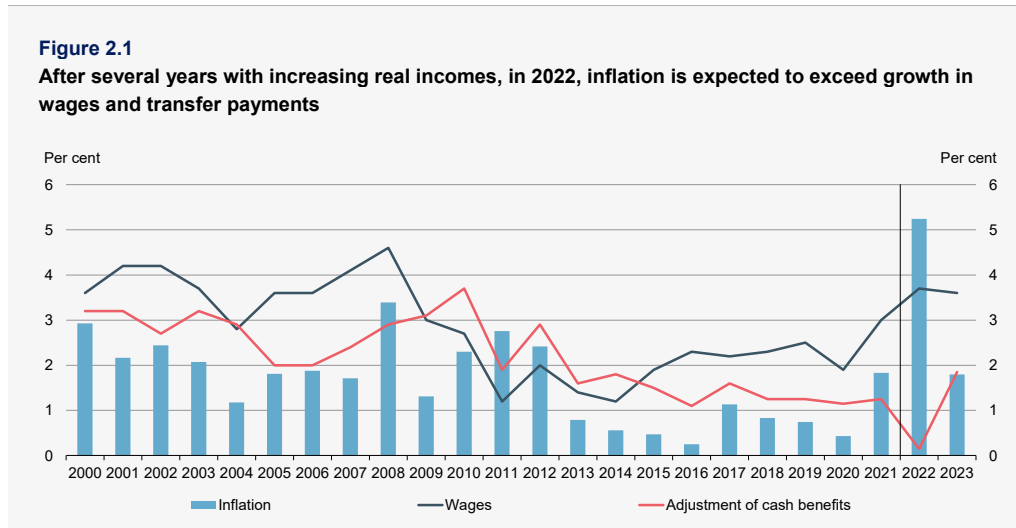
- Overall, household finances are cushioned by considerable savings buffers. Households have accumulated an extraordinary amount of savings during the corona pandemic. Many households will be able to maintain current consumption levels despite large price increases, which reduce their purchasing power. However, some households do not have many liquid funds at their disposal.
- The degree to which increasing prices affect individual households depends on a number of factors, such as the income of the household and the composition of its consumption.
- On average, price-driven increases in consumption expenditures does not differ widely across socioeconomic groups, but the households with the lowest incomes typically spend a larger share of their budget on food, electricity and heating, whose prices have increased most. However, there are marked differences across households with varying heating sources, modes of transport, etc.
- Compared to the variation in price-driven increases in consumption expenditure, the differences in income growth across socioeconomic groups is larger. All groups are expected to experience a

decline in their purchasing power in 2022, but this especially applies to recipients of public transfer payments (social pensions, unemployment benefits etc.).

- Seen as a whole, Danish households have improved their finances over the past years. In the years following the financial crisis, households have allocated their rising incomes to savings rather than to consumption to a greater degree. During the corona pandemic, savings have been particularly high due to limited consumption opportunities and the reimbursement of previously frozen holiday funds.
- As a share of disposable income, the wealth of Danish households is at the highest level ever.
- Generally, the households with the lowest incomes have the smallest stock of liquid assets. Moreover, especially families with average or high incomes have saved money on travelling and restaurant visits etc. during the pandemic. At the same time, mainly families close to the labour market have been the recipients of reimbursements of frozen holiday funds.
- Compared to the situation in other countries – including Germany, Sweden and Norway – the finances of Danish households get support from the strong recovery of the Danish economy from the corona pandemic with a comparatively large increase in employment.

2.1 Real wages over time

Usually, wages rise faster than prices, such that households experience an increase in their purchasing power. This also applies to recipients of transfer payments, as transfers are adjusted annually to track wages with a delay. However, there have been years where the rate of inflation was higher than the rise in incomes. For instance, this was the case in 2011 for both employees and recipients of transfer payments, *cf. figure 2.1*. In contrast, inflation was relatively low in the years 2013-2020, which gave rise to a substantial growth in real income through these years.



Note: Wage growth has been calculated on the basis of hourly wages in the private sector in the StrukturStatistik of the Confederation of Danish Employers. For 2022-2023, forecasts are displayed. From 2016, the depicted wage rate adjustment of cash benefits reflects the adoption in connection with the 2012 tax reform of mitigated adjustment, and from 2020, the gradual introduction of compulsory savings of 0.3 per cent for recipients of transfer payments. A forecast is shown for 2023.

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

On an annual basis, inflation was 1.9 per cent in 2021, and thus not higher than what can generally be expected in a normal situation given the inflation target of the ECB of 2 per cent. Because of the fixed exchange rate policy, this target also guides inflation in Denmark. It is expected that inflation will fall somewhat as the large contributions from energy prices wane. Next year, inflation is deemed to decrease to 1.8 per cent upon an expected increase in prices of 5.2 per cent this year, *cf. chapter 3*. Thus, there are prospects of real income growth by 2023.

In 2021, inflation ended up higher than expected at the start of the year, and the increase to the high current levels implies that many households are experiencing that consumer prices are rising faster than wages and transfer payments.

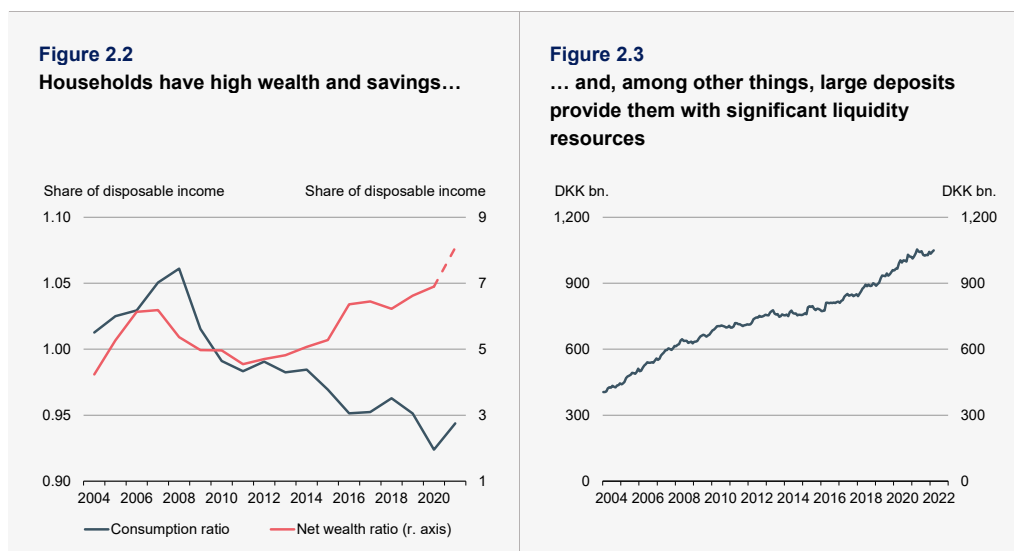
2.2 Finances of Danish households are as a whole cushioned by considerable savings buffers

As a whole, the Danish household sector has improved its finances over a number of years. Thus, since the financial crisis, households have allocated their increasing incomes to savings rather than to consumption to an increasing degree. During the corona pandemic, savings were particularly high because of fewer consumption opportunities. In addition, many households took the opportunity to get their frozen holiday funds reimbursed. Overall, during the corona pandemic, an extra cushion of approx. DKK 100 bn. was accumulated, *cf. chapter 3*, corresponding to 8-9 per cent of annual private consumption.

To put these DKK 100 bn. in perspective, total consumption expenditures will increase by approx. 35 bn. with the expected rate of inflation of 5.2 per cent relative to a situation with normal inflation of 2 per cent.

The extra savings from the corona period are undoubtedly not evenly distributed. *A priori*, one should mainly expect families with average or relatively high incomes to have saved money on travel and restaurant visits etc. during the corona pandemic, and it is especially families with tighter links to the labour market, which have been the recipients of reimbursements of frozen holiday funds.

