Creditreform ⊆ Rating

Rating Object	Rating Information	
KINGDOM OF DENMARK	Assigned Ratings/Outlook: AAA /stable	Type: Monitoring, Unsolicited with participation
Long-term sovereign rating Foreign currency senior unsecured long-term debt Local currency senior unsecured long-term debt	Initial Rating Publication Date: Rating Renewal: Rating Methodologies:	28-04-2017 01-09-2023 "Sovereign Ratings" "Rating Criteria and Definitions"

Rating Action

Neuss, 01 September 2023

Creditreform Rating has affirmed the unsolicited long-term sovereign rating of "AAA" for the Kingdom of Denmark. Creditreform Rating has also affirmed Denmark's unsolicited ratings for foreign and local currency senior unsecured long-term debt of "AAA". The outlook remains stable.

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Key Rating Drivers

- Prosperous, diversified and highly productive economy, which has proved resilient to the
 recent series of shocks—thanks in part to its high value-added pharmaceutical industry—
 and featuring a favorable business environment as well as advanced levels of innovation
 and digitalization; our expectations for this year and next are for continued, albeit somewhat lower growth
- 2. Solid medium-term growth perspectives underpinned by Denmark's very high degree of competitiveness, high productivity and robust public investment, as well as its well-performing labor market; high household debt amid rising interest rates merit further attention, whereas downside risks related to energy security appear limited, partly due to the imminent reopening of the large Tyra gas field
- 3. Exceptionally high institutional quality and a very strong fiscal and monetary policy framework, as reflected in world-leading scores on worldwide governance indicators; significant benefits from EU membership; following last November's snap election, a bipartisan government has been formed, providing confidence for stability-oriented and consensus-seeking policymaking, which should facilitate the continued and forward-looking implementation of structural reforms
- 4. Very remote medium-term fiscal risks, mirrored by sound public finances and a very low public debt ratio, providing substantial fiscal scope to address structural challenges going forward; we expect the sovereign's public debt ratio to move broadly around current levels over the medium term, and debt affordability to remain high despite rising interest costs; we will continue to monitor developments in the housing market and their implications for the stability of Denmark's large financial sector
- 5. Extraordinarily high current account surplus in 2022, inflated by one-off effects associated with the spike in shipping freight rates, adding to existing substantial external buffers; we

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expect the current account balance to remain in solidly positive territory over the medium term, and the highly positive net international investment position (NIIP) to mitigate external risks stemming from the small size and high degree of openness of the economy

Reasons for the Rating Decision and Latest Developments¹

Macroeconomic Performance

Our credit assessment reflects the sovereign's exceptionally strong macroeconomic profile, with very high levels of per capita income and productivity, robust growth in times of global economic, social, and political upheaval, and a well-diversified economy representing its key strengths. Additionally, the sovereign boasts a welcoming business environment, while being highly innovative and digitally well-advanced. A flexible and resilient labor market with very strong employment complements the overall excellent macroeconomic conditions. Risks relate to the still very high private sector debt, in particular with a view to households. We will therefore continue to monitor potential macro-financial risks stemming from house price and interest rate developments. Energy security risks are mitigated by the expected reopening of the Tyra gas field at the end of this year.

Following rapid economic growth in 2021, economic activity expanded by a strong 2.7% in 2022, suggesting that the Danish economy has so far weathered the external shocks from the pandemic and the energy crisis very well. While output growth came in slightly lower than in the euro area as a whole (2022: 3.4%), Denmark clearly outpaced the euro area with regard to the five-year average (2018-22: 2.1% vs. 1.3%).

Fueled by a drastic increase in transport services, net exports were the main driver of economic expansion last year, contributing 2.8 p.p. Moreover, gross fixed capital formation (+0.7 p.p.) and the build-up of inventories (+ 0.5 p.p.) had a positive impact on the growth of real economic activity. On the other hand, soaring inflation eroded real disposable income, so that private consumption made a negative contribution of 0.7 p.p. to real GDP growth. Public consumption added another -0.7 p.p.

We note that the positive contribution of fixed investment to real GDP growth in 2022 was almost entirely due to the purchase of a patent. More specifically, gross fixed capital formation added 2.9 p.p. to q-o-q growth in Q4-22, of which 2.8 p.p. was linked to intellectual property investment. As a result, this year's first quarter saw a significantly negative contribution by fixed investment to real GDP growth (-3.5 p.p.). Overall, real economic activity expanded by 0.6% compared with the previous quarter, mainly driven by net exports (+3.1 p.p.) and private consumption (+0.3 p.p.). According to a flash estimate by Statistics Denmark, GDP grew by 0.2% in the second quarter of 2023, with the pharmaceutical industry and the public sector being key growth drivers, whereas maritime transport has slowed down economic expansion.

