Creditreform Sovereign Rating

Creditreform Rating
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Rating Object	Rating Information	
KINGDOM OF DENMARK	Assigned Ratings/Outlook: **AAA /stable**	Type: Monitoring, unsolicited
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 29-03-2019 “Sovereign Ratings”

Rating Action

Neuss, 29 March 2019

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 is stable.

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Key Rating Drivers

1. Solid economic growth should remain in place, buttressed by healthy household spending and robust investment, while dragged down by increasing external head-winds
2. Denmark’s economy continues to display a very high degree of wealth and productivity, complemented by a flexible and well-performing labor market; high competitiveness not threatened, though sluggish labor productivity less aligned with wage developments more recently
3. Thanks to very forward-looking, consensus-based, and prudent economic policy-making, overheating economy avoided so far, despite rising capacity constraints; extraordinarily high quality of the sovereign’s institutional set-up; this year’s general elections no risk factor
4. Sound fiscal policies and strict fiscal framework translate into persistently strong fiscal metrics; government debt set to remain modest, catering for sufficient fiscal space to handle shocks potentially emanating from adverse housing market developments
5. Very strong external position mirrored by net international investment position; persistently large current account surpluses resulting from robust trade surpluses and investment income

Reasons for the Rating Decision

Our assessment of the Kingdom of Denmark’s creditworthiness continues to be backed by a strong macroeconomic performance profile. This is primarily reflected by a very high per capita income and solid and stable growth, as well as a resilient and flexible economy characterized by a well-performing labor market and a high degree of competitiveness,

although the exceptionally high indebtedness of the household sector leaves the economy somewhat exposed to macro-financial shocks.

Most recent data confirms that Denmark is one of the most productive economies in the EU-28, irrespective of whether nominal labor productivity is measured per person employed or hour worked. In 2017 the Danish economy stood 16.2 and 35.1% above the EU-28 level respectively. Denmark also remains among the wealthiest nations worldwide, as underscored by IMF data. However, with a per capita income estimated at USD 51,841 in 2018 (in PPP terms), Denmark continues to display a somewhat less dynamic GDP per capita growth than peer economies such as Germany, the Netherlands, and Sweden, where GDP p.c. posted at USD 52,897, 56,571 and 52,719 last year.

Despite being on a solid upswing, the Danish economy experienced a sharp slowdown in 2018, as real GDP growth almost halved from 2.3% in 2017 to a mere 1.2%. This corresponds to the lowest growth rate since 2013 and lies well below the annual average of 1.9% recorded between 2013 and 2017. What is more, total output has increased by less than in Germany (1.4%), the Netherlands (2.5%), and Sweden (2.3%), as well as in the euro area (1.8%). That being said, we deem Denmark's most recent growth performance as a transitory setback, and more importantly, we believe that last year's real GDP growth does not reflect the economy's underlying strength, being blurred by several one-offs. First and foremost, a large pharmaceutical patent sale has been attributed to the first quarter of 2017. According to its 28 February notification, Danmarks Statistik gauges that exports and production were thus lifted by 0.4 p.p. in 2017. Secondly, due to the warm and dry summer of 2018, agricultural output took a serious hit. Gross value added in agriculture, forestry and fishing declined by 11.2% in 2017-18 and the 2018 reading stood 2.1% below the 2013-17 average. Finally, we note that a large GDP revision occurred last November, resulting in significantly higher GDP growth outcomes for 2015-17. While not being a systematic issue, it nevertheless points to some challenges concerning estimating output expansion over the last quarters.

Driven by base effects related to the patent sale, but also due to extraordinarily large ship imports in the second quarter of 2018, output expansion was thus dragged down by net external trade, which subtracted 1.1 p.p. from real GDP growth, as export growth was flat at 0.3% (2017: 1.9%), significantly outpaced by import growth at 2.9%. Hence, Denmark's economic expansion was entirely driven by domestic demand, with gross fixed capital formation and private consumption each contributing 1.1 p.p. in 2018. Aided by low funding costs and the buoyant housing market, investment has continued to recover from its trough in 2010, increasing by 5.0% on the year, after 4.6% in 2017. While growth in investment in machinery and equipment (+7.4%) also appears to be distorted by ship imports (transport equipment +11.9%), investment in intellectual property remained near its all-time high at 5.3% of GDP (2016: 5.5%). High housing demand fed into rising residential construction investment, with investment in dwellings edging up by 5.1%. Total construction accounted for 10.4% of GDP in 2018, the highest level since 2008 (11.0%). Meanwhile, household spending has grown at a rate of more than 2% for the fourth consecutive year. Still, last year's 2.3% appears rather modest given the favorable economic backdrop. According to Eurostat data, the saving rate of Danish households has continued to trend upwards over

the recent quarters, standing at 12.9% in Q3-18 (Q3-15: 7.9%). Households benefited from increasing disposable incomes alongside persistent employment growth.