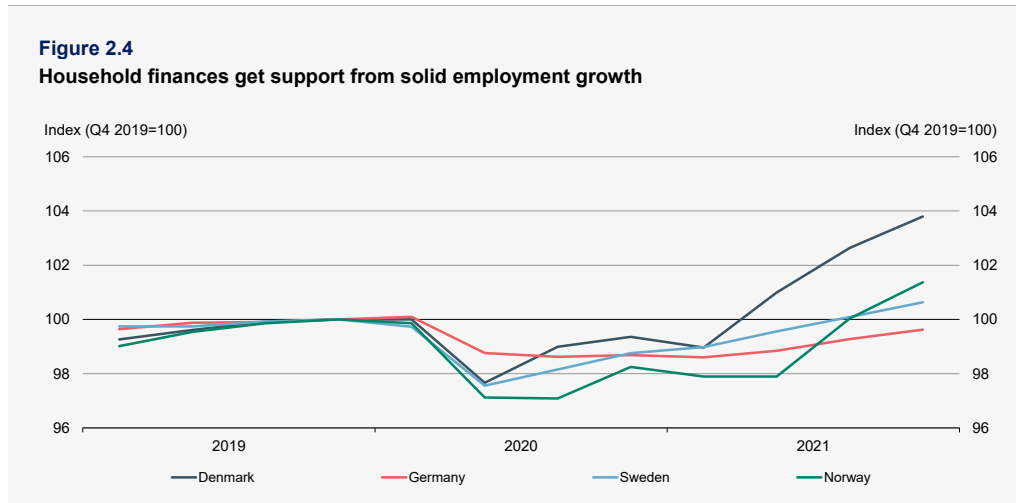
Extraordinarily high savings have contributed to a significant increase in household net wealth. As a share of disposable income, Danish household net wealth after tax is at the highest level ever, *cf. figure 2.2*. At the same time, the liquidity buffer of households in the form of bank deposits is overall at a very high level and amounted to just over DKK 1,049 bn. in March 2022, *cf. figure 2.3*.



Note: Figure 2.2 shows household net wealth, i.e. the sum of their assets minus their debt. Pension assets are calculated after tax. For the computation, an effective tax rate of 56.7 per cent has been assumed. The figure for net wealth in 2021 is an estimate. Net wealth includes land owned by farms organized as sole proprietorships. There is a data break in 2016 as a result of a new method to measure financial assets and liabilities in the national accounts. In 2020 and 2021, disposable income is adjusted for the tax payment of the holiday funds payout. Figure 2.3 is calculated for the sector *households – private individuals, etc.* and shows their bank deposits. Last observation is March.

Source: Danmarks Nationalbank, ADAM's database, Statistics Denmark and own calculations.

Compared with the situation in other countries, e.g. Germany, Sweden and Norway, the finances of Danish households also get support from the sound path of the Danish economy through the pandemic. Employment has risen to the highest level ever, and significantly more than in our neighbouring countries, *cf. figure 2.4*.



Note: The figures are seasonally and calendar-adjusted and show employment as measured in the national accounts.
Source: Eurostat and own calculations.

The steady increase in employment has led to a historically low unemployment rate in Denmark, and measured by the number of enrolled unemployed persons, unemployment remains stable and low at the beginning of May. Unemployment is as a result of Russia's invasion of Ukraine expected to rise from the very low starting point, but is not expected to exceed the pre-pandemic level at any time in 2022-2023, *cf. chapter 5*.

2.3 Impact of inflation for selected family types

Inflation has increased from 0.6 per cent in January 2021 to 6.7 per cent in April of this year. The severity of the impact of increasing prices on individual households depends on several factors, including the composition of household consumption. There is no register data for the actual consumption of individual household by product group. Calculations of the impact of unexpectedly high inflation on different groups are therefore subject to considerable uncertainty, and invariably, calculations will be based on family type examples or samples of the population, e.g. in the form of Statistics Denmark's Household budget survey. In 2018, this survey consisted of responses from 2,200 out of the 2.7 million private households in Denmark. The reader should therefore interpret the results in this section with caution.

Employees at the basic level, the unemployed, pensioners and persons otherwise not economically active spend a larger share of their budget on food, electricity, gas, etc. and fuel, *cf. table 2.1*. These goods have recently increased significantly in price and, in the short run, they are difficult to replace with other goods that have increased less in price. As a result, these socioeconomic groups appear to be hit the hardest by increasing consumption expenditures.

Table 2.1
Certain socioeconomic groups spend more on goods that have increased severely in price

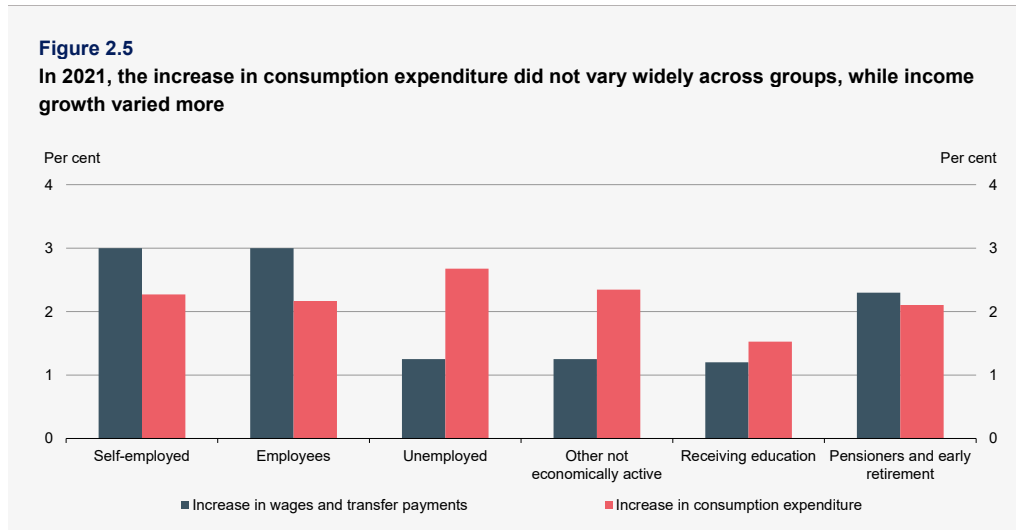
	Self-employed	Employees – upper level	Employees – medium level	Employees – basic level	Unemployed	Other not economically active	Receiving education	Pensioners and early retirement
Per cent of total consumption								
Food	10.3	9.6	10.3	10.3	14.0	12.0	10.4	10.3
Electricity, gas, etc.	5.0	4.3	4.5	5.3	7.5	6.4	5.1	6.0
Fuel	2.2	2.4	3.0	3.3	2.2	1.6	1.1	2.1
Other	82.5	83.7	82.2	81.1	76.4	80.0	83.4	81.7

Note: The shares are from the weights used in the computation of Statistics Denmark's consumer price indices by group of households in 2020, which reflects the composition of consumption in 2018.

Source: Statistics Denmark and own calculations.

Food accounts for a higher share of the consumption of the unemployed and of persons otherwise not economically active and a lower share for employees at the upper level. In contrast, the consumption share of fuel is higher for medium-level and basic-level employees, including consumption in connection with transport to work, and lower for groups outside of the labour market, the self-employed and employees at the upper level. The consumption of electricity, gas, etc. generally represents a larger budget share for the groups out of employment, discounting receivers of education, and the lowest share for employees at the upper level. Together, the three items make up between 16.3 and 23.6 per cent of the total consumption of the respective socioeconomic groups, most for the unemployed and least for employees at the upper level.

In 2021, inflation was not particularly high but it picked up speed at the end of the year, and real income growth varied across groups, *cf. figure 2.5*. Assuming unchanged consumption composition since 2018, the figure displays the increase in consumption expenditure for various socioeconomic groups from 2020 to 2021. The shown increases in consumption expenditure undoubtedly overestimate the price increases that households experience, as some households can restructure parts of their consumption and reduce consumption of goods and services that have risen relatively much in price or postpone consumption. The figure also displays the increase in wages and transfer payments. For employees and the self-employed, it is assumed for computational purposes that the increase in income has been on par with the average wage increase in the private labour market.