We expect private consumption to benefit from easing inflation, significant precautionary savings, the government's ongoing fiscal support measures and continued wage growth. Against the backdrop of moderating energy prices, headline HICP inflation fell markedly to 2.4% this June from an interim high of 11.4% last October, well below the euro area level (June: 6.4%). Core

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¹ This rating update takes into account information available until 25 August 2023.

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inflation (excluding energy, food, alcohol and tobacco) rose slightly to 4.7% in June, but also remains significantly below the corresponding euro area reading of 6.4%. Whilst recent collective wage agreements, e.g., in the manufacturing sector or between Finansforbundet and the Danish Employers' Association for the Financial Sector, hint at continued wage growth, higher wages in tandem with fiscal aid should bolster real disposable income and increasingly support household spending as price pressures abate.

Furthermore, Danish households can draw on a substantial amount of precautionary savings, as reflected in a savings rate of 15.9% in Q1-23. After consumers reined in spending last year, we think a larger share of household disposable income will be devoted to consumption this year. In this vein, consumer confidence has vastly improved over recent months, climbing to levels last seen in early 2022.

While we expect the Danish labor market to remain strong and thus continue to buttress consumption, it is nevertheless expected to slow down, with a somewhat more pronounced turnaround in certain industries such as construction. At 81.0% in Q1-23, the labor participation rate continued its upward trend and was well above the EU-27 level (75.0%). Employment increased throughout 2022 and in the first quarter of this year, underlining the resilience of the Danish labor market. Corroborating the favorable labor market conditions, Denmark performed strongly across all dimensions of the EU Social Scoreboard.

At the same time, the monthly unemployment rate has ticked up after trending downward since mid-2020, reaching 4.9% in June 2023, up from 4.3% a year before. Employment growth has decelerated over the last four quarters, and the job vacancy rate fell to 2.9% in Q1-23 from 3.6% a year earlier, although it remains well above the pre-pandemic levels (1.9%). Hence, we believe that unemployment will rise only moderately in the near term, as the still relatively tight labor market with significant, albeit diminishing, labor shortages will encourage employers to hoard labor for the time being.

The Danish government moves forward in further strengthening the labor market, inter alia, via the abolition of the public holiday 'Store Bededag', which was legislated this February and will take effect in 2024. We note that estimates by the Danish Economic Council as well as by IMF staff do not point to significant positive effects on labor supply in the medium to longer term. Furthermore, the retirement age in Denmark is indexed to life expectancy, with the next adjustment expected in 2025, which should further increase the labor participation rate of older workers. In any case, structural employment is likely to remain strong, as Danish authorities envisaged to raise it by 45,000 FTE by 2030, and also reflecting attractive working conditions and easy access for foreign workers.

Fixed investment will, in our view, benefit from public spending plans going forward, particularly in light of EU funding under NGEU. Concerning the Recovery and Resilience Facility (RRF), the European Commission (EC) disbursed a first tranche of EUR 301mm in April this year, mirroring Denmark's fulfilment of 25 milestones and targets, including successfully implemented investments related to the green transition. In order to accelerate the transition to a green economy and diversify its dependence on fossil fuels, Denmark submitted a request to add a REPowerEU chapter to its RRP in late May. A second RRF payment request is scheduled for the end of 2023.

Despite the positive impact of NGEU and planned public investments of 3.4% of GDP and 3.5% of GDP in 2023 and 2024 (Convergence Program 2023, CP23), we expect overall investment to

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contribute negatively to GDP growth this year and next. As mentioned above, the patent-induced effect on gross fixed capital formation was fully reversed in the first quarter of this year, and related base effects will be felt in 2023 as a whole. Higher funding costs will further dampen private investment, driven by Danmarks Nationalbank's (DN) monetary policy tightening. In particular, housing investment should decline significantly in 2023/24 as a result of falling house prices and rising interest rates.

Net exports should have a positive impact on real GDP growth in 2023 and, to a somewhat lesser extent, in 2024. However, this year's positive contribution is likely to come from lower imports rather than strong export performance. External demand will weaken in line with slower global GDP growth, but the impact is expected to be limited thanks to the relatively low share of cyclical goods in Denmark's export basket. The restart of the Tyra gas field at the end of 2023, which could make Denmark a net exporter of gas, should stabilize net external trade next year. Export expectations for the third quarter have improved significantly compared with the second quarter.

The reopening of Tyra should reduce the sovereign's dependence on energy imports and, together with the Baltic pipeline, which became fully operational last November, will contribute significantly to the diversification of Denmark's energy supply. Trade relations with Russia were relatively limited before the onset of the Russian war against Ukraine, and imports from Russia have been further restricted since then. In the first half of 2023, Russian imports accounted for 0.4% of total Danish imports (first half of 2022: 1.0%).