The well-performing labor market and Denmark's labor market flexibility in general are not only supportive to the sovereign's economic resilience, but also corroborate our view of Denmark's fundamental economic strength, in particular at times when uncertainty around GDP estimates arises. The quarterly average of the harmonized unemployment rate stood at 4.9% in Q4-18 (Q4-17: 5.4%), having dwindled to its lowest level since the last quarter in 2008, and posting well below the respective EU and euro area averages of 6.7 and 7.9%. Denmark's labor market performance in terms of unemployed workers is comparable to that of its peers, though the jobless rate in Germany (3.3%) and the Netherlands (3.6%) is somewhat lower. Quarterly unemployment was brought down by significant employment growth and a concurrent rise in the labor participation rate. In the third quarter of 2018, total employment (domestic concept, s.a., Eurostat) hit a new record high of 2.98m persons, surpassing the peak reached back in Q4-08, and expanding by an annual rate of 1.5% or more for nine consecutive quarters. Due to a determined reform effort targeted towards tapping hitherto unused labor force resources, employers were able to harness the labor market potential of elderly and foreign workers from outside the EU-28. According to detailed Eurostat LFS data, the employment ratio moved up by 5.1 and 6.8 p.p. to 60.0 and 71.4% between Q4-15 and Q4-18 on that count. Moreover, Denmark has one of the highest participation rates in the EU, which rose from 79.2% in Q3-17 to 79.4% in Q3-18, thus standing far above EA and EU averages (73.8 and 73.5%). Also, Denmark displays one of the best performances on the EU's social scoreboard, in particular regarding dynamic labor market indicators, and social protection and inclusion.

Looking forward, we expect that economic activity will expand by 1.6% this and next year. We believe that economic expansion will be buttressed mainly by domestic demand, while crosscurrents from the external side intensify. With the above-mentioned distorting effects on trade wearing off, export growth should pick up from the anemic level seen in 2018. At the same time, Danish exports in goods and services to its three main trading partners Germany, Sweden, and the UK already disappointed in 2018, and we assume that sluggish growth in the euro area and in Denmark's main trading partners is likely to weigh on exports. More generally, we assume external demand will gradually slacken going forward, reflecting the slowdown in global expansion and international trade.

Notwithstanding, we assess that the competitiveness of the Danish economy remains high. Denmark's export market share has been broadly stable over the last five years and, according to the latest edition of the World Economic Forum's Global Competitiveness Report, Denmark improved from rank 11 to 10 in 2017-18. In spite of the fact that the country trails behind peers such as Germany (rank 3) and the Netherlands (6), its economy appears well-prepared to meet a higher external demand and adapt to an ever-changing environment, exhibiting a top performance with regard to ICT adaption and its innovation ecosystem in general. Its business environment can be viewed as the best in its class, judging by the World Bank's Doing business ranking. As in the years before, Denmark stood at a remarkable third rank out of 190 economies, being the best European performer.

We think that the development of Denmark's real unit labor costs (ULC) requires close attention going forward, as tightening labor market conditions can be expected to push up wage growth. Denmark has sustained its competitiveness compared with its main trading partners and with the euro area over the medium term. Still, wages have begun to decouple from labor productivity more recently. Real ULC increased by 1.6% in 2018 (AMECO data), as a decline in Denmark's real labor productivity (-0.6%) was accompanied by a wage increase of 1.1%, approximated by real compensation per employee.

In our view, private consumption is likely to become the major determinant of economic growth going forward as employment growth is here to stay, providing for higher wage growth as labor markets tighten, eventually boosting Danish households' disposable incomes. Prospectively low inflation, favorable financing conditions, supportive fiscal measures (e.g. repayment of overcharged property taxes, see below), and sizable financial buffers also bode well for sustained private household spending. Additionally, rising housing prices bolster households' financial wealth.