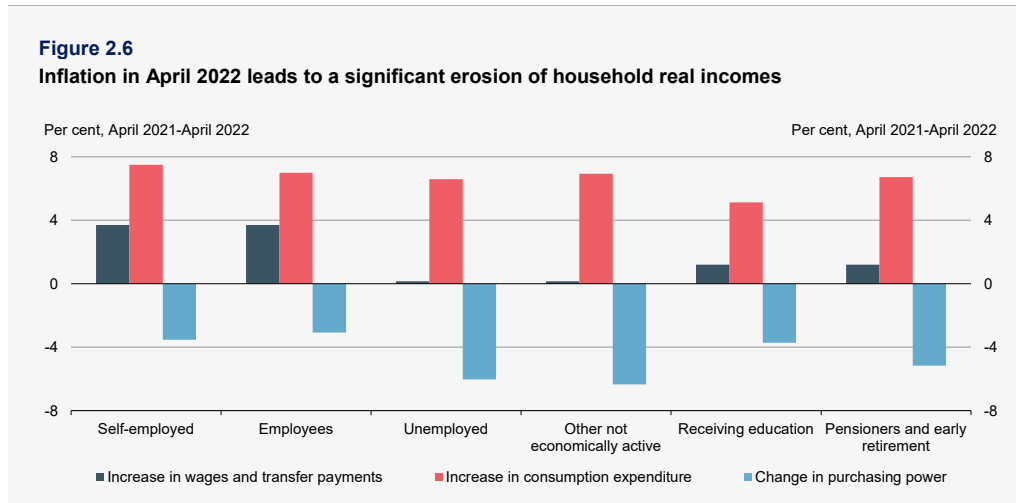
Note: The increase in consumption expenditure is projected using the increase in the price indices of 248 product groups assuming an unchanged consumption composition relative to 2018. The consumption composition of the socioeconomic groups is taken from the weights used in the computation of Statistics Denmark's consumer price indices by group of households in 2020. The increase in the consumption expenditure of the three wage earner groups is a weighted average, using their shares of employment in 2018. For computational purposes, it is assumed that the *self-employed* and *employees* have had an income increase on par with the expected, average hourly wage increase in the private labour market in 2021, that income of those *receiving education* tracks the state education grant, that the *unemployed* and persons *otherwise not economically active* receive a transfer subject to mitigated adjustment pursuant to the 2012 tax reform and contributions to compulsory savings, and that *pensioners and early retirement* recipients receive a public old age pension. Thus, the figure does not take into account, that early retirement benefits are subject to mitigated adjustment and contributions to compulsory savings.

Source: Statistics Denmark and own calculations.

As shown in the figure, there was not much difference in the rate of increase in the consumption expenditure of the various groups in 2021. The self-employed, the unemployed and persons otherwise not economically active experienced a price-driven increase in their consumption expenditure of between 2.3 and 2.7 per cent. By comparison, those receiving education and pensioners saw a price-driven increase in their consumption expenditure of 1.5-2.1 per cent.

While in 2021 there was not much difference in the increase in the price of consumption across socioeconomic groups, there was a significant difference in pre-tax-income growth. While employees and pensioners saw increasing purchasing power in 2021, the purchasing power of the other non-employed groups fell, partly due to the mitigated adjustment of a number of transfer payments pursuant to the 2012 tax reform and to increasing contributions to compulsory pension savings.

At the beginning of 2022, inflation has increased significantly, reaching 6.7 per cent in April. In addition, larger differences in the price-driven increase in the consumption expenditure of different socioeconomic groups have appeared, although wage and transfer payment growth still varies most across groups, *cf. figure 2.6*.



Note: It is technically assumed that the self-employed and employees during the 12 months in question had an income increase on par with the estimated, average hourly wage increase from 2021 to 2022. The weights used in the calculations reflect the composition of consumption in 2018. See also note to figure 2.5.

Source: Statistics Denmark and own calculations.

During the 12 months from April 2021 to April 2022, all groups have seen declines in their purchasing power. In the past year, the unemployed, those otherwise not economically active as well as pensioners and early retirement recipients have seen price-driven increases in their consumption expenditure that are 0.0-0.3 percentage points lower than average. For those receiving education, the price-driven increase in consumption expenditure was 1.8 percentage points below average. At the same time, income growth of the non-employed has been relatively low. Accordingly, the purchasing power of the unemployed and those otherwise not economically active has fallen by approximately 6 per cent, while that of students and pensioners has fallen by 4-5 per cent over the past year.

For the groups in employment, i.e. employees and the self-employed, inflation has over the past year led to an increase in the consumption expenditure by up to 0.6 percentage points more than the average. For these groups the hourly wages are expected to increase by the estimated increase in private sector wages of 3.7 per cent in 2022, *cf. chapter 5*. Hence, the purchasing power of the hourly wage is deemed to have fallen by 3.1-3.5 per cent. However, many employees can increase their income by working more hours and are thus able to supplement their purchasing power to some extent.

The difference in the price-driven increase in consumption expenditure across socioeconomic groups probably underestimates the variation in the population, as differences between individuals within the groups tend to offset each other. For example, those receiving education spent an average of 1.1 per cent of their budget on fuel in 2018 and 1.9 per cent on passenger transport by train, underground, tram, bus and taxi. However, this probably masks the fact that some of those receiving education transport themselves almost exclusively in public transport or by bicycle, while others, conversely, primarily use a car. The increase in the price of petrol will hit the first group less hard than the average for all of those receiving education suggests, while the impact will be harder on the second group of those receiving education. In general, persons with gas as heating source and a car as mode of

transport will experience greater price increases than, for example, persons who use district heating and public transport, *cf. box 2.1*.

Box 2.1

The composition of its consumption is crucial for how hard a household is hit, but more and more households are facing relatively large price increases

Different households experience different increases in their expenditure on consumption, depending on the composition of their consumption. Households that heat their homes with gas and use a car as a means of transport will therefore face greater price-driven increases in consumption expenditure than households that have access to district heating and that use public transport, *cf. figure a*. This illustrative example is based on the assumption that consumption has an otherwise unchanged composition. This leads to an overestimation of the increase in consumption expenditure, as households can undoubtedly restructure parts of their consumption and reduce the consumption of goods and services that have increased relatively much in price, or postpone consumption.

The illustrative example also shows that households that are not consumers of gas heating and fuel do also experience price-driven increases in their consumption expenditure that are somewhat greater than in a situation with more normal price increases of approx. 2 per cent. While the vast majority of households in mid-2021 saw price-driven increases in their consumption expenditure of less than 2 per cent annually, this was the case for only few in April 2022, *cf. figure b*. In fact, the share of households facing relatively large price-driven increases in their consumption expenditure has been rising. In April 2022, approx. every third household, assuming an unchanged consumption composition, saw a price-driven increase in their consumption expenditure of between 5 and 7 per cent annually, while the consumption expenditure of 3 out of 10 households had increased by more than 7 per cent.

Figure a

Some households have seen a relatively large increase in their consumption expenditure

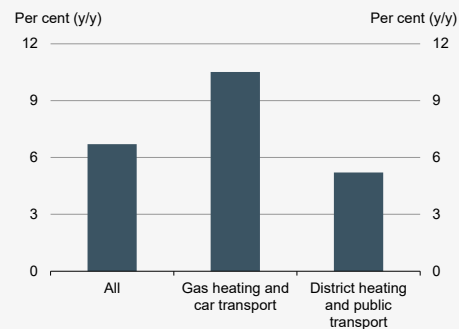
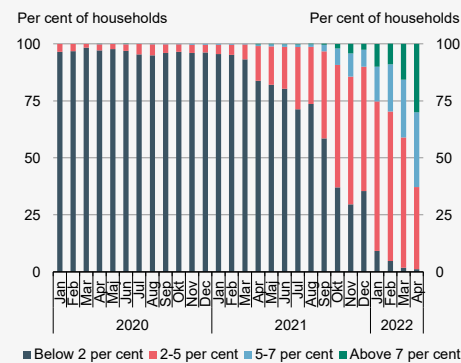