On the whole, we expect real economic growth to slow to 1.4% in 2023 and to remain stable at 1.4% in 2024 as domestic demand strengthens amidst a weaker growth contribution from net external trade. Thus, we project that Danish economic growth will outpace that of the euro area, which we forecast to grow by 0.9% and 1.1% in 2023 and 2024, respectively (see Creditreform Economic Briefs, August 2023).

Medium-term growth perspectives for the Danish economy remain favorable. Denmark has maintained its extremely high degree of global competitiveness, and the proactive approach of the Danish authorities ensures that Denmark remains an attractive location for businesses (see below). Its competitive edge is reflected in its renewed top position in the IMD World Competitiveness Ranking 2023. Based on the pillars 'Infrastrucure', 'Institutions', and 'Human capital and research', Denmark has also achieved a very strong 10th place in the UN's Global Innovation Index 2022. According to the EC's European Innovation Scoreboard 2022, Denmark retained its status as an innovation leader, ranking second. While awaiting the updated version for 2023, we point out that Denmark is the second-best performing economy in the Digital Economy and Society Index 2022, indicating its well-advanced stage in terms of digitalization.

Also highlighting Denmark's exceptional competitiveness, its global services export market share climbed by a remarkable 0.31 p.p. to 1.91% in 2022, while its global export market share of goods and services increased from 0.85% in 2021 to 0.90% in 2022. While its export and services shares are thus both well above their respective pre-pandemic levels, the jump in the services share was partly due to exceptionally high shipping freight rates last year.

Tying in on cost competitiveness aspects, Denmark's nominal labor productivity per person and per hour worked totaled 122.7% and 141.0% in 2022, respectively, both among the highest readings in the EU-27. Averaging 10.8% in 2013-22, real labor productivity per person comfortably

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surpassed the corresponding values of the EU and main trading partners. In light of these developments, Denmark's GDP per capita once again experienced vigorous growth, posting at an estimated USD 70,924 in 2022 (PPP terms, IMF data), thereby exceeding the levels of AAA-rated <u>Germany</u> and the <u>Netherlands</u>.

According to EC estimates, potential growth will amount to 1.9% in 2023 and 1.6% in 2024, above the euro area level for both years (AMECO data). In this context, we highlight that Denmark's gross domestic expenditure on R&D (2.81% of GDP in 2021) is among the highest in the EU, which should prove conducive to underlying growth further afield. Similarly, potential growth should be fostered by relatively high public investment. Averaging 3.5% of GDP in 2013-22, Denmark's public investment stood above the average EU level of 3.0% over the same period.

Downside risks to medium-term growth prospects pertain to Denmark's very high level of private sector debt amid rising interest rates, potentially entailing adverse spillover effects on the banking sector and financial stability more generally (see below). While we note that households are deleveraging their balance sheets, Danish households remain among the most indebted in Europe, coming in at 181.0% of disposable income in Q1-23 (Q1-22: 209.2%). Likewise, non-financial corporate debt declined year-on-year, but remained one of the highest in the EU at 102.6% of GDP as of Q1-23.

Given the ongoing monetary policy tightening cycle, bank lending to NFCs and households has weakened significantly over the past year, and some households may find it difficult to service their debt, especially in the lower income deciles. DN raised its key policy rates aggressively in 2022 and 2023, mirroring the ECB's monetary policy. More recently, DN hiked the current-account rate, the rate of interest on certificates of deposit, the lending rate, and the discount rate by a further 25bp in July. The lending rate now stands at 3.50%. We expect the ECB to hike key policy rates by another 25bp this year and DN to follow suit. In our view, a rate cut is unlikely to take place before the second half of 2024. In an effort to counter ongoing appreciation pressures, DN intervened in the FX market several times during our last review. DN purchased DKK 54.8bn of foreign exchange in 2022, and made a net purchase of foreign exchanges of DKK 13.2bn in January this year.

Institutional Structure

The Kingdom of Denmark's extraordinarily high institutional quality remains a key factor in our credit assessment and is underscored by its consistently outstanding performance as regards the World Bank's Worldwide Governance Indicators (WGIs) and the exemplary quality and efficiency of its justice system, as repeatedly testified to by the EC's annual Rule of Law reports. Benefits related to Denmark's EU membership add to this, including access to the single market and EU financing. Strong and credible fiscal and monetary policy frameworks, with the latter shaped by the krone's peg to the euro, round out the extremely positive institutional profile. Following the early election in 2022, a new government coalition representing a broad political spectrum, led by the former prime minister, was formed swiftly, backing our expectation of a continuation of consensus-seeking and coherent policymaking, which should be conducive to advancing the twin transition and working towards Denmark's ambitious climate targets.

The snap election held on 1 November 2022 resulted in the governing Social Democrats becoming the strongest party (50 seats out of 179 in the Folketing). The liberal Venstre became the

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second-strongest force with 23 seats. With the Moderates (16 seats) and the Denmark Democrats (14 seats), two newly created parties entered the Folketing, which now includes representatives of 12 parties, pointing to a more fragmented political landscape.