To be sure, it will become increasingly difficult to attract qualified staffing going forward, given that competition for foreign workers will increase amid already stretched labor markets in central and eastern European economies. Survey-based data indicate tightening labor markets, as the share of companies citing labor as a factor limiting production has risen considerably over the last two years, especially in construction (Jan-19: 25.4%). Yet, we believe that the government's reforms aimed at increasing the labor force, which will see the retirement age gradually rise to 67 years by 2022 and the early retirement age to climb to 64 years by 2023, will successfully alleviate labor market pressures, catering for sustained employment gains.

Against the background of low interest rates and increasing capacity constraints, we expect economic growth to be fostered by robust investment activity, although base effects are likely to result in somewhat subdued investment growth this year. While capacity utilization has hovered around its long-term average (2000-18: 80.9) for some while now, it should presumably rise as labor shortages increase firms' investment needs. As regards overheating concerns, we note that capacity utilization in the industry sector is currently posting well below the levels seen during the mid-2000s (Q1-19: 81.4%). Furthermore, the housing market is set to aid residential investment, but should slow down in the outer years, as some signs of cooling off have become apparent more recently (see below).

Monetary policy is set to remain very accommodative, aiding investment and the housing market. While policy rates have remained unchanged since January 2016, with the spread between the CD rate of Danmarks Nationalbank (DN) and the ECB's deposit facility remaining stable at 0.25%, we expect a first rate-hike to occur not earlier than in the last quarter of 2019. Since monetary policy in Denmark is essentially determined by the ECB's monetary policy, the probability that the decision of a first hike in the deposit rate will be pushed back into 2020 has increased, as we believe that the ECB will not start raising interest rates before the second quarter 2020. On 7 March, the ECB announced that it expects ECB key interest rates to remain at their present levels at least through the end of 2019.

Regardless of its rather narrow objective, we hold DN as highly credible and transparent, being supportive to the stability of the Danish krone (DKK), which has weakened somewhat against the euro in the past year but stayed well within the exchange rate band. Major FX interventions from DN have been scarce over the last two years. At the beginning of this year, DN sold DKK 1.9bn on the heels of a DKK 11.6bn sale last December. Official reserve assets totaled DKK 459.5bn in Jan-19, slightly down from DKK 465.9bn a year before.

The sovereign's AAA ratings also reflect the extraordinarily and persistently high quality of its institutional set-up. According to our preferred measures of institutional quality, the World Bank's Worldwide Governance Indicators (WGI), Denmark continues to stand among the leading sovereigns on all governance dimensions we consider, outperforming EU and euro area averages by far. Concerning the quality of policy formulation and implementation, the World Bank is currently ranking Denmark at 10 out of 209 economies worldwide, while freedom of expression and association are also assessed to meet the highest standards (rank 8/209) – thus achieving comparable results to peers Germany (13 and 10), the Netherlands (8 and 3), and Sweden (9 and 2). The sovereign fares even better as regards the WGIs 'rule of law' and 'control of corruption', being ranked at sixth and fourth out of 209 economies respectively.

According to the European Commission, Danish authorities have tackled a remarkable 94% of all country-specific recommendations since the start of the European Semester in 2011. More than half of the addressed recommendations have reached the stage of substantial progress or full implementation. In the EC's multi-annual assessment, Denmark achieves the best result among all EU-28 members, which we regard as yet further proof of the sovereign's very forward-looking and highly prudent policy-making.

Accordingly, authorities have further forged ahead in their effort to improve labor market performance and education outcomes, although it is fair to say that Denmark can already be counted to the worldwide leading economies in this respect. Denmark was thus ranked fifth out of 140 economies in the sub-categories 'skills' and 'labor' of the WEF's global competitiveness indicator. In this vein, the government enacted measures to harmonize labor market rules across target groups, upgrade skills and qualifications of unemployed persons, and to make vocational education and training an attractive choice for the jobless. On 1 July 2019, an agreement will become effective which is geared toward simplifying the employment system and removing bureaucracy. Furthermore, the governing coalition has agreed on a primary and secondary school system reform, which includes additional hours in certain subjects, shorter school days, and measures to enhance the quality of supportive teaching. Likewise, Danish authorities have taken further action to enhance its already excellent business environment, such as the Technology Pact, the Science Strategy, and the Public Sector Reform (Sammenhængsreformen).