Figure b

More households are experiencing relatively high price increases



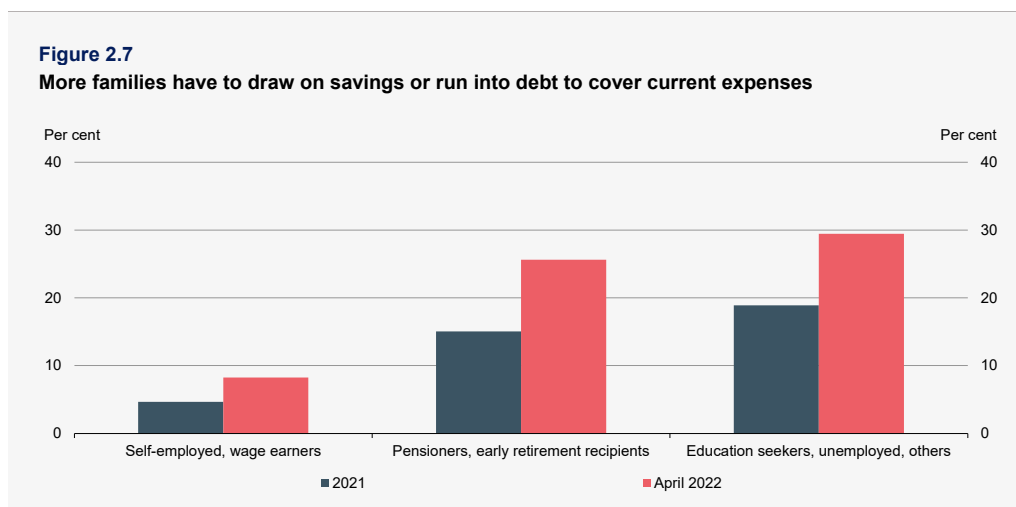
Note: As an example, figure a shows the increase in the consumption expenditure of two households in April 2022. The weights used in the computation of the consumer price index in 2022 form the basis of the calculation. The entire weight on the product groups gas, liquid fuel, solid fuel, etc., and district heating is assigned to either district heating or gas. Similarly, the total weight on the operation of personal means of transport and transport services is placed on either the operation of personal means of transport or on trains and metros. Figure b is calculated on the basis of the Household budget survey, which yields different weights than Statistics Denmark's consumer price indices by group of households in 2020.

Source: Statistics Denmark and own calculations.

Furthermore, the present price increases may affect the personal finances of households that heat their homes with gas to a greater extent. However, natural gas customers typically have a slightly higher income, are older and are more often homeowners than other groups.¹ Some groups of natural gas customers nevertheless feel a significant strain on their personal finances.

The low rate of income growth in 2022 of the non-employed reflects the fact that the wage rate adjustment of transfer payments of 1.2 per cent in 2022 is based on the low wage increase in 2020. Increased contribution to compulsory savings and mitigated adjustment pursuant to the 2012 tax reform imply that the actual adjustment of a number of transfer payments is smaller. For recipients of cash benefits, unemployment benefits and the like, the adjustment thus amounts to 0.15 per cent in 2022. The differences in income growth therefore reflect previous decisions and current regulatory mechanisms. In 2023, the expected higher wage increase of 2021 will form the basis of the wage rate adjustment of transfers, and correspondingly, relatively higher wage rate adjustments are expected in 2024 and 2025 based on the current wage forecasts for 2022 and 2023.

In the survey pertaining to consumer expectations, there has been an increase in the share of families stating that they currently have to draw on savings or run into debt in order to cover current expenses, cf. figure 2.7. Consumers also have, on average, a negative assessment of their own family's situation, cf. chapter 3.



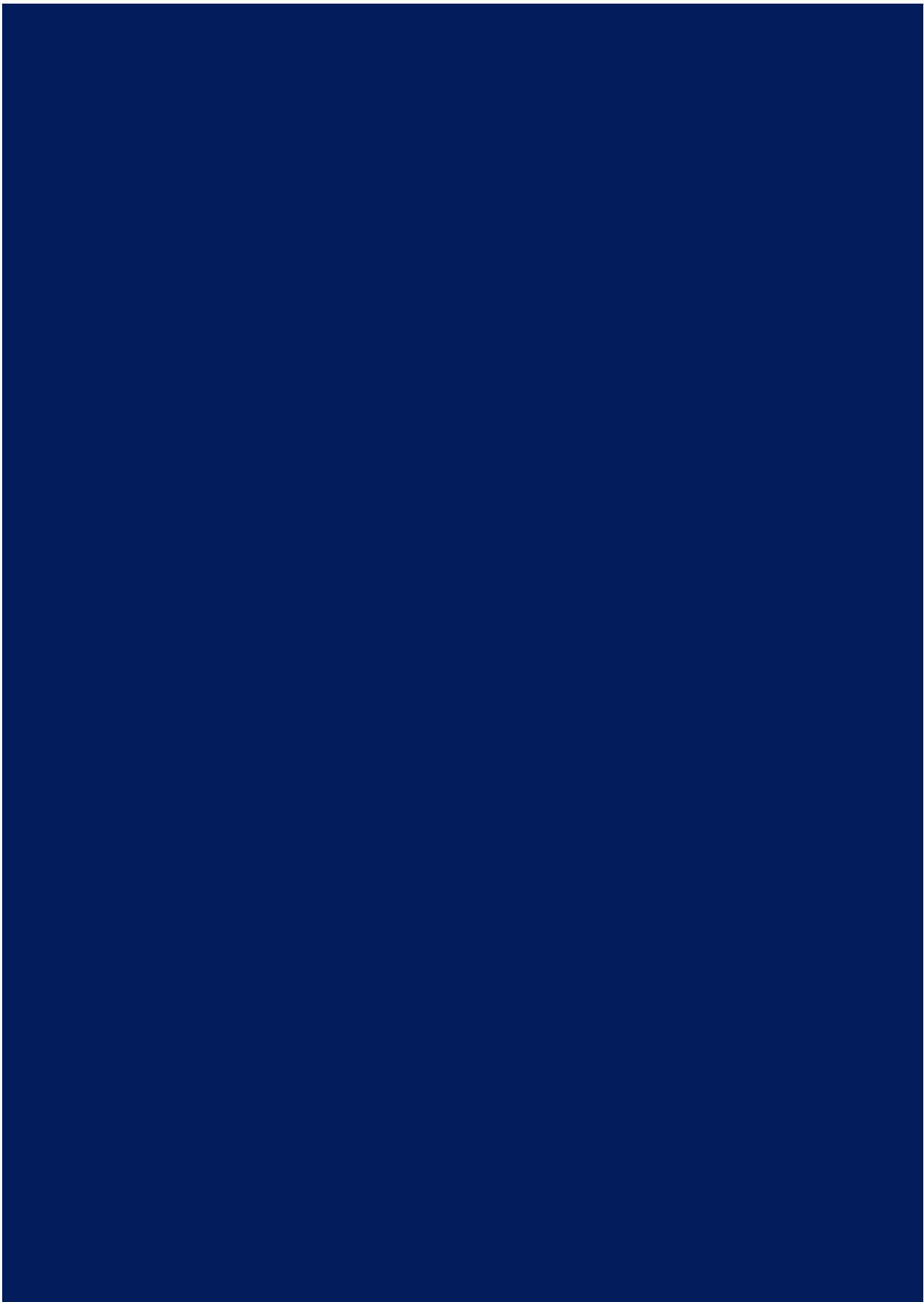
Note: The figure shows the weighted share of the respondents in the survey of consumer expectations who, when asked: “Which of these statements best describes the current financial situation of your household?”, respond “We are having to draw on our savings” or “We are running into debt”. The survey of consumer expectations is a small sample and the groups have therefore been merged to minimise uncertainty. The respondents in April 2022 are assigned to a socioeconomic group based on information from January 2022, while the information for respondents in 2021 is from November 2021. The division into socioeconomic groups is not made on the basis of the same type of information as in the other figures in the chapter, and there is thus not complete consistency with these.

Source: Statistics Denmark and own calculations based on consumer expectations.

¹ See e.g. Danmarks Nationalbank (2022): “Outlook for the Danish economy – War in Ukraine dampens growth and increases inflation”, Analysis, March 2022 no. 5.

On average, considerable savings buffers cushion household finances, *cf. above*, and in that sense, they have a reserve that can be spent to maintain consumption levels over a period of marked price increases and economic uncertainty. Nevertheless, some households do not have many funds at their disposition.

In the beginning of 2022, the government and a majority in the Parliament decided to give DKK 2 bn. in the form of a tax-free heat check to households in the lower part of the income distribution who use heat sources that are particularly exposed to price increases. The government has proposed further measures to support finances among households that have a long commute and among the elderly who have low incomes and modest wealth in addition to the public old age pension.