Former PM Frederiksen remains at the helm of the new alliance, which was sworn in in December 2022 and consists of her Social Democrats along with Venstre and the Moderates, thus covering a wide range of political views. Notwithstanding potentially more challenging policymaking against this backdrop, a long-standing track-record of consensus-seeking and coherent policymaking backs our expectations of a continued high level of policy predictability.

Denmark's exceptionally strong institutional features are reflected in consistent top-ten rankings in the four WGIs that we consider most important in assessing a sovereign's institutional quality. In fact, Denmark was repeatedly ranked first among all economies considered in the World Bank's rankings for the perceived extent to which public power is exercised for private gain ('control of corruption', out of 209). While awaiting the release of the latest annual set of WGIs this September, we also highlight that in the latest vintage, referring to the base year 2021, Denmark's ranks improved by two places in each of the other three pillars.

More specifically, regarding the perception of freedom of expression, freedom of association and free media, as well as the extent to which citizens participate in the selection of the government ('voice and accountability'), Denmark moved up from sixth to fourth (out of 208). In terms of the perceived quality of policy formulation and implementation ('government effectiveness') and the perceived quality of the judiciary ('rule of law'), Denmark climbed to the 3rd rank (out of 209), respectively.

The Danish authorities continue to display a high degree of responsiveness to structural challenges at hand. In the past, Denmark has presented initiatives such as 'Denmark can do more' (August 2021) and 'Denmark can do more II' (April 2022). The latest plan 'Denmark can do more III' (September 2022) focuses on welfare and education. Key reforms include the reduction of bureaucracy and the introduction of 1-year master's programs with the aim of creating more freedom at the municipality level and improving the quality of education.

Focusing on the quality of Denmark's judicial system, the EC's latest Rule of Law Report (Jul-23) continues to echo the very high level of perceived independence of the judiciary and its standard-setting role in the combat of corruption, while also mentioning some capacity issues in the sector, both with regard to human and financial resources. That said, the report also notes some progress in this respect, as well as in a multiannual IT project to promote the use of digital tools for processing criminal and probate cases.

Ongoing efforts to strengthen the AML/CFT framework underscore the government's firm commitment to ensuring good governance. As a case in point, risk-based supervision of financial institutions has been intensified against the backdrop of significant cross-border financial flows, not least in connection with an international money laundering case involving Danske Bank and its Estonian unit in recent years, for which the bank was ultimately fined in December 2022. The implementation of the five-pillar AML/CFT strategy, including cryptocurrencies and gambling, led by the Ministry of Justice and involving the Financial Supervisory Authority, the Bar Council and the Danish Business Authority, is underway and expected to run until 2025.

Corroborating its status as one of Europe's leaders in greening the economy, Denmark is considered one of the top performers in the 2022 Eco-Innovation index. In addition, its share of energy from renewable sources amounted to 34.6% in 2021, representing the fifth-highest

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among the EU-27 countries. That said, in terms of greenhouse gas emissions per capita, Denmark was roughly on par with the EU average, suggesting some room for improvement compared to the respective leaders.

The country's ambitious goal to reduce greenhouse gas emissions by 70% from 1990 levels by 2030, and the allocation of 59% of RRP funds to climate objectives, can be seen as evidence for Denmark's strong commitment to becoming a carbon neutral economy as quickly as possible. The target for climate neutrality has been brought forward to 2045, while a 110% reduction in carbon emissions from 1990 levels has been set as a new target for 2050.

A successful implementation of the Green Tax Reform may prove to be a cornerstone in reducing emissions. Phase 2 of the reform, scheduled to start in 2025, is to focus on emissions from the industrial sector. Key elements of the reform include harmonized carbon pricing and investment in carbon capture and storage technologies.

Fiscal Sustainability

Denmark's track record of sound public finances along with its moderate government debt level continue to support the sovereign's creditworthiness. The fact that Denmark has managed to maintain a budget surplus throughout the recent period of successive crises, boasting the highest surplus among the EU economies in 2022, underscores its fiscal strength. We expect fiscal metrics to remain favorable over the medium term, continuing to provide significant shock-absorbing capacity and ample scope to tackle structural challenges to the Danish economy. The Danish banking sector remains sound, and the recent activation of macroprudential measures aimed at bolstering capitalization levels should enhance buffers against risks surrounding mortgage lending and the cooling housing market.

Despite the headwinds linked to the geopolitical shock, Denmark's public finances ultimately outperformed our expectations, with the general government balance displaying a surplus of 3.3% of GDP in 2022 (2021: 3.6% of GDP, Eurostat), representing the highest reading among the EU member states. The outturn is also significantly higher than the five-year average in 2017-21, which stood at 2.1% of GDP, notwithstanding the difficult circumstances presented by the pandemic.