What is more, the government has been swiftly engaging in reforms targeted towards preventing money laundering and combating terrorism financing, triggered by the detection and the following investigation of substantial misconduct in the Estonian branch of Danske Bank. The bank is reported to have carried out suspicious transactions worth EUR 200bn in 2007-15. In the second half of 2018, policy-makers passed a comprehensive anti-money

laundering package and new legislation, which includes massively increased penalties, altered 'fit and proper' requirements, and amended financial sector legislation.

While the Estonian Financial Services Authority closed Danske's Estonian branch, Denmark's largest bank declared its withdrawal from the Baltic States and Russia. Meanwhile, EBA announced that it decided to investigate a possible breach of Union law by the Estonian and Danish financial supervisors in connection with money laundering activities. We note that we continue to closely monitor investigations linked with the Danske Bank case, as it may have negative repercussions on the perception of good governance more generally.

We view this year's general elections as no risk factor to Denmark's pro-active and prudent policy-making going forward, and expect that its consensus-based political culture will carry over into the next legislative term, supporting macroeconomic stability and fiscal sustainability. The current legislative term, during which Venstre, the Liberal Alliance, and DKF formed a minority government (53 seats), supported by DPP and Nunatta Qitornai (together 90/179 seats), is a case in point. Current polls see the left-wing bloc, led by the Social Democrats, in front (as of 22 March, 53.7%).

Danish public finances stand out as being in excellent shape, also contributing to our assessment of the sovereign's exceptionally low default risk. According to latest Statistics Denmark data, the general government headline surplus fell from 1.4% of GDP in 2017 to 0.5% of GDP last year. The favorable economic situation of private households as well as the booming housing market and labor market translated into solid growth in personal income taxes and taxes on wealth, property, etc., which rose by 3.4 and 2.2% in 2018 – the government's VAT intake also increased strongly by 3.9%. While revenue generated by corporate income taxes was down by 9.3%, the narrowing headline surplus was largely driven by the substantial decline in the generally volatile taxes on yields from the pension scheme, falling by more than 60% on the year, or approx. 0.9% of GDP.

Looking forward to 2019 and 2020, we expect the budget to move close to balance at 0.1% of GDP this year before shifting into deficit, recording a modest -0.3% of GDP in 2020. While robust economic growth and the favorable labor market performance is likely to generate solid PIT and VAT revenues, reimbursements of early retirement contributions, additional funds aimed at welfare services related to the elderly, health, and children, as well as corporate and consumption tax cuts, should weigh on the budget. Moreover, the postponed repayment of excessively collected property taxes and the reformed property valuation system will put a dent on the budget balance in 2020.

That said, we view Danish public finances as fundamentally sound, presumably benefiting from the reformed tax administration and safeguarded by the strict fiscal framework, with the structural balanced budget rule limiting the structural budget deficit to -0.5% GDP, and expenditure ceilings for all levels of government. The OECD judges the Danish framework to be one of the most restrictive fiscal rule sets among its members. According to government expectations, the budget is likely to remain in balance in structural terms, at -0.1% of GDP in 2019 and 2020 respectively. We note that the Economic Council (DØRS), which is

responsible for fiscal monitoring, has moved away from Copenhagen, which may have detrimental effects on attracting qualified staff and efficiency.

We expect EMU debt to remain modest, with a limited impact of government-financed social housing, catering for sufficient fiscal space to handle shocks. Last year, the government began to purchase government-guaranteed mortgage bonds in the amount of DKK 30bn or 1.4% of GDP. Up to Jan-19, central-government holdings of bonds financing social housing totaled around DKK 42bn or 6.7% of central government gross debt. DN expects the central government to have purchased bonds for approx. DKK 80bn (3.6% of 2018 GDP) by the end of 2019.

We assume that the new financing of social housing will not jeopardize public finances. General government debt has decreased to 35.2% of GDP in the third quarter of 2018, after standing at 36.1% of GDP a year before and well below the EU-28 average of 80.8% of GDP (Eurostat data). While gross debt is thus on a comparable level with peer Sweden (38.3%) and far lower than in the Netherlands (52.9%) and Germany (61.0%), we assess net debt to be among the lowest in the EU-28 (13.0% of GDP).