Annex tables

Table B.1
Demand, import and production

	2021	2022	2023	2021	2022	2023	2021	2022	2023
	DKK bn.			Volume, per cent			Prices, per cent		
Private consumption	1,139	1,229	1,276	4.2	2.6	2.0	2.1	5.2	1.8
Public consumption ¹⁾	609	623	636	3.7	0.8	-0.3	2.2	1.5	2.5
Public investments ²⁾	87	86	101	4.4	-3.5	14.3	0.2	3.3	1.7
Residential investment	140	148	155	6.1	2.0	2.3	2.0	3.8	2.1
Fixed business investment	334	358	379	5.9	3.7	4.5	2.0	3.4	1.4
Domestic demand excl. in- ventory investment	2,311	2,448	2,551	4.4	2.1	2.2	2.0	3.8	1.9
Inventory investment ³⁾	18.6	21.4	15.5	0.3	0.1	-0.2			
Total domestic demand	2,329	2,470	2,566	4.7	2.2	2.0	2.1	3.8	1.9
Exports of goods and ser- vices	1,487	1,617	1,631	7.8	5.1	3.7	7.9	3.5	-2.7
Total demand	3,816	4,087	4,197	5.8	3.3	2.6	4.3	3.7	0.1
Imports of goods and services	1,320	1,459	1,489	8.2	3.1	4.0	8.1	7.2	-1.9
Gross domestic product	2,497	2,628	2,709	4.7	3.4	1.9	2.4	1.8	1.2
Taxes on products, net	328	335	346						
Gross value added	2,169	2,292	2,363	4.5	3.7	1.8	2.3	1.9	1.3
- Non-farm private sector ⁴⁾	1,445	1,570	1,652	5.6	4.4	1.9	-0.5	4.1	3.3
Gross national income	2,577	2,678	2,769						

Note: The division into volume and price components is made based on a fixed price calculation in the previous year's prices.

- 1) The change in volume for public consumption is calculated using the input method. For 2022-2023, growth in public consumption using the input method is assumed to equal growth using the output method.
- 2) Public investments exclude general government net purchases of buildings, and therefore the figures will deviate from public investments in table B.7.
- 3) The volume figures reflect changes in inventories compared to GDP.
- 4) Non-farm private sector consists of manufacturing, construction and private service excluding shipping.

Source: Statistics Denmark and own calculations.

Interest rates, per cent		2019	2020	2021	2022	2023
USA	Federal Funds Target Rate	2.3	0.5	0.3	1.3	2.8
	3-month LIBOR	2.3	0.7	0.2	1.5	3.0
	10-year government bond	2.1	0.9	1.5	2.7	3.0
Euro area	Main Refinancing Operations Rate	0.0	0.0	0.0	0.8	0.0
	3-month EURIBOR	-0.4	-0.4	-0.8	-0.2	1.1
	10-year government bond (Germany)	-0.2	-0.5	-0.4	0.9	1.3
Denmark	Certificates of deposit rate	-0.7	-0.6	-0.6	-0.5	0.6
	3-month CIBOR	-0.4	-0.2	-0.2	0.0	1.1
	1-year adjustable mortgage rate	-0.6	-0.5	-0.5	0.1	1.2
	10-year government bond	-0.2	-0.4	-0.2	1.0	1.3
	30-year mortgage interest rate	1.6	1.1	1.3	2.5	3.5
Average interest rate		0.5	0.3	-0.2	1.2	1.9
Oil price						
Dollar per barrel		64.4	41.8	70.7	103.5	98.6
DKK per barrel		429.2	273.2	444.4	689.3	665.9
Exchange rate						
DKK per 100 dollar		666.9	654.2	628.7	666.0	675.4
DKK per 100 euro		746.6	745.4	743.7	743.7	743.7
Effective Krone Rate Index (1980=100)		102.9	102.9	102.9	102.1	101.6
Real growth rate, per cent						
External assumptions						
Export market growth ¹⁾ , per cent		1.5	-4.8	9.8	5.5	4.5
Trade weighted GDP-growth ²⁾ , per cent		1.9	-3.9	5.0	3.0	2.5

Note: The projections are based on data through April 19, 2022. Annual averages are own calculations. For monetary policy interest rates, the interest rate estimate is based on an assessment of the latest announcements by central banks and market expectations. For money market rates and the yield on 10-year government bonds, estimates are based on market expectations, which are based on the prices of swap interest rates. For the 1-year and 30-year mortgage rate bonds, data is Finance Denmark's bond rates and estimates are based on spreads to the 3-month money market rate and the 10-year government bond rate respectively. Estimates for exchange rates are calculated technically by assuming that the exchange rate for the remaining forecast period corresponds to the average during the last ten days prior to the estimation. Estimates for the oil price are based on the International Energy Agency, World Energy Outlook, October 2021, as well as futures prices.

1) Calculated as the weighted average of import growth in Denmark's 36 most important trade partners. The weights reflect the countries' share of Danish manufacturing exports in 2020.

2) Calculated as the weighted average of the GDP-growth in Denmark's 36 most important trade partners. The weights reflect the countries share of Danish export of goods and services in 2020.

Source: Macrobond, Nordea Markets, The International Energy Agency, IMF World Economic Outlook, April 2022 and own calculations.

Table B.3
Population and labour market

	2019	2020	2021	2022	2023
1,000 persons					
Total population	5,814	5,831	5,849	5,870	5,893
- Labour force	3,105	3,113	3,164	3,215	3,231
- Total employment	3,003	2,982	3,060	3,130	3,146
- Ordinary employment ¹⁾	2,914	2,892	2,964	3,029	3,040
- Subsidised employment ²⁾	89	90	96	101	106
- Gross unemployment (incl. activation) ³⁾	104	133	106	86	87
- Net unemployment	86	120	94	70	70
- Outside the labour force	2,710	2,718	2,685	2,654	2,662
- Recipients of unemployment benefits and cash benefits in activation outside the labour force	97	92	85	91	95
- Early retirement pensioners outside the labour force	183	191	198	206	205
- Senior pensioners outside the labour force	0	3	11	15	15
- Voluntary early retirement	46	48	52	35	27
- Persons under 15 years	955	951	946	942	938
- Pensioners outside the labour force	989	977	970	958	965
- Others outside the labour force	440	456	423	408	417

Note: Recipients of education assistance benefit, the special education benefit and other temporary benefits (kontantydelse) are included as cash benefit recipients.

- 1) Calculated as the difference between employment as determined in the national accounts and subsidised employment, which is based on data from AMFORA. Due to differences in the definition of employment in the two sources, the data is subject to a degree of uncertainty
- 2) Includes persons in employment with wage subsidies (including flex jobs and light duty jobs
- 3) The number of unemployment benefit recipients in activation and labour-market-ready cash benefit recipients includes persons in subsidised employment.

Source: Statistics Denmark and own calculations.

Annex tables

Table B.4
Employment by industry including leave

	2019	2020	2021	2022	2023
1,000 persons					
Employment, total	3,003	2,982	3,060	3,130	3,146
- Service industries	1,583	1,562	1,602	1,661	1,671
- Construction	192	195	204	208	210
- Manufacturing	311	304	306	319	320
- Agriculture	68	70	69	70	70
- Public sector	830	833	855	849	850

Note: The industry division is based on the division in the ADAM model, which are not identical to the division in the national accounts.

Source: Statistics Denmark and own calculations.

Tabel B.5
Unemployment

	2019	2020	2021	2022	2023
1,000 persons					
Gross unemployment	104	133	106	86	87
- per cent of workforce	3.4	4.3	3.3	2.7	2.7
Net unemployment	86	120	94	70	70
LFS unemployment (per cent)	5.1	5.8	5.2	4.3	4.3

Note: Differences in the definition of the labour force between the Ministry of Finance and Statistics Denmark mean that the gross unemployment rate in per cent of the workforce is estimated at a lower level.

Source: Statistics Denmark and own calculations.

Table B.6
Benefit recipients etc.

