IMF Country Report No. 22/169

DENMARK

June 2022

2022 ARTICLE IV CONSULTATION—PRESS RELEASE; STAFF REPORT; AND STATEMENT BY THE ALTERNATE EXECUTIVE DIRECTOR FOR DENMARK

Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. In the context of the 2022 Article IV consultation with Denmark, the following documents have been released and are included in this package:

- A **Press Release** summarizing the views of the Executive Board as expressed during its June 13, 2022, consideration of the staff report that concluded the Article IV consultation with Denmark
- The **Staff Report** prepared by a staff team of the IMF for the Executive Board's consideration on June 13, 2022, following discussions that ended on May 9, 2022, with the officials of Denmark on economic developments and policies. Based on information available at the time of these discussions, the staff report was completed on May 26, 2022.
- An **Informational Annex** prepared by the IMF staff.
- A **Statement by the Alternate Executive Director** for Denmark

The documents listed below have been or will be separately released.

Selected Issues

The IMF's transparency policy allows for the deletion of market-sensitive information and premature disclosure of the authorities' policy intentions in published staff reports and other documents.

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International Monetary Fund
Washington, D.C.

PRESS RELEASE

PR22/197

IMF Executive Board Concludes 2022 Article IV Consultation with Denmark

FOR IMMEDIATE RELEASE

Washington, DC – **June 16, 2022:** The Executive Board of the International Monetary Fund (IMF) concluded the Article IV consultation[1] with Denmark on June 13, 2022.

Denmark's strong economic recovery has raised economic activity above pre-pandemic levels. The rebound in activity was led by strong domestic demand. Private consumption normalized amid easing of containment measures. Investment remained solid as economic prospects brightened. Public consumption also had a positive impact as the pandemic support continued. At the same time, inflation was propelled to a historic high by soaring energy prices and labor market pressures increased. The current account continues to be in surplus. House price growth remains strong and household debt elevated.

The outlook is for the rebound in activity to continue but risks remain high amid the war in Ukraine and pandemic-related uncertainty**.** Given Denmark's small direct exposures to Russia and Ukraine, the impact of the war is expected to be limited. Amid the lifting of all pandemic-related restrictions, near-term growth—led by private consumption and investment—is projected to be strong, around 3.2 and 1.5 percent in 2022 and 2023, respectively. Lower demand from main trading partners—notably Germany—will weigh on Danish exports. Public consumption will retreat as the unwinding of COVID-support measures more than offsets war-related spending. Headline inflation is projected to rise appreciably this year—close to 5 percent—mainly due to surging energy prices. The planned fiscal tightening will help ease labor market pressures. But the balance of risks around the outlook is tilted to the downside. A further escalation of the war remains a key downside risk. Pandemic-related risks continue to be high as well given the possibility of new variants. And, high and increasing household debt remains a key source of risk as housing valuations remain elevated. However, further labor market pressures related to a faster-than-expected rebound are a key upside risk.

Executive Board Assessment[2]

Executive Directors welcomed the authorities' swift and well-calibrated policy response to the pandemic, which facilitated a strong recovery. At the same time, they noted that uncertainty is

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[1] Under Article IV of the IMF's Articles of Agreement, the IMF holds bilateral discussions with members, usually every year. A staff team visits the country, collects economic and financial information, and discusses with officials the country's economic developments and policies. On return to headquarters, the staff prepares a report, which forms the basis for discussion by the Executive Board.

[2] At the conclusion of the discussion, the Managing Director, as Chairman of the Board, summarizes the views of Executive Directors, and this summary is transmitted to the country's authorities. An explanation of any qualifiers used in summings up can be found here: http://www.IMF.org/external/np/sec/misc/qualifiers.htm.

high owing to the war in Ukraine and the lingering pandemic, and that the balance of risks is tilted to the downside. Against this background, Directors encouraged the authorities to retain policy flexibility while preserving macro-financial stability and supporting sustainable, inclusive growth.

Given cyclical pressures in the economy, Directors agreed with the planned fiscal tightening in 2022. They underscored, however, the importance of retaining flexibility and recalibrating policies as needed should risks materialize. Directors commended the authorities for their energy compensation scheme, which is small, temporary, and targeted, and agreed that potential additional measures should also be targeted and fiscally neutral.

Directors agreed that the exchange rate peg has served Denmark well, providing a framework for historically low and stable inflation, and that monetary policy should stand ready to maintain it.

Directors commended the resilience of the banking system and recommended implementing additional prudential tools, including revisiting sectoral systemic risk buffers and introducing a fully risk-based prudential framework. They welcomed the authorities' progress in implementing AML/CFT recommendations by adopting a new risk assessment model.

Directors noted the risks stemming from the housing market, with high household leverage and increases in risky mortgages. They saw scope for macroprudential tightening together with structural reforms to increase the supply of affordable housing and strengthen the tax code. Directors agreed that new mortgages extended to highly-leveraged households be subject to minimum down-payment requirements or mandatory amortization until a minimum equity share is reached, as well as reducing mortgage interest deductibility and introducing borrower-based tools, would help address risks.

Directors supported the authorities' labor market reforms that improved employment prospects of the young, the low-skilled, and the foreign-born. To ensure adequate labor supply, they considered that any changes to the indexation of the statutory retirement age to life-expectancy should be consistent with long-term fiscal sustainability, and also recommended reducing labor taxes.

Directors commended Denmark's ambitious green and digital transformation plans. They noted that a prompt decision on carbon pricing would further incentivize the private sector to step up green investment. To further boost productivity growth, Directors recommended enabling high productivity sectors to expand by encouraging broad-based innovation, improving access to equity finance and accelerator capital, while rebalancing taxation.

Denmark: Selected Economic Indicators, 2019–27

	2019	2020	2021	2022	2023	2024	2025	2026	2027
						proj.			
Supply and Demand (change in percent)									
Real GDP	2.1	-2.1	4.7	3.2	1.5	1.8	1.8	1.8	1.8
Final domestic demand	1.0	0.0	4.3	2.8	1.9	2.1	2.1	2.1	2.1
Private consumption	1.2	-1.3	4.2	3.6	2.3	2.2	2.2	2.2	2.2
Public consumption	1.5	-1.7	3.7	0.3	0.3	0.9	0.9	0.9	0.9
Gross fixed investment	0.1	5.1	5.6	3.8	2.7	3.0	3.0	3.0	3.0
Net exports 1/	1.4	-2.0	0.4	-0.7	-0.1	0.0	0.0	0.1	0.1
Gross national saving (percent of GDP)	30.8	31.1	31.6	31.4	31.2	31.2	31.2	31.2	31.2
Gross domestic investment (percent of GDP)	22.0	22.9	23.3	24.2	24.3	24.4	24.6	24.6	24.7
Potential output	1.9	1.7	1.9	2.1	2.2	2.2	2.2	1.9	1.8
Output gap (percent of potential output)	1.6	-2.1	0.6	1.6	0.9	0.5	0.1	0.0	0.0
Labor Market (change in percent) 2/									
Labor force	1.6	-0.4	0.6	1.0	0.5	0.1	0.1	0.1	0.1
Employment	1.7	-1.1	1.2	1.0	0.5	0.2	0.1	0.1	0.1
Harmonized unemployment rate (percent)	5.0	5.7	5.1	5.1	5.1	5.0	5.0	5.0	5.0
Prices and Costs (change in percent)									
GDP deflator	0.7	2.6	2.4	4.4	2.1	2.0	2.1	2.2	2.2
CPI (year average)	0.7	0.3	1.9	4.8	1.7	1.8	1.9	1.9	1.9
Public Finance (percent of GDP) 3/									
Total revenues	53.6	53.3	53.3	51.5	51.1	50.6	50.0	49.9	49.8
Total expenditures	49.5	53.4	51.0	50.5	50.5	50.4	50.0	50.0	49.9
Overall balance	4.1	-0.2	2.3	1.1	0.6	0.2	0.0	-0.1	-0.1
Primary balance 4/	3.8	-0.5	1.9	0.8	0.3	0.0	-0.2	-0.3	-0.3
Cyclically-adjusted balance (percent of potential	2.9	1.4	1.9	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1
Structural balance (percent of potential GDP) 5/	0.6	-0.4	-1.4	-0.4	-0.2	-0.1	0.0	-0.1	-0.1
Gross debt	33.6	42.1	36.7	32.3	33.1	32.9	32.8	32.7	32.8
Money and Interest Rates (percent)									
Domestic credit growth (end of year)	4.3	1.3	3.1	...	...	...	...	...	...
M3 growth (end of year)	2.6	12.3	-0.9	...	...	...	...	...	...
Short-term interbank interest rate (3 month)	-0.4	-0.4	-0.5	...	...	...	...	...	...
Government bond yield (10 year)	-0.2	-0.5	-0.3	...	...	...	...	...	...
Balance of Payments (percent of GDP)									
Exports of goods & services	59.0	54.9	59.6	61.8	62.0	61.9	61.7	61.6	61.3
Imports of goods & services	51.6	48.4	52.9	55.5	55.9	56.0	56.0	55.9	55.7
Trade balance, goods and services	7.4	6.5	6.7	6.3	6.1	5.9	5.7	5.7	5.7
Oil trade balance	-0.5	-0.5	-1.0	-1.8	-1.8	-1.8	-1.9	-2.0	-2.1
Current account	8.8	8.1	8.3	7.1	6.9	6.7	6.6	6.5	6.5
International reserves, changes	-0.9	-0.1	3.7	...	...	...	...	...	...
Exchange Rate									
Average DKK per US$ rate	6.7	6.5	6.3	...	...	...	...	...	...
Nominal effective rate (2010=100, ULC based)	99.4	100.3	100.1	...	...	...	...	...	...
Real effective rate (2010=100, ULC based)	93.3	94.1	97.5	...	...	...	...	...	...
Memorandum Items									
Nominal GDP (Bln DKK)	2318	2330	2497	2690	2787	2894	3008	3128	3254
GDP (Bln USD)	348	356	397	...	...	...	...	...	...
GDP per capita (USD)	59862	6115	67997	...	...	...	...	...	...

Sources: Danmarks Nationalbank, Eurostat, IMF World Economic Outlook, Statistics Denmark, and Fund staff calculations.

1/ Contribution to GDP growth.
2/ Based on Eurostat definition.
3/ General government.
4/ Overall balance net of interest.
5/ Cyclically-adjusted balance net of temporary fluctuations in some revenues (e.g., North Sea revenue, pension yield tax revenue) and one-offs. Covid-related one-offs are not excluded.

INTERNATIONAL MONETARY FUND

DENMARK

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION

May 26, 2022

KEY ISSUES

Context: The strength of the economic recovery bodes well for the rebound in activity to persist, but uncertainty remains high due to the war in Ukraine and the pandemic, with risks tilted to the downside. With employment above pre-pandemic levels, however, labor market pressures have increased. High energy prices have propelled inflation to a historic high. The current account remains elevated. High household debt constitutes a key source of risk as house price growth remains strong.

Policy Recommendations: Given the fluid developments and heightened uncertainty related to the war, policy should remain flexible. Policy should also enhance macro-financial resilience, facilitate the economic transformation, while targeting higher potential growth over the longer term.

- ***Fiscal Policy.*** Due to the strong rebound, the planned fiscal tightening—by unwinding pandemic-related measures—is appropriate. However, if the recovery wavers, fiscal space should be deployed as needed. If upside risks materialize, the authorities should stand ready to tighten further. Fiscal policy should continue to provide a bridge to the economy of the future by supporting green and digital initiatives.
- ***Labor market.*** The clearing of the labor market should be supported by the wage bargaining framework, labor inflows and planned fiscal tightening. *Flexicurity* allowed to operate at full force will facilitate efficient resource allocation. Efforts to improve labor supply should continue, including additional activation policies that target the young, low-skilled and the foreign-born.
- ***Green transformation.*** Current carbon taxation proposals—with different cost estimates—are welcome. A prompt decision on carbon pricing, reinforced by fiscal incentives across different sectors would catalyze private investment to complement planned increases in public investment, helping Denmark attain its ambitious emissions goals. Carbon tax revenues should be used to address leakages, secure a just transition, and reduce labor taxes.
- ***Macrofinancial.*** The financial sector remains vulnerable to high household leverage and an increasing share of risky mortgages. Targeted policies should tighten macroprudential tools, reduce overly favorable tax incentives, and improve housing supply. The authorities should continue to fortify anti-money laundering supervision.

Approved By
M. Pradhan (EUR) and M. Gonzalez (SPR)

Discussions took place in Copenhagen during April 27–May 09, 2022. The staff team comprised Mr. Segoviano (head), Ms. Bricco, Messrs. Huidrom, Tudyka, and Yousefi (all EUR). The mission was assisted by Messrs. Fuda (EUR), Bonthuis, Hebous (FAD), Rebillard, Allen (RES) and Ms. Jung and Noren (EUR). Ms. Brolev (OED) participated in the discussions. The mission met with Ms. Krogstrup, Governor of Danmarks Nationalbank; Messrs. Kieler and Haagen, Deputy Permanent Secretaries of the Ministry of Finance; Mr. Berg, Director General of the Danish Financial Supervisory Authority; Ms. Anker, Director General of Statistics Denmark; Mr. Skaarup, Deputy Permanent Secretary of the Ministry of Taxation; other senior officials; and representatives from the Danish Economic Council, social partners, academics, and the financial sector.

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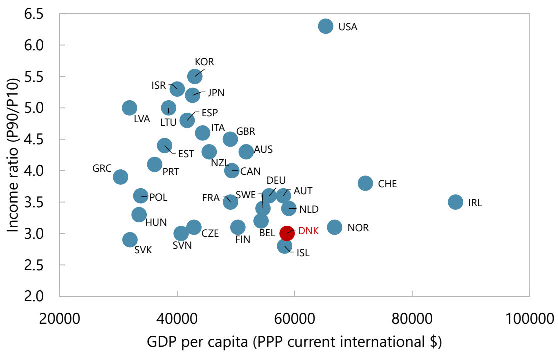
CONTEXT

1. **Denmark weathered the pandemic well.** Prior to the pandemic, strong institutions combined with sound policies delivered robust economic performance and high levels of social inclusion. This gave Denmark substantial buffers which were used swiftly during the crisis. Containment measures were well calibrated. Consequently, the economic and the health impact of the pandemic in 2020 was among the mildest in Europe ([Article IV 2021](#)).

A robust economic performance—high average income with low inequality—prior to the pandemic.

Income Levels and Income Inequality

(2019 or most recent year)

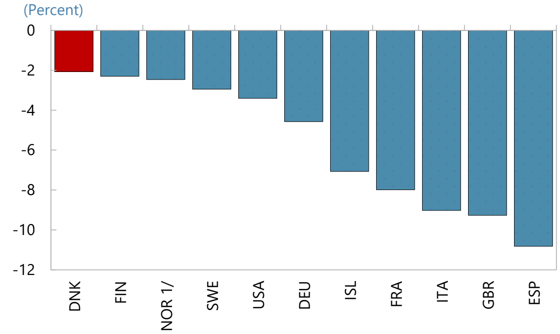


Sources: OECD; World Bank, WDI database; and IMF staff calculations.

The economic contraction in Denmark in 2020 was one of the smallest in Europe.

Real GDP Growth in 2020

(Percent)



Sources: Haver Analytics; National Authorities; and IMF, World Economic Outlook database.

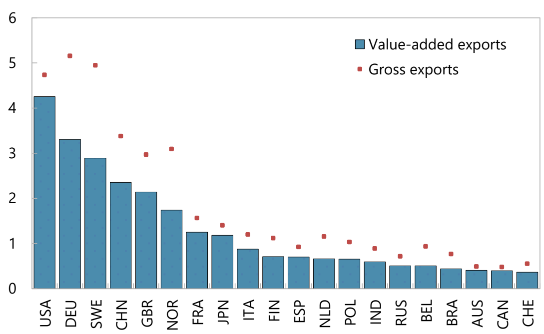
1/ NOR refers to non-oil GDP growth.

2. **The war in Ukraine has worsened the global economic outlook, though Denmark is well positioned to withstand this negative shock.** Denmark's direct exposures to Russia (trade, energy, financial) are relatively small, but the war will weigh on activity—mainly via external demand, and to a lesser extent, investment, and consumption—and add to inflationary pressures. [1] Nonetheless, Denmark is well placed to face this headwind given its significant buffers. [2]

Denmark's export exposure to Russia is relatively small…

Denmark's Top Export Destinations

(Percent of GVA, 2018)

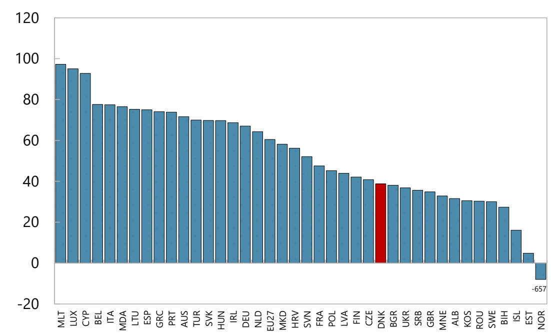


Sources: OECD TiVA; and IMF staff calculations.

…and its energy dependency rate is lower than in many countries in Europe.

Energy Dependency Rate

(Percent, 2019)



Source: Eurostat.

[1] Renewable energy sources contribute more than 40 percent of Denmark's energy needs. Natural gas constitutes only about 14 percent of its energy supplies and only 4 percent of electricity generation. Financial linkages are also small with a gross foreign asset exposure share to Russia of roughly 0.3 percent in 2021:Q3. The share of gross foreign liabilities to Russia is also small, standing at roughly 0.6 percent in 2021:Q3.

[2] Gross debt is around 37 percent of GDP, reserve assets are around 18 percent of GDP, and capitalization of the banking system remains solid.

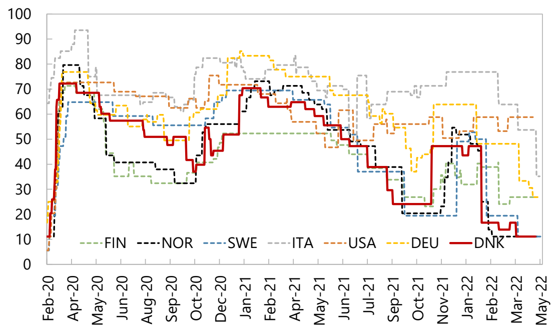
RECENT DEVELOPMENTS: COMING OUT FROM THE PANDEMIC

3. **Containment and mitigation strategies continued to adapt to the course of the pandemic.** Having undertaken one of the fastest vaccination rollouts in the EU, Denmark lifted all restrictions in September 2021. Restrictions were reimposed in the winter as the pandemic flared up with the Omicron variant. Omicron's low virulence, high vaccination and booster rates, and the use of anti-viral therapeutics resulted in a low death rate due to COVID. [3] Subsequently, Denmark lifted all restrictions in February 2022.

Denmark's containment and mitigation strategy has been flexible and effective.

Oxford Stringency Index 1/

(Index)

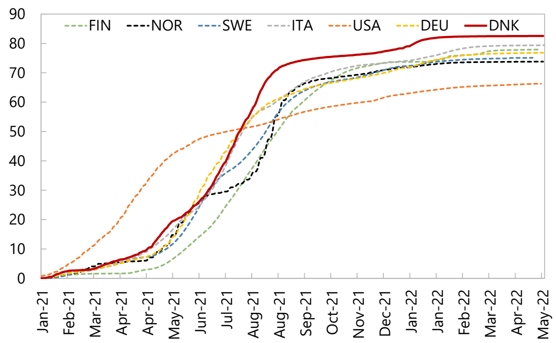


Sources: Haver Analytics; Oxford University (Our World in Data) ; and IMF staff calculations.
1/ 100 refers to maximum possible containment stringency and 0 refers to no measure.

The vaccination rate is one of the highest in the region.

People Fully Vaccinated for COVID-19

(Per 100 persons)

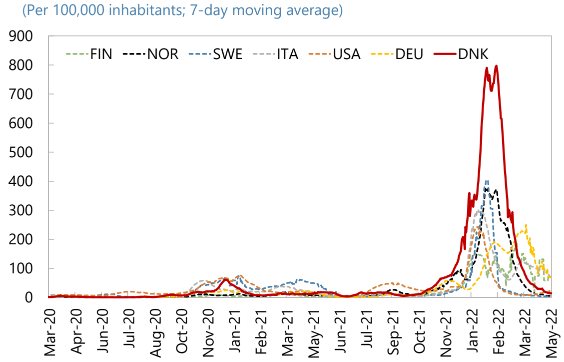


Sources: Haver Analytics; Oxford University (Our World in Data); and IMF staff calculations.

With the omicron variant, new cases flared up…

New Daily COVID-19 Cases

(Per 100,000 inhabitants; 7-day moving average)

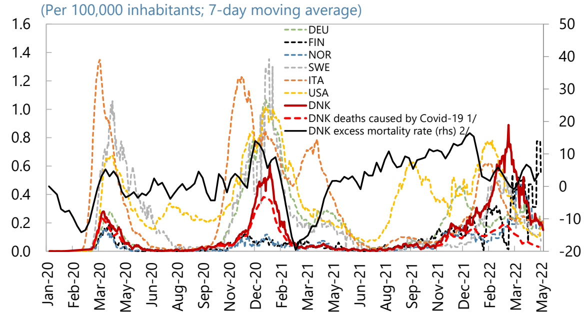


Sources: Haver Analytics; Oxford University (Our World in Data) ; and IMF staff calculations.

…and deaths increased in tandem, but the death rate due to COVID remained low.

New COVID-19 Deaths

(Per 100,000 inhabitants; 7-day moving average)



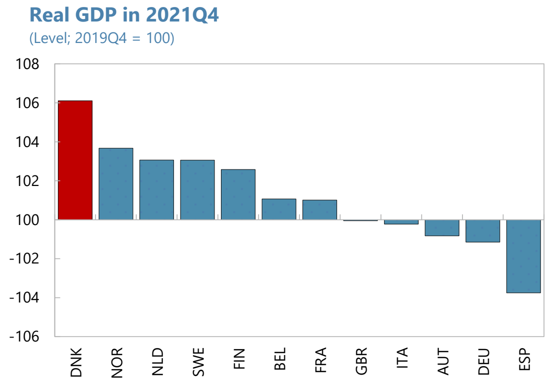
Sources: Haver Analytics; Oxford University (Our World in Data); Statens Serum Institut; Sundhedsdatastyrelsen; and IMF staff calculations.
1/ Deaths caused by Covid-19 are shown only for the periods for which data are available.
2/ Excess mortality rate is two-week moving average.

4. **The strength of the economic recovery bodes well for the rebound in activity to persist, but uncertainty remains high due to the war in Ukraine and the pandemic**. Growth

[3] As new cases flared up during the Omicron wave, the death rate increased but at a slower pace than new cases, with the excess mortality rate only around the level of the previous peak. Moreover, "death with COVID" (as opposed to "death by COVID") accounts for a sizable share of the recorded death rate (Statens Serum Institut). As of early May, fully-vaccinated and booster rates were above 80 and 60 percent of the population respectively—one of the highest in Europe. The testing rate is also one of the highest, which partly explains the relatively high new cases rate during the Omicron wave.

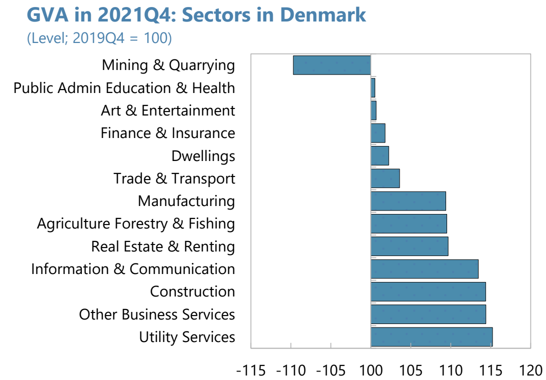
rebounded to 4.7 percent in 2021, putting activity above the pre-pandemic level and the output gap in positive territory. Domestic demand led the strong rebound. Amid easing of containment measures, private consumption rebounded strongly as demand for services began to normalize. [4] Public consumption also contributed positively given continued fiscal support. Investment remained strong as economic prospects brightened. Net exports, however, only had a small contribution to growth as strong imports offset the pickup in exports. The rebound was also broad-based across sectors. Nevertheless, given the fluid developments, the economic environment remains highly uncertain. (Outlook and Risks Section).

The Danish recovery has been faster than peer countries. Aggregate activity is now above the pre-pandemic level…



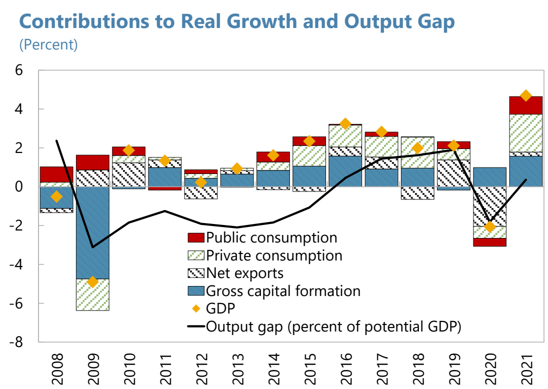
Sources: Haver Analytics; National Authorities; and IMF staff calculations.

…as is the case for activity in most of the sectors.



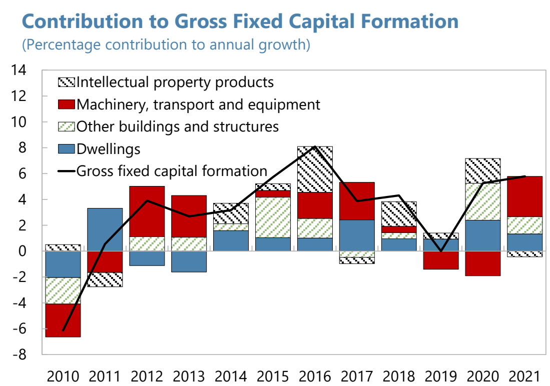
Sources: Haver Analytics; Statistics Denmark; and IMF staff calculations.

Domestic demand contributed to the strong growth in 2021…



Sources: Haver Analytics; Statistics Denmark; and IMF staff calculations.

…and a rebound in business investment supported overall investment.



Sources: Haver Analytics; Statistics Denmark; and IMF staff calculations.

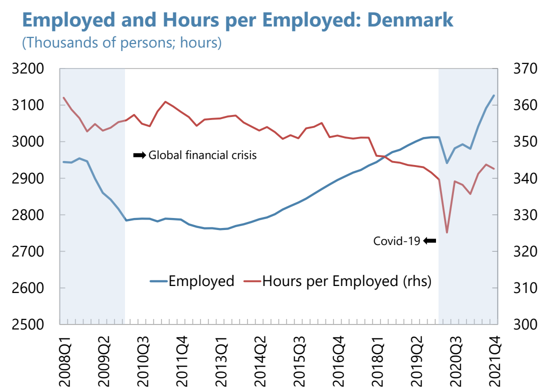
5. **The labor market continues to improve; however, pressures have increased.** After a relatively mild hit during the initial phase of the pandemic, the labor market continued to rebound, helped by increasing participation, especially by older and foreign workers. While Denmark is receiving Ukrainian refugees, they are still in the process of being incorporated into the labor force. [5] Employment and hours-worked are now above pre-pandemic levels. COVID-related measures

[4] Household savings, which increased significantly during the pandemic, remain high. Household consumption was further supported by the disbursement of holiday funds (Figure 2).

[5] The authorities are currently processing 24,000 applications. Denmark is expected to receive about 50,000 Ukrainian refugees, some one-fifth of which are expected to be employed.

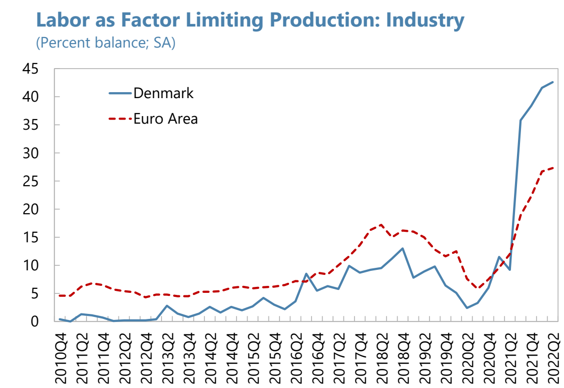
undoubtedly helped, though these were gradually rolled back in 2021 (and sunset in February 2022) to facilitate labor flexibility—a key feature of the Danish *flexicurity* model. [6] However, labor shortages increased in 2021 and remain high, mainly reflecting a cyclical overshooting in labor demand as restrictions were lifted. These, along with supply chain bottlenecks, are weighing on activity. Given the tightening labor market, wages grew by 3¾ percent (y/y) in 2021:Q4, from a 2020 average of 2¼ percent. [7]

Employment and hours are above pre-pandemic levels.



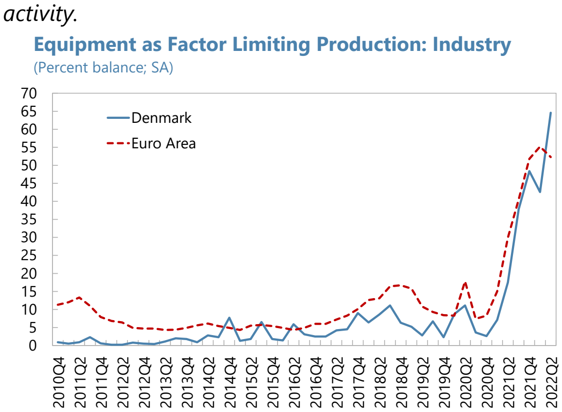
Sources: Haver Analytics; Statistics Denmark; and IMF staff calculations.

But labor shortages are increasing, which...



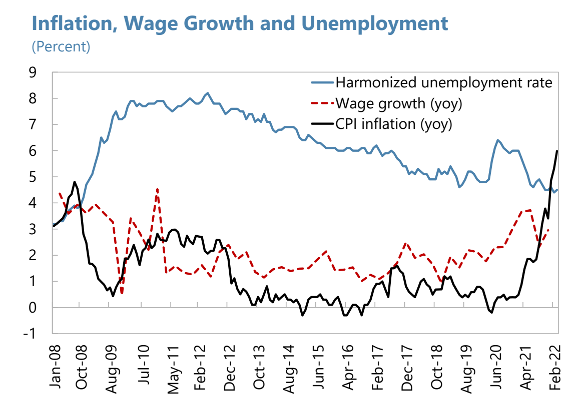
Sources: Haver Analytics; and European Commission.

...along with supply chain bottlenecks, are constraining activity.



Sources: Haver Analytics; and European Commission.

Wage growth increased as the labor market tightened.



Sources: ECB; Eurostat; Haver Analytics; Statistics Denmark; and IMF staff calculations.

6. Fiscal measures cushioned the impact of the pandemic and laid the groundwork for economic transformation. In addition to Denmark's strong automatic stabilizers, COVID-related one-off measures supported activity (Text Table 1). Fiscal support in 2021 included broad-based and targeted measures. [8] Fiscal policy—Phase 1 of the Green Tax Reform and the Digitization Fund—facilitated green and digital transitions. The fiscal stance in 2021 was expansionary, though the overall fiscal balance turned to surplus (2.3 percent of GDP), as revenues remained high, and the

[6] See Labor Section.