Overall, total general government revenue decreased by 0.2% in 2022. Taking a closer look at the underlying movements reveals diverging developments. While receipts from VAT and taxes on production and imports rose by 6.0% and 2.6%, respectively, current taxes on income, wealth, etc. fell by 3.9%. Thanks to an additional marked increase in property income by 24.8%, the impact of lower current taxes on income and wealth was partly offset. The pension yield tax intake, which tends to be rather volatile, was comparatively low in 2022 (0.4% of GDP).

The decline of total general government outlays was slightly stronger than that of total revenue last year, amounting to 0.4%. This was mainly due to the reduction in subsidies, which fell by 37.6% due to the phasing out of pandemic-induced measures. At the same time, public wages and final consumption expenditure saw increases (+3.0% and +1.2%). Interest payments mounted by 46.1%, while remaining at a very low levels in terms of GDP and total revenue (0.7% and 1.5%), respectively, underscoring that debt remains highly affordable despite the higher interest rate environment.

Drawing on recent budget execution data for the current year, total revenue declined by 0.6% y-o-y in Q1-23, mainly due to lower taxes on production and imports (-2.7%) and current taxes

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on income and wealth (-0.3%). On the other hand, current and capital expenditure remained virtually flat (+0.1% y-o-y), suggesting that public finances are heading for a lower surplus this year.

Indeed, energy support measures have been maintained throughout 2023. Child and youth benefits were temporarily raised and disbursed in January 2023. Moreover, the electricity tax was reduced to the EU minimum level during the first half of 2023. Additionally, the so-called Market Revenue Cap Act caps revenues from electricity produced between December 2022 and June 2023.

In its 2023 budget, delayed due to the election and adopted by parliament in May-23, the government envisages further measures to soften the impact of high prices on lower-income groups. At an estimated 0.3% of GDP (EC intelligence), their budgetary impact is estimated to be larger this year than in 2022, but still comparatively moderate from a European angle, judging by cross-country data provided by Bruegel and the IMF. With regard to 2024, the respective finance bill is to be announced in parliament this month

Taking into account the developments elaborated above and assuming robust GDP growth as well as abating inflation, we currently project that the general government surplus will narrow to roughly 1.8% of GDP in 2023 and 0.9% of GDP in 2024. We highlight that our forecasts remain subject to elevated uncertainty, not least as they have to be seen in the context of the current geopolitical conflict.

The medium term fiscal outlook remains positive overall, also backed by presumably solid medium-term growth, leading us to expect continued sound public finances. We note that fiscal leeway towards 2030 seems somewhat larger than previously envisaged, as pointed out by the Danish Ministry of Finance, implying larger headroom to tackle structural issues in the healthcare system and to invest more heavily in defense and the green transition. Higher estimated and projected structural employment, given enacted and proposed policy measures as well as the rather robust growth performance, would partly explain this (see also above).

According to the CP23, the Folketing voted for the abolition of the public holiday 'Store Bededag' this February, inter alia to finance higher defense spending, which is to be raised permanently to 2.0% of GDP by 2033. According to the Convergence Program 2023, achieving the targeted defense ratio will require an increase in defense spending of approx. DKK 20bn by 2030.

Meanwhile, general government debt diminished from 36.7% of GDP in 2021 to 30.1% of GDP in 2022, thanks to the combination of the high budget surplus and the denominator effect arising from strong nominal GDP growth. Drawing on Eurostat data, Denmark's fiscal position improved further, with a debt-to-GDP ratio of 29.4% as of Q1-23 (preliminary), which remains one of the lowest values among the EU-27 members. As we project real GDP growth to slow compared to 2022 and the headline surplus to shrink, we expect the debt-to-GDP ratio to edge down to 30.0% in 2023. In 2024, the ratio should continue to decrease somewhat, to 28.8%.

Fiscal sustainability risks remain limited, in our view, and are mitigated by Denmark's very strong track record of fiscal discipline, sound debt management and high debt affordability. Denmark continues to exhibit one of the EU's lowest net financial debt ratios, posting at 2.9% of GDP in Q1-23. As mentioned above, Denmark's interest-to-revenue remains relatively low by European comparison. Moreover, the pass-through effect of rising interest rates to total interest costs at the central government level tends to be slow at this stage due to a high average fixed interest rate period of central government debt.

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Apart from that, we think that the central bank's hiking cycle is close to its peak, with DN likely to replicate a further hike by 25bp, which we assume the ECB will undertake this year (see above). While the yield on 10-year government bonds rose sharply in 2022, there is now a tendency towards stabilization, with the respective yield standing at 2.84% as of 4 August 2023 (weekly data). The corresponding Bund spread has hovered around 30bp in recent months.