Besides being comparatively low, public debt remains highly affordable. The government has continued to capitalize on the low interest rate environment as its interest outlays dwindled further, accounting for only 1.9% of general government revenues in the four quarters up to Q3-18, down from 2.2% in in the third quarter of 2017 and 2.8% three years ago. Accordingly, Denmark's interest-to-revenue ratio was among the lowest in the EU-28, although Sweden and Luxembourg came in a touch lower at 0.8 and 0.7% respectively. Long-term government bond yields remain at historically low levels (0.303% at 01-Mar-19), and the Bund spread remains very tight (at around 12bp). What is more, the average maturity was stable at 7.5y in 2018 (2017: 7.5y) and the average rate of interest fell from 1.42% in 2013 to 0.14% in 2018 (2017: 0.15%).

A hard landing on the housing market, which is not our base case scenario, may have significant adverse effects on fiscal sustainability and the Danish economy – essentially transmitted via the private household sector and the financial system. We do not think that the banking sector entails fiscal risks at the current juncture, as Danish banks command over sufficient capital buffers and are characterized by high asset quality. As illustrated by EBA data, the CET 1 ratio was stable at 17.6% at the end of Q3-18, after 17.7% in Q3-17, and stood well above the EU average of 14.7%, while the NPL ratio stood at a modest 2.3% (EU average 3.4%), having gradually declined from 3.6% in the third quarter of 2015. DN's semi-annual stress test of the Danish banking sector showed that most banks had sufficient capital to withstand its adverse recession scenario (Nov-18). Furthermore, DN attests the systemic credit institutions' profitability to have remained high, with return on equity having hovered around 10% over the last few years (as of H1-18: 9.5%). Notwithstanding, we have to stress the high share of banks in total external debt (Q3-18: 65.2%), and the still substantial size of the highly concentrated Danish banking sector. Although having come down from a pre-crisis 400% of GDP in Q4-08, the banking sector is still one of the largest in Europe, with an asset-to-GDP ratio amounting to 297% of GDP.

In the same vein, we carefully monitor the extremely high indebtedness of Danish households. To be sure, household debt has continued to decline, having fallen to 230.3% of disposable income in last year's third quarter, down from 236.7% in Q3-17 and 267.3% five years ago. However, Denmark displays the highest DTI ratio in Europe by far, well above the Netherlands, coming in second at 213.4%. As measured by net disposable income, Denmark's households also feature the highest debt level among all OECD economies (2017: 281.1%).

Having said this, we observe a slowdown on Denmark's housing market. Real house price growth has decelerated notably over the last year, as the 3-year-growth rate has fallen to 11.0% in Q3-18, after oscillating around 15% since mid-2015 (OECD data). However, house prices at the national level still surpass their long-term average (1995-2018) by 26.1%, while affordability ratios continue to point to misalignments, standing 17.5% (price-to-rent ratio) and 8.2% (price-to-income ratio) above their respective long-term averages. According to Finans Denmark data on realized transaction prices, prices of owner-occupied flats are still extremely high, but increased by only 3.9 and 3.5% in Q3 and Q4 last year after rising at an annual rate of 7.2% or more since the beginning of 2015. The same applies to the area of Copenhagen, where price growth dropped sharply to 1.7% y-o-y in Q4-18.

At the same time, mortgage loan growth still appears moderate, and the share of fixed interest rate loans continued to rise, equaling 40.7% of total outstanding mortgage loans in Jan-19 (mortgage banks, DN data). The share of interest-only loans has edged down to its lowest level since Q1-08, posting at 44.3% in the last quarter of 2018. We note that authorities remain vigilant, having seized additional macroprudential measures, and legislating counteracting measures over the recent years.