[7] Wage growth in 2021, on average, remained in line with productivity growth. Wage growth was higher in sectors, such as construction, where labor market shortages were more acute.

[8] Measures—such as disbursements of frozen holiday pay—were broad-based. This supported aggregate demand. Targeted measures included support for businesses, the hospitality sector, and upskilling for the worst-hit areas.

uptake of COVID-related measures turned out to be smaller than announced. [9] Gross public debt declined from 42 percent in 2020 to 37 percent of GDP in 2021. [10]

Text Table 1. Denmark: Policies in Response to COVID-19
(Percent of GDP)

	2020	2021	2022
Transfers to households	0.1	0.1	0.0
Subsidies 1/	1.2	0.8	0.1
Public consumption	0.6	1.0	0.3
VAT	0.0	-0.1	0.0
Automatic tax revenue	-0.3	-0.2	0.0
Measures to boost business activity 2/	0.1	0.1	0.0
Contribution to EU	0.1	0.0	0.0
Other one-off measures related to COVID-19	0.4	0.8	0.0
Total one-off measures related to COVID-19 3/	**2.2**	**2.5**	**0.4**
Below the line measures			
Liquidity measures			
Tax deferrals 4/	11.8	3.4	0.0
Interest-free loans 5/	0.3	1.2	0.0
Guarantees (inc. trade credit insurance) 6/	3.3	3.3	3.3

Source: Economic Survey, December 2021; Ministry of Finance; IMF staff calculations.

1/ Subsidies include the main Covid-19 support measures aimed at business such as the temporary compensation scheme for companies' fixed costs, the wage compensation and work-sharing support scheme, and many others. For detailed description of all policy measures see Article IV report 2021.

2/ Measures include increase in R&D tax deduction, tax deduction for summer houses, tax exemption for employer paid gift cards and selected craft services.

3/ 2022 refers to announced.

4/ Announced measures.

5/ Actual amount of loans used.

6/ Announced measures.

7. **Headline inflation has increased markedly in 2022 as in many other countries.** Headline inflation surged to a historic high of 6 percent (y/y) in March—from a 2021 average of 1.9 percent—on the back of higher energy prices and to a lesser extent, prices of food and services. [11] The latter—

[9] The overall fiscal surplus was mainly due to a better-than-expected pension return tax (as interest rates remain low). The fiscal impulse in 2021—in terms of the change in the structural balance in percent of potential GDP—is about -1 percentage point, thus suggesting an expansionary stance.

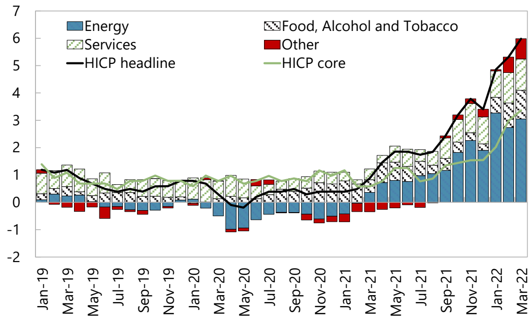
[10] In addition to the fiscal surplus in 2021, this reflects a negative stock-flow adjustment likely due to a lower take-up of below-the-line COVID measures.

[11] Headline inflation in Denmark was, however, somewhat lower than the euro area mainly due to a lower contribution from energy prices as energy inflation and the weight of energy in Denmark were lower. Rent for housing has a smaller contribution in Denmark as house prices are not automatically imputed into rents. Demand for used cars and electronics was also lower relative to the euro area.

which reflects rising wages—also raised core inflation to 3.4 percent (y/y) in March. While near-term inflation expectations remain high, medium-term expectations remain anchored around 2 percent. [12]

Headline inflation has increased sharply mainly driven by energy prices...

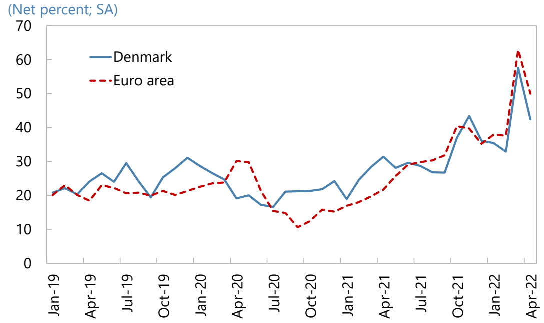
Denmark: Inflation Decomposition
(Percent change; year over year)



Sources: Eurostat; Haver Analytics; and IMF staff calculations.

...which is feeding into near-term inflation expectations.

Consumer Opinion Surveys: Future Tendency of Inflation 1/
(Net percent; SA)

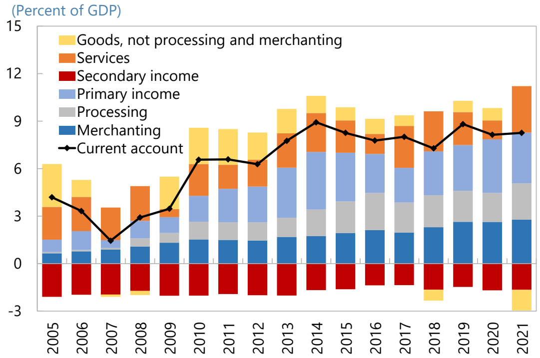


Source: OECD.
1/ Survey question: "By comparison with the past 12 months, how do you expect that consumer prices will develop in the next 12 months?".

8. The current account continues to be in surplus. The surplus stood at 8.3 percent of GDP in 2021, a modest increase from 2020. [13] The balance on services exports improved; merchanting and primary income continued to have strong positive balances. [14] Staff assess the external position to be moderately stronger than implied by medium-term fundamentals and desirable policies. But this assessment is subject to important uncertainties (ESA Annex). Structural policies that aim at raising investment, including climate and digital-related, would help reduce the surplus (SIP 2022).

The current account remains in surplus...

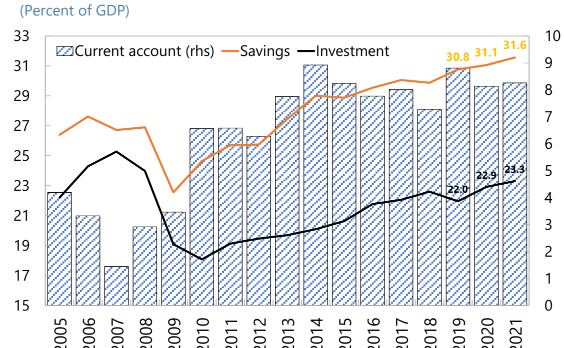
Current Account
(Percent of GDP)



Sources: Statistics Denmark; and IMF staff calculations.

...as the saving-investment gap persists.

External Balance, Savings and Investment
(Percent of GDP)



Sources: Statistics Denmark; and IMF staff calculations.

9. The banking system weathered the pandemic well. It remains profitable, liquid, and well-capitalized. [15] Furthermore, household and corporate balance sheets appear relatively unscathed

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[12] Five-year ahead consensus forecasts of inflation in Denmark stands around 1.9 percent. Inflation expectations in the euro area (SPF five-year ahead) are around 2 percent.

[13] This reflects a rise in savings from 31.1 percent in 2020 to 31.6 percent in 2021, which is partially offset by an increase in investment rate by 0.4 percentage point.

[14] Services exports are mainly due to freight services as freight prices went up.

[15] Banks were not particularly exposed to contact-intensive sectors (Article IV 2021).

from the pandemic. As measures to support corporate liquidity during the pandemic expire, bank lending to corporates has recovered. Banks are adequately provisioned and have buffers to absorb larger-than-expected losses should corporate defaults increase from current low levels.

OUTLOOK AND RISKS

10. The near-term outlook is for the rebound in activity to continue. The baseline assumes a temporary impact from the war in Ukraine and a waning pandemic in Denmark and abroad (Annex VII). The war is denting confidence, but private consumption will still remain strong as households continue to draw down savings. The investment momentum overall is expected to remain steady on the back of various initiatives that incentivize green investment and digitalization, despite some dampening from war-related uncertainty. Growth downgrades in major trading partners—notably Germany—will weigh on exports. [16] Public consumption will retreat as the unwinding of COVID-related measures more than offsets small increases in war-related spending. The fiscal tightening—along with labor supply inflows—will ease labor market pressures and help gradually close the positive output gap. [17] Headline inflation is expected to rise appreciably this year as energy and food prices surge, but will soften in 2023 as these drivers unwind. The increase in core inflation, on the other hand, is expected to persist into 2023, consistent with a positive—albeit closing—output gap. Along with the near-term rebound, robust medium-term potential growth—on account of various initiatives to raise investment and labor supply—implies that the pandemic will have no material scarring. [18]

11. But risks remain high amid the war and pandemic-related uncertainty. A persistent and further escalation of the war remains a key downside risk, further weighing on activity and lifting inflation. [19] Inflation could also remain high for a protracted period among continued supply chain bottlenecks, fueled by a surge in private consumption (as households unwind savings faster). Pandemic-related downside risks remain high given the possibility of new variants which could entail new lockdowns. Given its sizable buffers, Denmark is well positioned to face these headwinds (Context Section). However, further labor market pressures related to a faster-than-expected rebound are a key upside risk. Amid high uncertainty, the balance of risks remains tilted to the downside.

[16] This, along with still-strong imports, means that net exports would have a negative—albeit small—contribution to growth. All in all, the war in Ukraine would have a relatively small impact on Danish activity (consistent with its limited direct exposures). The war alone is estimated to reduce 2022 growth by some 1 percentage point compared with the pre-war baseline (Annex VII). However, a strong carry-over effect from a better-than-expected growth in 2021Q4 implies a net upward growth revision in 2022 (compared to the pre-war projection for 2022 as published in the Spring 2022 WEO.

[17] Foreign labor (employed in industry, construction) is expected to be steady. The positive output gap in 2022 would be smaller than during the boom years in 2005–07, thus not indictive of overheating in the baseline.

[18] These initiatives are part of reforms such *Denmark Can Do More*, *Green Tax Reform*, *Green Restart* (Labor and Investment Sections). See Annex VII in the 2021 Article IV for a related discussion.

[19] See Annex VI for details of the scenarios.

12. Macrofinancial vulnerabilities remain elevated. Household leverage remains high by international standards and housing prices rose faster than incomes through the pandemic. [20] Furthermore, a sizable share of newly-originated loans were interest-only loans, some with amortizing options that could be exercised by lenders if housing values fall. In addition, homeowners are increasingly taking out variable-rate mortgage loans and repaying fixed-rate loans which naturally increases the interest-rate sensitivity of homeowners. Thus, a domestic or regional house price correction, triggered possibly by a reassessment of fundamentals or a tightening of global financial conditions could reverberate in Denmark, weighing on the real estate market, private consumption, and investment. The impact could be amplified by the high interconnectedness of mortgage credit institutions (MCIs), pension funds, and insurance companies given their dependence on the housing sector. While the net impact is uncertain, high, and persistent inflation could weigh on bank profitability including through lower aggregate demand, or if highly-leveraged households cannot service their debt due to variable-rate mortgages resetting at higher rates.

Authorities' Views

13. The authorities broadly shared staff's assessment of outlook and risks. They expect activity to remain high this year following the strong rebound in the second half of last year, despite the dampening effect from the war. They acknowledge the cyclical pressures but do not deem the economy to be overheated. Given the heightened uncertainty, they see both downside (supply-related) and upside (demand-related) risks. The authorities do not see imbalances or policy distortions that underpin the high current account surplus, pointing instead to the role of structural features of the economy, including high pension savings. They recognize that macrofinancial risks mainly stem from the housing market in combination with high household leverage and an increasing share of risky mortgages.

POLICIES FOR SUSTAINED GROWTH AMID HIGH UNCERTAINTY

As the outlook is highly uncertain, policy should remain flexible in the near term. Policy should also preserve macro-financial stability and support a sustainable and inclusive growth path. If the recovery wavers, fiscal space should be used as needed. If upside risks materialize, the authorities should stand ready to further tighten. Fiscal policy should continue to facilitate reallocation and the green and digital transitions. Current developments warrant tightening macroprudential tools while deploying tax and housing supply policies. Efforts to further strengthen anti-money laundering supervision should continue.

[20] The household credit-to-GDP ratio declined by roughly 5 percentage points, hitting 106.2 percent of GDP by 2021:Q3.

A. Macroeconomic Policies

Fiscal Policy

14. The fiscal plan is to return to the medium-term objective while continuing to support the economic transformation.

- Fiscal policy is planned to be tightened in 2022 as the unwinding of COVID-related measures more than offsets war-related spending.[21] Compensation for higher energy prices ("heat checks") is temporary, small, and targeted to lower-income households.[22] Designed as direct transfers, it is also less distortionary than measures implemented in other countries such as reduced excise taxes. Defense and humanitarian spending will persist beyond this year.[23] The fiscal balance will remain in surplus in 2022—a more favorable projection relative to the Convergence Programme (April 2021).[24]
- Over the medium term, fiscal policy is envisaged to be broadly neutral, gradually reaching the objective of zero balance by 2025. The fiscal plan entails a retreat in public consumption while accommodating an increase in public investment. Beyond 2022, the more favorable fiscal projection will allow higher spending—both public investment and consumption—relative to the Convergence Programme, with public investment peaking around 4 percent of GDP in 2023.[25] With medium-term projected gross debt of 33 percent of GDP—well below the EU 60 percent threshold—staff assess Denmark to have substantial fiscal space (DSA Annex).
- Green and digital initiatives—financed by the EU RRF, Digitalization Fund, and green bonds—will appropriately support the economic transformation this year and beyond.[26]

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[21] Tightening housing-related measures would also support the consolidation effort. These include elimination of the deduction for home improvement services and postponement of renovations projects.

[22] The authorities are also considering additional measures that may include compensation to low-income pensioners and commuters. All in all, these compensation measures are planned only for this year and constitute some 0.2 percent of GDP.

[23] Denmark plans to increase defense spending to 2 percent of GDP by 2033 from an estimated 1.1 percent in 2022. The authorities have reserved DKK 3.5 billion (about 0.1 percent of GDP) each for 2022 and 2023. Denmark is expected to receive about 50,000 Ukrainian refugees which is estimated to entail, on average, an annual spending of about 0.1 percent of GDP during the forecast horizon (2022–27).

[24] The fiscal impulse in 2022—change in the structural balance as percent of potential output—is about 1 percentage point, thus suggesting tightening.

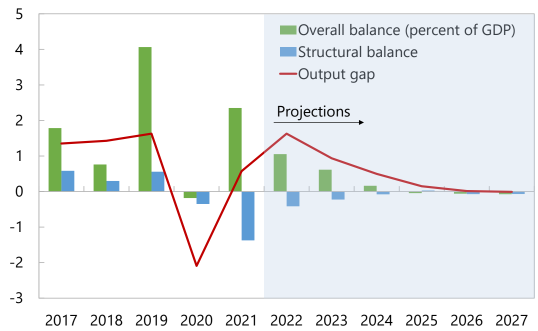
[25] This is based on the updated medium-term plan (Basis for Expenditure Ceilings, August 2021). The fiscal plan now targets growth in real public consumption not to exceed an average of 1 percent during 2023–25, which is 0.1 percentage point higher than in the Convergence Programme. In 2023, the budget surplus would also be reduced due to one-off expenses related to the repayment to housing owners (refund of property taxes paid by excessive assessments).

[26] Denmark is expected to receive about 1½ billion euros (½ percent of 2021 GDP) in EU RRF grants by 2026 (European Commission 2021). Around 59 and 25 percent of these funds are planned for the green and digital transitions respectively. Green bonds worth 5 billion DKK were issued by the DN in January 2022, and a total of 15 billion DKK is planned for this year. These would finance eligible green expenditures aligned with the "technical screening criteria" and "do no significant harm" criteria of the EU Taxonomy. From Digitalization Fund, 125 million DKK is reserved per year. The EC's assessment of Denmark's RRF plan is that the measures would accelerate green and digital transitions and also boost potential growth by increasing productivity and competitiveness (European Commission 2021).

Fiscal policy will be tightened in 2022 and subsequently converge towards the medium-term goal of zero balance.

Fiscal Balances

(Percent of potential GDP)

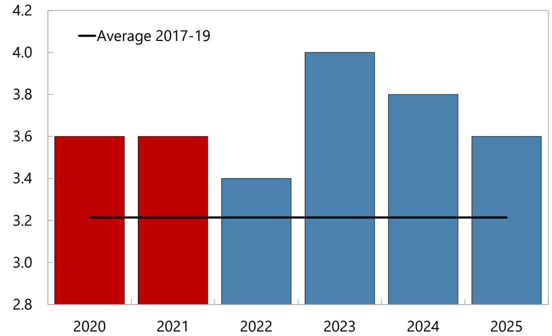


Sources: IMF, World Economic Outlook database; and IMF staff calculations.

Public investment is planned to increase relative to the pre-COVID period.

Framework for Public Investment

(Percent of GDP)



Sources: Basis for Expenditure Ceilings, August 2021; and IMF staff calculations.

15. The fiscal stance in the baseline is appropriate, but fiscal policy should remain flexible given the uncertain outlook.

- *Baseline.* Given the baseline cyclical position—positive output gap, labor shortages, and inflationary pressures—the planned fiscal tightening will appropriately dampen aggregate demand. Going forward, any additional compensation measures, beyond those envisaged in the baseline, must be well targeted and fiscally neutral—remaining in line with the current fiscal stance in terms of the structural balance. Fiscal policy must be adapted to new priorities such as compensation packages, military spending, and energy transition—if necessary, by alleviating capacity pressure elsewhere in the economy. The broadly-neutral stance in the medium term would help protect buffers—given significant long-term health care costs and adverse demographics. [27]

- *Risk scenarios.* Given the uncertain outlook, fiscal policy should remain flexible. If downside risks materialize, Denmark should allow automatic stabilizers to operate fully with the possibility for discretionary loosening. Fiscal policy should be recalibrated accordingly in case of upside risks.

16. Staff welcome the recent review of the Budget Law. The Parliament is discussing a new Budget Law that would relax the annual structural deficit limit from ½ percent of potential GDP to 1 percent. Over the long term, the new framework would appropriately allow policy to respond to spending priorities—related to demographic headwinds, public investment, and defense—while also providing more flexibility to deal with cyclical challenges should it be needed. Given Denmark's substantial fiscal space, the relaxation would not threaten long-term fiscal sustainability, though the latter hinges on adequately maintaining indexation of the retirement age to life expectancy (Labor Section).

17. Fiscal measures could help reduce the savings-investment gap. Besides raising public investment over the long term, further incentives are warranted for the private sector to step up

[27] See Danish Economic Council (2021) and OECD (2021). Public expenditure related to health and long-term care costs are projected to increase by around 4¼ percent (baseline) to 6½ percent (risk scenario) of GDP in the long run (The 2021 Ageing Report, European Commission).

investment in green initiatives and knowledge-intensive sectors. To close the savings-investment gap, while at the same time encouraging innovation, tax reforms in the areas of dividend taxation, losses carried forward and allowances for corporate equity (ACE) should be considered (Investment Section). [28]

18. Denmark aspires to become one of the most climate-friendly countries in the world. [29] However, based on current policies, the projected emission reduction would fall short of the target by 10.1 million tons. [30] To close this shortfall, the authorities have announced several initiatives, notably the *Green Tax Reform* (GTR). [31] Regarding the next phase of GTR (after 2025), an expert group has proposed alternative models with higher and more uniform carbon prices as the centerpiece (See below). [32] The government has put forward a concrete proposal which is similar to Model 2 of the expert group; this is expected to close the emission shortfall by 3.7 million tons. [33] Proposals to address the remaining shortfall—in agriculture and road transport—are expected later this year.

19. To support Denmark's emissions targets, the authorities should adopt a comprehensive strategy. The proposed strengthening of carbon pricing is welcome. However, given uncertainties regarding emissions reduction and acceptability of higher carbon prices, complementary fiscal incentives at the sectoral level are also needed, including the use of feebates in transportation and agriculture (IMF 2021). [34] For power and industrial sectors, feebates and the proposed EU carbon border adjustment can limit leakage risks. [35] The choice of the model of carbon taxation must weigh these considerations in addition to the tradeoff between leakages and tolerance of the Danish society regarding carbon prices. Recycling of carbon revenues should be considered between addressing leakages, cutting labor taxes, and securing a just transition. A prompt decision on carbon pricing would create further incentives for the private sector to step up green investment.

[28] Overall, the Danish tax system, however, does not appear to be a major driver of the savings-investment gap (SIP 2022).

[29] Denmark's goal is to reduce net emissions by 70 percent below 1990 levels by 2030, with net zero emissions for 2050—more ambitious than the EU's target to cut emissions by 55 percent.

[30] See *Climate Status and Projection* (2022) by the Danish Energy Agency. The shortfall is about 47 percent of the net emissions reduction requirement by 2030.

[31] Phase 1 of the *Green Tax Reform* includes a net tax relaxation followed by an increase in energy taxes during 2023–25.

[32] While all models include higher and harmonized carbon pricing, they differ in terms of considerations for cost efficiency and leakage risks—these, in turn, imply different ton-for-ton emission reduction costs. See Annex VI.

[33] In the government's proposal, carbon prices in the ETS and the non-ETS sectors would align with Model 2 of the expert group. Furthermore, there is additional support of DKK 7 billion (4 billion for adjustment support including reserve for hard-hit companies and 3 billion for carbon capture and storage (CCS).

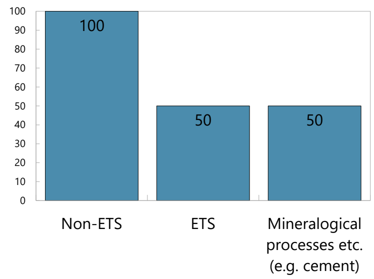
[34] In transportation, feebates—a charge on vehicles with above average emissions intensity and a subsidy for vehicles with below average emissions intensity—have led to the rapid deployment of electric vehicles in European countries such as Norway and the Netherlands.

[35] Feebates do not have a first-order impact on prices. The proposed BCA is expected to come into effect in 2026.

Green Tax Reform: Carbon Taxation Proposals[1]

Model 1:
Cheapest reductions

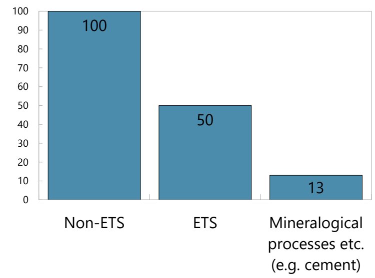
CO_2-tax: EUR per ton



Tax revenue
100 mil. EUR
Socio-economic cost
35 EUR per tonne CO_2
CO_2 reductions: 3.5 mil. Tonnes
47 percent from technical effect

Model 2:
Partial handling of leakage

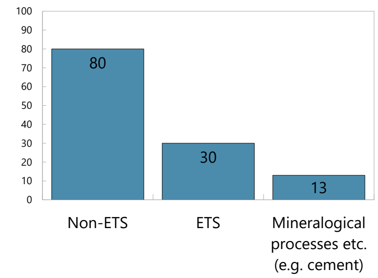
CO_2-tax: EUR per ton



Tax revenue
0 EUR
Socio-economic cost
65 EUR per tonne CO_2
CO_2 reductions: 3.5 mil. tonnes
70 percent from technical effect

Model 3:
Further handing of leakage

CO_2-tax: EUR per ton



Tax revenue
-70 mil. EUR
Socio-economic cost
70 EUR per tonne CO_2
CO_2 reductions: 3.5 mil. tonnes
75 percent from technical effect

Sources: Expert Working Group for Green Tax Reform (Feb 2022).

1/ ETS sectors (including mineralogical processes etc.) will be additionally subject to the quota price. See Annex VI.

Monetary and FX Policy

20. The central bank successfully managed the peg amid appreciation pressures in 2021. The exchange rate has traded consistently above the central parity rate since the market disruption at the onset of the pandemic.[36] The sustained pressure was partially due to increased hedging demand by pension and insurance companies following large gains in their foreign equity positions.[37] The DN sold roughly USD 19.4 billion of kroner in 2021 and cut the policy rate to -0.6 percent in October 2021, widening the spread vis-à-vis the ECB by 10 basis points.[38]

[36] Currency swap lines with other central banks remained open. USD swap lines were extended from June to December 2021, but there were no draws on these lines throughout 2021. EUR swap lines remain open though there has been no activity on these swap lines throughout the pandemic.

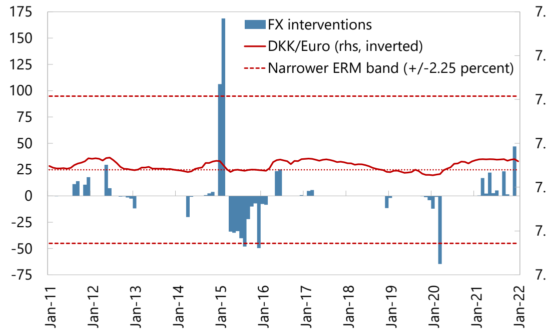
[37] A DN analysis shows that Danish pension company purchases, and sales of foreign exchange affect both the krone and the likelihood of intervention by the central bank.

[38] The DN narrowed the interest rate spread vis-à-vis the ECB by 10 basis points in March 2021 while reconfiguring its current account and lending policy rates. The current account rate was decreased by 50 basis points to -0.5 percent and the account limits, beneath which financial institutions could deposit cash, were removed. Finally, the lending rate was reduced to -0.35 percent from 0.05 percent. These rates subsequently moved in tandem with the certificates of deposit rate, declining by 10 basis points in October 2021.

The DN intervened in FX markets to stem appreciative kroner pressures…

FX Interventions and the Exchange Rate

(LHS: Bln. DKK; RHS: percent)

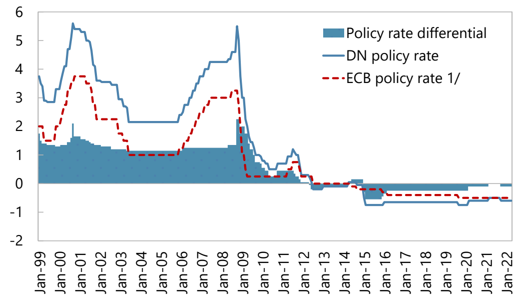


Sources: Haver Analytics; and IMF staff calculations.

…and lowered the policy rate to -0.6 percent, widening the spread to the ECB policy rate by 10 basis points.

Policy Rate Differential with the ECB

(Percent)



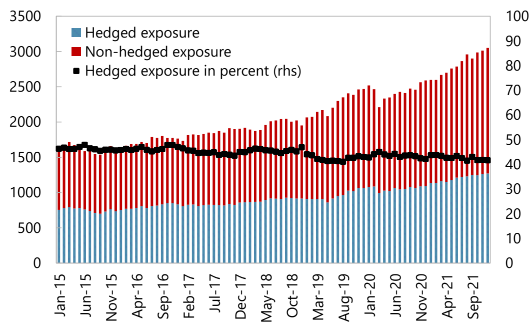
Sources: Danmarks Nationalbank; ECB; and IMF staff calculations.

1/ This reflects the ECB's deposit rate. Prior to the global financial crisis, the main refinancing operations (MRO) rate was the relevant ECB policy rate.

Pension and insurance companies have large FX exposures and hedging needs…

Pension and Insurance Sector Currency Exposure

(DKK billion)

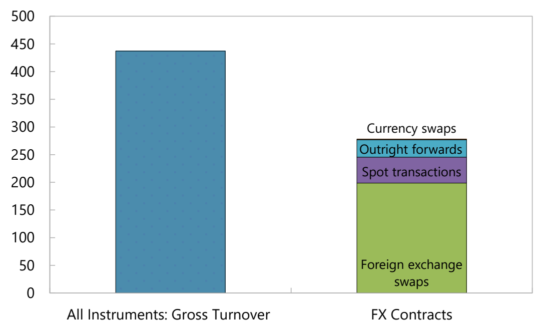


Sources: Danmarks Nationalbank; and IMF staff calculations.

…which are sizeable relative to kroner turnover.

OTC DKK Foreign Exchange Turnover

(2019; daily average; billions of DKK)



Sources: BIS; Danmarks Nationalbank; and IMF staff calculations.

21. **The exchange rate peg has served Denmark well, thus the authorities should stand ready to defend it.** The policy has historically provided a framework for low and stable inflation in Denmark. Notwithstanding recent inflationary pressures, inflation and interest rates are within narrow spreads relative to the euro zone, and medium-term euro area inflation expectations are well anchored. The DN should continue to use interventions for short-term FX fluctuations and interest rate adjustments for more persistent movements, such as protracted inflation in the euro area potentially triggering ECB policy tightening.

Authorities' Views

22. **The authorities generally agree with staff's assessment of fiscal stance and policy.** The Ministry of Finance (MOF) view energy-related measures as supporting vulnerable groups, while adding little to demand pressures (given the small size of these measures). The DN see risks that these measures, if expanded and unfunded, could exacerbate such pressures. The authorities concur with staff that additional support should be fiscally neutral, although the MOF deem the current proposals too small to make any appreciable difference for inflation. They underscored the need for fiscal flexibility as the outlook remains highly uncertain and given the current high pressure on production capacity. They share staff's view that the planned relaxation of the structural deficit limit is appropriate given long-term structural needs. Regarding Green Tax Reforms, the government has put forward a concrete proposal similar to Model 2 of the export group, citing risks of leakage in

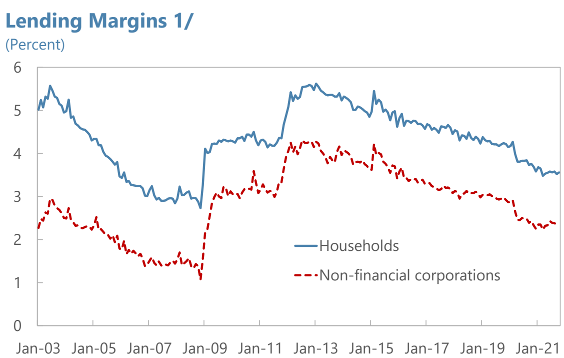
energy-intensive industries. The DN reiterated that the exclusive objective of monetary policy is to maintain the peg.

B. Macrofinancial Policies to Address Financial Imbalances

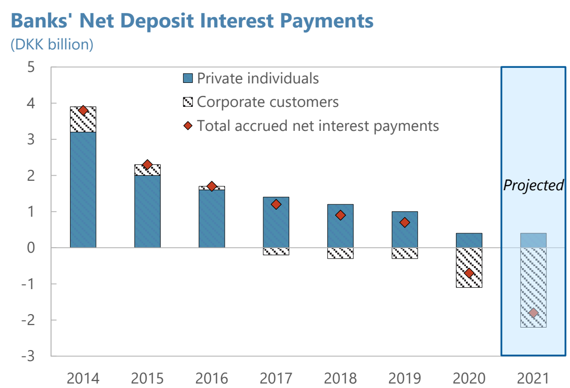
Financial Sector

23. Banks remain highly capitalized, liquid, and profitable.

- ***Profitability.*** Returns on assets and equity increased in 2021. [39] Increased competition has led to declining lending margins, but low impairments—resulting from the authorities' timely policy response and the sharp economic recovery—and the passthrough of negative deposit rates helped support profitability.