Contingent liabilities (CP23 data) remain elevated and warrant further monitoring, with public guarantees declining from 13.9% of GDP in 2021 to a still relatively high 12.4% of GDP in 2022, of which 1.0% were linked to the financial sector. Tying in with contingent liability risks, rising interest rates have begun to take their toll on the housing market. According to Eurostat data, house prices dropped by 6.2% y-o-y in Q1-23 (Q1-22: +4.2%). OECD affordability indicators, such as the price-to-income and price-to-rent ratios, mirror this development and have fallen over the past year. We note that a new property tax system, which includes the removal of the cap on recurrent property taxes, is to enter into force from 1 January 2024, aiming to realign housing taxes with property values, thus enhancing effectiveness of price signals.

In light of the rising borrowing costs, we will continue to monitor any risks to household debt servicing, given that Denmark features one of the highest shares of mortgage loans in total outstanding loans to the private sector among EU members (Jun-23: 57.6%). However, outstanding mortgages to Danish households have declined recently, alongside slower transaction activity on the housing market, continuing to weigh on house price developments. As of Jun-23, outstanding credit to private households for house purchases stood 1.9% below its level a year earlier (Jun-22: +2.2%). While some households have made use of the option to convert their fixed-rate mortgages into variable-rate loans, the Danish Systemic Risk Council highlights vulnerabilities to financing costs, which could add to pressure from retreating house prices for highly indebted households. Danish house prices fell by 6.2% y-o-y in Q1-23, having posted negative annual rates of change since Q3-22 (Eurostat data).

At the same time, the Danish banking sector continues to give a sound impression, judging by metrics capturing asset quality, capitalization and profitability, with relevant metrics even improving over the past year (EBA data). As of Q1-23, the NPL ratio stood well below the EU average reading, having declined to 1.3% in (EU: 1.8%), from 1.5% a year earlier. Similarly, the CET1-ratio points to a more comfortable buffer compared to the EU-average, posting at 18.2% (EU: 15.8%). Against the backdrop of tightening interest rates, banks' profitability has also increased, moving in line with the EU level in terms of return on assets more recently.

Drawing on the results of the EBA's EU-wide banking stress test (Jul-23), the large Danish financial institutions could see their capital ratios significantly reduced in an adverse scenario, with two of the four banks possibly having to revert to their capital conservation buffer. In the meantime, the CCyB was further increased from 2% to 2.5%, effective from the end of March 2023, supporting banks' shock-absorbing capacity. As a side note, and in addition to financial stability aspects, DN fell victim to a cyber-attack at the beginning of the year, highlighting required efforts to strengthen cyber resilience.

Foreign Exposure

We continue to assess Denmark's external position as credit positive, underpinned by a high positive NIIP and persistently large current account surpluses, whilst its diversified economy remains highly competitive. The current account surplus and the NIIP are likely to remain high this year and over the

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medium term, with Denmark likely to become a net exporter of gas, offsetting to some extent the surplus-reducing impact of import demand arising from growing investment activity.

After traditionally running large current account surpluses (2012-2021: 8.0% of GDP), Denmark's current account balance soared to a record-high 13.7% of GDP in 2022, representing by far the largest surplus among the EU-27 countries. The drastic increase (2021: 9.2% of GDP) came largely on the back of surging freight rates, which boosted revenues from the export of transport services. The surplus in the services balance increased by 5.1 p.p. overall, whereas the positive balances in goods trade and primary income narrowed slightly.

As freight rates have further retreated, we expect the current account surplus to decline in 2023 as a whole, but to remain in double-digits, bearing in mind the stabilization of commodity prices and that the reopening of the Tyra gas field will likely make Denmark a net exporter of energy again, leading to a further improvement in the goods balance, in particular in 2024. Looking ahead beyond next year, we expect the current account balance to remain well within positive territory, but it could narrow due to imports related to the implementation of investments induced by the twin transition.

Recurring current account surpluses should strengthen Denmark's position as a large net external creditor over the medium term. That said, Denmark's NIIP fell by more than 12 p.p. to 62.8% of GDP in 2022, mainly due to a relatively large swing in portfolio investment partly driven by valuation effects. According to latest available data (Q1-23), the NIIP contracted further to a still very high 59.9% of GDP.

Rating Outlook and Sensitivity

Our rating outlook for the Kingdom of Denmark is stable. The stable outlook reflects our view that downside risks to the sovereign's credit rating are balanced by Denmark's strong economic fundamentals, which helped it to successfully weather the pandemic and geopolitical shocks, its excellent institutional set-up, as well as its ample fiscal and external buffers.

We could lower our rating or outlook if economic performance deteriorates substantially over a sustained period, together with a sharply upward sloping debt trend. An escalation of the geopolitical conflict, or a drastic correction on the housing market accompanied by a materialization of contingent liabilities could also lead to a negative rating action.