	2019	2020	2021	2022	2023
1,000 persons					
Unemployment benefits (excl. activation)	71	102	81	57	56
Cash benefits (excl. activation)	80	85	75	73	74
Recipients of unemployment benefits and cash benefits in activation ¹⁾	34	24	22	25	25
Holiday benefit	4	3	3	1	1
Early retirement pensioners ²⁾	203	210	218	226	226
Senior pension	0	3	12	16	16
Resource assessment benefit	38	36	33	37	36
Voluntary early retirement	46	48	52	35	27
Early retirement	0	0	0	24	29
Flex job scheme benefit	3	3	3	3	3
Disablement rehabilitation benefit ³⁾	3	3	2	2	2
Sickness benefit ⁴⁾	59	76	84	67	64
Maternity leave	50	51	52	50	51
Benefit for unemployed	16	18	16	16	17
Self-support, home-travelling and transitional benefits ⁵⁾	13	12	10	20	25
Total	621	674	663	654	652
Student grant (SU)	322	318	315	318	320
Total, including SU	943	992	978	972	971
Pensioners	1,145	1,124	1,116	1,101	1,112
Total, including SU and pensioners	2,088	2,116	2,094	2,073	2,083
Subsidised employment ⁶⁾	89	90	96	101	106
Total, including SU, pensioners and subsidised employment	2,176	2,206	2,191	2,175	2,189

Note: Recipients of education assistance benefit, the special education benefit and other temporary benefits (kontantydelse) are included as cash benefit recipients.

- 1) The data does not cover persons in subsidised employment and thereby differs from other register-based data and table B.3. Furthermore, both labour market ready and non-labour market ready cash benefit recipients are included in the group of recipients of unemployment benefits and cash benefits in activation schemes.
- 2) Early retirement and retirement pension include pensioners living abroad as well as pensioners, who are employed.
- 3) Excl. persons on disablement rehabilitation with wage support.
- 4) The number of sickness benefit recipients does not reflect the total absence due to illness. It includes the part of the sickness absence, which is not covered by the employer. Specifically, this covers sickness absences longer than 30 days as well as sickness among the unemployed.

Annex tables

- 5) The number of self-support and home-travelling as well as transitional benefits are calculated excl. recipients of wage subsidies
- 6) Includes persons in employment with wage subsidies (including flexi-jobs and sheltered jobs).
- Source: Statistics Denmark, DREAM and own calculations.

Table B.7
Gross investments

	2021	2019	2020	2021	2022	2023
	DKK bn.	Real growth rate, per cent				
Gross fixed capital formation	560	0.1	5.1	5.6	2.4	5.3
<i>Divided into groups:</i>						
- Construction investments	284	2.1	10.4	5.7	2.4	4.7
- Tangible and intangible investments	276	-1.5	0.4	5.5	2.4	6.0
<i>Divided into groups:</i>						
- Residential investments	140	4.7	10.1	6.1	2.0	2.3
- Public investments ¹⁾	87	-3.7	10.1	3.9	-2.0	13.9
- Total business investments	334	-0.6	2.0	5.9	3.7	4.5
- Construction investments	98	1.7	11.9	3.8	2.3	2.3
- Tangible and intangible investments	236	-1.3	-1.5	6.7	4.3	5.4

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

Table B.8
Balance of payments

	2019	2020	2021	2022	2023
DKK bn.					
Goods exports	810	780	900	959	981
Goods imports	705	675	828	931	944
Goods balance, total	105	105	72	28	37
Service exports	558	498	587	658	651
Service imports	492	453	492	528	545
Service balance, total	66	45	96	130	106
Balance of goods and services	171	150	167	158	143
- Per cent of GDP	7.4	6.5	6.7	6.0	5.3
Investment income from abroad, net	76	87	92	60	70
Wage income from abroad, net	-13	-12	-15	-13	-13
EU payments, net	-13	-16	-17	-14	-17
Other current transfers from abroad, net	-18	-19	-22	-21	-23
Net transfers from abroad, total	33	39	39	12	17
Current account, total	204	190	206	170	160
- Per cent of GDP	8.8	8.1	8.3	6.5	5.9
Net assets against other countries	1,797	1,603	1,762	2,650	3,005
- Per cent of GDP	77.5	68.8	70.6	100.8	110.9

Source: Statistics Denmark and own calculations.

Table B.9
Exports og imports

	2021	2019	2020	2021	2022	2023
	DKK bn.	Real growth rate, per cent				
Exports						
Goods, total	900	7.7	-2.2	12.7	2.2	1.7
- Agricultural goods etc.	130	2.0	0.6	5.5	1.7	1.4
- Industrial goods (excl. ships etc.)	689	10.5	-1.4	12.8	3.1	1.5
- Other goods ¹⁾	81	-3.9	-13.7	29.2	-5.1	4.1
Services, total	587	1.2	-14.0	0.2	9.6	6.6
- Sea transport	325	2.6	-6.5	4.3	3.0	2.0
- Other services	232	0.4	-11.8	-4.8	13.5	8.0
Total	1.487	5.0	-7.0	7.8	5.1	3.7
Imports						
Goods, total	828	2.4	-1.5	12.0	1.9	3.2
- Agricultural goods etc.	93	2.9	-6.4	6.5	2.5	3.1
- Industrial goods (excl. ships etc.)	542	5.5	0.6	13.6	2.3	3.4
- Other goods ²⁾	193	-5.2	-4.6	9.8	0.3	2.8
Services, total	492	3.7	-7.8	2.6	5.3	5.4
Total	1.320	3.0	-4.1	8.2	3.1	4.0
Memo						
		Nominal growth rate, per cent				
Export of basic goods ³⁾	854	9.0	-1.3	12.4	5.1	2.3
Export prices						
		Change, per cent				
Goods, total	-	-0.2	-1.5	2.4	4.3	0.5
Services, total	-	5.8	3.9	17.6	2.3	-7.2
Total	-	2.2	0.5	7.9	3.5	-2.7
Import prices						
Goods, total	-	-0.3	-2.8	9.5	10.3	-1.8
Services, total	-	6.1	0.0	5.7	2.1	-2.2
Total	-	2.3	-1.7	8.1	7.2	-1.9

1) Raw materials, energy and ships etc.

2) Raw materials, energy, cars and ships etc.

3) Export of basic goods consists of export of goods excluding energy, ships and airplanes.

Source: Statistics Denmark and own calculations.

Table B.10
Private consumption

	2021	2019	2020	2021	2022	2023
	DKK bn.	Real growth rate, per cent				
Total consumption	1,139	1.2	-1.3	4.2	2.6	2.0
Retail trade	397	1.5	6.1	6.4	-0.2	1.9
- Food, drinks and tobacco	179	0.8	4.0	4.5	-0.5	0.4
- Other goods	218	2.0	7.9	8.0	0.0	3.1
Purchase of vehicles	48	4.2	0.8	0.4	-13.3	17.7
Electricity, fuels and gas	54	-3.9	-7.4	10.1	-4.3	-1.0
Gasoline and similar	26	-0.8	-11.8	9.1	-12.1	-2.4
Housing	255	1.4	1.2	1.6	1.9	1.9
Other services	362	1.4	-11.4	2.7	11.8	3.7
Tourist expenditures	28	-0.4	-45.8	13.0	35.0	10.0

Source: Statistics Denmark and own calculations.

Table B.11
Net lending by sectors

	2019	2020	2021	2022	2023
DKK bn.					
Private sector, total	111	193	151	155	157
- Households	0	23	-2	13	29
- Corporations	111	171	153	143	129
- Non-financial corporations	63	120	127	128	109
- Financial corporations	48	51	26	15	20
General government	94	-4	59	17	5
Total	205	189	210	172	162

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

Source: Statistics Denmark and own calculations.