Source: Danmarks Nationalbank
1/ Margin is defined as lending rates net of T/N money market rates for systemic credit instituions.



Sources: Danmarks Nationalbank and IMF staff calculations

- ***Liquidity.*** Banks' liquidity coverage ratios remain comfortably above the 100 percent minimum requirement. And both systemic and non-systemic banks comfortably comply with the 100 percent net stable funding ratio (NSFR) requirement. [40]

- ***Capitalization.*** Capital buffers had been strengthened prior to the pandemic and capital was preserved through the pandemic by suspended dividend payments and share buybacks. [41] Risk-weighted capital ratios were stable in 2021 as dividend payments resumed. [42] The proposed EU

[39] Returns on assets and equity increased by 0.2 and 3 percentage points, respectively, to 0.5 and 8 percent in 2021.

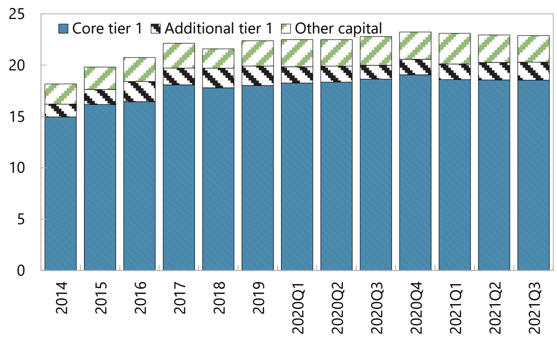
[40] The DFSA replaced its funding ratio benchmark (lending as a ratio of working capital net of short-term bonds should be less than 1) with the NSFR requirement as of June 28, 2021. The transitional period ran through August 11, 2021.

[41] The DFSA completed the Banking Recovery and Resolution Directive (BRRD) that subjected banks to hold MREL requirements and Mortgage Credit Institutions (MCIs) to hold debt buffers (Article IV 2019 and Finanstilsynet). Several amendments to BRRD (BRRD2) came into force December 28, 2020 (DN 2020).

[42] A new standard method for counterparty risk and guidelines from the European Banking Authority (EBA) on a new default definition have pushed up risk-weighted exposure amounts.

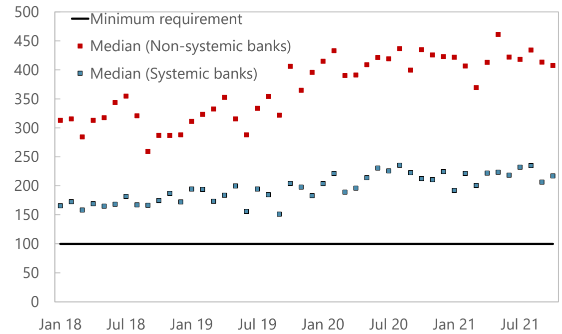
banking package published on October 27, 2021, included a new overall output floor for risk-weighted exposures which will come into effect January 1, 2025. [43]

Regulatory Capital of Credit Institutions
(Percent of risk-weighted assets)



Source: European Central Bank.

Liquidity Coverage Ratio (LCR)
(Percent)



Sources: Danmarks Nationalbank

24. Stress tests indicate that banks are resilient and can withstand the unwinding of government support. Stress tests undertaken by the Danish authorities as well as EU-wide exercises show that both systemic and non-systemic banks can withstand losses in a severe recession scenario without breaching their combined buffer requirements. [44] The share of IFRS9 Stage 2 loans—those with significantly increased credit risk—has declined markedly. [45] Bank lending has increased as economic activity rebounded and government support is being phased out. [46]

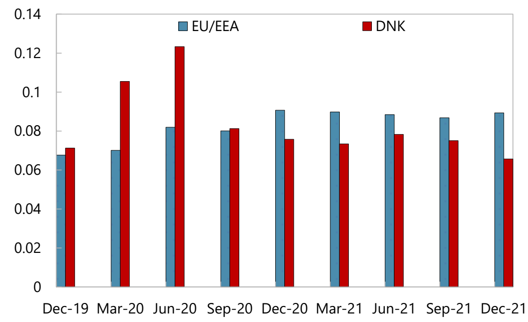
[43] The package includes escape clauses with lower risk-weights during the transition period for mortgage loans with LTVs below 80 percent issued by credit institutions with historically lower loan losses. This would imply a smaller increase in capital requirements for systemic banking groups in Denmark along the transition to the new Basel regime. The authorities estimate that capital requirements for systemic groups in Denmark could increase by up to 34 percent on average due to the output floor (DN 2019). This estimate does not account for the newly-proposed escape clauses. The ECB's TRIM exercise resulted in a 12 percent increase in risk weights for credit institutions as the new EBA guidelines-imposed pillar 1 add-ons upon banks. This has brought forward some of the projected increase in capital requirements due to the output floor which will be introduced in 2028.

[44] The combined buffer requirements refer to solvency requirements plus the capital conservation buffer. For the EU-wide stress tests, all banks comfortably meet solvency requirements though one large bank is forced to use part of its capital conservation buffer.

[45] The share of IFRS9 Stage 2 loans declined from its peak of 12.3 percent in 2020Q2 to 7.8 percent in 2021Q2.

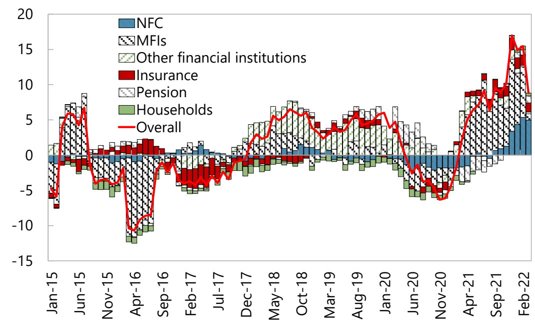
[46] In response to the COVID-19 pandemic, the government provided, *inter alia*, interest-free loans based on VAT and payroll tax liabilities, and interest-free loans based on withholding tax and social security contributions. The payment deadlines for these loans were in September 2021 extended until April 2022. In addition to liquidity guarantee schemes for corporates with export-related activities, the government introduced new loan guarantee schemes [on bank loans] for both large companies and small and medium enterprises. The scheme of government guarantees for bank loans ended in 2021.

IFRS9 Stage 2 Loans
(Share of total loans at amortized cost)



Sources: European Banking Authority.

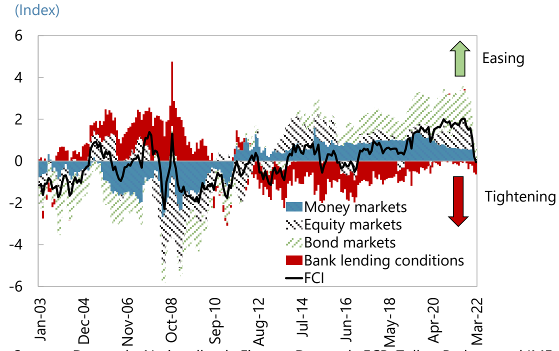
Bank Lending Growth
(Percent; y-o-y)



Source: Danmarks Nationalbank.

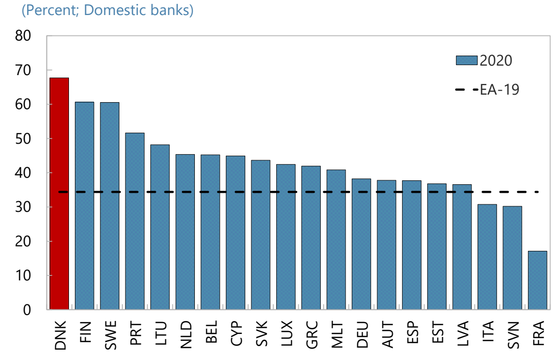
25. While systemic risk is low, financial sector vulnerabilities remain. Financial conditions remained relatively loose in 2021. The financial system is large and highly interconnected, and banks—via MCIs—have large real estate exposures. Households have large gross debt positions matched by large housing and pension assets (Figure 5). Close regional interlinkages expose banks to potential regional spillovers.

Financing Condition Index
(Index)



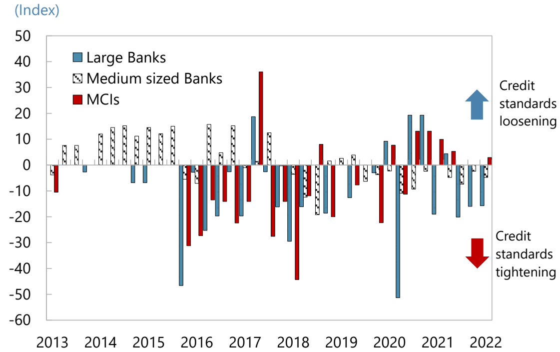
Sources: Danmarks Nationalbank; Finance Denmark; ECB; Tullett Prebon; and IMF staff calculations.

Real Estate Exposure Share
(Percent; Domestic banks)



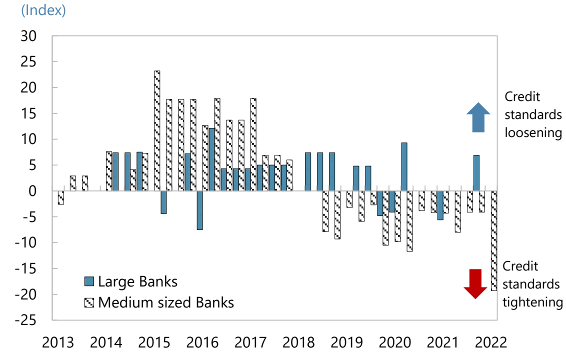
Source: European Central Bank.

Credit Standards for Households
(Index)



Source: Statistics Denmark.

Credit Standards for Corporate Customers
(Index)



Source: Statistics Denmark.

26. Staff welcome the authorities' response to the buildup of risk, but more could be done. The government followed the recommendation by the Systemic Risk Council (SRC) to raise the Countercyclical-capital-buffer (CCyB) to 2.5 percent. [47] The CRDV/CRR2 framework permits the

[47] The SRC recommended in December 2021 that the CCyB be increased to 2.0 percent (effective December 2022) following a recommended increase to 1 percent earlier (effective September 2022).

use of a sectoral Systemic-risk-buffer (SyRB) to build resilience against specific exposures, including based on borrowers' riskiness. Requiring a sectoral SyRB requirement would imply additional capital charges for specific risks, e.g., for mortgage loans with debt-to-income limits (DTIs) above a specified threshold. Staff recommend that the authorities consider this tool for strengthening buffers against adverse real estate shocks. Staff also recommend developing a fully risk-based prudential framework using the credit registry, which would allow timely monitoring of risk dynamics for individual exposures and facilitate calibrating macroprudential tools, including the SyRB and the CCyB, combined with the use of macroprudential stress tests (Article IV 2021).

27. The authorities have continued to improve their AML/CFT framework. The recommendations made in the 2019 Staff Report (Article IV 2019) have been largely addressed with the adoption of the Danish Financial Supervisory Authority's (DFSA) new institutional risk assessment model that became operational in June 2021. [48] Currently, the DFSA is developing a new supervisory strategy and is taking part in a Nordic-Baltic engagement with the IMF (DFSA 2021). [49] The DFSA should continue intensifying AML/CFT on-site inspections of higher-risk financial institutions. Furthermore, as identified in the FATF's 2021 follow-up report, it should strengthen the AML/CFT regulatory framework for virtual asset providers. The MIBFA should keep abreast of proposals to consolidate AML/CFT supervision in Europe (FSAP 2020).

Authorities' Views

28. The authorities assess the financial system as resilient. They confirmed that the pace of CCyB tightening is adequate and will fortify buffers in an already strong financial sector. They acknowledged the high concentration of real estate exposures in the financial system. They deemed the scope of risks stemming from regional spillovers and the potential fallout from the war in Ukraine as limited. The authorities reaffirmed their continued commitment to improve Denmark's AML/CFT regime and the staff noted the substantial progress that has already been made in implementing FATF recommendations.

Real Estate Markets

29. Real estate market activity remained robust in 2021. Transactions in the residential property market accelerated through March 2021 before declining though activity is still above pre-pandemic levels. Residential property prices surged in 2021:H1, hitting double digit growth, and continued to increase strongly through Jan-2022. Long-term mortgage rates increased, but standard valuation metrics, including price-to-income and price-to-rent ratios remain elevated. [50]

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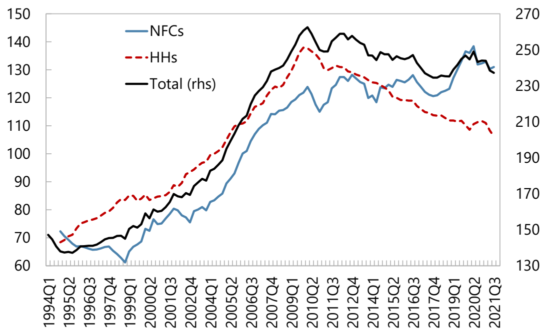
[48] Denmark is now rated "compliant" or "largely compliant" with 38 out of 40 of FATF's technical compliance recommendations (FATF 2021). Denmark's effectiveness ratings have yet to be revisited during its next Mutual Evaluation Review (tentatively scheduled for 2024/2025).

[49] The DFSA is also working on its AML/TEK initiative, which supports companies to detect financial crimes (DFSA's Project AML/TEK 2021).

[50] Credit to the nonfinancial private sector grew at 2 percent y-o-y in 2021 and credit to GDP remains high but has declined to 237.2 percent of GDP by 2021:Q3 from 246.8 percent of GDP at the end of 2019. Mortgage lending grew at 4.5 percent year-on-year.

Household credit to GDP declined as credit to households grew by 1.6 percent while GDP grew 4.1 percent.

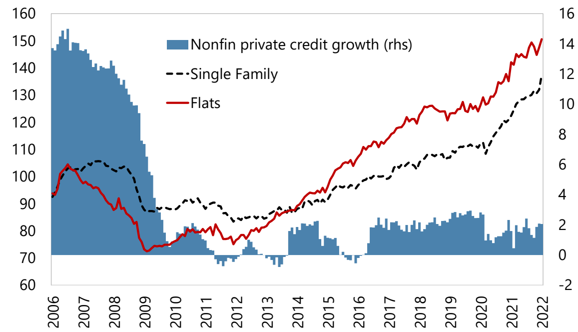
Private Sector Credit to GDP
(Percent)



Sources: Bank for International Settlements; and Haver Analytics.

Residential real estate prices continue to grow strongly.

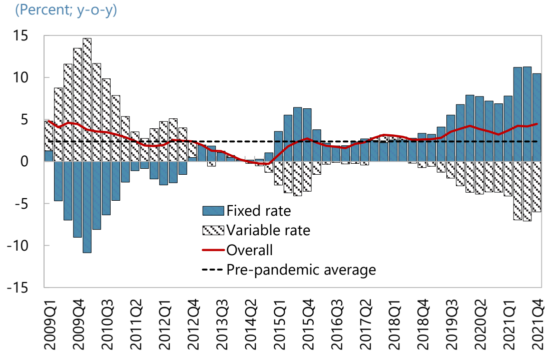
Credit Growth and Residential Real Estate Prices
(Index, 2006=100; rhs: y-o-y, percent)



Sources: Danmarks Nationalbank; Haver Analytics; and IMF staff calculations.

Mortgage lending growth in 2021 was mainly driven by fixed rate mortgages…

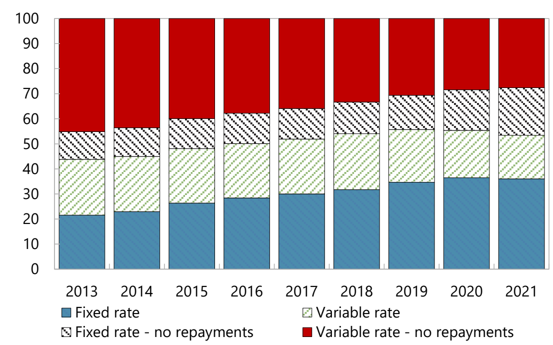
Mortgage Lending Growth
(Percent; y-o-y)



Source: Danmarks Nationalbank.

…but the majority of these were deferred amortization products.

Stock of Residential Mortgages by Type
(Percent of total)



Sources: Danmarks Nationalbank; and Statistics Denmark.

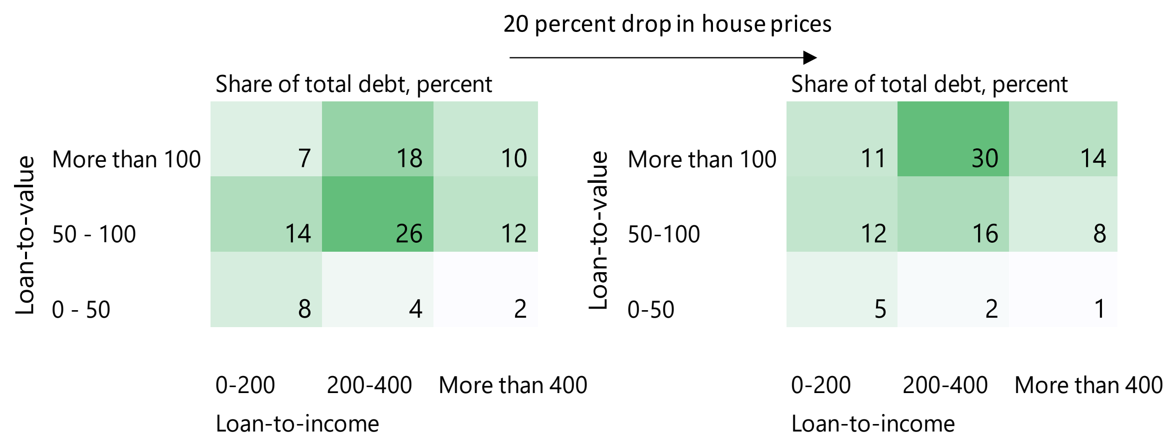
30. Macrofinancial vulnerabilities persist due to high leverage and an increasing share of risky mortgages. Following a prolonged period of low interest rates, high debt, combined with illiquid assets (concentrated in real estate via housing and pension assets), exposes households to price and interest rate shocks that can spill over to aggregate demand. [51] Furthermore, many households have recently opted for interest-only mortgages with options for lenders to request amortization if housing prices fall, which could amplify adverse shocks. Many of these households would face markedly higher debt-servicing costs were they required to amortize their mortgages (DN 2021). A sharp revaluation could harm highly-leveraged households, particularly those who purchased in overvalued urban areas and low-income households. [52] These vulnerabilities are compounded by the large and growing proportion of variable-rate mortgages, which are

[51] Housing price shocks affect household consumption via wealth effects, through (i) housing collateral (financial accelerator); and (ii) households' large pension savings invested in covered bonds.

[52] LTI ratios and credit growth are higher in urban areas than elsewhere (SIP 2018) and low-income households spend a significant share of their income on housing. The likelihood of a large repricing is also higher due to uncertainty regarding the liquidity and solvency of households and corporates after government support is withdrawn. Indeed, households appear temporarily resilient to liquidity risk from pandemic-related unemployment shocks, but this is due in large part to the government's wage compensation and business assistance schemes (Finance Denmark).

increasingly used to repay fixed-rate loans, exposing homeowners to higher interest rate risk. Moreover, MCIs and pension and insurance companies are highly interconnected and dependent on the health of the housing sector. [53]

Highly indebted households are most vulnerable to declining house prices.



Source: Danmarks National Bank.

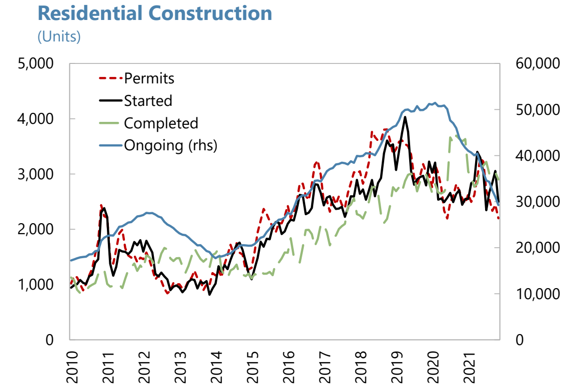
31. These developments warrant tightening prudential tools. Macroprudential tools aim to increase macrofinancial resilience and contain excessive risk taking. Staff recommend that new mortgages extended to highly-leveraged households be subject to minimum down-payment requirements or mandatory amortization until a minimum equity share is reached, regardless of maturity and type of interest rate fixation. As valuation-based measures can be less binding when housing prices appreciate rapidly (Chen et. al, 2020), the limits applying to "highly-leveraged" borrowers should become binding if either DTI or loan-to-value (LTV) limit is breached, instead of the current joint requirement. [54] Based on borrowers' riskiness, differentiated limits on income-based measures and LTVs for interest-only and floating-rate mortgages should also be considered. In an environment of increasing mortgage rates, the "growth area guidelines" should be extended beyond Copenhagen and Aarhus and debt-service-to-income (DSTI) caps should be considered to protect against liquidity shocks. [55] The proposed risk-based prudential framework should facilitate calibration of these measures, to account for risk differentiation across groups, e.g., first-time home buyers to improve affordability. National legislation should include borrower-based tools (limits on LTVs, DTIs, and DSTIs) in the policy toolkit (FSAP 2020).

[53] These sectors are entangled via real estate assets as high mandatory pension contributions and household savings have created a pension system that has facilitated the development of the world's largest covered bond market. Insurance companies, pension funds, and foreign investors are among the largest holders of covered bonds, which are issued by MCIs to fund household mortgages.

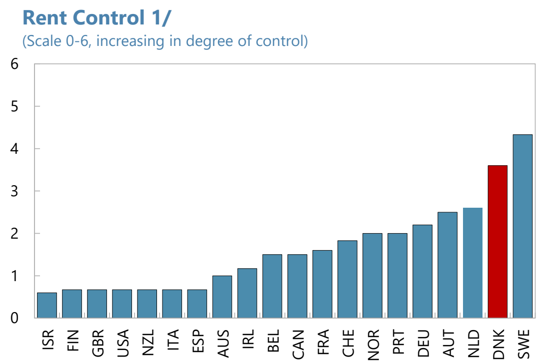
[54] The authorities previously introduced rules to limit interest-only and floating-rate mortgage lending to highly indebted households. Effective from 2018, lending restrictions for households with DTI greater than 4 times and LTV greater than 60 percent were implemented: (i) the interest-rate fixation of floating-rate mortgages needs to be at least 5 years; and (ii) deferred amortization is only applicable on 30-year fixed-rate loans.

[55] These guidelines state that borrowers in Copenhagen and Aarhus who want a variable-rate loan must be able to service a loan with a minimum interest rate of 4 per cent and amortize, even if the loan-to-value rate is low (Bentzen et al., 2020).

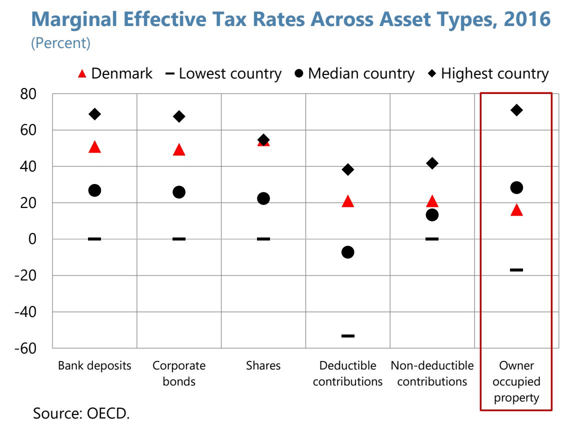
32. To improve affordability, it is important to address features of the tax code and housing supply constraints that create price pressures. Incentives for the adequate supply of housing should be reviewed. Moreover, rent controls in Denmark are pervasive relative to peer countries. Once inflationary pressures abate, these should be relaxed to stimulate the rental market, while protecting the most vulnerable. Mortgage interest deductibility should be reduced as in other advanced economies, as this incentivizes larger housing purchases and higher indebtedness, pushing up prices (Gruber et. al, 2019). [56] Linking property taxes to market valuations should be prioritized. [57]



Sources: Statistics Denmark; and Haver Analytics.



Sources: Geng (2018); OECD; and Cuerpo et. al. (2014).
1/ The indicator is a composite indicator of the extent of controls of rents, how increases in rents are determined and the permitted cost pass-through onto rents in each country.



Source: OECD.

33. A review of the efficacy of macroprudential policy implementation and institutional arrangements is encouraged. Staff recommend to reassess the effectiveness of the current system vis-à-vis international best practice, where independent authorities are provided with a legal mandate to implement macroprudential policy with corresponding transparency and accountability (Article IV 2019, FSAP 2020). Given that the decision-making power lies with the government, there is a risk that political considerations not related to financial stability—albeit commendable from different perspectives; e.g., affordability—could influence macroprudential policy decisions. [58]

[56] Many advanced economies including Germany, Ireland, and the UK do not provide tax subsidies for debt-financed housing purchases.

[57] The Housing Taxation Agreement, originally intended for 2021, is scheduled to commence in 2024.

[58] In June 2021 the SRC recommended that the government restrict access to interest-only mortgages for borrowers with LTVs above 60 percent and DTIs above 4; however, the government as the designated macroprudential authority, chose not to follow the recommendation. The only recourse available to the SRC is to publish its evaluation of consequences for systemic risks.

Moreover, the process followed by the SRC, which strives for consensus to arrive at a recommendation, can take too long, potentially hindering implementation (Article IV 2019).

Authorities' Views

34. The authorities acknowledge the risks stemming from the property market and continue to vigilantly monitor developments. Despite increasing leverage, households have overall sufficient buffers to withstand shocks and credit quality remains robust. They agreed that some highly-leveraged homebuyers with variable-rate mortgages may find it difficult to adapt to potentially rapid increases in interest rates. The ministries stressed that lenders are required to sufficiently stress test borrowers' financial situations at the time of mortgage origination. They further noted that the shift towards variable-rate mortgages does not automatically translate into higher risk, if this is due to refinancing fixed rate mortgages reducing the borrower's outstanding debt level and LTV. The DN sees scope for tighter income-based measures and mandatory amortization requirements.

C. Structural Policies

Labor Market

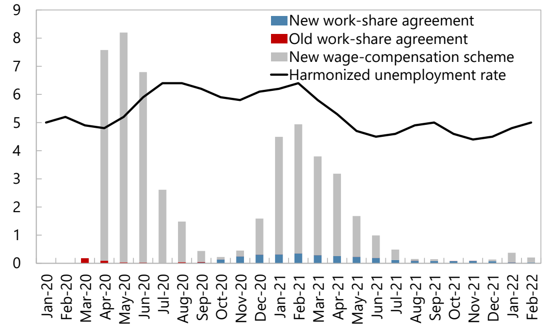
35. Enhancements to *flexicurity* and complementary job retention policies supported the labor market throughout the pandemic. At the onset of the pandemic, a complementary wage-compensation scheme and enhancements to *flexicurity*, including a new work-sharing agreement, the temporary relaxation of sickness, unemployment and cash benefits were implemented. [59] These measures gave employers substantial flexibility to reduce their labor costs—when economic activity was impacted by lockdown restrictions—while allowing them to retain their workforce; hence reducing job separations, loss of skills and human capital—which allowed employers to eventually hire back more easily in the recovery phase. [60] Hence, these policies were effective in shielding the labor market and supporting a strong recovery, characterized by record high employment and low unemployment. [61]

[59] *Flexicurity* has historically generated strong labor market performance characterized by overall low (long-term) unemployment, high job turnover and social security. Flexicurity stands on three pillars: (i) flexible hiring and firing; (ii) a generous social safety net; and (iii) an extensive system of activation policies.

[60] The wage-compensation scheme reimbursed employers wage cost by up to 90 percent. The work-sharing scheme allowed employers to reduce working hours by up to 80 percent while supplementing employees' wages through unemployment insurance payments. For a detailed description of all labor market support measures including the wage-compensation and work-share scheme, please see Article IV 2021.

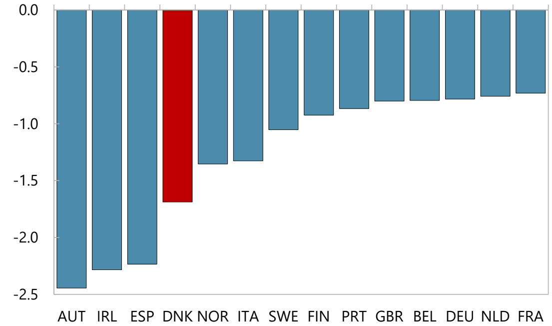
[61] Amid the *flexicurity model* that supports labor market adjustment along the extensive margin, i.e., number of workers—as firing and hiring is relatively easy and costless; the complementary policies implemented during the pandemic, supported labor market adjustment along the intensive margin, i.e., in terms of hours worked—as unemployment remained fairly stable while hours worked decreased. This allowed the preservation of human capital, which eventually permitted employers to hire back more easily in the recovery phase, facilitating reallocation (Auray and Eyquem, 2020).

Take-up of Work Support Schemes and Unemployment
(Percent of total labor force)



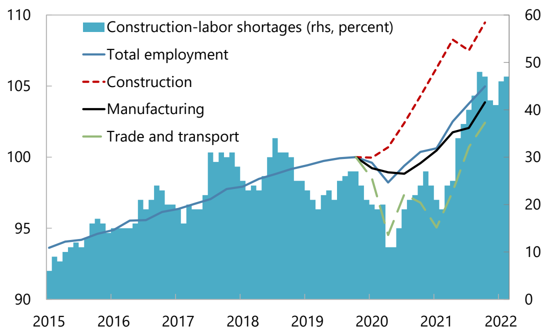
Sources: The Danish Agency for Labor Market and Recruitment; and OECD.

Changes in Unemployment Rates
(Percentage points; 2021Q1-2021Q4)



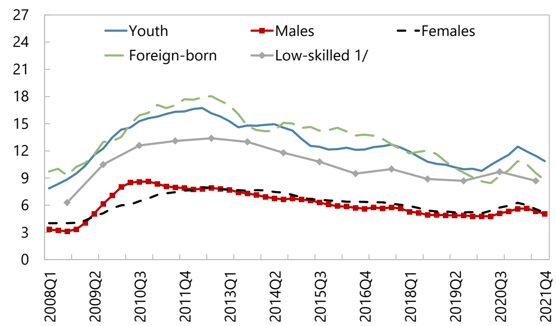
Sources: Eurostat; Haver Analytics; Office for National Statistics; and IMF Staff Calculations.

Employment and Labor Shortages
(Employment: index, 2020Q1 = 100; Labor shortages survey: percent)



Sources: Statistics Denmark; and IMF staff calculations.

Unemployment Rates by Different Groups
(Percent of each group's labor force; 4-quarter moving average)



Sources: Eurostat; Haver Analytics; and IMF staff calculations.
1/ Unemployment rate by skill (i.e. educational attainment) is annual.