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Analysts

Primary Analyst
Lucas Leon Spintig
Analyst | Public Finance
L.Spintig@creditreform-rating.de
+49 2131 109 3048

Chairperson
Dr Benjamin Mohr
Head of Public Finance
b.mohr@creditreform-rating.de
+49 2131 109 5172

Ratings*

Long-term sovereign rating AAA /stable

Foreign currency senior unsecured long-term debt AAA /stable

Local currency senior unsecured long-term debt

AAA /stable

*) Unsolicited

ESG Factors

Creditreform Rating has signed the ESG in credit risk and ratings statement formulated within the framework of the UN Principles for Responsible Investment (UN PRI). The rating agency is thus committed to taking environmental and social factors as well as aspects of corporate governance into account in a targeted manner when assessing creditworthiness.

While there is no universal and commonly agreed typology or definition of environment, social, and governance (ESG) criteria, Creditreform Rating views ESG factors as an essential yardstick for assessing the sustainability of a state. Creditreform Rating thus takes account of ESG factors in its decision-making process before arriving at a sovereign credit rating. In the following, we explain how and to what degree any of the key drivers behind the credit rating or the related outlook is associated with what we understand to be an ESG factor, and outline why these ESG factors were material to the credit rating or rating outlook.

For further information on the conceptual approach pertaining to ESG factors in public finance and the relevance of ESG factors to sovereign credit ratings and to Creditreform Rating credit ratings more generally, we refer to the basic documentation, which lays down key principles of the impact of ESG factors on credit ratings.

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ESG Factor Box



The governance dimension plays a pivotal role in forming our opinion on the creditworthiness of the sovereign. As the World Bank's Worldwide Governance Indicators Rule of Law, Government Effectiveness, Voice and Accountability, and Control of corruption have a material impact on Creditreform Rating's assessment of the sovereign's institutional set-up, which we regard as a key rating driver, we consider the ESG factors 'Judicial System and Property Rights', 'Quality of Public Services and Policies', 'Civil Liberties and Political Participation', and 'Integrity of Public Officials' as highly significant to the credit rating.

Since indicators relating to the assessment of an economy's competitive stance by e.g. the World Bank, the World Economic Forum, the European Commission, and IMD Business School and the World Intellectual Property Organization (UN) add further input to our rating or adjustments thereof, we judge the ESG factor 'Business Environment' as significant.

The social dimension plays an important role in forming our opinion on the creditworthiness of the sovereign. Labor market metrics constitute crucial goalposts in Creditreform Rating's considerations on macroeconomic performance of the sovereign, and we regard the ESG factor 'Labor' as significant to the credit rating or adjustments thereof.

While Covid-19 may exert adverse effects on several components in our ESG factor framework in the medium to long term, it has not been visible in the relevant metrics we consider in the context of ESG factors – though it has a significant bearing on public finances. To be sure, we will follow ESG dynamics closely in this regard.

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Economic Data

[in %, otherwise noted]	2017	2018	2019	2020	2021	2022	2023e
Macroeconomic Performance	·						
Real GDP growth	2.8	2.0	1.5	-2.4	6.8	2.7	1.4
GDP per capita (PPP, USD)	55,673	57,821	59,48	58,886	64,329	70,924	73,386
Credit to the private sector/GDP	172.3	173.8	177.0	178.3	170.1	157.4	n/a
Unemployment rate	5.8	5.1	5.0	5.6	5.1	4.5	n/a
Real unit labor costs (index 2015=100)	98.7	99.1	99.9	100.8	98.6	94.4	98.1
World Competitiveness Ranking (rank)	7	6	8	2	3	1	1
Life expectancy at birth (years)	81.1	81.0	81.5	81.6	81.5	n/a	n/a
Institutional Structure							
WGI Rule of Law (score)	1.8	1.8	1.9	1.8	1.9	n/a	n/a
WGI Control of Corruption (score)	2.2	2.2	2.2	2.3	2.4	n/a	n/a
WGI Voice and Accountability (score)	1.5	1.6	1.5	1.5	1.6	n/a	n/a
WGI Government Effectiveness (score)	1.8	1.8	1.9	1.9	2.0	n/a	n/a
HICP inflation rate, y-o-y change	1.1	0.7	0.7	0.3	1.9	8.5	4.2
GHG emissions (tons of CO2 equivalent p.c.)	9.1	9.0	8.3	7.5	7.7	n/a	n/a
Default history (years since default)	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Fiscal Sustainability							
Fiscal balance/GDP	1.8	0.8	4.1	0.2	3.6	3.3	1.8
General government gross debt/GDP	35.9	34.0	33.7	42.2	36.7	30.1	30.0
Interest/revenue	1.5	1.6	1.4	1.0	1.0	1.5	n/a
Debt/revenue	68.6	66.3	62.6	78.5	66.9	61.4	n/a
Total residual maturity of debt securities (years)	7.9	7.8	7.9	7.5	7.8	8.9	n/a
Foreign exposure							
Current account balance/GDP	8.0	7.3	8.5	8.1	9.2	13.7	n/a
International reserves/imports	80.9	69.0	68.1	74.1	68.3	76.1	n/a
NIIP/GDP	55.4	64.0	77.7	68.9	75.2	62.8	n/a
External debt/GDP	154.9	142.8	145.2	160.1	150.3	123.9	n/a