Table B.12
Gross value added (GVA)

	2021	2019	2020	2021	2022	2023
	Share, per cent	Real growth rate, per cent				
Total GVA	100	2.2	-2.4	4.5	3.7	1.8
Public sector	20	2.2	-4.5	2.3	1.6	0.0
Private sector	80	2.2	-1.8	5.1	4.2	2.2
Private sector excl. mining and quarrying	79	2.6	-1.6	5.2	4.3	2.0
Non-farm private sector ¹⁾	67	1.9	-1.9	5.6	4.4	1.9

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

Table B.13
Hourly productivity in selected industries

	Avg. 1997-2021	2019	2020	2021	2022	2023
Real growth rate, per cent						
Total	1.1	1.5	0.5	0.3	1.5	1.4
Public sector	0.3	1.8	-2.6	-1.8	1.2	0.0
Private sector	1.3	1.4	1.3	0.8	1.3	1.7
Private sector excl. mining and quarrying	1.5	1.8	1.6	0.9	1.4	1.5
Non-farm private sector ¹⁾	1.4	1.0	1.5	1.5	1.3	1.4

Note: Hourly productivity is defined as gross value added in constant prices relative to the total number of hours.

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

Table B.14
Contributions to growth in households' real disposable income¹⁾

	2019	2020	2021	2022	2023
Real growth rate, per cent					
Disposable income ²⁾	2.5	-0.2	2.8	1.6	2.2
Contribution, percentage points					
Compensation of employees ³⁾	2.8	1.3	4.1	-1.2	2.4
Social benefits	0.6	1.7	-0.5	-1.6	0.3
Income taxes	-1.4	-2.3	0.2	3.1	-1.2
Net interest income	0.1	0.3	-0.1	0.0	-0.1
Dividend etc. ⁴⁾	0.3	-0.8	0.7	-1.6	0.1
Pension contribution	-1.4	-0.6	-1.3	2.3	-0.5
Payment from pension schemes ⁵⁾	0.3	0.0	0.2	1.1	0.4
Others ⁶⁾	1.3	0.3	-0.5	-0.4	0.8

1) The household sector in the Economic Survey includes Non-Profit Institutions Serving Households (NPISH).

2) Taxation on payments of frozen holiday funds is subtracted in the calculation of disposable income.

3) Covering only employees residing in Denmark.

4) Incl. dividends from investment funds.

5) Occupational pensions etc. (but not individual pension schemes in banks, etc.)

6) Including the self-employed.

Source: Statistics Denmark and own calculations.

Table B.15
Households' net lending¹⁾

	2019	2020	2021	2022	2023
DKK bn.					
Disposable gross income ²⁾	1,135	1,139	1,195	1,276	1,328
Private consumption	1,080	1,071	1,139	1,229	1,276
Gross investment ³⁾	113	122	134	143	149
Net capital transfers ⁴⁾	-1	4	-3	3	15
Direct net lending	-59	-50	-81	-92	-83
Adjustment for the change in pension entitlements ⁵⁾	58	73	79	105	111
Net lending⁶⁾	-0	23	-2	13	29
Per cent of disposable gross income					
Direct net lending	-5.2	-4.4	-6.8	-7.2	-6.2
Net lending	-0.0	2.0	-0.1	1.0	2.1

1) The household sector in the Economic Survey includes Non-Profit Institutions Serving Households (NPISH).

2) Taxation on payments of frozen holiday funds is subtracted in the calculation of disposable income.

3) Households' gross investments include investments in owner-occupied housing and investments in buildings and materials by sole proprietors.

4) Net capital transfers in 2022 include property taxes refunded to owner-occupied property owners, funds for specific challenges as a result of covid-19 and further stimulants as well as reimbursement of contributions to the voluntary early retirement scheme.

5) Net payments to and returns (excl. tax on pension yield) on household capital in life insurance companies and pension funds.

6) Households' (net) acquisition of financial assets (incl. shares) in other sectors.

Source: Statistics Denmark and own calculations.

Table B.16
Real estate market and construction

	2019	2020	2021	2022	2023
Per cent					
Increase in the price of traded single-family houses ¹⁾	3.0	4.8	10.6	4.8	0.9
Housing gross investment (real growth)	4.7	10.1	6.1	2.0	2.3

1) The increase is adjusted for developments in the volume of housing sales.
Source: Statistics Denmark and own calculations.

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

	2019	2020	2021	2022	2023
Labour wage ratio, per cent					
Private sector	57.9	58.9	58.2	57.1	58.0
The entire economy	63.0	63.8	63.1	62.0	62.6
Wage increase, per cent					
Private sector					
- Hourly earnings (excl. nuisance bonus)	2.5	1.9	3.0	3.7	3.6
Public sector					
- Hourly earnings (excl. nuisance bonus)	2.2	2.5	1.2	-	-
- Budgetary impact	1.8	2.5	1.3	2.0	2.9
Wage adjustment rate, per cent ¹⁾	2.0	2.0	2.0	1.2	2.7

Note: The labour income ratio is calculated as aggregated labour income relative to the GVA (gross value added) and adjusted for the number of self-employed. The hourly wage increases in the private sector in 2019-2020 are published by The Confederation of Danish Employers. The hourly wage increases in the public sector are a weighted average of wage indices for the state, the municipalities and the counties, all reported by Statistics Denmark. No estimates are made on the development in public sector hourly earnings. The budgetary impact is based on the contractually agreed wage increases including contributions from the adjustment scheme (reguleringsordningen) but excluding any residual increases. The hourly wage increases for the private and public sectors are not comparable.

1) The wage adjustment rate stated for 2019-2022 is the announced wage adjustment rate, while 2023 is an estimate based on the estimated wage rate increase in the private sector in 2021.

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

Table B.18
Price developments and explanatory factors

	2019	2020	2021	2022	2023
Change, per cent					
Net price index	0.9	0.4	1.5	6.7	2.2
Tariffs and housing benefits, contribution	-0.1	0.0	0.4	-1.5	-0.4
Consumer price index	0.8	0.4	1.9	5.2	1.8
HICP	0.7	0.3	1.9	5.2	1.8

Note: The contribution from tariffs and housing benefits is computed as the difference between the consumer price inflation and the net price inflation. Changes in the prices of taxed goods such as energy can therefore influence the contribution from taxes, even though the tax level remains unchanged. The EU-harmonised consumer price index (HICP) is assumed to follow the same development as the consumer price index in the estimated years.

Source: Statistics Denmark and own calculations.

Table B.19
Public finances

	2019	2020	2021	2022	2023
DKK bn.					
Public consumption	557.7	574.5	608.7	622.6	636.3
Income transfers ¹⁾	365.2	385.9	387.6	387.0	398.0
Investments	75.0	83.0	86.7	86.5	100.6
Interest expenditures	17.0	12.7	13.5	16.8	13.3
Subsidies	38.0	73.7	62.9	40.7	40.3
Other expenditures ²⁾	71.8	89.9	86.6	89.6	104.8
Total expenditure³⁾	1,124.5	1,219.7	1,246.0	1,243.1	1,293.2
Personal income taxes, etc. ⁴⁾	487.4	509.0	517.6	526.2	545.2
Labour market contributions	100.8	105.9	110.3	113.3	118.0
Pension yield taxation	63.4	48.2	63.1	6.6	6.7
Corporate taxes	72.7	61.1	93.6	80.1	79.3
VAT	222.7	230.5	249.4	260.3	269.5
Other duties	145.0	144.6	147.5	148.9	152.6
Other taxes ⁵⁾	4.5	4.0	2.6	1.0	1.0
Interest revenues	24.1	20.7	23.8	25.8	25.6
Other revenues ⁶⁾	101.1	94.4	100.4	101.3	104.0
Tariffs etc. to the EU	-3.1	-3.1	-3.7	-3.8	-3.9
Total revenue⁷⁾	1,218.7	1,215.5	1,304.7	1,259.8	1,298.0
General government budget balance	94.2	-4.3	58.7	16.6	4.8
Net interest expenditure	-7.1	-8.0	-10.3	-9.0	-12.2
General government primary balance ⁸⁾	87.1	-12.2	48.4	7.6	-7.4

Annex tables

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

Source: Statistics Denmark and own calculations.