36. **Commensurate with the recovery from the pandemic, *flexicurity* has been allowed to operate at full force.** Most exceptional support measures were unwound by February 2022 and remaining measures i.e., loans and guarantees, will expire by end-2022. In the near term, *flexicurity* combined with the Danish wage bargaining framework—which allows wage flexibility over and above the collectively negotiated wages—and labor supply inflows should support the clearing of the labor market, which is subject to shortages due to cyclical overshooting in labor demand. [62] Importantly, a full-fledged *flexicurity*—with its extensive ALMP measures, the highest in the OECD, and the various "positive lists" that link upskilling, educational services and provision of work permits for foreigners to in-demand skills—appears well suited to facilitating matching and the reallocation of labor from contracting to expanding sectors including those due to the transition to a more green and digital economy (Article IV 2021, and Annex VIII). [63]

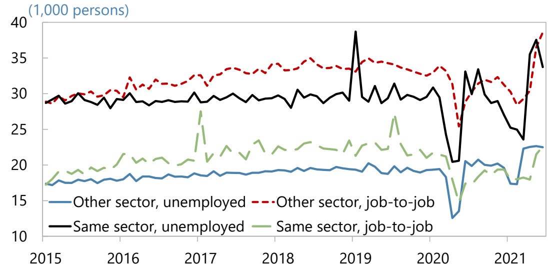
[62] Labor demand would be subject to two opposing forces in the near term. Nominal wage growth would likely fall behind inflation (which already hit 5.3 percent (y/y) in February 2022) which would push up labor demand. On the other hand, the planned fiscal tightening along with the uncertain outlook (pandemic and the war in Ukraine) would dampen aggregate demand and hence, labor demand.

[63] Upskilling and educational services as well as work visa permissions are linked to in-demand skills based on unsuccessful recruitment data, the so-called "positive list" (see Annex VIII).

Cross-sectoral mobility of unemployed persons has been elevated during most of the pandemic suggesting a high degree of reallocation.

Cross-sectoral Mobility of Unemployed

(1,000 persons)

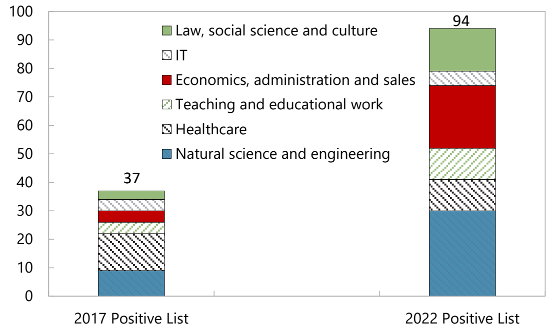


Sources: Bess, Grenestam, Hviid, and Rozsypal (2022), "Pressure on the labour market during the pandemic", Danmarks Nationalbank, Economic Memo.
Note: This chart separates the workers who find new jobs in two dimensions; whether they spent at least one month not working (unemployed-to-job) or transitioned directly to a new job (job-to-job transition) and whether the new job is in the same or different sector as the previous job (only workers with a previous job considered). It shows that all four channels were negatively affected in early 2020. The sectoral transitions are computed based on 15 sectors.

The positive list—that guides education and upskilling courses as well as work visa—has changed over the years (Annex VIII).

Changes in the Positive List

(Number of job descriptions)



Sources: www.nyidanmark.dk; www.akkam.in; and IMF staff calculations.

37. Initiatives that improve employment prospects for the young, low-skilled, and foreign-born appear to be working and should continue. Although unemployment of the young, low-skilled, and foreign-born increased disproportionally at the onset of the pandemic, several initiatives are bearing fruit, as unemployment rates recently went down to pre-pandemic levels. During the pandemic, the authorities expanded incentives for education by increasing unemployment benefits from 100 to 110 percent if the unemployed began vocational education of in-demand skills (VET). [64] They also provided more funds for upskilling and training to include COVID-19 courses such as delivering medicine or elderly care as well as green economy jobs. [65] To further promote labour market participation of refugees, the government agreed to expand the basic integration education (IGU) program in 2020 to include migrants that have been in Denmark for up to 10 years (from five years previously) and extended it to 2023. [66] These efforts are welcome and should continue.

38. The long-term sustainability of the Danish economy relies on maintaining adequate labor supply. The current pension reform that defines the indexation of the statutory retirement age (SRA) to life-expectancy is key to maintain labor supply and underpins long-term fiscal sustainability. Any changes to indexation that might result from the ongoing review should ensure that long-term fiscal sustainability is kept. [67] Additional policies to boost labor supply over the medium and long-term—along with those that raise investment— would help bolster potential growth.

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[64] VET is a program aimed at the young to incentivize and increase enrollment in vocational training.

[65] About DKK 1.1 bn in one-off funds was appropriated for upskilling and education during the pandemic.

[66] The IGU program was launched in 2016 and was supposed to run till June 2022. It aims to improve the chances of refugees to find permanent jobs in Denmark. It is a two-year course where wages are subsidized. After finishing the program, the employee receives a training certificate while the company receives a bonus of DKK 20,000 after the first six months of the course and again once the IGU has been completed.

[67] Under the current pension reform, retirement age is planned to increase from 65½ years in 2021 to 67 years in 2022 and to 68 in 2030. However, a *Pension Commission* recently recommended—among other things—a slower pace of the link between the SRA and life expectancy from 2045 onward.

- In this regard, the recent agreement to strengthen structural employment by about 12,000 by 2025 is welcome (Denmark Can Do More I 2022). Reforms include raising in-work benefits, [68] making the temporary increase in unemployment benefits for VET permanent, reducing unemployment benefits for students after graduation, [69] relaxing tax pension rules to further incentivize seniors to work, [70] and increasing incentives to attract international labor including an extension of the job-search period of foreign student graduates. [71] Staff also welcomes the new law that grants Ukrainian refugees quicker access to the labor market under the Special Act.

- Staff recommend to make progress on reducing high marginal and participation tax rates (Article IV 2019). [72] The authorities should review the adequacy of routes to early retirement so that incentives for remaining in the labor market are maintained. [73] Making the positive list forward looking could improve the supply of labor with adequate skills. [74] A more equal split in parental leave and improvements to the provision of after-hours public childcare could further decrease the gender gap and increase productivity (OECD 2021). [75] Simplifying the certification of foreign degrees (OECD 2019), permanently lowering the threshold under the pay-limit scheme, and reviewing its link to unemployment rates would help attract skilled foreign labor. Immigrant integration could be further improved by ensuring that integration policy best practices across municipalities are adopted more broadly (OECD 2021). [76]

[68] By increasing the employment allowance (tax reduction).

[69] Student can claim unemployment benefits after graduation for up to two years. The agreement will cut this period to one year.

[70] Currently, pension income is reduced if seniors continue to work and earn more than DKK 120,000 per year. Under the new agreement this restriction will be abolished such that there will be no reductions in pension income.

[71] A temporary supplementary pay-limit scheme should help attract foreign labor. Additional incentives include, an expansion of the positive list with more jobs, expansion of the fast-track scheme by increasing the number of firms eligible, pop-up recruitment centers abroad where foreign workers will be presented with job opportunities in Denmark, and an increased effort to retain international graduates through talent recruitment, career clarification courses, and an extension of the period they are allowed to stay after graduation from 6 to 12 months. (Ministry of Finance 2022).

[72] A comprehensive tax reform that uses targeted in-work benefits and reduces marginal and participation rates would positively impact the intensive and extensive margins, increasing labor supply and supporting the alleviation of inactivity traps (Article IV 2019).

[73] There are currently four early retirement schemes, the old early pension scheme, the new early pension scheme *(Tidlig Pension)*, the old-age disability pension scheme (*Seniorpension*), and the disability pension scheme.

[74] The positive list is based on current unsuccessful recruitment data. The list can be made forward looking by assessing the skills that will be needed over the medium term.

[75] Denmark has some of the smallest gender gaps in the OECD, but the share of women in management positions remains low and women remain the primary childcare provider, which explains most of the remaining gender gap (OECD 2019). They also take substantial earnings hit when becoming mothers. A more even split in parental leave could remedy this by implementing the EU-directive in June 2022 which requires a minimum of two months of leave for each parent.

[76] The quality and implementation of integration programs for migrants is unequal across municipalities (OECD 2021). The authorities should analyze the features of implementation of the most effective municipalities and advice poor performing municipalities on how to emulate them.

Authorities' Views

39. The authorities recognize labor market pressures but see features of the system—*flexicurity*, the wage-bargaining framework—conducive for alleviating pressures. Over the medium term, they consider reforms under *Denmark Can Do More I* favorable to increase labor supply, notably reforms to reduce generosity of the unemployment benefit scheme for recent graduates. The authorities agree that an adequate indexation of the SRA to life-expectancy is key to maintain labor supply and long-term sustainability. The authorities point out that more equal parental leave will be effective in June 2022 with the implementation of the EU directive. They think that working hours of day-cares are adequate.

Reforms to Boost Investment and Productivity

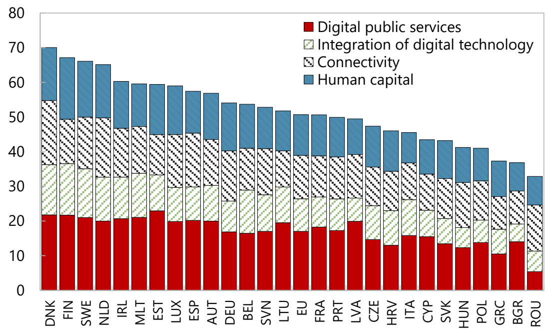
40. Denmark is turning the pandemic into an opportunity to raise investment, productivity growth and embrace the economy of the future. Before the pandemic, the authorities initiated a comprehensive business-oriented growth policy strategy to support the transformation of the Danish economy. This involved various initiatives targeting key areas, including digitalization, qualified labor, and competitiveness. [77] To further Denmark's digital and green transitions, throughout the pandemic, the GTR phase 1 and a proposal for its next phase (Fiscal Section), Green Restart, the Digitization Partnership and Denmark Can Do More I 2022 were launched. [78] These initiatives have contributed to Denmark's top rankings in the EU's Digital Economy and Society Index and the Climate Change Performance Index (Figure) and will likely play a role on keeping Denmark ahead of the curve in the global race for digitization and economic greening. Moreover, despite the hit to activity, gross-fixed-capital formation remained robust throughout the pandemic—with information communication technology (ICT) equipment registering significant increases—in comparison with the Global Financial Crisis (GFC) (Figure). [79]

[77] The growth policy targets six areas: Digitalization, Qualified labor, Venture capital, Cost of doing business, Competitiveness, and Good economic conditions (Ministry of Industry, Business and Financial Affairs 2018). To support the transition to new technologies, the authorities also established the Digital Hub Denmark, the Technology Pact, the Danish National Strategy for Artificial Intelligence, the Disruption Council and expanded public-private partnerships, particularly in SMEs. Through the setup of the Innovation Fund (which facilitates subsidies for innovation and R&D) and the Danish Growth Fund (which serves as a one-stop shop for access to finance for SME's) the authorities aimed to support investment, innovation, and increased SME financing. The Digitalization Fund was established to strengthen SMEs' digital transition and trade.

[78] The Digitization Partnership report makes recommendations to set a new digital strategy that will focus on (i) Improving public services for citizens and businesses; (ii) Driving digital transition of SME's; (iii) Digital solutions for the green transition with open data about climate, utilities, and circular economy; and (iv) A strong ethical and data secure approach to digital solutions.

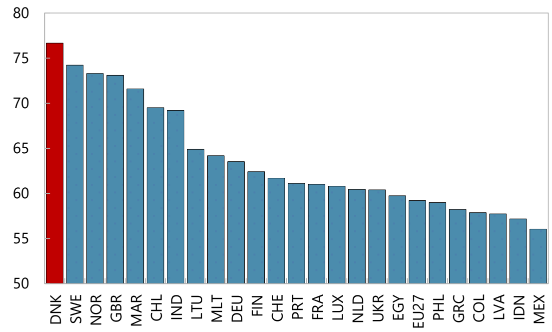
[79] Total investment as share of GDP is projected to increase by about 2.3 percentage points in the medium term relative to pre-pandemic (2017-19) average of 21.4 percent of GDP. Public investment is set to peak at 4.0 percent of GDP in 2023—from 3.2 percent of GDP average 2017–19 (Fiscal Section).

Digital Economy and Society Index 2021 Ranking
(Index)



Sources: Digital Scoreboard; and European Commission.

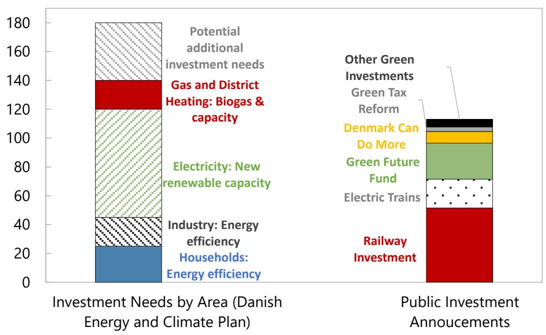
Climate Change Performance
(Index; 2022)



Source: Climate Change Performance Index.

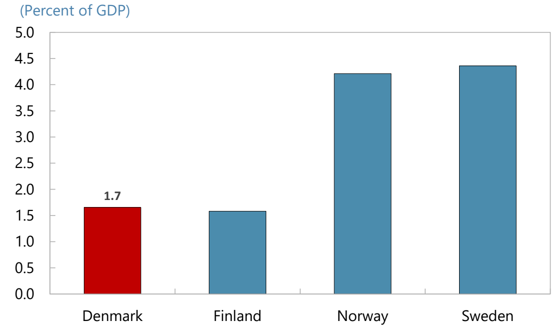
41. Denmark's green transformation commitment offers an opportunity to further boost investment and thereby reduce the savings-investment gap. Estimated investment needs for climate mitigation and adaptation are significant and vary widely depending on different considerations.[80] While several initiatives that have already been launched envisage an increase in green investment, more public and private investment will likely be needed.[81] Over the long term, fiscal space should be used to raise public investment as much as efficiently possible, while being compliant with the new Budget Law and the medium-term objective. To catalyze private investment to complement planned increases in public investment, a prompt definition of the tax framework for green investment—including the proposed models in the GTR and forthcoming proposals for agriculture and transportation—is encouraged (Fiscal Section, Denmark SIP (2022)).

Denmark: Climate Mitigation Investment Needs vs Announced
(DKK billion)



Sources: Danish authorities; and OECD.

Estimates of the Annual Costs to Improve Public Infrastructure for Climate Change Adaptation
(Percent of GDP)



Source: IMF, Fiscal Monitor October 2020.

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[80] To support climate mitigation, important areas for investment, and sizeable amounts—DKK 100 to 180 billion (4–7 percent of GDP)—have been identified by the Danish National Energy and Climate Plan (DNEC 2019). Depending on different considerations, adaptation investment needs are also likely significant. Staff analysis shows these could be as high as 1.7 percent of GDP annually during 2020–2030. Other estimates point to needs of about DKK 50–75 billion (2.1–3.1 percent of GDP in total).

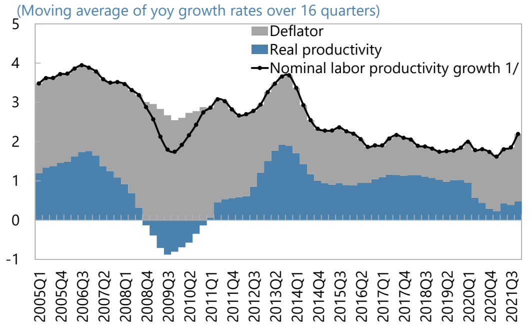
[81] Initiatives including among others the GTR, Green Restart, the EU RRF, the Danish Export and Growth Fund embed public investment announcements for about DKK 112 billion. Danish Pension Funds have pledged to invest DKK 350 billion by 2030 (Danish Energy Agency, Climate Programme, 2020).

Productivity Growth and Investment

Labor productivity growth recovered but mainly due to inflationary pressures.

Decomposition of Labor Productivity Growth

(Moving average of yoy growth rates over 16 quarters)



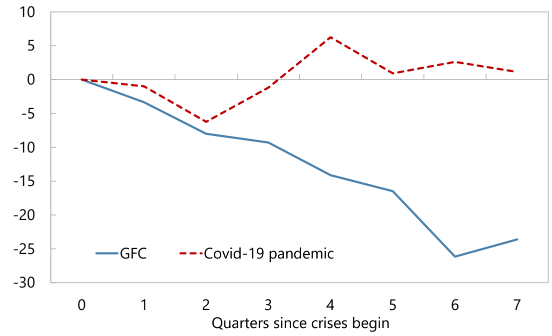
Sources: Haver analytics; and IMF staff calculations.

1/ Nominal labor productivity growth equals growth in real labor productivity plus growth in the sector's deflator.

Investment remained on trend during the pandemic unlike during the GFC...

Gross Fixed Capital Formation

(Percent change from the five-year trend pre-crisis)

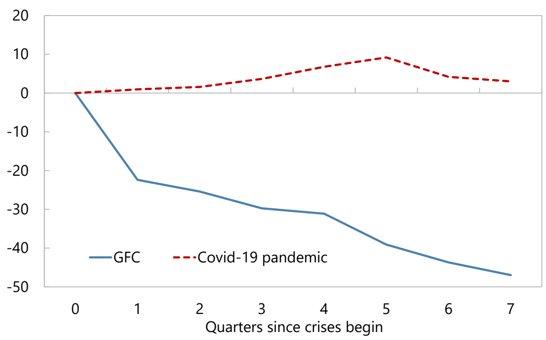


Sources: Haver Analytics; Statistics Denmark; and IMF staff calculations.

...held up by investment in housing...

Gross Fixed Capital Formation: Housing

(Percent change from the five-year trend pre-crisis)

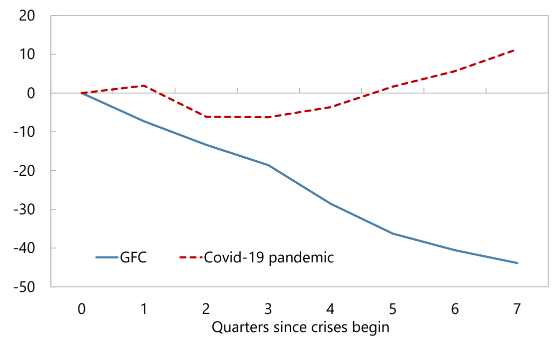


Sources: Haver Analytics; Statistics Denmark; and IMF staff calculations.

...and ICT.

Gross Fixed Capital Formation: ICT Equipment

(Percent change from the five-year trend pre-crisis)

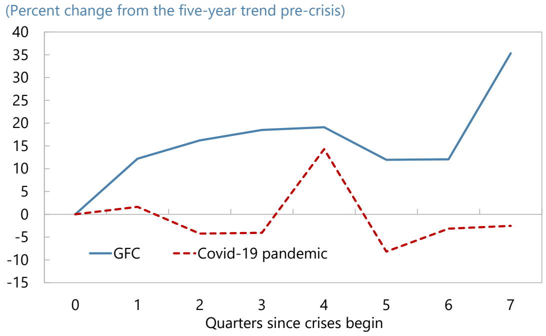


Sources: Haver Analytics; Statistics Denmark; and IMF staff calculations.

While software and intellectual property (IP) investment remain on trend, they are lower than during the GFC.

Gross Fixed Capital Formation: Software and Intellectual Property Products

(Percent change from the five-year trend pre-crisis)

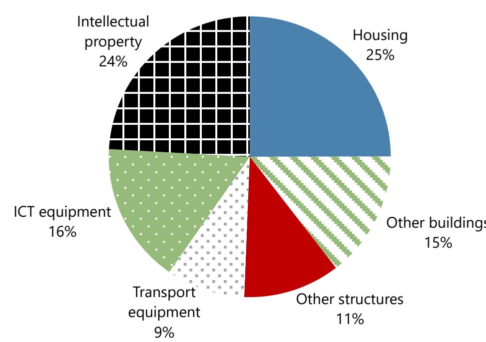


Sources: Haver Analytics; Statistics Denmark; and IMF staff calculations.

IP, housing, and ICT make up 2/3 of total investment.

Decomposition of Gross Fixed Capital Investments

(Percent share of total, 2021)



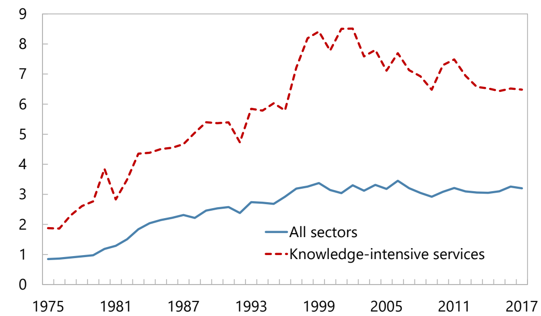
Sources: Statistics Denmark; and IMF staff calculations.

42. However, additional policies should be considered:

- **Bolster the expansion of highly productive sectors.** While Denmark already ranks high on digitalization, there is scope to increase the share of employment in knowledge-intensive services (KIS) and boost ICT investment, as both tend to be positively associated with firm productivity and a more dynamic business environment. Policies to consider include supporting entrepreneurship by rebalancing taxation for start-ups and high-technology firms through adjustments to carry-forward losses and dividend taxation and ensuring the provision of technical and digital skills to nurture an adequate supply of human capital (Annex 3, Article IV 2019). The implementation of an incremental ACE should also be considered.[82]

Although ICT investments appear broadly in line, investments in KIS have been decreasing since the early 2000…

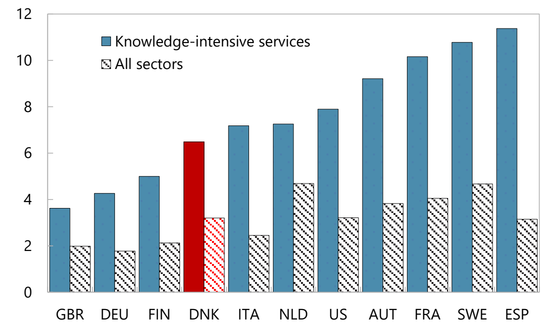
ICT Investments over Time
(Percent of gross value added)



Sources: EU KLEMS (2019); and IMF staff calculations.

…and are lower than in many peers.

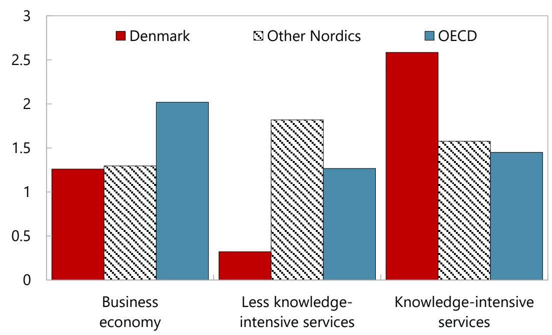
ICT Investment, 2017
(Percent of gross value added)



Sources: EU KLEMS (2019); and IMF staff calculations.
Note: Data for GBR, SWE and ESP are up to year 2016.

KIS sectors are highly productive.

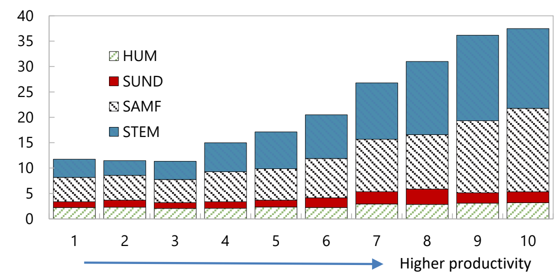
Labor Productivity Growth, 2000-2015
(Percent)



Source: OECD.

Employees with degrees in STEM and economics (SAMF) that work in KIS sectors tend to be more productive.

Employees Productivity and Educational Background
(Percent, horizontal axis: higher number=higher productivity, 2015)



Sources: Statistics Denmark; and Report on Growth and Competitiveness 2018 by the Danish Government.
STEM=Science, technology, engineering & math), SAMF=Economics, law & political science, SUND=pedagogue & health science, HUM=human society and culture

- **Ensure that incentives for R&D expenditure remain adequate for a broad spectrum of firms,** including SMEs and promote further collaboration between universities and businesses to foster innovation.[83]
- **Improve access to equity finance.** Better access to equity finance would improve funding options for new, small, or high-technology firms that tend to be subject to credit constraints due

[82] Relaxing the cap on the use of carry-forward losses should be considered, as such a cap might pose a challenge for cash-constrained start-ups which tend to be initially loss making. Reducing the taxation of dividends, while ensuring regulations are in place to minimize avoidance, would encourage equity investment in start-ups and high-technology firms. Assessing how to properly implement an incremental Allowance for Corporate Equity (ACE) should be considered, as ACE would reduce the debt bias and the cost of capital (SIP 2018).

[83] To foster innovation, the 130 percent R&D tax deduction—introduced during the pandemic—was made permanent and it was agreed to invest DKK 1 billion in the green transition every year during 2023–30 including in three new green business schools. However, R&D spending is concentrated among a few large firms. There is room to improve the design of R&D grants and tax credits to appeal to broader range of firms, including SMEs.

to a lack of collateral. Reviewing pension fund regulation to provide further incentives for investments while ensuring adequate risk practices should be considered. Also, continuing with the implementation of investment vehicles by which pension sector and public resources are invested in SMEs remains relevant. As agreed in DMCD I, the authorities should foster an environment to provide accelerator capital for companies that are in the scale-up phase and therefore require larger amounts of capital.

- **The institutional framework for competition should be enhanced** by a market investigation tool to make determinations of anticompetitive practices and a system to scrutinize mergers. [84] Evaluation of sectoral regulations (e.g., Taxi Act, Foreclosure Act, etc.) is suggested to ensure that these are conducive to adequate competition.

Authorities' Views

43. The authorities agree that the green and digital transformation will catalyze investment and raise productivity. They concur with the need to support innovation and productivity growth. Hence, they have increased and made permanent R&D deductions. While they see advantages in ACE, they believe its implementation poses significant challenges. The authorities recognize that access to equity finance needs to be improved. While they pointed out that the supply of venture capital has been increasing, accelerator capital remains scarce. To ensure competition friendly regulation, the authorities agree that reviews of sectoral regulation would be useful.

STAFF APPRAISAL

44. Denmark's successful containment of the pandemic bodes well for the strong rebound to continue into 2022. With high vaccination rates, Denmark was the first EU country to lift all pandemic-related restrictions. Led by private consumption and investment, the strong rebound is expected to continue into 2022, despite some dampening from war-related uncertainty.

45. But risks to economic outlook remain high with risks tilted to the downside. A further escalation and persistence of the war could additionally weigh on activity and inflation. New virus variants could emerge, which presents a downside risk. Labor market pressures stemming from a stronger-than-expected rebound is a key upside risk. Amid high uncertainty, the balance of risks is tilted to the downside. High and increasing household debt remains a key vulnerability as housing valuations remain elevated.

[84] Although, Denmark's competition framework is generally in line with international best practice, the structure for enforcement and determination is more complex than in other EU countries (OECD 2019). Thus, the implementation of the European Competition Network directive (ECN+) in March 2021 is welcome. This aims to make the national competition authorities more effective enforcers, importantly, enabling the Danish authorities to handle civil fines where previously only criminal fines were possible. Regarding merger activity, the Competition and Consumer Authority gets involved when mergers are above a certain sales turnover threshold. However, it would be useful to also set a threshold with regard to market power, as sales could be low such that the authority is not informed but competition is still affected as market share is large.

46. **Fiscal policy should remain consistent with cyclical pressures in the baseline, but it should remain flexible given the uncertain outlook.** The planned fiscal tightening in 2022 will suitably help ease cyclical pressures. Compensation for higher energy prices is small, temporary, and targeted. It is also less distortionary compared with measures in other countries. Any additional measures, however, must be well targeted and fiscally neutral. As the outlook is highly uncertain, fiscal policy should remain flexible and be recalibrated as needed if either downside or upside risks materialize. Staff welcome the planned relaxation of the structural deficit limit as it will allow policy to respond to long-term spending priorities while also providing the flexibility to deal with cyclical challenges should it be needed.

47. **The exchange rate peg has served Denmark well.** The policy has historically provided a framework for low and stable inflation in Denmark.

48. **The banking system is sound and resilient to stress.** Prudential tools, including sectoral systemic risk buffer requirement and fully risk-based prudential framework would further strengthen financial stability. Staff welcome the DFSA's adoption of a new AML/CFT institutional risk assessment model.

49. **High household indebtedness and the growing share of risky mortgages call for macroprudential tightening and structural reforms.** Household indebtedness has grown to high levels, exposing them to interest rate shocks that could spill over to the real sector. Staff recommend that new mortgages extended to highly-leveraged households be subject to minimum down-payment requirements or mandatory amortization until a minimum equity share is reached. Moreover, the "growth area guidelines" should be extended across Denmark and debt-service-to-income caps be considered. Unlike the combined requirement currently in place, a breach of either the DTI or LTV threshold should trigger binding limits that apply to highly leveraged households. Moreover, mortgage interest deductibility should be reduced, and legislation should include borrower-based tools in the policy toolkit.

50. **Efforts to improve labor supply are welcome and should continue.** Reforms that improve employment prospects of the young, the low-skilled and foreign-born that were undertaken during the pandemic and in the context of "Denmark Can Do More I" should continue. Any changes to the indexation of SRA to life-expectancy that might result from the ongoing pension reform review should ensure that adequate labor supply and long-term fiscal sustainability is kept. The adequacy of routes to early retirement should be reviewed. To further increase labor supply, marginal and participation tax rates could be reduced, forward-looking components to different positive lists could be added, while a more equal split in parental leave could further reduce the gender gap. Further policies to attract skilled foreigners should be taken.

51. **Denmark's green and digital transformation offers an opportunity to further boost investment, raise productivity, and lower the savings-investment gap.** A prompt decision on carbon pricing would further incentivize the private sector to step up green investment. Entrepreneurship can be supported by rebalancing taxation for start-ups and high-technology firms. To further boost productivity growth, the authorities should continue to foster the environment for

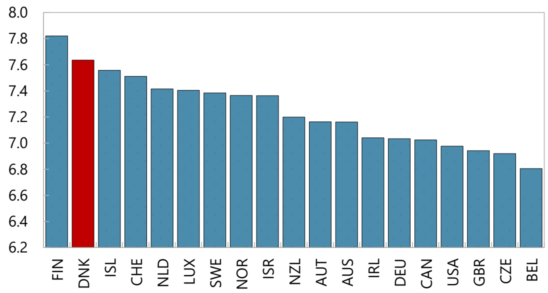
high productivity sectors to expand, encourage broad-based innovation, and improve access to equity finance and accelerator capital. The institutional framework for competition should be enhanced by a market investigation tool and a system to scrutinize mergers.

52. It is recommended that the next Article IV consultation take place on the standard 12-month cycle.

Figure 1. Denmark: Context

Measures of wellbeing suggest Danes are among the happiest people in the world…

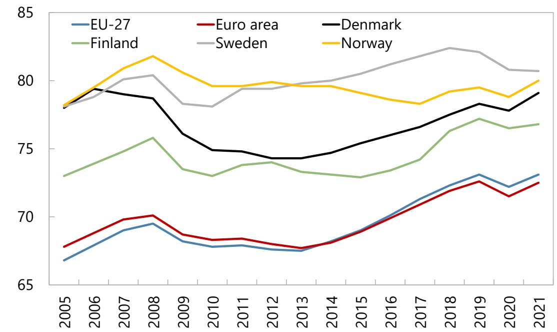
Happiness Score, 2019-2021 1/
(Index)



Source: World Happiness Report 2022.
1/ Higher numbers mean more happiness. Caution is needed in interpreting scores for any individual country as the quality of underlying data can vary.