Sources: IMF, World Bank, Eurostat, AMECO, ECB, Statistics Denmark, own estimates

Appendix

Rating History

Event	Publication Date	Rating /Outlook
Initial Rating	28.04.2017	AAA /stable
Monitoring	30.03.2018	AAA /stable
Monitoring	29.03.2019	AAA /stable
Monitoring	27.03.2020	AAA /stable
Monitoring	25.09.2020	AAA /stable
Monitoring	17.09.2021	AAA /stable
Monitoring	16.09.2022	AAA /stable
Monitoring	01.09.2023	AAA /stable

Regulatory Requirements

In 2011 Creditreform Rating AG (CRAG) was registered within the European Union according to EU Regulation 1060/2009 (CRA-Regulation). Based on the registration Creditreform Rating AG is allowed to issue credit ratings within the EU and is bound to comply with the provisions of the CRA-Regulation. The rating was not endorsed by Creditreform Rating AG from a third country as defined in Article 4 (3) of the CRA-Regulation.

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This sovereign rating is an unsolicited credit rating. Danmarks Nationalbank provided additional information during the credit rating process. Creditreform Rating AG had no access to the accounts, representatives or other relevant internal documents for the rated entity or a related third party.

Unsolicited Credit Rating			
With Rated Entity or Related Third Party Participation	YES		
With Access to Internal Documents	NO		
With Access to Management	NO		

The rating was conducted on the basis of CRAG's <u>"Sovereign Ratings" methodology</u> (v1.2, July 2016) in conjunction with its basic document <u>"Rating Criteria and Definitions"</u> (v1.3, January 2018). CRAG ensures that methodologies, models and key rating assumptions for determining sovereign credit ratings are properly maintained, up-to-date, and subject to a comprehensive review on a periodic basis. A complete description of CRAG's rating methodologies and basic document "Rating Criteria and Definitions" is published on our <u>website</u>.

To prepare this credit rating, CRAG has used the following substantially material sources: International Monetary Fund, World Bank, Organization for Economic Co-operation and Development, Eurostat, European Commission, European Banking Authority, European Central Bank, World Economic Forum, IMD Business School, Danmarks Nationalbank, Statistics Denmark, Kingdom of Denmark (Ministry of Economic Affairs and the Interior, Ministry of Finance, Ministry of Health).

A Rating Committee was called consisting of highly qualified analysts of CRAG. The quality and extent of information available on the rated entity was considered satisfactory. The analysts and committee members declared that the rules of the Code of Conduct were complied with. No conflicts of interest were identified during the rating process that might influence the analyses and judgements of the rating analysts involved or any other natural person whose services are placed at the disposal or under the control of Creditreform Rating AG and who are directly involved in credit rating activities or approving credit ratings and rating outlooks. The analysts presented the results of the quantitative and qualitative analyses and provided the Committee with a recommendation for the rating decision. After the discussion of the relevant quantitative and qualitative risk factors, the Rating Committee arrived at a unanimous rating decision. The weighting of all risk factors is described in CRAG´s "Sovereign Ratings" methodology. The main arguments that were raised in the discussion are summarized in the "Reasons for the Rating Decision".

As regards the rating outlook, the time horizon is provided during which a change in the credit rating is expected. This information is available within the credit rating report. There are no other attributes and limitations of the credit rating or rating outlook other than displayed on the CRAG website. In the event of providing ancillary services to the rated entity, CRAG will disclose all ancillary services in the credit rating report.

The date at which the credit rating was released for distribution for the first time and when it was last updated including any rating outlooks is indicated clearly and prominently in the rating

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report; the first release is indicated as "initial rating"; other updates are indicated as an "update", "upgrade or downgrade", "not rated", "affirmed", "selective default" or "default".

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An explanatory statement of the meaning of each rating category and the definition of default are available in the credit rating methodologies disclosed on the website.

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Creditreform Rating AG

Europadamm 2-6 D - 41460 Neuss

Phone +49 (0) 2131 / 109-626 Fax +49 (0) 2131 / 109-627 E-Mail info@creditreform-rating.de Internet www.creditreform-rating.de

CEO: Dr. Michael Munsch Chairman of the Board: Michael Bruns HRB 10522, Amtsgericht Neuss