Table B.20
Taxes and tax burden

DKK bn.	2019	2020	2021	2022	2023
Indirect taxes	364.6	372.0	393.2	405.4	418.2
- VAT	222.7	230.5	249.4	260.3	269.5
- Registration tax	20.3	18.7	16.4	16.3	17.8
- Excise duties	69.0	68.8	71.8	67.7	68.3
- Energy (incl. PSO)	38.3	37.3	37.7	35.4	34.4
- Environmental	3.3	3.5	3.7	3.7	3.8
- Tobacco and spirits etc.	11.6	12.6	13.2	10.9	12.0
- Others	15.9	15.4	17.1	17.7	18.2
- Property taxes	30.6	31.6	32.4	32.9	33.7
- Motor vehicle tax paid by businesses	3.8	3.8	4.0	4.0	4.1
- Other indirect taxes	18.2	18.7	19.3	24.1	24.7
Direct taxes	719.3	720.3	779.0	720.5	743.8
- Withholding taxes ¹⁾	463.2	486.8	495.5	505.3	525.0
- State tax	163.3	172.2	178.2	179.1	187.2
- Bottom-bracket tax	143.4	151.5	155.4	157.3	163.6
- Top-bracket tax	17.6	18.4	20.2	19.0	20.8
- Health contributions	0.0	0.0	0.0	0.0	0.0
- Limited tax liability	2.3	2.3	2.6	2.8	2.9
- Total municipal tax	247.6	262.6	269.6	272.3	282.7
- Property value tax	14.8	15.0	13.8	13.9	14.1
- Other withholding taxes ²⁾	37.6	37.0	34.0	40.0	40.9
- Pension yield tax	63.4	48.2	63.1	6.6	6.7
- Corporate tax	72.7	61.1	93.6	80.1	79.3
- Other personal taxes	8.2	8.3	8.1	7.8	7.3
- Media license	3.5	2.7	1.1	0.0	0.0
- Motor vehicle tax paid by households	7.4	7.3	7.3	7.4	7.6
- Labour market contributions	100.8	105.9	110.3	113.3	118.0
Social security contributions ³⁾	1.0	1.4	1.5	1.0	1.0
Capital taxes	8.6	6.7	6.6	5.7	5.5
Customs and import duties (collected by the EU)	3.1	3.1	3.7	3.8	3.9
Total taxes	1,096.6	1,103.4	1,184.1	1,136.5	1,172.4
GDP	2,318.0	2,329.6	2,496.6	2,627.6	2,709.0
Total taxes, share of GDP	47.3	47.4	47.4	43.3	43.3

Annex tables

- 1) For 2019-2021, the distribution of withholding taxes to the state and municipalities is from Statistics Denmark. For 2022-2023, an estimate is used based on the Ministry of Finance's tax base forecast.
 - 2) Includes equity income tax, tax on estates of deceased persons and revenue from the Danish business scheme etc.
 - 3) Includes mandatory pension payments for civil servants in public enterprise etc.
- Source: Statistics Denmark and own calculations.

Table B.21
Development in the tax base for municipalities

	2019	2020	2021	2022	2023	2019	2020	2021	2022	2023
	DKK bn.					Per cent				
May 2018	1,005.3	-	-	-	-	2.5	-	-	-	-
August 2018	1,008.0	-	-	-	-	2.9	-	-	-	-
December 2018	1,013.2	1,045.9	-	-	-	3.5	3.2	-	-	-
August 2019	1,005.7	1,033.8	-	-	-	4.0	2.8	-	-	-
December 2019	1,006.3	1,035.9	1,073.4	-	-	4.2	2.9	3.6	-	-
May 2020	1,008.8	997.6	1,042.7	-	-	4.5	-1.1	4.5	-	-
August 2020	1,010.7	1,054.6	1,044.9	-	-	4.7	4.3	-0.9	-	-
December 2020	1,007.3	1,063.6	1,070.7	1,087.2	-	4.3	5.6	0.7	1.5	-
May 2021	1,006.8	1,060.5	1,070.3	1,085.6	-	4.3	5.3	0.9	1.4	-
August 2021	1,006.8	1,058.3	1,075.5	1,081.7	-	4.3	5.1	1.6	0.6	-
December 2021	1,006.8	1,064.4	1,094.1	1,104.2	1,153.8	4.3	5.7	2.8	0.9	4.5
May 2022	1,006.8	1,064.4	1,102.1	1,105.9	1,148.2	4.3	5.7	3.5	0.3	3.8

Note: Rows show the time of the budgeting of the municipal tax base. The columns show the tax base in the year concerned.

Source: Statistics Denmark and own calculations.

Table B.22
Income transfers

	2019	2020	2021	2022	2023
DKK bn.					
Unemployment benefits (excl. activation)	14.6	21.2	17.8	12.3	12.4
Cash benefits ¹⁾ (excl. activation)	24.4	26.3	26.9	31.6	30.5
Vacation allowance	0.7	0.7	0.6	0.3	0.3
Anticipatory pensions ²⁾	41.9	44.1	46.3	47.2	48.6
Resource rehabilitation allowance	6.7	6.3	5.8	6.4	6.3
Early retirement benefit	8.2	8.5	8.9	5.9	4.7
Rehabilitation benefit	0.8	0.6	0.5	0.4	0.4
Sickness benefit	11.9	14.1	16.2	13.1	12.5
Maternity pay	11.1	12.0	12.1	11.9	12.3
Rent benefit	15.1	15.4	15.5	15.8	16.4
Child and youth benefit	14.7	14.8	14.9	15.1	15.3
Other transfers ³⁾	21.6	24.5	21.6	21.3	21.4
Student grants (SU)	20.7	20.9	21.0	21.5	22.3
Public pension scheme ⁴⁾	142.5	144.9	146.2	146.2	155.0
Other pension schemes ⁵⁾	30.2	31.5	33.5	37.9	39.7
Total⁶⁾	365.2	385.9	387.6	387.0	398.0
Total, excl. public and other pensions	192.5	209.6	208.0	202.9	203.3
Total, excl. education grants, public pensions and other pensions	171.8	188.7	187.0	181.4	181.0

1) Taxable and non-taxable benefits incl. the integration benefit.

2) Incl. early retirement benefits to retired citizens in foreign countries.

3) Activation benefits, dependent child allowance, subsidy for childcare, unemployment benefits, special education benefit, green check and pay scheme for holders of flexi-jobs etc.

4) Incl. differentiated allowances and heating allowance for pensioners. Incl. pension schemes for citizens in foreign countries.

5) Civil servants in public enterprises and part-time early retirement scheme etc.

6) Income transfers exclude other regular transfers to households such as mileage allowance and index supplement.

Note: The expenditures to income transfers is not directly equivalent to the number of benefits recipients in table B.6.

Source: Statistics Denmark and own calculations.

Table B.23
Key figures estimated at different times

	Aug. 2020	Dec. 2020	May 2021	Aug. 2021	Dec. 2021	May 2022
2020						
GDP (real growth rate, per cent)	-4.5	-3.8	-2.7	-2.1	-2.1	-2.1
Gross unemployment (1,000 persons)	147	133	133	133	132	133
Consumer prices (change, per cent)	0.3	0.5	0.4	0.4	0.4	0.4
Balance of payments (DKK bn.) ¹⁾	125	162	181	192	190	190
Actual budget balance (DKK bn.)	-88	-81	-27	-14	-4	-4
2021						
GDP (real growth rate, per cent)	4.2	2.8	2.4	3.8	3.9	4.7
Gross unemployment (1,000 persons)	138	126	122	114	107	106
Consumer prices (change, per cent)	1.2	1.2	1.1	1.3	1.8	1.9
Balance of payments (DKK bn.) ¹⁾	133	160	160	165	181	206
Actual budget balance (DKK bn.)	-56	-31	-74	-47	-5	59
2022						
GDP (real growth rate, per cent)	-	3.1	3.6	2.8	2.8	3.4
Gross unemployment (1,000 persons)	-	119	115	104	78	86
Consumer prices (change, per cent)	-	1.6	1.5	1.5	2.2	5.2
Balance of payments (DKK bn.) ¹⁾	-	187	182	175	186	170
Actual budget balance (DKK bn.)	-	-39	-16	10	25	17
2023						
GDP (real growth rate, per cent)	-	-	-	-	2.1	1.9
Gross unemployment (1,000 persons)	-	-	-	-	77	87
Consumer prices (change, per cent)	-	-	-	-	1.8	1.8
Balance of payments (DKK bn.) ¹⁾	-	-	-	-	174	160
Actual budget balance (DKK bn.)	-	-	-	-	20	5

1) The current account balance.

Source: Statistics Denmark and own calculations.

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