…amid high levels of employment following structural reforms though dipping somewhat in 2020.

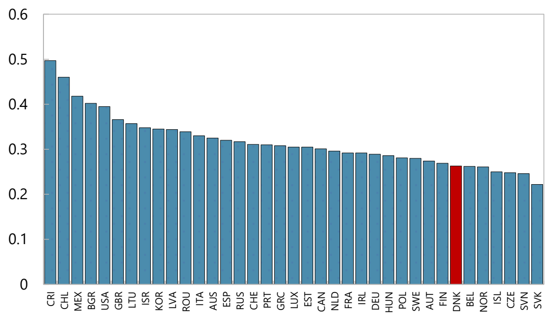
Employment Rates
(Percent of population)



Sources: Eurostat; and Haver Analytics.

Inequality is low by international standards.

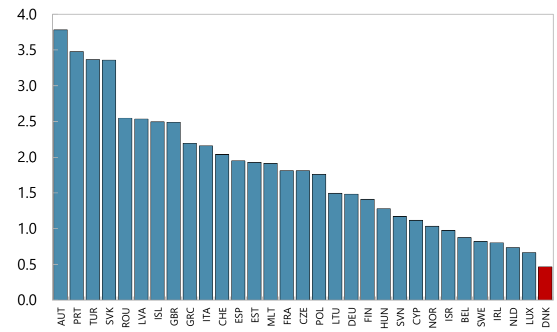
Gini Coefficients, Latest available data 1/
(Percent of disposable income)



Source: OECD.
1/ Lower numbers mean less income inequality.

Gas and electricity matter less for Danish production.

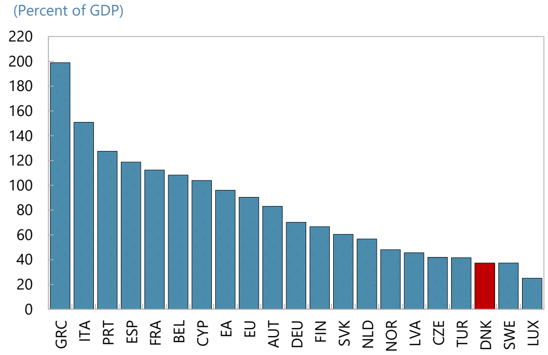
Electricity and Gas Usage
(Percent share of Gross Output, 2018)



Sources: OECD ICIO; and IMF staff calculations.

Public debt remained one of the lowest in the region.

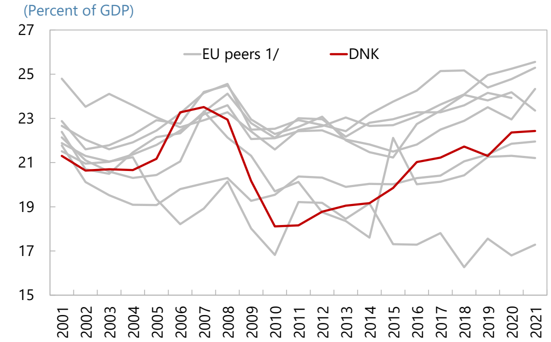
General Government Gross Debt, 2021
(Percent of GDP)



Sources: IMF, World Economic Outlook database; and IMF staff calculations.

Investment rate picked up after lagging peers for some time following the GFC.

Total Investment
(Percent of GDP)



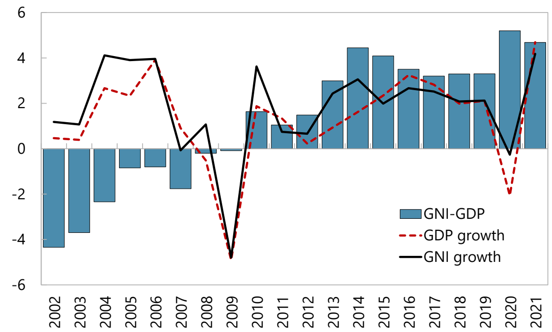
Sources: Haver Anaytics; National Authorities; and IMF staff calculations.
1/ EU peers are AUT, BEL, FIN, FRA, DEU, LUX, NLD and SWE.

Figure 2. Denmark: Recent Developments

Activity rebounded strongly in 2021…

Denmark: GDP and GNI

(Percent)

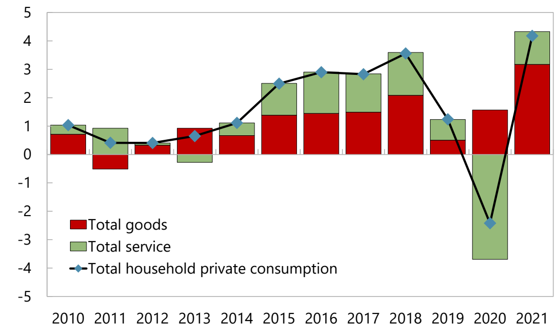


Sources: Haver Analytics; Statistics Denmark; and IMF staff calculations.

…so did private consumption as services consumption began to normalize.

Household Private Consumption

(Percent; Percentage contribution)

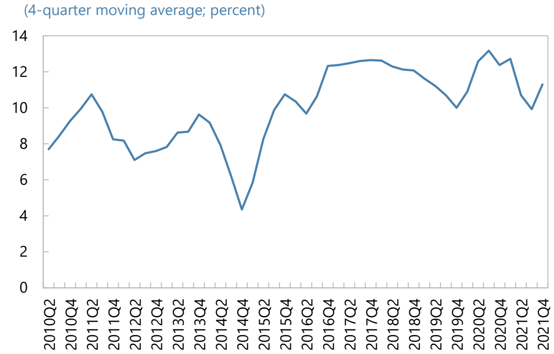


Sources: Statistics Denmark; Haver Analytics; and IMF staff calculations.

Household savings rate still remained above pre-pandemic.

Gross Household and NPISH Saving Rate

(4-quarter moving average; percent)

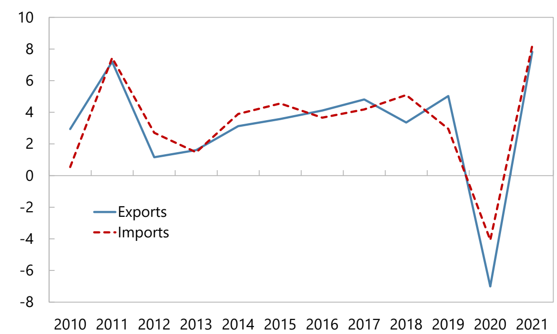


Sources: Haver Analytics; Statistics Denmark; and IMF staff calculations.

Exports rebounded strongly matched by a strong rebound in imports.

Exports and Imports of Goods and Services

(Percent)

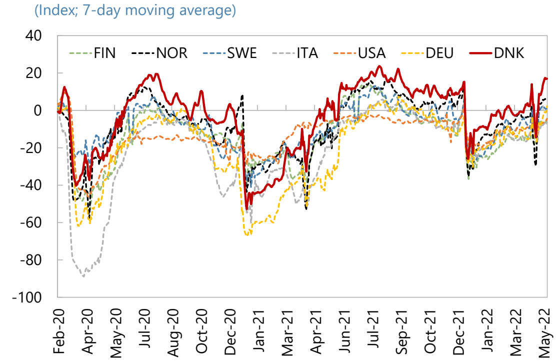


Sources: Statistics Denmark; Haver Analytics.

Relative to previous episodes, mobility declined less during the most recent lockdown.

Mobility in Retail and Recreation

(Index; 7-day moving average)

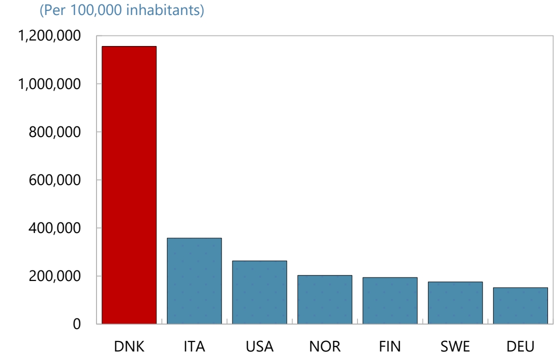


Sources: Google Community Mobility Reports; Haver Analytics; and IMF staff calculations.

Test ratio in Denmark is one of the highest in Europe.

Test Ratios of COVID-19

(Per 100,000 inhabitants)

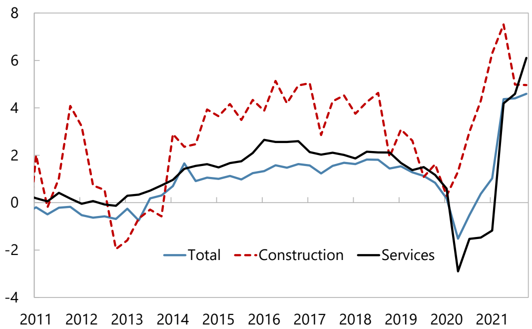


Sources: Haver Analytics; Oxford University (Our World in Data); and IMF staff calculations.

Figure 3. Denmark: Labor Market Developments

Employment growth skyrocketed following the pandemic.

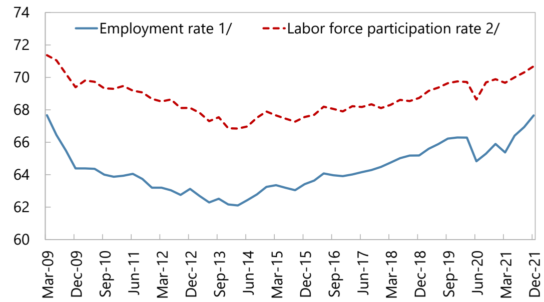
Employment Growth
(Y-o-y; percent; SA)



Sources: Statistics Denmark; and IMF staff calculations.

Employment and participations rates are above pre-pandemic levels...

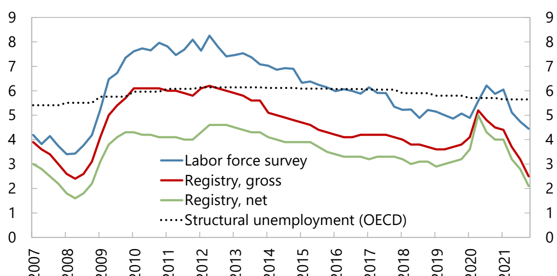
Labor Market Rates
(Percent of working age (15-64 years old) population, SA)



Sources: Statistics Denmark; and IMF staff calculations.
1/ Employment rate = Employed/working age population.
2/ Labor force participation rate = Labor force/working age population.

...as unemployment drops below pre-pandemic rates.

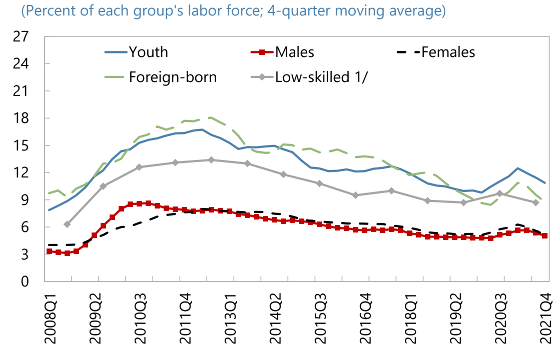
Unemployment Rates 1/
(Percent of labor force, SA)



Sources: Statistics Denmark; OECD; and IMF Staff Calculations.
1/ "Registry" refers to unemployed persons registered with the unemployment insurance funds and public job centers. Gross is the number of registered (net) unemployed plus activation program participants.

Unemployment rates among the young, low-skilled, and foreign born remain elevated but are decreasing...

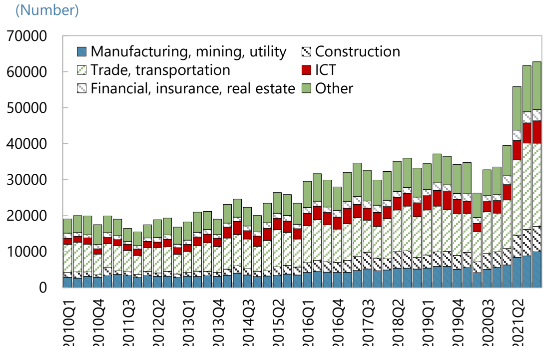
Unemployment Rates by Different Groups
(Percent of each group's labor force; 4-quarter moving average)



Sources: Eurostat; Haver Analytics; and IMF staff calculations.
1/ Unemployment rate by skill (i.e. educational attainment) is annual.

...as vacancies sky rock driven by trade and transportation...

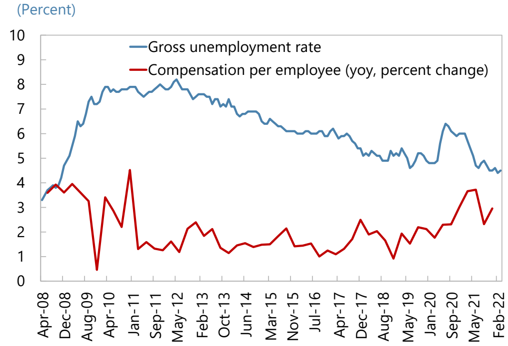
Job Vacancies by Industry
(Number)



Source: Statistics Denmark.

...wages increased sharply at the beginning of 2021 amid shortages but moderated at the beginning of 2022.

Unemployment Rate and Compensation per Employee
(Percent)

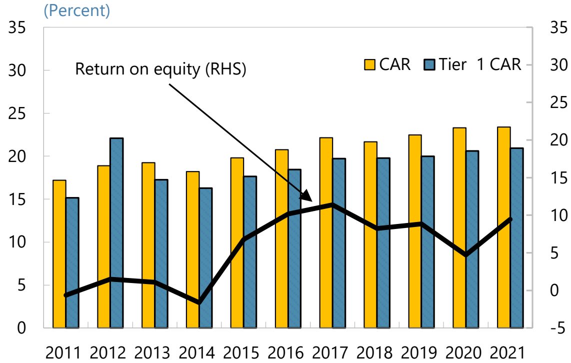


Sources: Haver Analytics; Statistics Denmark; and IMF staff calculations.

Figure 4. Denmark: Financial Soundness Indicators

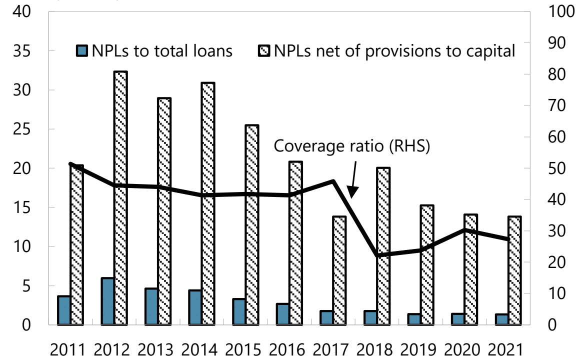
Capital ratios are healthy, and profitability has rebounded.

Capital Adequacy Ratios
(Percent)



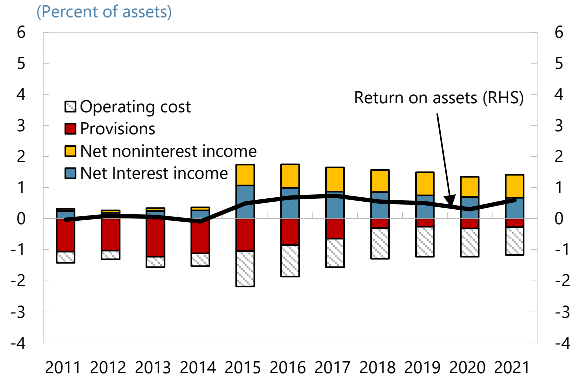
Nonperforming loans, net of provisions to capital, remain low.

Nonperforming Loans
(Percent)



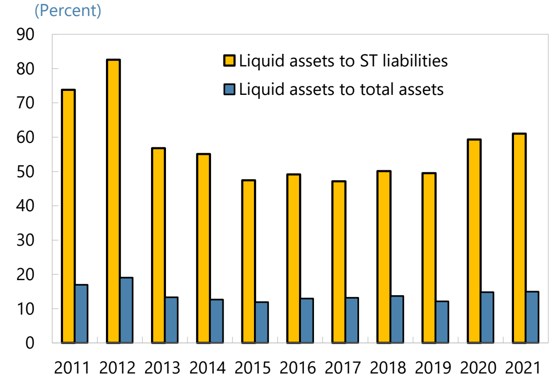
Bank earnings recovered from their dip in 2020.

Decomposition of Income
(Percent of assets)



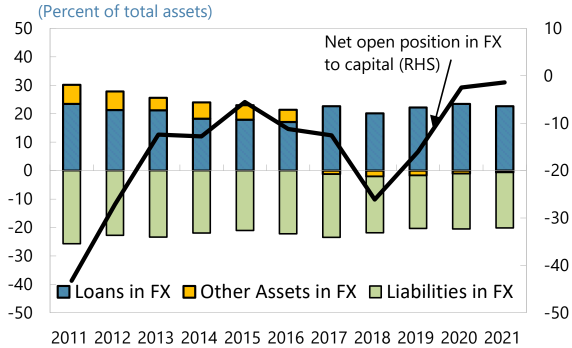
Liquidity remains high.

Liquid Assets Indicators
(Percent)



FX exposures have remained steady.

Banks Exposure to FX
(Percent of total assets)



Customer deposits fell as tax loans and deferrals for corporates were unwound.

Loans and Deposits Growth
(Annual percentage change and percent)

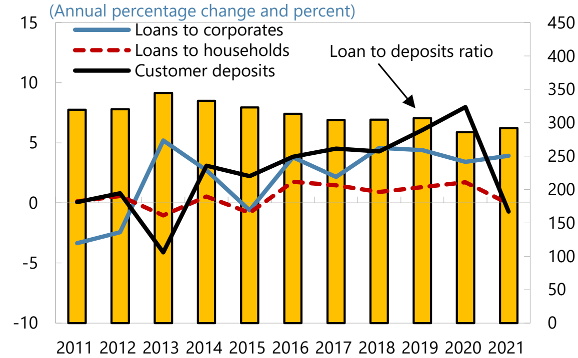
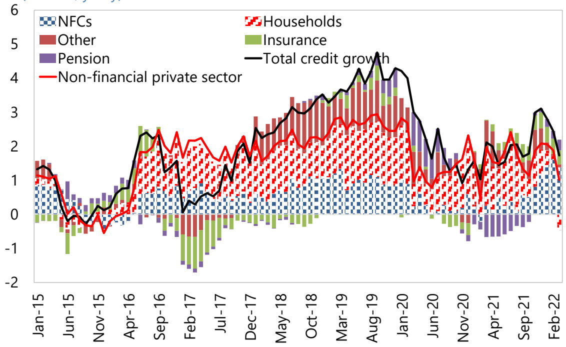


Figure 5. Denmark: Housing Market Developments

Growth in credit to the nonfinancial private sector was modest in 2021…

Credit Growth

(Percent; y-o-y)

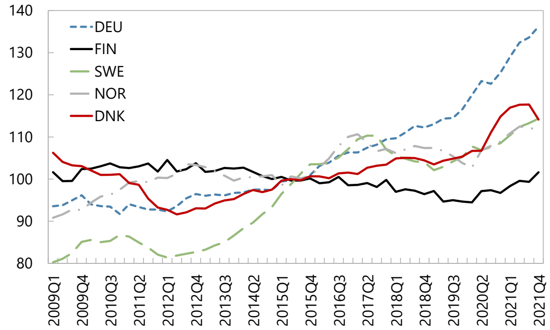


Sources: Danmarks Nationalbank; IMF staff calculations.

…and housing valuations moderated in the second half of 2021 after a sharp increase in 2021H1.

Price to Income Ratio

(Index, 2015=100)

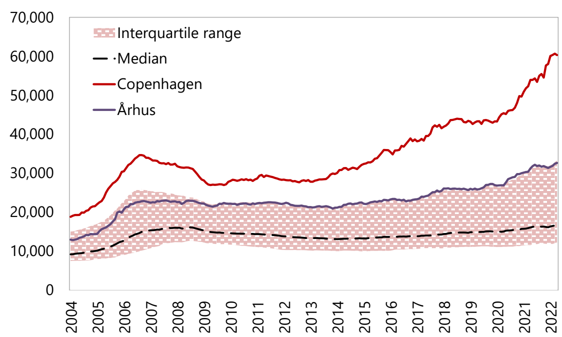


Source: OECD.

Single family home prices continue to rise sharply in the Copenhagen region while moderating elsewhere…

Regional Prices for Single Family Homes

(DKK per m2)

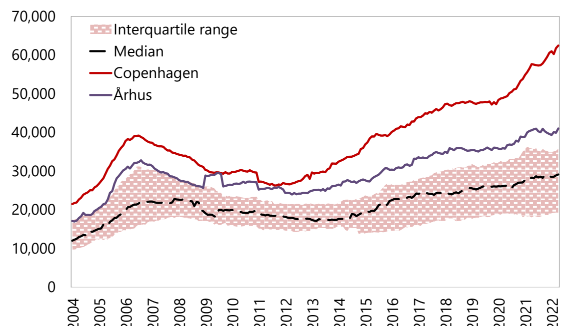


Sources: Statistics Denmark; and IMF staff calculations.

…and similarly for flats.

Regional Prices for Flats

(DKK per m2)

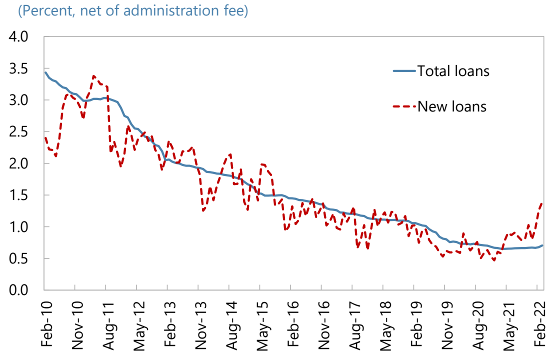


Sources: Statistics Denmark; and IMF staff calculations.

Mortgage rates increased slightly on average…

Average Mortgage Rates

(Percent, net of administration fee)

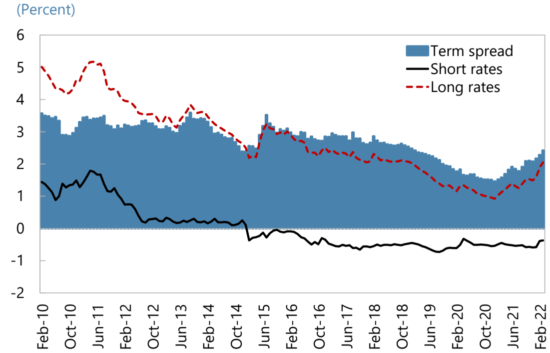


Sources: Danmarks Nationalbank; and IMF staff calculations.

…as long-term rates increased while short-term rates remained flat.

Mortgage Bond Rates

(Percent)



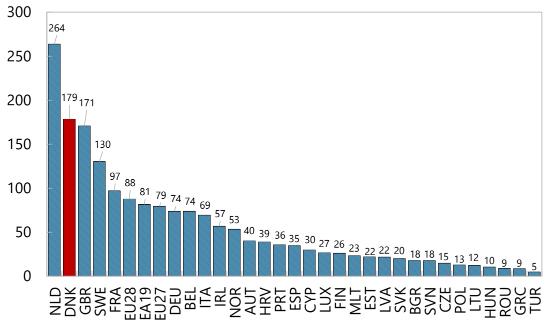
Sources: Finance Denmark; and Haver Analytics.

Figure 5. Denmark: Housing Market Developments (concluded)

Large household savings and mandatory pension contributions have created a relatively large pension system…

Household Pension and Insurance Assets, 2020 1/

(Percent of GDP)

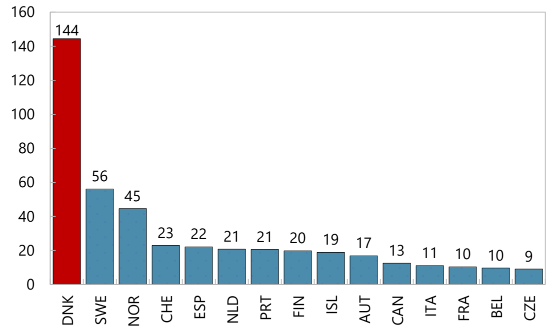


Source: Eurostat.
1/ Data from 2019 is used for GBR and EU28.

…which has facilitated the development of the world's largest mortgage covered bond market…

Mortgage Covered Bond Markets

(Outstanding amount, 2020; percent of GDP)

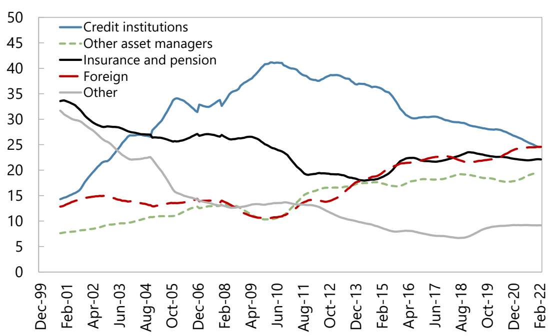


Sources: European Covered Bond Council; and IMF staff calculations.

…with credit institutions, foreigners, and insurance and pension funds, amongst the largest holders…

Ownership Shares of Danish Mortgage Bonds

(Percent)

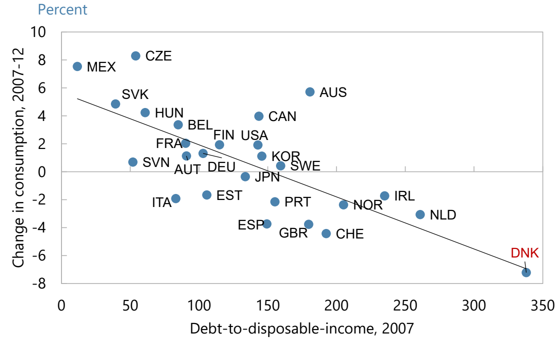


Sources: Danmarks Nationalbank; and IMF staff calculations.

…linking household consumptions to real estate shocks.

Household Leverage and Consumption 1/

Percent

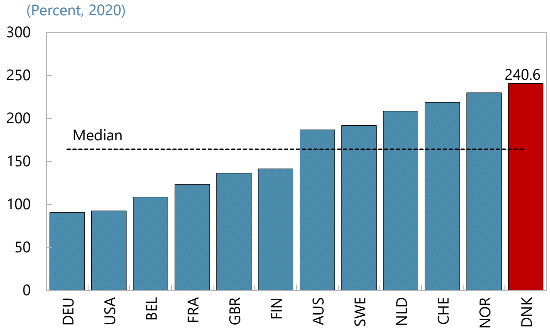


Source: Riksbank Financial Stability Report (H1 2015).
1/ Consumption is real private consumption per working-age capita.

Danish households' debt-to-income ratios remain among the highest in advanced economies…

Household and NPISH Outstanding Debt to Gross Disposable Income

(Percent, 2020)

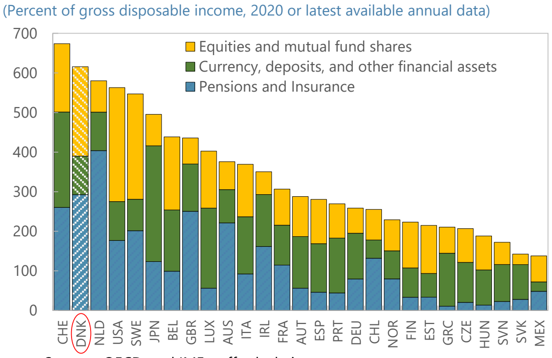


Sources: Haver Analytics; and IMF staff calculations.

…and these large liabilities are counterbalanced by large housing and pension assets.

Financial Assets

(Percent of gross disposable income, 2020 or latest available annual data)

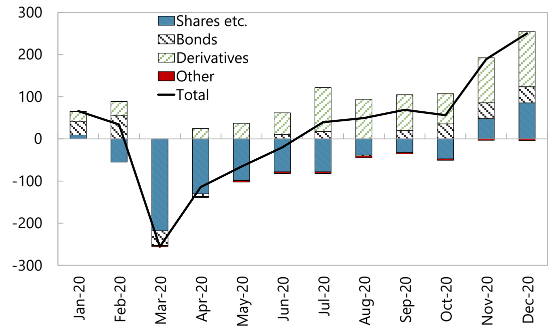


Sources: OECD; and IMF staff calculations.

Figure 6. Denmark: Pension and Insurance Sector Developments

Pension funds experienced large market losses in 2020Q1 but have since recovered.

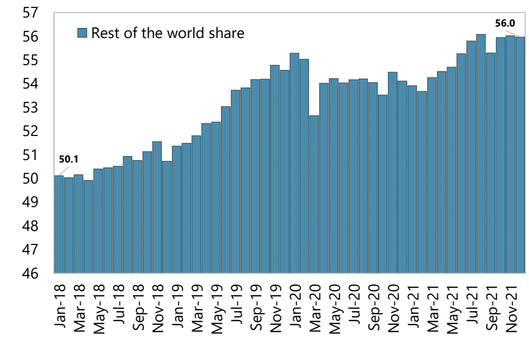
Pension Fund Performance in 2020
(DKK billions)



Source: Danmarks Nationalbank.

Pension and insurance companies expanded their geographical exposure…

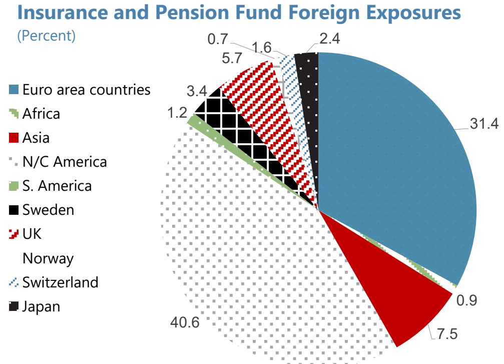
Insurance and Pension Fund Foreign Exposure Share
(Percent)



Source: Danmarks Nationalbank.

…with large exposure to US markets.

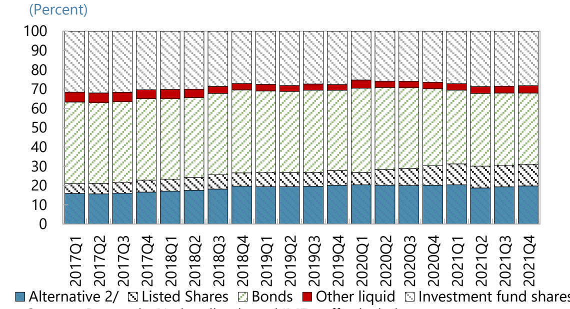
Insurance and Pension Fund Foreign Exposures
(Percent)



Sources: Danmarks Nationalbank; and IMF staff calculations.

The low rate environment has pushed pension and insurance companies into alternative investments….