Strong external metrics are also supportive of the sovereign's ratings. Denmark's current account has been among the highest worldwide over the past years, averaging at 6.7% of GDP between 2008 and 2017. According to Stat DK data, the current account surplus narrowed sharply from 8.0% of GDP in 2017 to 6.0% in 2018. The decline was mainly due to the deterioration of the trade of goods balance, which dropped from 5.6 to 4.9% of GDP, while Denmark's trade in services surplus fell from 1.4 to 0.4% of GDP over the same period. In our view, this development does not signal a loss in competitiveness, but boils down to the above-mentioned transitory factors, namely large ship imports and base effects related to the large patent export. This year, the Danish current account should widen again, but will presumably not be lifted to levels seen in the years 2014-17, before gradually narrowing over the medium term, as we expect domestic demand to strengthen, thereby boosting imports. Exports are likely to moderate due to softening global trade and growth in Denmark's main trading partners in particular. Still, persistently large current account surpluses should suffice to prospectively drive Denmark' net international investment position (NIIP) to even higher levels as was previously seen. By the latest count, the NIIP jumped from 54.2% of GDP in Q3-17 to 65.2% in Q3-18 (second highest reading in the EU28), with a very high and positive net FDI position.

Rating Outlook and Sensitivity

Our Rating outlook on the long-term sovereign rating is stable, as we assume that the risk situation underlying the key factors affecting sovereign credit risk – including macroeconomic performance, institutional structure, fiscal sustainability, and foreign exposure – is likely to remain fundamentally unchanged in the next 12 months.

We could lower our rating if medium-term growth falls significantly short of our expectations. This could be the case if growth in Denmark's key trading partners fails to meet our current forecasts. In general, Denmark's export performance appears to be sensitive with regard to the further developments in the European Union. As of 2017, the EU accounted for 53.8% of total exports. In particular, we believe that a disorderly Brexit or escalating global trade tensions would seriously affect Denmark's trade and output growth going forward.

Moreover, downward pressure on the rating may arise in the event of a notable increase of the sovereign's debt-to-GDP-ratio. Such a scenario could materialize if housing prices decline sharply. We assume that falling housing prices would weaken private consumption of highly indebted households. At the same time, worsening asset quality could put pressure on financing conditions of the Danish banking sector. As a result, financing conditions for Danish corporates could tighten – with a negative impact on corporate investment and growth.

Primary Analyst
Johannes Kühner
Sovereign Credit Analyst
j.kuehner@creditreform-rating.de
+49 2131 109 1462

Chair Person
Benjamin Mohr
Head of Sovereign Ratings
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

Economic Data

	2013	2014	2015	2016	2017	2018	2019e
Real GDP growth	0.9	1.6	2.3	2.4	2.3	1.2	1.6
GDP per capita (PPP, USD)	44,977	46,365	47,341	48,393	50,071	51,841	53,564
HICP inflation rate, y-o-y change	0.5	0.4	0.2	0.0	1.1	0.7	1.2
Default history (years since default)	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Life expectancy at birth (years)	80.4	80.7	80.8	80.9	81.1	n.a.	n.a.
Fiscal balance/GDP	-1.2	1.1	-1.3	-0.1	1.4	0.5	0.1
Current account balance/GDP	7.8	8.9	8.2	7.9	8.0	6.0	n.a.
External debt/GDP	171.1	166.8	158.9	159.7	155.5	n.a.	n.a.

Source: International Monetary Fund, Eurostat, 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

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.

This sovereign rating is an unsolicited credit rating. Neither the rated sovereign nor a related third party participated in 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. Between the disclosure of the credit rating to the rated entity and the public disclosure no amendments were made to the credit rating.

The rating was conducted on the basis of CRAG´s “Sovereign Ratings” methodology in conjunction with its basic document “Rating Criteria and Definitions”. 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 the following internet page: www.creditreform-rating.de/en/regulatory-requirements/.

To prepare this credit rating, CRAG has used 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, Danmarks Nationalbank, Statistics Denmark, Kingdom of Denmark – Ministry of Economic Affairs and the Interior, Kingdom of Denmark – Ministry of Finance.

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 case 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 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".

In accordance to Article 11 (2) EU-Regulation (EC) No 1060/2009 registered or certified credit rating agency shall make available in a central repository established by ESMA information on its historical performance data, including the ratings transition frequency, and information about credit ratings issued in the past and on their changes. Requested data are available on the ESMA website: https://cerep.esma.europa.eu/cerep-web/statistics/defaults.xhtml.

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

Creditreform Rating AG
Hellersbergstrasse 11
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: Prof. Dr. Helmut Rödl
HRB 10522, Amtsgericht Neuss