Insurance and Pension Fund Asset Composition 1/
(Percent)



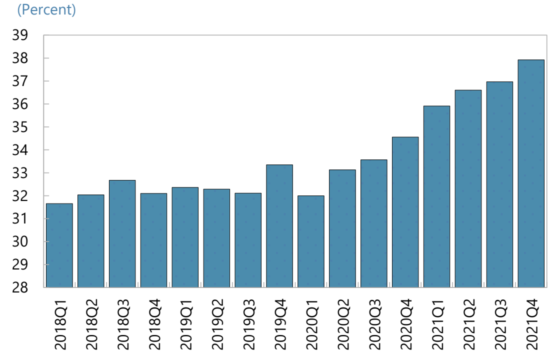
Sources: Danmarks Nationalbank; and IMF staff calculations.

1/ Decomposition does not permit Danish investment fund-look through. Other liquid includes deposits and receivables.

2/ Alternatives include unlisted shares, other equity, and direct lending.

Danish insurers have transferred some of this market risk to customers…

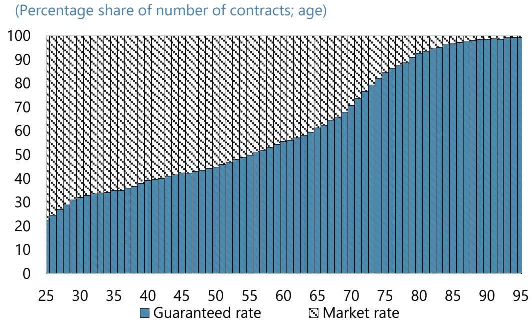
Market Rate Product Share of Insurance Provisions
(Percent)



Sources: Danmarks Nationalbank; and IMF staff calculations.

…who tend to be younger and have shifted to unit-linked products.

Retirement Savings Rate Type by Age 1/
(Percentage share of number of contracts; age)



Sources: Statistics Denmark; and Danmarks Nationalbank.

1/ Includes retirement savings in life insurance companies, pensions funds and company pension funds.

Table 1. Denmark: Selected Economic and Social Indicators, 2019–27

	2019	2020	2021	2022	2023	2024	2025	2026	2027
						proj.			
Supply and Demand (change in percent)									
Real GDP	2.1	-2.1	4.7	3.2	1.5	1.8	1.8	1.8	1.8
Final domestic demand	1.0	0.0	4.3	2.8	1.9	2.1	2.1	2.1	2.1
Private consumption	1.2	-1.3	4.2	3.6	2.3	2.2	2.2	2.2	2.2
Public consumption	1.5	-1.7	3.7	0.3	0.3	0.9	0.9	0.9	0.9
Gross fixed investment	0.1	5.1	5.6	3.8	2.7	3.0	3.0	3.0	3.0
Net exports 1/	1.4	-2.0	0.4	-0.7	-0.1	0.0	0.0	0.1	0.1
Gross national saving (percent of GDP)	30.8	31.1	31.6	31.4	31.2	31.2	31.2	31.2	31.2
Gross domestic investment (percent of GDP)	22.0	22.9	23.3	24.2	24.3	24.4	24.6	24.6	24.7
Potential output	1.9	1.7	1.9	2.1	2.2	2.2	2.2	1.9	1.8
Output gap (percent of potential output)	1.6	-2.1	0.6	1.6	0.9	0.5	0.1	0.0	0.0
Labor Market (change in percent) 2/									
Labor force	1.6	-0.4	0.6	1.0	0.5	0.1	0.1	0.1	0.1
Employment	1.7	-1.1	1.2	1.0	0.5	0.2	0.1	0.1	0.1
Harmonized unemployment rate (percent)	5.0	5.7	5.1	5.1	5.1	5.0	5.0	5.0	5.0
Prices and Costs (change in percent)									
GDP deflator	0.7	2.6	2.4	4.4	2.1	2.0	2.1	2.2	2.2
CPI (year average)	0.7	0.3	1.9	4.8	1.7	1.8	1.9	1.9	1.9
Public Finance (percent of GDP) 3/									
Total revenues	53.6	53.3	53.3	51.5	51.1	50.6	50.0	49.9	49.8
Total expenditures	49.5	53.4	51.0	50.5	50.5	50.4	50.0	50.0	49.9
Overall balance	4.1	-0.2	2.3	1.1	0.6	0.2	0.0	-0.1	-0.1
Primary balance 4/	3.8	-0.5	1.9	0.8	0.3	0.0	-0.2	-0.3	-0.3
Cyclically-adjusted balance (percent of potential GDP)	2.9	1.4	1.9	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1
Structural balance (percent of potential GDP) 5/	0.6	-0.4	-1.4	-0.4	-0.2	-0.1	0.0	-0.1	-0.1
Gross debt	33.6	42.1	36.7	32.3	33.1	32.9	32.8	32.7	32.8
Money and Interest Rates (percent)									
Domestic credit growth (end of year)	4.3	1.3	3.1	...	...	...	...	...	...
M3 growth (end of year)	2.6	12.3	-0.9	...	...	...	...	...	...
Short-term interbank interest rate (3 month)	-0.4	-0.4	-0.5	...	...	...	...	...	...
Government bond yield (10 year)	-0.2	-0.5	-0.3	...	...	...	...	...	...
Balance of Payments (percent of GDP)									
Exports of goods & services	59.0	54.9	59.6	61.8	62.0	61.9	61.7	61.6	61.3
Imports of goods & services	51.6	48.4	52.9	55.5	55.9	56.0	56.0	55.9	55.7
Trade balance, goods and services	7.4	6.5	6.7	6.3	6.1	5.9	5.7	5.7	5.7
Oil trade balance	-0.5	-0.5	-1.0	-1.8	-1.8	-1.8	-1.9	-2.0	-2.1
Current account	8.8	8.1	8.3	7.1	6.9	6.7	6.6	6.5	6.5
International reserves, changes	-0.9	-0.1	3.7	...	...	...	...	...	...
Exchange Rate									
Average DKK per US$ rate	6.7	6.5	6.3	...	...	...	...	...	...
Nominal effective rate (2010=100, ULC based)	99.4	100.3	100.1	...	...	...	...	...	...
Real effective rate (2010=100, ULC based)	93.3	94.1	97.5	...	...	...	...	...	...
Memorandum Items									
Nominal GDP (Bln DKK)	2318	2330	2497	2690	2787	2894	3008	3128	3254
GDP (Bln USD)	348	356	397	...	...	...	...	...	...
GDP per capita (USD)	59862	61154	67997	...	...	...	...	...	...

Sources: Danmarks Nationalbank, Eurostat, IMF *World Economic Outlook,* Statistics Denmark, and IMF staff calculations.

1/ Contribution to GDP growth.
2/ Based on Eurostat definition.
3/ General government.
4/ Overall balance net of interest.
5/ Cyclically-adjusted balance net of temporary fluctuations in some revenues (e.g., North Sea revenue, pension yield tax revenue) and one-offs. Covid-related one-offs are not excluded.

Table 2. Denmark: Balance of Payments, 2019–27

	2019	2020	2021	2022	2023	2024	2025	2026	2027
						proj.			
					Billions of DKK				
Current Account	204.2	189.6	206.2	191.5	193.5	195.2	197.9	204.4	211.8
Balance on Goods	123.2	122.4	94.1	101.9	101.6	100.4	99.5	101.0	103.1
Merchandise exports f.o.b.	809.8	780.1	899.9	1047.1	1083.6	1116.8	1152.6	1187.9	1224.9
Merchandise imports f.o.b.	686.7	657.7	805.8	945.2	982.0	1016.3	1053.1	1086.9	1121.8
Balance on Services	48.2	27.8	73.3	66.8	68.3	70.3	72.9	77.0	81.1
Exports of services, total	557.8	498.4	587.1	614.4	643.6	673.6	704.9	737.7	771.3
Imports of services, total	509.6	470.5	513.8	547.7	575.4	603.3	632.0	660.8	690.1
Balance on Income	32.9	39.3	38.8	22.8	23.6	24.5	25.5	26.5	27.6
Capital and Financial Account	154.9	119.8	235.9	199.1	201.4	203.4	206.5	213.3	221.0
Capital transfer, net	0.9	-0.7	3.5	3.8	3.9	4.1	4.3	4.4	4.6
Financial Account	154.1	120.4	232.4	195.3	197.4	199.3	202.2	208.9	216.4
Direct investment, net	66.4	49.7	114.8	3.9	-4.8	12.8	24.8	39.7	54.8
Abroad	43.1	58.4	207.8	104.1	99.0	120.6	136.8	156.2	176.0
In Denmark	-23.3	8.7	93.0	100.1	103.8	107.8	112.0	116.5	121.2
Portfolio investment, net	28.0	-21.4	55.8	8.5	18.1	8.7	-58.5	-52.4	-49.5
Assets	138.6	229.2	79.9	123.4	133.9	130.4	132.6	154.6	143.4
Liabilities	110.6	250.6	24.1	114.9	115.7	121.7	191.1	207.0	192.9
Financial derivatives, net	-21.8	-17.2	-31.3	-33.7	-35.0	-36.3	-37.7	-39.3	-40.8
Other investment, net	102.7	111.4	0.9	216.5	219.0	214.2	273.7	260.8	251.9
Reserve assets	-21.3	-2.0	92.2	0.0	0.0	0.0	0.0	0.0	0.0
Net errors and omissions	49.3	69.9	-29.7	-7.6	-7.9	-8.2	-8.5	-8.9	-9.2
					Percent of GDP				
Current Account	8.8	8.1	8.3	7.1	6.9	6.7	6.6	6.5	6.5
Balance on Goods	5.3	5.3	3.8	3.8	3.6	3.5	3.3	3.2	3.2
Merchandise exports f.o.b.	34.9	33.5	36.0	38.9	38.9	38.6	38.3	38.0	37.6
Merchandise imports f.o.b.	29.6	28.2	32.3	35.1	35.2	35.1	35.0	34.7	34.5
Balance on Services	2.1	1.2	2.9	2.5	2.4	2.4	2.4	2.5	2.5
Exports of services, total	24.1	21.4	23.5	22.8	23.1	23.3	23.4	23.6	23.7
Imports of services, total	22.0	20.2	20.6	20.4	20.6	20.8	21.0	21.1	21.2
Balance on Income	1.4	1.7	1.6	0.8	0.8	0.8	0.8	0.8	0.8
Capital and Financial Account	6.7	5.1	9.5	7.4	7.2	7.0	6.9	6.8	6.8
Capital transfer, net	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Financial Account	6.6	5.2	9.3	7.3	7.1	6.9	6.7	6.7	6.7
Direct investment, net	2.9	2.1	4.6	0.1	-0.2	0.4	0.8	1.3	1.7
Abroad	1.9	2.5	8.3	3.9	3.6	4.2	4.5	5.0	5.4
In Denmark	-1.0	0.4	3.7	3.7	3.7	3.7	3.7	3.7	3.7
Portfolio investment, net	1.2	-0.9	2.2	0.3	0.7	0.3	-1.9	-1.7	-1.5
Assets	6.0	9.8	3.2	4.6	4.8	4.5	4.4	4.9	4.4
Liabilities	4.8	10.8	1.0	4.3	4.2	4.2	6.4	6.6	5.9
Financial derivatives, net	-0.9	-0.7	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3	-1.3
Other investment, net	4.4	4.8	0.0	8.1	7.9	7.4	9.1	8.3	7.7
Reserve assets	-0.9	-0.1	3.7	0.0	0.0	0.0	0.0	0.0	0.0
Net errors and omissions	2.1	3.0	-1.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
Memorandum items:									
Net oil and oil-related exports	-0.5	-0.5	-1.0	...	...	...	...	...	...
Net sea transportation receipts	2.8	3.0	5.3	...	...	...	...	...	...
Current Account net of items above	6.4	5.6	4.0	...	...	...	...	...	...
Reserves coverage (months of imports)	4.5	5.1	4.7	...	...	...	...	...	...
Gross External Debt	139.1	151.2	142.2	...	...	...	...	...	...
Gross Domestic Product	2,318	2,330	2,497	2,690	2,787	2,894	3,008	3,128	3,254

Sources: National Bank of Denmark, Statistics Denmark and IMF staff calculations.

Table 3. Denmark: International Investment Position, 2013–21

	2013	2014	2015	2016	2017	2018	2019	2020	2021
					Billions of DKK				
Assets	5,328	5,832	5,956	6,503	6,912	6,832	7,610	8,248	9,217
Direct investment	1,412	1,516	1,627	1,785	1,833	2,006	2,043	2,108	2,382
Equity	982	1,089	1,184	1,321	1,367	1,499	1,444	1,501	1,744
Debt instruments	430	427	443	464	466	508	599	607	638
Portfolio investment	2,206	2,643	2,704	2,935	3,100	3,148	3,766	4,091	4,767
Equity	920	1,061	1,180	1,315	1,521	1,537	1,876	2,123	2,681
Investment fund shares	197	264	271	317	363	365	431	453	547
Debt securities	1,088	1,319	1,253	1,303	1,217	1,246	1,459	1,514	1,539
Fin. deriv. (other than reserves)	69	100	68	40	59	26	69	157	49
Other investment	1,161	1,113	1,114	1,295	1,456	1,192	1,285	1,450	1,480
Reserve assets	480	460	442	449	465	461	446	441	539
Liabilities	4,608	4,974	5,275	5,395	5,697	5,353	5,813	6,645	7,329
Direct investment	806	987	1,015	1,187	1,183	1,291	1,305	1,361	1,417
Equity	513	655	663	823	830	927	867	890	890
Debt instruments	292	332	352	364	353	364	438	471	527
Portfolio investment	2,297	2,649	3,072	2,985	3,251	2,845	3,331	4,020	4,580
Equity	739	958	1,314	1,133	1,363	1,132	1,488	1,967	2,547
Investment fund shares	54	55	64	83	107	82	104	114	140
Debt securities	1,503	1,636	1,695	1,769	1,781	1,630	1,739	1,939	1,894
Financial derivatives	0	0	0	0	0	0	0	0	0
Other investment	1,506	1,338	1,188	1,223	1,263	1,217	1,178	1,263	1,332
Net Investment Position	720	858	680	1,108	1,216	1,480	1,797	1,603	1,888
Direct Investment	607	529	612	598	650	716	738	747	965
Portfolio Investment	-91	-5	-368	-51	-151	303	436	71	187
Other Investment	-345	-225	-73	72	192	-25	108	187	148
					Percent of GDP				
Assets	276.1	294.4	292.5	308.5	315.2	303.2	328.3	354.0	369.2
Direct investment	73.2	76.5	79.9	84.7	83.6	89.0	88.1	90.5	95.4
Equity	50.9	55.0	58.1	62.7	62.4	66.5	62.3	64.4	69.9
Debt instruments	22.3	21.5	21.8	22.0	21.2	22.5	25.9	26.1	25.5
Portfolio investment	114.3	133.4	132.8	139.2	141.4	139.7	162.5	175.6	190.9
Equity	47.7	53.6	57.9	62.4	69.3	68.2	80.9	91.1	107.4
Investment fund shares	10.2	13.3	13.3	15.0	16.6	16.2	18.6	19.5	21.9
Debt securities	56.4	66.6	61.6	61.8	55.5	55.3	63.0	65.0	61.6
Fin. deriv. (other than reserves)	3.6	5.0	3.3	1.9	2.7	1.1	3.0	6.8	2.0
Other investment	60.2	56.2	54.7	61.4	66.4	52.9	55.5	62.3	59.3
Reserve assets	24.9	23.2	21.7	21.3	21.2	20.5	19.2	18.9	21.6
Liabilities	238.8	251.0	259.1	256.0	259.8	237.5	250.8	285.2	293.5
Direct investment	41.7	49.8	49.9	56.3	53.9	57.3	56.3	58.4	56.7
Equity	26.6	33.1	32.6	39.0	37.8	41.1	37.4	38.2	35.6
Debt instruments	15.2	16.7	17.3	17.3	16.1	16.1	18.9	20.2	21.1
Portfolio investment	119.0	133.7	150.9	141.6	148.2	126.3	143.7	172.6	183.5
Equity	38.3	48.4	64.5	53.8	62.2	50.3	64.2	84.4	102.0
Investment fund shares	2.8	2.8	3.1	3.9	4.9	3.6	4.5	4.9	5.6
Debt securities	77.9	82.6	83.2	83.9	81.2	72.4	75.0	83.3	75.9
Financial derivatives	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other investment	78.1	67.5	58.3	58.0	57.6	54.0	50.8	54.2	53.3
Net Investment Position	37.3	43.3	33.4	52.6	55.4	65.7	77.5	68.8	75.6
Direct Investment	31.4	26.7	30.0	28.4	29.7	31.8	31.9	32.1	38.7
Portfolio Investment	-4.7	-0.3	-18.1	-2.4	-6.9	13.4	18.8	3.0	7.5
Other Investment	-17.9	-11.3	-3.6	3.4	8.8	-1.1	4.6	8.0	5.9

Sources: Haver Analytics, Statistics Denmark, and IMF staff calculations.

Table 4. Denmark: GFSM 2001 Statement of Government Operations, 2019–27
(Billions of DKK)

	2019	2020	2021	2022	2023	2024	2025	2026	2027
						proj.			
General Government									
Total Revenues	1242.0	1240.5	1331.9	1385.5	1423.8	1463.5	1504.1	1560.8	1620.0
Personal Income Taxes	557.4	586.0	600.2	640.6	658.2	680.5	704.3	732.4	761.8
Pension Return Taxes	63.4	48.2	63.1	45.7	41.8	40.5	36.1	34.4	32.5
Company Taxes	72.7	61.1	93.6	78.0	78.0	78.1	81.2	84.5	87.9
Taxes on Goods and Services	321.4	327.6	347.5	376.6	390.2	405.2	421.1	438.0	455.5
Social Contributions	18.6	19.3	17.5	18.8	19.5	20.3	21.1	21.9	22.8
Interest and Dividends	24.1	20.7	23.8	24.2	27.9	28.9	30.1	31.3	32.5
Other revenues	184.4	177.6	186.2	201.6	208.1	209.9	210.2	218.4	226.9
Total Expenditures	1147.8	1244.8	1273.3	1357.2	1406.7	1458.8	1505.5	1562.8	1622.5
Expense	1076.2	1165.9	1192.0	1265.8	1300.8	1348.8	1397.2	1450.2	1505.3
Public Consumption	546.3	564.4	600.1	626.3	646.9	670.3	694.8	720.1	746.4
Public Subsidies	38.0	73.7	62.9	45.7	44.6	43.4	42.1	43.8	45.6
Interest Expenditures	17.0	12.7	13.5	16.1	19.5	23.2	24.1	25.0	26.0
Social Benefits	403.1	424.1	426.8	473.2	484.4	499.7	518.9	539.2	560.4
Other Expenditures	71.8	90.9	88.7	104.4	105.4	112.3	117.3	122.0	126.9
Net Acquisition of Nonfinancial Assets	71.6	78.9	81.3	91.5	105.9	110.0	108.3	112.6	117.1
Gross operating balance	165.8	74.6	139.9	119.7	123.0	114.7	106.9	110.7	114.7
Net lending/borrowing	94.2	-4.3	58.7	28.3	17.1	4.7	-1.4	-2.0	-2.5
Net financial transactions	94.9	-9.6	53.4	..	..	..	..	..	..
Net acquisition of financial assets	118.6	236.1	-27.8	..	..	..	..	..	..
Currency and deposits	-47.4	63.6	14.8	..	..	..	..	..	..
Securities other than shares	59.9	11.5	16.6	..	..	..	..	..	..
Loans	13.4	65.5	12.7	..	..	..	..	..	..
Shares and other equity	7.0	18.9	5.5	..	..	..	..	..	..
Insurance technical reserves	0.0	0.0	0.0	..	..	..	..	..	..
Financial derivatives and employee stock options	0.1	-8.3	-4.1	..	..	..	..	..	..
Other financial assets	85.5	84.8	-73.3	..	..	..	..	..	..
Net incurrence of liabilities	23.6	245.7	-81.2	..	..	..	..	..	..
Currency and deposits	-0.4	0.7	-0.2	..	..	..	..	..	..
Securities other than shares	9.1	201.7	-82.7	..	..	..	..	..	..
Loans	0.2	6.4	5.1	..	..	..	..	..	..
Shares and Other Equity	0.0	0.0	0.0	..	..	..	..	..	..
Insurance Technical Reserves	0.0	0.8	0.0	..	..	..	..	..	..
Other liabilities	14.8	36.1	-3.5	..	..	..	..	..	..

Sources: Statistics Denmark and IMF staff calculations.

Table 5. Denmark: GFSM 2001 Statement of Government Operations, 2019–27

(Percent of GDP)

	2019	2020	2021	2022	2023	2024	2025	2026	2027
						proj.			
General Government									
Total Revenues	53.6	53.3	53.3	51.5	51.1	50.6	50.0	49.9	49.8
Personal Income Taxes	24.0	25.2	24.0	23.8	23.6	23.5	23.4	23.4	23.4
Pension Return Taxes	2.7	2.1	2.5	1.7	1.5	1.4	1.2	1.1	1.0
Company Taxes	3.1	2.6	3.8	2.9	2.8	2.7	2.7	2.7	2.7
Taxes on Goods and Services	13.9	14.1	13.9	14.0	14.0	14.0	14.0	14.0	14.0
Social Contributions	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7
Interest and Dividends	1.0	0.9	1.0	0.9	1.0	1.0	1.0	1.0	1.0
Other revenues	8.0	7.6	7.5	7.5	7.5	7.3	7.0	7.0	7.0
Total Expenditures	49.5	53.4	51.0	50.5	50.5	50.4	50.0	50.0	49.9
Expense	46.4	50.0	47.7	47.1	46.7	46.6	46.4	46.4	46.3
Public Consumption	23.6	24.2	24.0	23.3	23.2	23.2	23.1	23.0	22.9
Public Subsidies	1.6	3.2	2.5	1.7	1.6	1.5	1.4	1.4	1.4
Interest Expenditures	0.7	0.5	0.5	0.6	0.7	0.8	0.8	0.8	0.8
Social Benefits	17.4	18.2	17.1	17.6	17.4	17.3	17.2	17.2	17.2
Other Expenditures	3.1	3.9	3.6	3.9	3.8	3.9	3.9	3.9	3.9
Net Acquisition of Nonfinancial Assets	3.1	3.4	3.3	3.4	3.8	3.8	3.6	3.6	3.6
Gross operating balance	7.2	3.2	5.6	4.5	4.4	4.0	3.6	3.5	3.5
Net lending/borrowing	4.1	-0.2	2.3	1.1	0.6	0.2	0.0	-0.1	-0.1
Net financial transactions	4.1	-0.4	2.1	..	..	..	..	..	..
Net acquisition of financial assets	5.1	10.1	-1.1	..	..	..	..	..	..
Currency and deposits	-2.0	2.7	0.6	..	..	..	..	..	..
Securities other than shares	2.6	0.5	0.7	..	..	..	..	..	..
Loans	0.6	2.8	0.5	..	..	..	..	..	..
Shares and other equity	0.3	0.8	0.2	..	..	..	..	..	..
Insurance technical reserves	0.0	0.0	0.0	..	..	..	..	..	..
Financial derivatives and employee stock options	0.0	-0.4	-0.2	..	..	..	..	..	..
Other financial assets	3.7	3.6	-2.9	..	..	..	..	..	..
Net incurrence of liabilities	1.0	10.5	-3.3	..	..	..	..	..	..
Currency and deposits	0.0	0.0	0.0	..	..	..	..	..	..
Securities other than shares	0.4	8.7	-3.3	..	..	..	..	..	..
Loans	0.0	0.3	0.2	..	..	..	..	..	..
Shares and Other Equity	0.0	0.0	0.0	..	..	..	..	..	..
Insurance Technical Reserves	0.0	0.0	0.0	..	..	..	..	..	..
Other liabilities	0.6	1.5	-0.1	..	..	..	..	..	..
Memorandum items									
Primary Balance 1/	3.8	-0.5	1.9	0.8	0.3	0.0	-0.2	-0.3	-0.3
Structural Balance 2/	0.6	-0.4	-1.4	-0.4	-0.2	-0.1	0.0	-0.1	-0.1
One-off Measures 2/ 3/	2.3	1.7	3.3	0.3	0.2	-0.1	-0.1	0.0	0.0
Cyclically Adjusted Balance 2/	2.9	1.4	1.9	-0.1	-0.1	-0.2	-0.1	-0.1	-0.1
Gross Debt	33.6	42.1	36.7	32.3	33.1	32.9	32.8	32.7	32.8
Gross Domestic Product (Bln. Kroner)	2,318	2,330	2,497	2,690	2,787	2,894	3,008	3,128	3,254

Sources: Statistics Denmark and IMF staff calculations.

1/ Overall balance net of interest.

2/ In percent of potential GDP.

3/ One-off items relate to vehicle registration tax, pension yield tax, North Sea oil and gas revenue, net interest payments, and other special items.

Table 6. Denmark: Public Sector Balance Sheet, 2013–20

	2013	2014	2015	2016	2017	2018	2019	2020
					Billions of DKK			
Assets	1,959	2,034	1,977	2,017	2,116	2,191	2,400	2,781
Financial assets	1,015	1,074	993	998	1,056	1,094	1,271	1,629
Monetary gold and SDR	0	0	0	0	0	0	0	0
Currency and deposits	218	272	228	156	182	155	108	172
Securities other than shares	102	67	68	70	70	108	170	184
Loans	176	180	184	189	188	202	215	281
Shares and other equity	416	425	420	470	491	526	587	726
Insurance technical reserves	2	1	2	1	1	1	1	1
Financial derivatives and employee stock options	6	5	5	4	4	7	8	6
Other financial assets	95	125	87	107	119	94	181	261
Capital stock net of depreciation	944	959	984	1,019	1,060	1,097	1,130	1,151
Liabilities	1,095	1,172	1,088	1,091	1,079	1,068	1,123	1,367
Financial liabilities	1,095	1,172	1,088	1,091	1,079	1,068	1,123	1,367
Monetary gold and SDR	0	0	0	0	0	0	0	0
Currency and deposits	15	23	24	24	20	20	20	21
Securities other than shares	764	831	737	733	718	696	732	928
Loans	163	165	170	173	176	180	181	186
Other financial assets	152	153	157	155	159	167	183	219
Net worth	864	862	889	926	1,036	1,123	1,277	1,414
Financial net worth	-80	-98	-95	-93	-23	26	148	263
					Percent of GDP			
Assets	101.5	102.6	97.1	95.7	96.5	97.2	103.6	119.4
Financial assets	52.6	54.2	48.8	47.3	48.2	48.6	54.8	69.9
Monetary gold and SDR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Currency and deposits	11.3	13.7	11.2	7.4	8.3	6.9	4.7	7.4
Securities other than shares	5.3	3.4	3.4	3.3	3.2	4.8	7.4	7.9
Loans	9.1	9.1	9.0	9.0	8.6	9.0	9.3	12.1
Shares and other equity	21.5	21.4	20.6	22.3	22.4	23.4	25.3	31.1
Insurance technical reserves	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Financial derivatives and employee stock options	0.3	0.2	0.2	0.2	0.2	0.3	0.3	0.3
Other financial assets	4.9	6.3	4.3	5.1	5.4	4.2	7.8	11.2
Capital stock net of depreciation	48.9	48.4	48.3	48.4	48.3	48.7	48.7	49.4
Liabilities	56.7	59.1	53.4	51.8	49.2	47.4	48.4	58.7
Financial liabilities	56.7	59.1	53.4	51.8	49.2	47.4	48.4	58.7
Monetary gold and SDR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Currency and deposits	0.8	1.2	1.2	1.1	0.9	0.9	0.9	0.9
Securities other than shares	39.6	41.9	36.2	34.8	32.8	30.9	31.6	39.8
Loans	8.5	8.3	8.3	8.2	8.0	8.0	7.8	8.0
Other financial assets	7.9	7.7	7.7	7.3	7.2	7.4	7.9	9.4
Net worth	44.8	43.5	43.6	43.9	47.3	49.8	55.1	60.7
Financial net worth	-4.1	-4.9	-4.7	-4.4	-1.1	1.2	6.4	11.3
Memorandum items:								
Nominal GDP (in billions of DKK)	1,930	1,981	2,036	2,108	2,193	2,253	2,318	2,330

Sources: Eurostat, Statistics Denmark, and IMF staff calculations.

Table 7. Denmark: Financial System Indicators, 2013–21[1]

(Percent)

	2013	2014	2015	2016	2017	2018	2019	2020	2021
Deposit-taking institutions: Total									
Regulatory capital to risk-weighted assets	22.3	21.0	21.8	23.2	23.8	23.3	24.6	25.3	25.5
Regulatory Tier I capital to risk-weighted assets	19.5	18.5	19.5	20.7	21.4	21.5	22.0	22.5	22.9
Core / Common Equity Tier 1 capital to risk-weighted assets	16.7	17.3	17.8	18.3	19.3	19.0	19.5	20.6	20.9
Nonperforming loans net of provisions to capital	22.4	22.0	17.8	14.2	11.0				
Nonperforming loans net of provisions to capital (new IFRS9)					14.4	16.3	12.3	13.4	8.6
Bank provisions to Nonperforming loans	51.0	50.3	50.5	51.0	54.3				
Bank provisions to Nonperforming loans (new IFRS9)					46.9	42.2	44.7	38.3	44.1
Nonperforming loans to total gross loans	8.7	8.2	6.9	5.3	4.3				
Nonperforming loans to total gross loans (new IFRS9)					4.9	4.7	3.8	4.1	3.1
Sectoral distribution of loans to total loans, of which									
Nonfinancial corporation	37.0	37.3	39.5	39.4	41.2	41.6	38.1	41.2	42.4
Households (including individual firms)	32.0	32.5	32.8	34.2	33.4	31.0	32.8	32.8	32.7
ROA (aggregated data on a parent-company basis) 2/	0.4	0.4	0.8	1.0	1.2	0.9	0.7	0.4	0.9
ROA (main groups on a consolidated basis) 3/	0.4	0.3	0.5	0.7	0.7	0.6	0.5	0.3	0.5
ROE (aggregated data on a parent-company basis) 2/	5.7	5.6	9.1	14.1	14.2	10.2	8.2	4.8	10.3
ROE (main groups on a consolidated basis) 3/	6.9	6.4	10.2	13.2	14.0	10.2	9.4	5.5	9.9
Interest margin to gross income	64.2	60.0	54.4	50.8	46.9	50.0	48.4	47.7	41.5
Noninterest expenses to gross income	47.2	55.5	55.2	49.4	46.7	52.5	55.0	60.4	57.4
Liquid assets to total assets	30.9	27.3	31.4	32.8	34.4				
Liquid assets to total assets (new IFRS9)					22.2	19.9	19.1	25.7	26.4
Liquid assets to short-term liabilities	49.8	42.0	50.3	51.9	54.8				
Liquid assets to short-term liabilities (new IFRS9)					28.5	24.7	23.4	30.9	30.2
Foreign currency position	1.2	1.7	1.5	1.5	1.6	1.4	1.1	0.6	0.6

Source: Danish Financial Supervisory Authority.

1/ These may be grouped in different peer groups based on control, business lines, or group structure.

2/ All credit institutions' aggregated data on a parent-company basis.

3/ Consolidated data for the five main banking groups (IFRS).

Annex I. Risk Assessment Matrix (April 26, 2022)[1]

(Potential Deviations from Baseline)

Source of Risks and Relative Likelihood (High, medium, or low)	Impact if Risk is Realized (High, medium, or low)	Policy Response
High **Russia's invasion of Ukraine leads to escalation of sanctions and other disruptions.** Sanctions on Russia are broadened to include oil, gas, and food sectors. Russia is disconnected almost completely from the global financial system and large parts of the trading system. This, combined with Russian countersanctions and secondary sanctions on countries and companies that continue business with Russia, leads to even higher commodity prices, refugee migration, tighter financial conditions, and other adverse spillovers, which particularly affect LICs and commodity-importing EMs.	Medium Direct exposure to Russia is limited. Nevertheless, a protracted war in Ukraine would further weaken confidence, weigh on activity in trading partners reducing external demand, and worsen supply disruptions, adding to inflationary pressures.	Allow automatic stabilizers to operate fully. If necessary, provide additional discretionary fiscal support. Complete structural reforms and let flexicurity operate to facilitate reallocation.
High **Rising and volatile food and energy prices.** Commodity prices are volatile and trend up amid supply constraints, war in Ukraine, export restrictions, and currency depreciations. This leads to short-run disruptions in the green transition, bouts of price and real sector volatility, food insecurity, social unrest, and acute food and energy crises (especially in EMDEs with lack of fiscal space).	Medium Higher local food and energy prices could potentially negatively impact households and firms. However, households and corporates have sufficient buffers at this point. Denmark is in the process of implementing policies to support the green transition.	Allow firms to absorb cost increases to the extent that profit margins permit. Use targeted fiscal tools such as means-tested cash transfers to households for protection against rising energy prices. Secure needed energy supplies in the near term while maintaining the medium/long term strategy for green transition.
Medium **De-anchoring of inflation expectations in the U.S. and/or advanced European economies.** Worsening supply-demand imbalances, higher commodity prices (in part due to war in Ukraine), and higher nominal wage growth lead to persistently higher inflation and/or inflation expectations, prompting central banks to tighten policies faster than anticipated. The resulting sharp tightening of global financial conditions and spiking risk premia lead to lower global demand, currency depreciations, asset market selloffs, bankruptcies, sovereign defaults, and contagion across EMDEs.	Medium A vicious wage-price spiral could result from higher and persistent inflation—due to continued supply-side disruptions and/or rising commodity prices—feeding into higher inflation expectations which then feeds back into higher inflation.	Allow firms to absorb cost increases to the extent that profit margins permit. Use targeted fiscal tools such as means-tested cash transfers to vulnerable households. Deploy prudential tools to mitigate financial stability risks.
Medium **Failure to address macrofinancial risks.** These include high household leverage amid elevated house valuations, new money laundering cases, and close interlinkages across the Nordic financial system.	High A housing bust cycle would affect highly-indebted households, with severe knock-on effects on the broader economy. New money laundering cases could negatively impact confidence in the financial sector. A marked reversal of high house prices in the Nordic region would adversely affect financial conditions, given close linkages of the regional banking system.	Continue vigilant financial surveillance and make use of available tools to discourage further build-up of housing debt. Address bottlenecks in rental market and zoning policies, especially in urban areas. Continue implementation of regulatory agenda to bolster banks' buffers and efforts to further strengthen AML/CFT supervision. After the shock, support liquidity as needed.

[1] The Risk Assessment Matrix (RAM) shows events that could materially alter the baseline path. The relative likelihood is the staff's subjective assessment of the risks surrounding the baseline ("low" is meant to indicate a probability below 10 percent, "medium" a probability between 10 and 30 percent, and "high" a probability between 30 and 50 percent). The RAM reflects staff views on the source of risks and overall level of concern as of the time of discussions with the authorities. Non-mutually exclusive risks may interact and materialize jointly. The conjunctural shocks and scenario highlight risks that may materialize over a shorter horizon (between 12 to 18 months) given the current baseline. Structural risks are those that are likely to remain salient over a longer horizon.

Annex II. Debt Sustainability Analysis

Annex II. Figure1. Denmark: Public Sector Debt Sustainability Analysis (DSA)—Baseline Scenario

(In percent of GDP unless otherwise indicated)

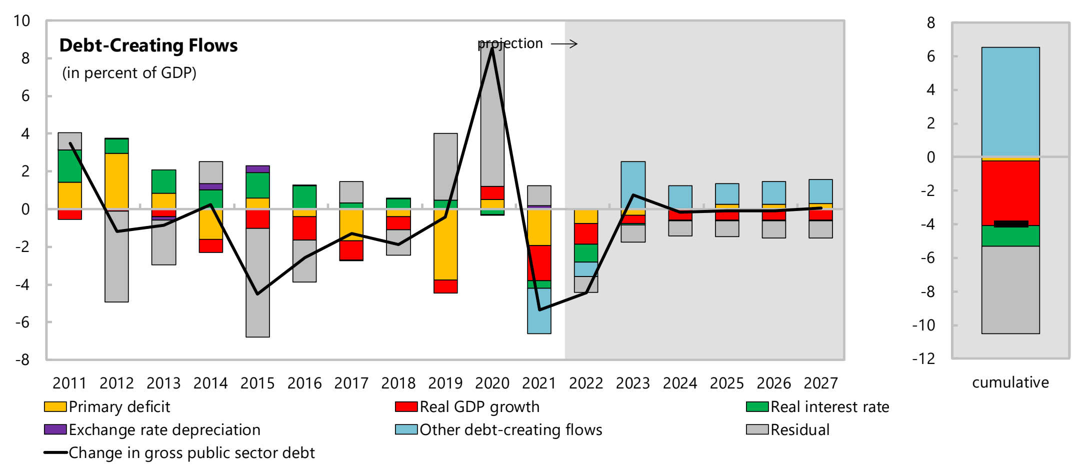
Debt, Economic and Market Indicators [1/]

	Actual			Projections					
	2011-2019 [2/]	2020	2021	2022	2023	2024	2025	2026	2027
Nominal gross public debt	40.0	42.1	36.7	32.3	33.1	32.9	32.8	32.7	32.8
Public gross financing needs	5.3	5.2	2.4	2.7	5.4	7.5	8.7	6.5	5.9
Net public debt	16.1	14.8	11.5	9.6	8.6	8.2	7.9	7.7	7.4
Real GDP growth (in percent)	1.8	-2.1	4.7	3.2	1.5	1.8	1.8	1.8	1.8
Inflation (GDP deflator, in percent)	0.9	2.6	2.4	4.4	2.1	2.0	2.1	2.2	2.2
Nominal GDP growth (in percent)	2.8	0.5	7.2	7.7	3.6	3.8	3.9	4.0	4.0
Effective interest rate (in percent) [4/]	3.3	1.6	1.4	1.7	1.9	1.9	1.9	2.0	2.1

As of March 28, 2022		
Sovereign Spreads		
EMBIG (bp) 3/		25
5Y CDS (bp)		12
Ratings	Foreign	Local
Moody's	Aaa	Aaa
S&Ps	AAA	AAA
Fitch	AAA	AAA

Contribution to Changes in Public Debt

	Actual			Projections							
	2011-2019	2020	2021	2022	2023	2024	2025	2026	2027	cumulative	debt-stabilizing primary balance [10/]
Change in gross public sector debt	-1.0	8.5	-5.4	-4.4	0.8	-0.2	-0.1	-0.1	0.0	-4.0	
Identified debt-creating flows	0.1	0.9	-6.4	-3.6	1.7	0.6	0.7	0.8	1.0	1.2	
Primary deficit	-0.2	0.5	-1.9	-0.8	-0.3	0.0	0.2	0.3	0.3	-0.2	0.7
Primary (noninterest) revenue and grants	52.5	52.4	52.4	50.6	50.1	49.6	49.0	48.9	48.8	296.9	
Primary (noninterest) expenditure	52.3	52.9	50.5	49.9	49.8	49.6	49.2	49.2	49.1	296.7	
Automatic debt dynamics [5/]	0.3	0.4	-2.1	-2.1	-0.5	-0.6	-0.6	-0.6	-0.6	-5.1	
Interest rate/growth differential [6/]	0.3	0.4	-2.3	-2.1	-0.5	-0.6	-0.6	-0.6	-0.6	-5.1	
Of which: real interest rate	1.0	-0.3	-0.4	-1.0	-0.1	0.0	-0.1	-0.1	0.0	-1.2	
Of which: real GDP growth	-0.7	0.7	-1.8	-1.1	-0.5	-0.6	-0.6	-0.6	-0.6	-3.8	
Exchange rate depreciation [7/]	0.1	0.0	0.2	…	…	…	…	…	…	…	
Other identified debt-creating flows	0.0	0.0	-2.4	-0.7	2.5	1.2	1.1	1.2	1.3	6.5	
0 (negative)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
Contingent liabilities	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
"Below the line" COVID measures; social housing bonds [8/]	0.0	0.0	-2.4	-0.7	2.5	1.2	1.1	1.2	1.3	6.5	
Residual, including asset changes [9/]	-1.1	7.6	1.1	-0.9	-0.9	-0.8	-0.8	-0.9	-0.9	-5.2	



Source: IMF staff calculations.

1/ Public sector is defined as general government.

2/ Based on available data.

3/ Long-term bond spread over German bonds.

4/ Defined as interest payments divided by debt stock (excluding guarantees) at the end of previous year.

5/ Derived as $[(r - \pi(1+g) - g + ae(1+r)]/(1+g+\pi+g\pi))$ times previous period debt ratio, with r = interest rate; π = growth rate of GDP deflator; g = real GDP growth rate; a = share of foreign-currency denominated debt; and e = nominal exchange rate depreciation (measured by increase in local currency value of U.S. dollar).

6/ The real interest rate contribution is derived from the numerator in footnote 5 as $r - \pi(1+g)$ and the real growth contribution as -g.

7/ The exchange rate contribution is derived from the numerator in footnote 5 as $ae(1+r)$.

8/ In addition to the fiscal surplus in 2021, this reflects a negative stock-flow adjustment likely due to a lower take-up of below-the-line COVID measures.

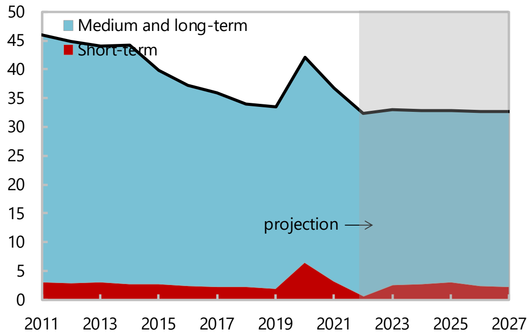
9/ Includes asset changes and interest revenues (if any). For projections, includes exchange rate changes during the projection period.

10/ Assumes that key variables (real GDP growth, real interest rate, and other identified debt-creating flows) remain at the level of the last projection year.

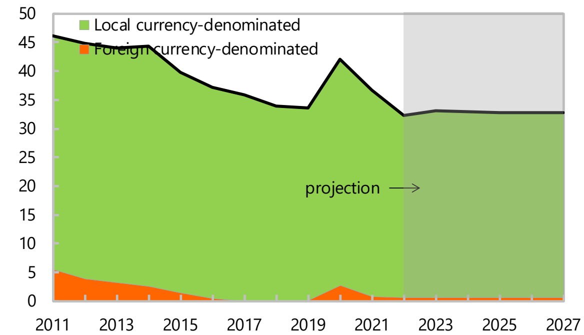
Annex II. Figure 2. Denmark: Public DSA—Composition of Public Debt and Alternative Scenarios

Composition of Public Debt

By Maturity
(in percent of GDP)



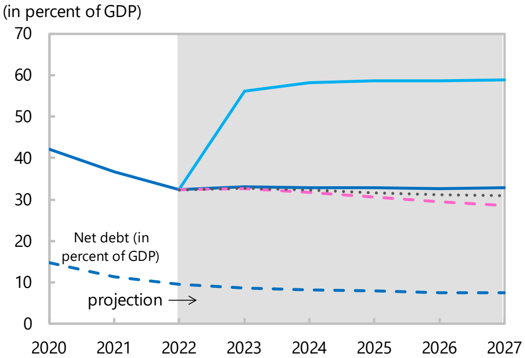
By Currency
(in percent of GDP)



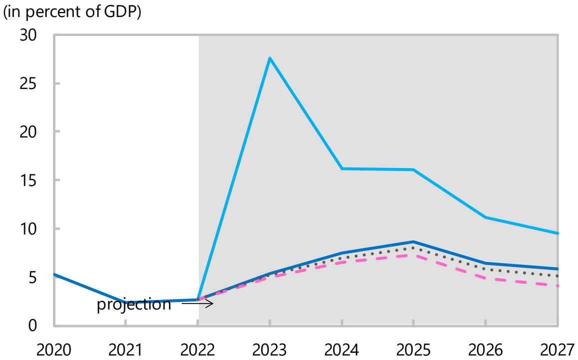
Alternative Scenarios

Baseline
Historical
Constant Primary Balance
Contingent Liability Shock

Gross Nominal Public Debt
(in percent of GDP)



Public Gross Financing Needs
(in percent of GDP)



Underlying Assumptions
(in percent)

Baseline Scenario	2022	2023	2024	2025	2026	2027
Real GDP growth	3.2	1.5	1.8	1.8	1.8	1.8
Inflation	4.4	2.1	2.0	2.1	2.2	2.2
Primary Balance	0.8	0.3	0.0	-0.2	-0.3	-0.3
Effective interest rate	1.7	1.9	1.9	1.9	2.0	2.1
Constant Primary Balance Scenario						
Real GDP growth	3.2	1.5	1.8	1.8	1.8	1.8
Inflation	4.4	2.1	2.0	2.1	2.2	2.2
Primary Balance	0.8	0.8	0.8	0.8	0.8	0.8
Effective interest rate	1.7	1.9	2.0	2.0	2.1	2.2

Historical Scenario	2022	2023	2024	2025	2026	2027
Real GDP growth	3.2	1.8	1.8	1.8	1.8	1.8
Inflation	4.4	2.1	2.0	2.1	2.2	2.2
Primary Balance	0.8	0.5	0.5	0.5	0.5	0.5
Effective interest rate	1.7	1.9	2.4	2.7	3.2	3.4
Contingent Liability Shock						
Real GDP growth	3.2	-0.3	0.0	1.8	1.8	1.8
Inflation	4.4	1.6	1.5	2.1	2.2	2.2
Primary Balance	0.8	-21.6	0.0	-0.2	-0.3	-0.3
Effective interest rate	1.7	2.2	3.9	3.4	3.1	3.1

Source: IMF staff calculations.

Annex III. External Sector Assessment

<table>
<tr><td colspan="8">Overall Assessment: The external position in 2021 is assessed as moderately stronger than the level implied by medium-term fundamentals and desirable policies. Compared to last year, the position changed from stronger to moderately stronger. The headline CA surplus rose by 0.2 percentage points to 8.3 percent of GDP in 2021. The increase was driven by a steep jump in sea transport services but was muted by a decline in the exports of machinery goods. Going forward, the CA surplus is expected to decline to its long-term average of 6.6 percent over the medium term, as domestic and global fiscal policies normalize, and structural reforms are undertaken.

Potential Policy Responses: Structural polices aimed at raising investment, including climate- and digital-related, and through a gradual improvement in capital markets, would help reduce the surplus.</td></tr>
<tr><td>Foreign Asset and Liability Position and Trajectory</td><td colspan="7">Background. The NIIP is estimated to have increased by 6.8 percentage points to reach 75.6 percent of GDP in 2021 on account of increases in foreign direct (FDI) and portfolio investments. While mostly non-financial corporates investment in FDI, it is primarily the Danish insurance and pension sector that invests in foreign equities. However, the increase is slightly lower than the CA balance due to valuation effects. The NIIP is expected to rise further in the medium term, reflecting the outlook for continued CA surpluses. But these projections are subject to uncertainty as IIP data includes large errors and omissions, which have averaged −2.0 percent of GDP in the past ten years.

Assessment. Gross liabilities have increased by 8.3 percentage points to 293.5 percent of GDP in 2021, with half being gross external debt (142 percent of GDP). Financial institutions hold the bulk of net foreign assets (144 percent of GDP), amongst them Investment Funds (72.3 percent of GDP) and Insurance/Pension Funds hold the largest shares (70.8 percent of GDP) whereas mortgage institutions are net external debtors (-31.6 percent of GDP). Households are the second largest external lenders with 10.7 percent of GDP in net assets, while nonfinancial corporations (-70 percent of GDP) and the government (-9.2 percent of GDP) are net external debtors.</td></tr>
<tr><td>2021 (% GDP)</td><td colspan="2">NIIP: 75.6</td><td>Gross Assets: 369.2</td><td>Debt Assets: 120.9</td><td colspan="2">Gross Liab.: 293.5</td><td>Debt Liab.: 129.2</td></tr>
<tr><td>Current Account</td><td colspan="7">Background. The CA surplus rose by 0.2 percentage points to 8.3 percent of GDP in 2021. The increase was driven by a steep jump in sea transport services (the largest container shipping company in the world is headquartered in Denmark) but was muted by a decline in the exports of machinery goods. Denmark is a net oil importer with a negative oil balance of 1.0 percent of GDP in 2021 (-0.5 percent of GDP previously). The impact from the higher-than-usual exports of transport services and lower-than-usual exports of medical goods and travel services are estimated to have improved the CA surplus by about 1.7 percentage points (see COVID-19 adjustor). Over the medium-term, the CA is projected to return to its long-term average of 6.6 percent of GDP.

Assessment. The cyclically adjusted CA is estimated at 8.8 percent of GDP in 2021, 3.5 percentage points above the cyclically adjusted EBA norm of 5.3 percent of GDP. However, the estimated EBA norm for Denmark is low and has been below the actual CA balance for the past ten years, suggesting that these estimates remain subject to uncertainties, as they don't capture Denmark-specific factors, such as Denmark's large pension contributions arising from the ongoing transition to the fully-funded retirement system, which funds generous pension incomes (with replacement rates among the highest in the OECD) and measurement issues related to merchanting and offshore processing trade, which play a substantial role in Denmark's trade balance. Indeed, EBA's new complementary pension tool shows that Denmark's pension system has a significant contribution to the CA. Overall, taking into account COVID adjustments for transport (−2.2 percent of GDP), medical (0.4 percent of GDP), travel (0.1 percent of GDP), and household consumption (0.0 percent of GDP), which were affected by the COVID-19 crisis, the IMF staff assesses the CA gap at 1.8 percent of GDP in 2021, within a range of ± 1.5 percent of GDP, reflecting uncertainty around the EBA estimated norm. While the EBA model does not identify policies that explain most of the excess surplus, parts of the gap are explained by Denmark's cyclically adjusted fiscal stance, which was not as expansionary as in the rest of the world. Measurement error analysis shows that the CA may have been overstated by 0.6 to 1.4 percent of GDP over the last 5 years (Denmark SIP 2022).</td></tr>
<tr><td>2021 (% GDP)</td><td>CA: 8.3</td><td>Cycl. Adj. CA: 8.8</td><td>EBA Norm: 5.3</td><td>EBA Gap: 3.5</td><td>COVID-19 Adj.: −1.7</td><td>Other Adj.: —</td><td>Staff Gap: 1.8</td></tr>
<tr><td>Real Exchange Rate</td><td colspan="7">Background. Denmark's currency is pegged to the Euro. The Danish krone appreciated by 2.0 percent in real effective terms (ULC based) in 2021 relative to its level in 2020.

Assessment. Based on the CA gap model, staff estimates a REER undervaluation of −4.1 percent in 2021 (applying an estimated elasticity of -0.44), with a range between −1 to −7.5 percent. The REER index and level models suggest an overvaluation of 14.6 percent and 7.5 percent, respectively, for 2021. Meanwhile, the REER index based on ULC is slightly above its 26-year average (indicating an overvaluation by 1.5 percent) whereas the REER CPI based index suggests an undervaluation of less than 4 percent.</td></tr>
<tr><td>Capital and Financial Accounts: Flows and Policy Measures</td><td colspan="7">Background. Financial account flows increased to 9.3 percent of GDP (2020: 5.2 percent of GDP) driven by an accumulation in reserves (which changed by 3.8 percentage points), portfolio investments (which changed by 3.1 percentage points) and FDI which changed by 2.5 percentage points) while other investments declined to zero (from 4.8 percent of GDP in 2020).

Assessment. Large fluctuations in capital flows are inherent to countries with a large financial sector. This volatility is a potential source of vulnerability, although it is mitigated by sound financial regulation and supervision and a strong financial sector. Danish banks remain highly capitalized, liquid, and profitable.</td></tr>
<tr><td>FX Intervention and Reserves Level</td><td colspan="7">Background. Denmark's currency is pegged to the Euro. The peg has served Denmark well. The DN adjusts the interest rate spread relative to the ECB's monetary policy rate in response to krone pressures but also influences the exchange rate using interventions financed via its FX reserves. Amid appreciation pressures in 2021 due to increased hedging demand by pension and insurance companies following large gains in their foreign equity positions, the DN sold roughly USD19.4 billion of kroner in 2021 and cut the policy rate to -0.6 percent in October 2021, widening the spread vis-à-vis the ECB by 10 basis points.

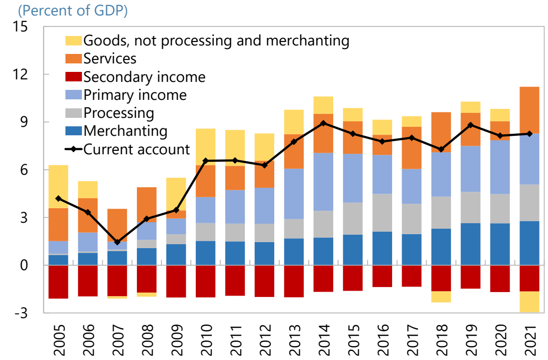
Assessment. Foreign currency reserves increased by US$9.4 billion to stand at US$82 billion in December 2021, which is equivalent to 44.8 percent of the short-term external debt of monetary and financial institutions (primarily banks), about 22 percent of GDP and 4.7 months of imports. The increase in reserves reflects the increase in general SDR allocation which became effective in August 2021. A US$30 billion swap line was agreed with the US Federal Reserve to address risks on dollar funding related to the COVID-19 crisis; although it was not utilized in 2021, it provided an important backstop function.</td></tr>
</table>

Annex III. Figure 1. Denmark: External Sector Assessment

The CA rose to 8.3 percent of GDP due to a jump in export services which was damped by a decline in goods.

Current Account

(Percent of GDP)

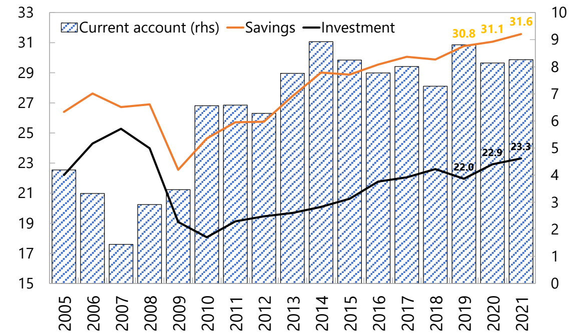


Sources: Statistics Denmark; and IMF staff calculations.

Both savings and investments increased in 2021.

External Balance, Savings and Investment

(Percent of GDP)

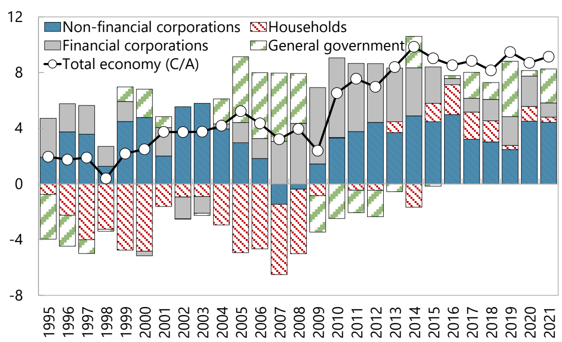


Sources: Statistics Denmark; and IMF staff calculations.

The savings-investment gap is driven by non-financial firms and financial corporations.

Saving - Investment Balances by Sector

(Percent of GDP)

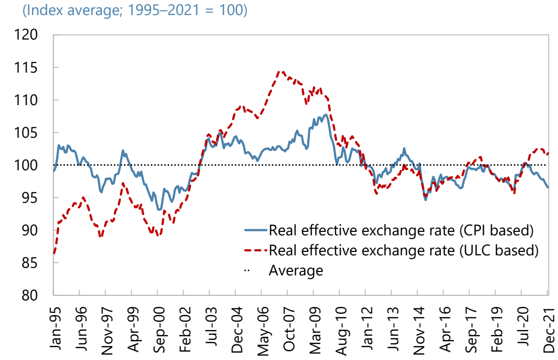


Sources: Statistics Denmark; and IMF staff calculations.

The CPI based REER shows an undervaluation of the exchange rate by 3 percent whereas the ULC based REER is slightly overvalued.

Real Effective Exchange Rate, 1995–2021

(Index average; 1995–2021 = 100)

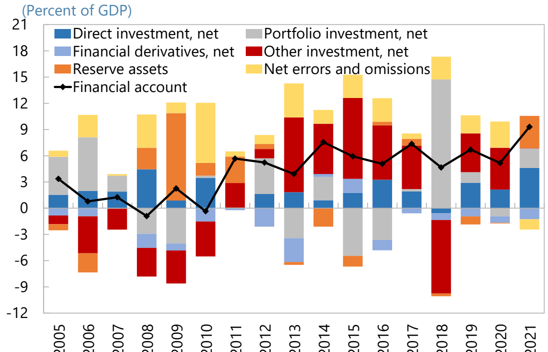


Source: IMF staff calculations.

The FA has increased to 9.3 percent on account of reserves, portfolio investments, and FDI flows.

Financial Account

(Percent of GDP)

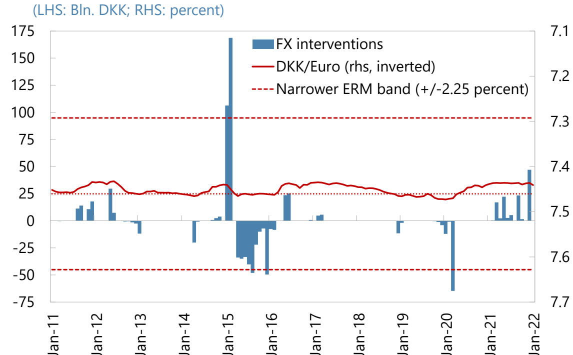


Sources: Statistics Denmark; and IMF staff calculations.

The DN intervened in FX markets to stem appreciative kroner pressures.

FX Interventions and the Exchange Rate

(LHS: Bln. DKK; RHS: percent)



Sources: Haver Analytics; and IMF staff calculations.

Annex IV. Authorities' Response to Past IMF Policy Recommendations

Past Policy Recommendations	Authorities' Actions
Fiscal Policy: Continue to support lives and livelihoods until the recovery is well entrenched, and when so, return to the medium-term objective (MTO). Reduce high marginal and participation tax rates to promote labor supply. Increase reliance on in-work benefits and improve targeting to lower-income workers to alleviate inactivity traps and improve youth employment. Increase public investment to upgrade infrastructure. A comprehensive strategy—enhanced carbon prices reinforced by fiscal incentives across sectors including the use of feebates—is required to meet Denmark's emission targets. Revision of the Budget Law would provide fiscal flexibility.	Fiscal measures supported the recovery in 2021. Given the projected continued rebound into 2022, fiscal consolidation is planned this year as unwinding of COVID measures more than offsets war-related spending. This would place fiscal towards the MTO. There was progress on raising in-work benefits but no progress on reducing high marginal and participation tax. The fiscal plan includes raising public investment relative to the pre-COVID period. Proposals for carbon taxation (Green Tax Reform) have been put in place, but decisions are pending. These proposals do not include the use of feebates. The Parliament is discussing the revision of the Budget Law.
Housing Market: Further tighten existing macroprudential measures to protect households form house price declines and higher interest rates, further reduce mortgage interest deductibility, lower rent controls, and relax zoning restrictions to increase supply.	Loan-to-value (LTV) limit remained at 95 percent. Some urban area zoning size restrictions have been relaxed.
Financial Sector: Staff recommended raising the CCyB if the risk buildup continued. To improve the calibration of tools and support financial stability surveillance, staff recommended further refining frameworks to assess systemic risk. To strengthen AML/CFT supervision, it was advised to develop a comprehensive institutional risk assessment model; (ii) increase the depth of the DFSA's AML/CFT on-site inspections; (iii) further expand its sanctioning powers; and (iv) strengthen regional and international cooperation.	The CCyB has been tightened to 2 percent, effective December 2022 and further to 2.5 percent after the SRC's recommendation at its March 2022 meeting. The DN used information from a newly implemented credit registry to improve calibration of their stress tests. The authorities' new institutional risk assessment model became operational in June 2021. Number of DFSA's on-site inspections has been increased as well as its sanctioning powers. The authorities continue to strengthen cross-border cooperation via supervisory colleges.
Structural Reforms: Higher labor participation could be achieved by a comprehensive tax and benefit reform. Policies to improve employment in knowledge-intensive sectors including for the youth (VET), better integrate migrants (IGU), and reduce the gender gap by increasing flexibility in the provision of childcare services should be considered. Streamline the accreditation of foreign degrees to attract foreign qualified labor. To incentivize more investments, capital income tax reforms in the areas of dividend taxation, losses carried forward, R&D deductions, and business asset taxation should be considered. An ACE would reduce disincentives to invest. Improve institutional framework for competition and foster the business environment for high productive sectors (KIS).	Partially implemented: The authorities increased in-work benefits and incentives for seniors to work to increase labor participation in 2022. The temporary increase in incentives to participate in VET to 110 percent of unemployment benefits has been made permanent. It was also agreed to expand the IGU program and extend it to 2023 but female refugees have not been specifically targeted. With the implementation of the EU directive in June 2022 which requires a minimum of two months leave for each parent a more equal split is hoped to be achieved. The authorities also made the increase in R&D deductions to 130 percent permanent. A digital partnership between the government and firms was established in 2021, it will provide recommendations on how companies can utilize digitalization. Other capital tax reforms including ACE have not been implemented. The European Competition Network directive (ECN+) has been implemented March 2021.

Annex V. Authorities' Response to Past FSAP Recommendations

Denmark: Key FSAP Recommendations		
Recommendations and Authority Responsible for Implementation	**Time[1]**	**Status**
Systemic Risk Oversight and Macroprudential Policy		
Give the chair of the SRC the ability, enshrined in law, to make proposals for a recommendation after dueconsultation with other SRC members without the need to strive for consensus (MIBFA).	MT	Not Implemented
Introduce national legislation to include borrower-based tools (limits on LTVs, DTIs, and DSTIs) in the policytoolkit (MIBFA).	MT	Not Implemented
Introduce a stricter LTV limit to safeguard against large house price shocks (MIBFA).	MT	Not Implemented
Introduce a binding income-based macroprudential measure that limits lending to households above a certain DTI (MIBFA).	MT	Not Implemented
Issue recommendations to responsible authorities to reduce debt bias, simplify rental regulations, and relax supply constraints on housing (SRC).	MT	Not Implemented
Close data gaps, including by enhancing the coverage and quality of commercial real estate data (DN).	MT	Partially Implemented
Develop macroprudential stress tests that take feedback loops between financial system and real economymore fully into account while incorporating contagion effects across financial institutions (DN).	MT	Not Implemented
Banking and Insurance Supervision		
Enhance the operational independence of the DFSA including by, for example, clearly stating in law the reasonsfor the dismissal of a DFSA Director General (MIBFA).	MT	Not Implemented
Expand the budget envelop for the DFSA to recruit and retain quality staff across a full range of skills andexperience and with a focus on non-financial risks (MIBFA).	ST	Partially Implemented
Develop more detailed guidance on risk assessments to support supervisory judgement and ensure consistentoutcomes (DFSA).	ST	Implemented
Enhance approaches to confirm explicitly the veracity of supervisory data and information received (DFSA).	MT	Partially Implemented
Increase the number of insurance on-site inspections guided by a finalized risk assessment framework andstrengthen the supervision of cross-border business (DFSA).	ST	Partially Implemented
Anti-Money Laundering and Combating the Financing of Terrorism (AML/CFT)		
Test, finalize, and implement the DFSA's new institutional risk assessment model (DFSA).	ST	Implemented
Intensify AML/CFT on-site inspections of higher-risk financial institutions (DFSA).	ST	Implemented
Consider, select, and pursue next-stage options for the regional consolidation of AML/CFT supervision (MIBFA).	MT	Partially Implemented
Systemic Liquidity		
Complete the framework for accepting credit claims as non-standard collateral (DN).	ST	Implemented
Seek greater domestic interagency information sharing and collaboration to enhance the operational preparedness for non-standard liquidity support (DN, DFSA).	ST	Implemented

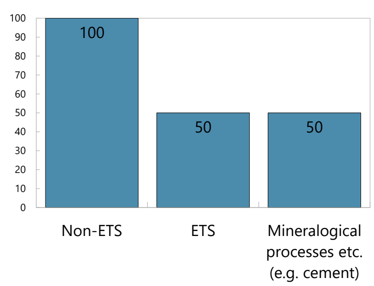
Denmark: Key FSAP Recommendations (concluded)		
Recommendations and Authority Responsible for Implementation	**Time1**	**Status**
Financial Crisis Management and Safety Nets		
Strengthen the autonomy of FSC, including by limiting the decision power of the MIBFA in resolution tosituations when fiscal support is needed (MIBFA)	ST	Not Implemented
Expedite the resolvability of SIFIs, particularly by finalizing the priority areas for resolution planning (DFSA,FSC)	ST	Partially Implemented
Define strategies for liquidity assistance to institutions in resolution (DN,DFSA,FSC,MIBFA,MOF)	ST	Implemented
Develop and test a system-wide contingency and crisis communication plan (DFSA,DN,FSC,MIBFA,MOF)	ST	Implemented
[1/] ST: Short term (1-3 years); MT: Medium Term (3–5 years).		

Annex VI. Green Tax Reform: Carbon Taxation Proposals

1. An expert working group has proposed alternative models of carbon taxation for the next phase of the Green Tax Reform. These will be phased in after 2025 and cover emissions from the industrial sector, non-road transport, and electricity production. Of the estimated emission shortfall of 10.1 million tons (about 47 percent of the net emissions reduction requirement) by 2030, the proposed models would reduce emissions by 3½ million tons.[1] Proposals for the remaining shortfall—from agriculture (non-energy related) and transportation—are expected later this year.

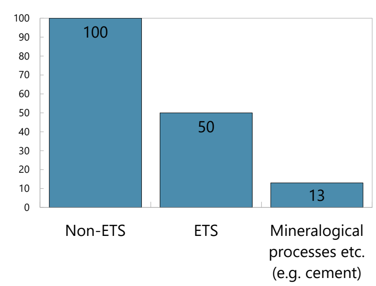
2. Three alternative models have been proposed. The centerpiece of all three models is a higher and more uniform carbon pricing across all emissions, by converting—and raising—energy taxes to a CO_2 tax. This is in contrast to the current system where CO2 is taxed differently depending on where the CO_2 is emitted, and which fuels are used. All three models would ensure the same emission reduction (3½ million tons), but they differ in terms of considerations for cost efficiency and leakage risks—these, in turn, imply different ton-for-ton emission reduction costs.

Model 1:
Cheapest reductions
CO_2-tax: EUR per ton



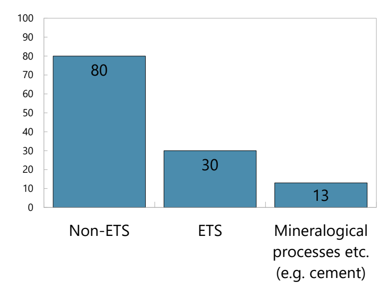
Tax revenue
100 mil. EUR
Socio-economic cost
35 EUR per tonne CO_2
CO_2 reductions: 3.5 mil. tonnes
47 percent from technical effect

Model 2:
Partial handling of leakage
CO_2-tax: EUR per ton



Tax revenue
0 EUR
Socio-economic cost
65 EUR per tonne CO_2
CO_2 reductions: 3.5 mil. tonnes
70 percent from technical effect

Model 3:
Further handing of leakage
CO_2-tax: EUR per ton



Tax revenue
-70 mil. EUR
Socio-economic cost
70 EUR per tonne CO_2
CO_2 reductions: 3.5 mil. tonnes
75 percent from technical effect

Sources: Expert Working Group for Green Tax Reform (Feb 2022).

3. Model 1: Cheapest reduction. For sectors outside the ETS, a uniform CO_2 tax rate of EUR 100 per ton of CO_2 would be imposed, corresponding to the expected quota price in 2030. For the ETS sector, including mineralogical processes, a tax rate of EUR 50 per ton is proposed (a tax reduction of 50 percent); but along with the ETS price, this would add up to an effective tax of EUR 150 per ton. With a higher effective CO_2 tax in the ETS sector, the proposal seeks a relatively quicker

[1] The government has put forward a concrete proposal which is similar to Model 2 of the expert group. See Fiscal Section.

reduction in emissions from this sector. [2] The proposal also includes a subsidy for negative emissions. Of the estimated 3½ million-ton emission reduction, more than half of the reduction would occur via business shifts—production declines in the most CO_2-intensive companies—rather than through technical conversions that reduce emissions per produced unit. Since Model 1 entails the most harmonized carbon pricing across all sectors/emissions, this is also the most cost effective, with socio-economic costs (loss of economic welfare in the form of lower real wages and adjustment costs) estimated at EUR 35 per ton of emission reduction. That said, the model comes at the risk of high leakage—both within and outside EU. Carbon tax revenues, according to the proposal, are estimated at around EUR 100 million in 2030.

4. **Model 2: Partial handling of leakage.** For the non-ETS sectors, the uniform CO_2 tax rate of EUR 100 per ton is maintained. The ETS sector would also face the same tax rate of EUR 50 per ton as in Model 1, but companies in the mineralogical processes—where leakage risks are the greatest—would face a lower rate of EUR 13 per ton to alleviate leakage. To achieve the same emission reduction as in Model 1, the carbon tax revenues would be used to finance subsidies for capture and storage of CO_2 (CCS), in addition to funding negative emissions as before. As technical reductions achieved via CCS technology are socio-economically more expensive than the reductions achieved via the large business shifts in Model 1, the ton-for-ton emission reduction cost would be larger.

5. **Model 3: Further handling of leakage.** Relative to previous models, Model 3 entails lower CO_2 tax rates both in non-ETS and ETS sectors (except in mineralogical processes which would face the same reduced rate as in Model 2) to further address leakage risks. The same amount of emission reduction would be achieved by a larger CCS contribution. But these would require additional financing of about EUR 70 million. The ton-for-ton emission reduction cost would be the largest in Model 3.

6. **The strengthening of carbon prices in the proposed models is welcome, but complementary policies are also needed.** Strengthening carbon pricing—through higher and more harmonized pricing across sectors—would be the most effective from an economic efficiency standpoint. Supporting measures at the sectoral level are also needed however, given uncertainties about the emissions impacts and acceptability of higher carbon prices, and the presence of sector-specific market frictions which may hinder emission reductions. These measures include fiscal incentives at the sectoral level, including the use of feebates in transportation and agriculture. For power and industrial sectors, feebates—with no first-order impact on prices—and the proposed EU carbon border adjustment can also limit leakage risks. The choice of the model of carbon taxation must weigh these considerations, in addition to the tradeoff between leakages and tolerance of the Danish society regarding carbon prices. Recycling of carbon revenues should be considered between addressing leakages, cutting labor taxes, and securing a just transition.

[2] However, unilateral increases in carbon pricing in sectors covered by the ETS could lead to a “waterbed effect,” where the price of emission permits falls due to a country’s unilateral actions, and no reduction in overall emissions is achieved (as the overall amount of ETS permits is fixed).

Annex VII. Adverse Scenario

1. **The war in Ukraine has created headwinds to growth.** The war would impact activity and inflation in Denmark via these channels. First, *commodities and trade*: an increase in energy and food prices would raise inflation which, in turn, would reduce real incomes, thus weighing on private consumption. A lower external demand—as the war hits major trading partners, notably Germany—would reduce Danish exports. Second, *confidence channel:* higher commodity prices, war-related uncertainty, and weakening economic prospects globally could dent consumer and business confidence, dampening activity. Third, *financial conditions*: a tightening in global financial conditions and widening corporate spreads could adversely impact activity, particularly investment. But given Denmark's safe haven status, this channel is expected to be somewhat less relevant.

2. **Denmark's direct exposures to Russia and Ukraine—trade, energy, financial—are limited.** Renewable energy sources contribute more than 40 percent of Denmark's energy needs. Natural gas constitutes only about 14 percent of its energy supplies and only 4 percent of electricity generation. Financial linkages are also small with a gross foreign asset exposure share to Russia of roughly 0.3 percent in 2021:Q3. The share of gross foreign liabilities to Russia is also small, standing at roughly 0.6 percent in 2021:Q3. Exposures to Ukraine are negligible.

3. **Given this, in the baseline, the impact of the war on Denmark is assessed to be relatively small.** Growth downgrades in major trading partners (as a result of the war) would hit Danish exports even though Denmark's direct trade linkages with Russia and Ukraine are limited. Private consumption and investment are expected to see some dampening due to confidence and uncertainty effects. Staff assess the war would reduce 2022 growth by some 1 percentage point compared with the pre-war baseline. However, a strong carry-over effect from a better-than-expected growth in 2021Q4 implies a net upward growth revision in 2022 (compared to the pre-war projection for 2022 in the Spring 2022 WEO). The baseline assumes a temporary impact from the war (in addition to a waning pandemic); thus, activity is projected to pick up in 2023 in this scenario.

4. **Staff present an adverse scenario where sanctions arising from the war escalate further** (Scenario Box, World Economic Outlook April 2022)**.** [1] Relative to the baseline, the channels mentioned above would operate with greater force in the adverse scenario. This would also lead to an upward shift in inflation expectations, requiring a greater tightening in monetary policy, further amplifying the negative impact on global activity—this would, in turn, further weigh on Danish activity. Importantly, relative to the baseline, the impact of the war is projected to persist into 2023. The adverse scenario takes into account mitigating impact from Denmark's large automatic stabilizers. [2]

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[1] The scenario assumes a broadening of sanctions mid-2022 to include additional embargoes on oil and gas and the disconnection of Russia from much of the global financial and trade system.

[2] But the adverse scenario does not assume further discretionary fiscal loosening mainly because the size and composition of these measures are hard to pin down at this point.

5. In the adverse scenario, near-term growth would be further reduced, and inflation elevated. Relative to the baseline, the adverse scenario will see growth downgrades in the range of 1–1½ percentage points during 2022 and 2023. While this still implies a relatively healthy growth in 2022 (around 1.7 percent), growth in 2023 will be quite subdued (around ½ percent). Thus, the case for discretionary loosening, if downside risks materialize, is particularly warranted in 2023 (Fiscal Section). Headline inflation will increase by a further 1 percentage point in 2022 (relative to the baseline). While headline inflation will unwind—due to base effects—it will still be higher by some ¼ percentage point in 2023 (relative to the baseline). These estimates are subject to unusually-large uncertainty.[3] The situation remains very fluid, and the adverse scenario could be much worse depending on how the war unfolds.

Baseline and Adverse Scenarios
(Percent)

	Baseline		Adverse		Difference	
	2022	**2023**	**2022**	**2023**	**2022**	**2023**
GDP growth	3.2	1.5	1.7	0.4	-1.5	-1.1
HICP Headline inflation	4.8	1.7	5.8	2.1	1.0	0.4

Source: IMF staff calculations.

6. Nonetheless, Denmark is well positioned to face these headwinds given its significant buffers. Gross debt is around 37 percent of GDP, reserve assets are around 18 percent of GDP, and capitalization of the banking system remains solid.

[3] Beyond 2023, the uncertainty is exceedingly large for a quantitative assessment.

Annex VIII. Denmark Labor Market: Primer on the Positive List

1. In the context of Danish Active Labor Market Policies (ALMP), the authorities use several so-called "positive lists" to determine skill shortages in the labor market. These lists are based on unsuccessful recruitment data as reported by employers. They guide upskilling and educational courses provided to the unemployed as well as work permits for foreigners. In particular, ALMP courses (but not all) are based on this positive list. Also, foreigners (outside the EU) can apply for a work permit, if they find a job that is on the positive list.

2. The list that guides foreign work visas has undergone substantial changes over the years. The list is updated twice a year (January 1st and July 1st) and has changed significantly in the past years. In 2017, it showed 37 jobs that are in high demand which required a Master, Bachelor's degree or at least 3 years of university education (Figure). In 2022, the number of jobs increased to 94 and the list now distinguishes between jobs that require higher education or skilled work experience. Currently, the list indicates that demand is high for professions in the area of natural science and engineering including skilled technicians in the construction and industry sector as well as in the economics/business administration sector followed by professions in the law, social science, and cultural sector.

2017 Positive List

All jobs require either a Master, Bachelor's degree, or 3 years university education

Natural Science and Engineering (9)
- Building engineer
- Mechanical engineer
- Engineer, design and innovation
- Engineer, medicine and technology
- Electrical engineer
- Architect
- Land surveyor
- Urban planner
- Building constructor

Healthcare (13)
- Medical doctor
- Hospital doctor
- Medical consultant
- Chief physician
- Nurse
- Anesthetic nurse
- Surgical nurse
- Health visitor
- Midwife
- Dentist
- Pharmacist
- Optician
- Radiographer

Teaching and educational work (4)
- Primary and lower secondary school teacher
- Teacher at independent boarding school
- Pedagogue
- Social pedagogue

Economics, administration and sales (4)
- Auditor
- Business controller
- Accounting controller
- Key account manager

IT (4)
- IT architect
- IT consultant
- Web developer
- Programmer and system developer

Law, social science and culture (3)
- Attorney
- Psychologist
- Social worker

Source: https://www.akkam.in/denmark-announces-the-new-positive-list

2022 Positive List

List in 2022 now distinguishes between Higher Education and Skilled Work:

Higher Education:	Skilled work:
Natural Science and Engineering (30)	
Biochemist	Laboratory technician
Mechanical Engineer	Plumbing Technician
Architectural Technology and	Plumber
Civil Engineer	Production Technician
Environmental Engineer	Production Technician
Electronics Engineer	Technical Designer
Architect	Landscape Gardener
Town Planner	Electrician
Land Surveyor	Electro-Technician
Marine engineer	Bricklayer
	Carpenter
	Building Painter and Decorator
	Welder
	Blacksmith
	Sheet Metal Worker
	Service Technician, Iron and Metal
	Industrial Technician
	CNC-operator
	Mechanic, passenger cars and vans
	Agricultural Machine Mechanic
Healthcare (11)	
Medical doctor	Social and Health Care Assistant
Chief physician	
Nurse	
Midwife	
Dentist	
Pharmacist	
Physiotherapist	
Occupational therapist	
Radiographer	
Dental Hygienist	
Teaching and educational work (11)	
Ph.D. in Humanities	
Assistant Professor	
Teacher at a Vocational Upper School	
Business College Teacher	
General Upper Secondary School Teacher	
Primary School Teacher	
Continuation School Teacher	
Child Care Worker	
Social Education Worker	
Music Teacher	
Head of Education	
Economics, administration and sales (22)	
Auditor	Procurement Officer
Accounting controller	Shipping Agent
Head of Accounting	Job and Company Consultant
Head of Secretariat	Local Authority Case Officer
Head of Division	Real Estate Agent
Head of Administration	Logistic Assistant, sales and purchasing
Sales Manager	Study Administrative Secretary
Marketing Manager	Medical Secretary
	Managing Clerk
	Office Clerk
	Accountant Assistant
	Bookkeeper
	Bookkeeping and Accounting Clerk
	Sales Support Assistant
IT (5)	
IT architect	
IT Project Leader	
Head of IT	
Web developer	
Programmer and system developer	
Law, social science and cultural (15)	
Psychologist	Parish Helper
Social worker	Parish Clerk
Economist	Floral Decorator
Legal Officer	Head Chef
Librarian	Deputy Manager, kitchen
Organist, Cantor	Chef
	Hairdresser
	Baker
	Cabinetmaker

Source: https://www.nyidanmark.dk/en-GB/You-want-to-apply/Work/The-Positive-Lists/Positive-List-for-skilled-work

INTERNATIONAL MONETARY FUND

DENMARK

May 26, 2022

STAFF REPORT FOR THE 2022 ARTICLE IV CONSULTATION—INFORMATIONAL ANNEX

Prepared By	European Department

CONTENTS

FUND RELATIONS

As of April 30, 2022

Membership Status: Joined: March 30, 1946; Article VIII.

General Resources Account:	**SDR Million**	**Percent Quota**
Quota	3,439.40	100.00
Fund holdings of currency (Exchange Rate)	2,615.50	76.05
Reserve Tranche Position	823.91	23.96
Lending to the Fund		
New Arrangements to Borrow	28.50	

SDR Department:	**SDR Million**	**Percent Allocation**
Net cumulative allocation	4,827.98	100.00
Holdings	4,809.68	99.62

Outstanding Purchases and Loans: None

Latest Financial Commitments: None

Projected Payments to Fund[1]
(SDR Million; based on existing use of resources and present holdings of SDRs):

	Forthcoming				
	2022	2023	2024	2025	2026
Principal	…	…	…	…	…
Charges/Interest	0.09	0.15	0.15	0.15	0.15
Total	0.09	0.15	0.15	0.15	0.15

[1] When a member has overdue financial obligations outstanding for more than three months, the amount of such arrears will be shown in this section.

Exchange Arrangements: Denmark participates in the European Exchange Rate Mechanism II (ERMII) with a central rate at DKr 746.038 per 100 euro. The standard width of the fluctuation band in ERM II is +/-15 percent. However, due to its high degree of convergence, Denmark has entered into an agreement with the European Central Bank (ECB) and the euro area member states on a narrower fluctuation band of +/- 2.25 percent. This means that the krone can only fluctuate between DKr 762.824 per 100 euro and DKr 729.252 per 100 euro.

Denmark has accepted the obligations under Article VIII, Sections 2(a), 3, and 4 and maintains an exchange system free of multiple currency practices and restrictions on the making of payments and transfers for current international transactions, apart from those imposed solely for the preservation of national or international security, as notified to the Fund by the National Bank of Denmark in accordance with Executive Board Decision No. 144-(52/51).

Article IV Consultation: The last Article IV consultation was concluded by the Executive Board on June 14, 2021. The staff report (IMF Country Report No. 21/112) was published with Press Release No. 21/174 (June 15, 2021).

Outreach: The team met with representatives of the private sector, academics, labor and financial institutions.

Press conference: None.

Publication: The staff report will be published.

Technical Assistance: None.

Resident Representative: None.

STATISTICAL ISSUES

Data Provision is adequate for surveillance. The country has a full range of statistical publications, many of which are on the internet. The quality and timeliness of the economic database are generally very good. The country subscribes to the Fund's Special Data Dissemination Standard Plus. Metadata are posted on the Dissemination Standards Bulletin Board.

National Accounts: Denmark adopted the *European System of Accounts 2010 (ESA 2010)* in September 2014. Parallel to the transition to the new international guidelines, a revision of data and methods has been carried out as well, improving the quality of the statistics. Historical data were revised going back to the initial year of 1966.

Government Finance Statistics: Starting from September 2014, government finance statistics data is based on the *ESA 2010* methodology, which includes revisions of the general government deficit and debt levels from 1995 onwards. Revised data series was published in October 2014.

External Statistics: Starting in 2014, external sector statistics are compiled according to the *Balance of Payments and International Investment Position Manual, sixth edition (BPM6)* and in accordance with legal requirements of the ECB and Eurostat.

Monetary and Financial Statistics: Monetary data reported for International Financial Statistics are based on the European Central Bank's (ECB) framework for collecting, compiling, and reporting monetary data. The data are reported to STA through the ECB and largely accords to the *Monetary and Financial Statistics Manual and Compilation Guide (MFSMCG).* Data for Other Financial Corporations are currently not available.

Danmarks Nationalbank also reports some data and indicators of the Financial Access Survey (FAS), including the two indicators adopted by the UN to monitor Target 8.10 of the Sustainable Development Goals (SDGs).

Financial Sector Surveillance: Danmarks Nationalbank reports all of the 12 core Financial Soundness Indicators (FSIs) and 12 of the 13 encouraged FSIs for deposit takers, two FSIs for OFCs, one FSI for households, and 4 FSIs on real estate markets—on a quarterly basis—for posting on the IMF's FSI website.

Denmark: Common Indicators Required for Surveillance (As of May 15, 2022)					
	Date of latest observation	**Date received**	**Frequency of Data[7]**	**Frequency of Reporting[7]**	**Frequency of publication[7]**
Exchange Rates	5/22	5/22	D	D	D
International Reserve Assets and Reserve Liabilities of the Monetary Authorities[1]	3/22	5/22	M	M	M
Reserve/Base Money	3/22	5/22	M	M	M
Broad Money	3/22	5/22	M	M	M
Central Bank Balance Sheet	4/22	5/22	M	M	M
Consolidated Balance Sheet of the Banking System	3/22	5/22	M	M	M
Interest Rates[2]	5/22	5/22	D	D	D
Consumer Price Index	4/22	5/22	M	M	M
Revenue, Expenditure, Balance and Composition of Financing[3]––General Government[4]	2021	2022	A	A	A
Revenue, Expenditure, Balance, and Composition of Financing[3]––Central Government	2021:Q4	4/2022	Q	Q	Q
Stocks of Central Government and Central Government-Guaranteed Debt[5]	2021	2022	A	A	A
External Current Account Balance[8]	3/22	4/22	M	M	M
Exports and Imports of Goods and Services	3/22	4/22	M	M	M
GDP/GNP	2021:Q4	3/22	Q	Q	Q
Gross External Debt	2021:Q4	4/22	Q	Q	Q
International Investment Position[6,8]	2021:Q4	4/22	Q	Q	Q

1/ Any reserve assets that are pledged or otherwise encumbered should be specified separately. Also, data should comprise short-term liabilities linked to a foreign currency but settled by other means as well as the notional values of financial derivative to pay and to receive foreign currency, including those linked to a foreign currency but settled by other means.
2/ Both market-based and officially-determined, including discount rates, money market rates, rates on treasury bills, notes, and bonds.
3/ Foreign, domestic bank, and domestic nonbank financing.
4/ The general government consists of the central government (budgetary funds, extra budgetary funds, and social security fun and state and local governments.
5/ Including currency and maturity composition.
6/ Includes external gross financial asset and liability positions vis-à-vis nonresidents.
7/ Daily (D), weekly (W), monthly (M), quarterly (Q), annual (A), irregular (I); and not available (NA).
8/ Starting with data for 2014, external sector statistics are compiled according to the sixth edition of the *Balance of Payments and International Investment Position Manual* (*BPM6*) and in accordance with legal requirements of the ECB and Eurostat.

Statement by Ms. Marcussen and Mrs. Ogmundsdottir on Denmark
June 13, 2022

On behalf of the Danish authorities, we would like to thank staff for the candid and constructive policy discussions during the Article IV mission held in April and May. The authorities appreciate staff's high-quality report and analytical work on relevant issues.

Outlook and risks

The Danish economy is in a strong position despite increasing headwinds. Russia's invasion of Ukraine has created new turmoil in the global economy with increasing commodity prices and higher uncertainty. The Danish economy will also be affected and while GDP is projected to grow by 3½ percent in 2022, activity is expected to stagnate or even fall in parts of 2022 as high inflation and increased uncertainty leads to lower demand.

Nevertheless, the basis for continued growth remains present. Employment and output continue to exceed their structural levels. High savings and record employment levels buoy household demand. Danish businesses have seen strong growth in exports and are in a sound financial position.

Risks to the outlook are mainly to the downside, in view of the consequences of the war in Ukraine. In particular, a stop to the supply of natural gas from Russia to Europe could lead to lower growth. Furthermore, should high inflation levels prove more persistent, this could lead to further substantial increases in interest rates and financial market turbulence which could dampen the outlook for the global and Danish economy.

Fiscal Policy

For more than two decades, Danish fiscal policy has been conducted within a forward-looking medium-term fiscal framework. The framework entails operational targets for the medium-term structural budget balance and plays an important role in ensuring long-term fiscal sustainability. The most recent update of the 2025-plan aims at structural budget balance in 2025.

Despite the expenses related to the Russian invasion of Ukraine, the structural budget balance is close to being balanced in 2022 and thus keeps a safe distance to the current deficit limit of 0.5 percent in the Budget Law. New targeted and temporary support measures to households in view of the increase in energy prices have been limited to 0.1 percent of GDP and no energy taxes have been reduced. Given the strong cyclical position of the Danish economy, fiscal policy is planned to be tightened substantially in 2022 and 2023, measured by the one-year fiscal effect.

In March 2022, the Danish government and a majority of parliament agreed to revise the structural deficit limit in the Budget Law from 0.5 percent of GDP to 1.0 percent of GDP in compliance with the EU fiscal framework and continued long-term fiscal sustainability. The revision of the Budget Law provides better conditions for dealing with forthcoming demographic pressures on public finances while maintaining room for fiscal maneuver in case of an economic downturn.

Financial sector and real estate markets

Overall, the authorities consider the Danish financial sector to be resilient. The increase in impairments during the pandemic was a result of management buffers due to expectations that the economy would deteriorate. In general, these buffers have not been used. Government support packages, such as deferred VAT payments and wage compensation to businesses, helped mitigate the impact of the pandemic. Additionally, the government released the Countercyclical Capital Buffer (CCyB) in March 2020 to support banks' lending capacity during the pandemic. Following the recommendations by the Systemic Risk Council in June 2021, December 2022, and March 2022 the government has gradually rebuilt the CCyB to 2.5 percent (effective from 31 March 2023).

The authorities continuously monitor developments in the housing market. During the Covid19 pandemic, housing prices increased rapidly, but since summer 2021, the increase has been lower. In June 2021, the Systemic Risk Council recommended tightening lending policies in the housing market, specifically to restrict access to interest-only loans for borrowers with an LTV above 60. The primary purpose of reducing access to interest-only loans is to increase the resilience of homeowners – and the Danish economy – to falling house prices, increasing interest rates, and other negative economic shocks that may impact the individual homeowner or the Danish economy. The government chose not to follow the recommendation based on its assessment that financial stability and household robustness against shocks were not currently threatened, referring to the pandemic-related and temporary nature of the extraordinary activity in the housing market, as well as the moderate credit growth compared to the years leading up to the financial crisis in 2008. However, the government recognizes the need for vigilantly monitoring the risks stemming from the housing market.

The recent increase in inflation and higher nominal interest rates have diverse effects on the financial sector. A higher interest rate level will loosen the squeeze on banks' interest rate margins and strengthen profitability in the banking sector. On the other hand, investors face significant losses on financial assets and uncertainty is high. A downturn in the property market may significantly affect the business cycle and impose losses in the financial sector. However, Danish credit institutions are much better capitalized today than before the financial crisis.

Preventing the use of the financial system for money laundering and terrorist financing is of great importance for the government. Strengthening AML/CFT frameworks is highly prioritized, as evident in the progress in the implementation of the FATF recommendations. The Danish government is working internationally to strengthen cross-border cooperation between authorities in the fight against money laundering and terror financing, including through the joint Nordic-Baltic engagement with the IMF. Furthermore, the government has actively supported the European Commission's proposals for an Anti-Money Laundering Authority.

Productivity and structural policies

Wide-ranging reforms – of retirement and early retirement rules, the labor market, and taxes – have contributed significantly to increase the labor supply over the last decades. This includes the recent reform agreement "Denmark Can Do More I", which is estimated to increase potential GDP by around 0.7 percent in 2030 through increased labor supply and productivity gains.

With the government's policy proposal "Denmark Can Do More II", the focus is on reducing Danish dependence on Russian gas and accelerating the green transition. This includes through phasing out natural gas for heating, expanding renewable energy from wind and solar, and a green tax reform with higher and more uniform taxation of CO2. Furthermore, the government has an ambition to entirely phase out the use of natural gas by 2030, such that Danish gas usage will be fully covered by biogas and other renewable energy gases in 2030. The green tax reform implies a tax on carbon at 100 euro/tCO2 for sectors not covered by the EU Emissions Trading Scheme (ETS), 150 euro/tCO2 in total (incl. ETS price) for sectors covered and 113 euro/tCO2 for mineralogical processes where risks of leakage are higher. The tax will be phased in gradually from 2025-30 and will be combined with targeted support for the green transition of firms.

The authorities agree with staff that there is a need to step up investments, especially in the green transition, which in Denmark is mainly a question of private sector investments.

In 2020, the Danish climate law was passed with the core aim of reducing emissions in Denmark by 70 percent relative to 1990 levels. Since the current government entered office in 2019, the emission reduction shortfall has been halved. Further, with the government's carbon tax proposal and policies in the "Denmark Can Do More II" proposal, plans for more than two thirds of the shortfall have been put forth.

External Sector Assessment and current account analysis

The Danish authorities welcome staff's work on understanding the Danish current account surplus, which has been substantial for a number of years. A current account surplus is not a policy objective per se, but rather the result of individual decisions by households and firms. While the surplus partially reflects savings associated with the build-up of labor market pensions, the authorities take note of the finding that firms, and a small group of multinationals in particular, play a key role in driving the surplus. To some extent, the surplus may also reflect deleveraging among households with high levels of debt and a continued focus on the long-run sustainability of public finances. Importantly, while policies aimed at boosting investment could reduce the current account surplus, the surplus does not appear to reflect underlying distortions to the economy. In any case, potential policies would need to take as given the central parity of the krone vis-à-vis the euro, which is an integral part of the framework for economic policy in a Danish context.