

NATIONAL BANKING MARKET ASSESSMENT

DENMARK

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Nordic Credit Rating (NCR) applies a score of 'a-' for the Danish banking market and views the domestic operating environment as stable. The Danish economy is highly dependent on the international cycle, which is expected to weaken. Positively, the country scores highly on sovereign strength, and unemployment is low. The Danish banking market has been heavily affected by the recent Baltic money laundering scandal, among other environmental, social and governance related cases, which we see as a negative factor for the country's banking environment and consider in our final national banking assessment.

The banking market score is a component of NCR's issuer ratings for financial institutions. Depending on the nature of the rated entity's exposure and geographic profile, the score can affect up to 20% of an issuer's overall credit rating.

Figure 1. Denmark—scoring of national indicators

SUBFACTOR	SCORE	RATIONALE
Sovereign strength	aa	Major credit rating agency average: AAA.
Output growth	a-	We expect economic growth to improve in 2019 due to strong exports, but to decline in subsequent years due to slower international growth.
Credit growth	bbb	Credit growth is lower than GDP growth and has been sub-zero recent years.
Housing prices	a	Moderate growth in housing prices; we expect stability to continue.
Unemployment	aa	Unemployment is low in a Nordic context and is expected to fall somewhat.
Available stable funding (ASF)	aa	ASF in the form of deposits and domestic covered bonds exceeds monetary financial institution (MFI) private-sector loans by a good margin at both a consolidated level and at individual banks and mortgage companies.
International cycle	bb+	Global growth prospects are weakening, though supported by significant monetary stimulus. Increasing trade rhetoric and the prospect of trade and currency conflicts and the UK leaving the EU without a withdrawal agreement could affect global economic growth. Asset prices are at or near peak levels.

Figure 2. Denmark—key banking metrics, %

	2016	2017	2018	2019e	2020e	Trend
Growth in credit to the private non-financial sector	(1.6)	(7.8)	(1.6)	0.0	1.0	Stable
Real housing price growth	5.0	3.3	3.7	3.0	2.5	Stable
Net interest margin	1.1	1.1	1.0	1.0	1.0	Stable
Problem loans/gross loans	2.9	2.3	2.2	2.1	2.0	Falling

Based on Bank of International settlements (BIS) data, aggregated bank reports, and NCR data

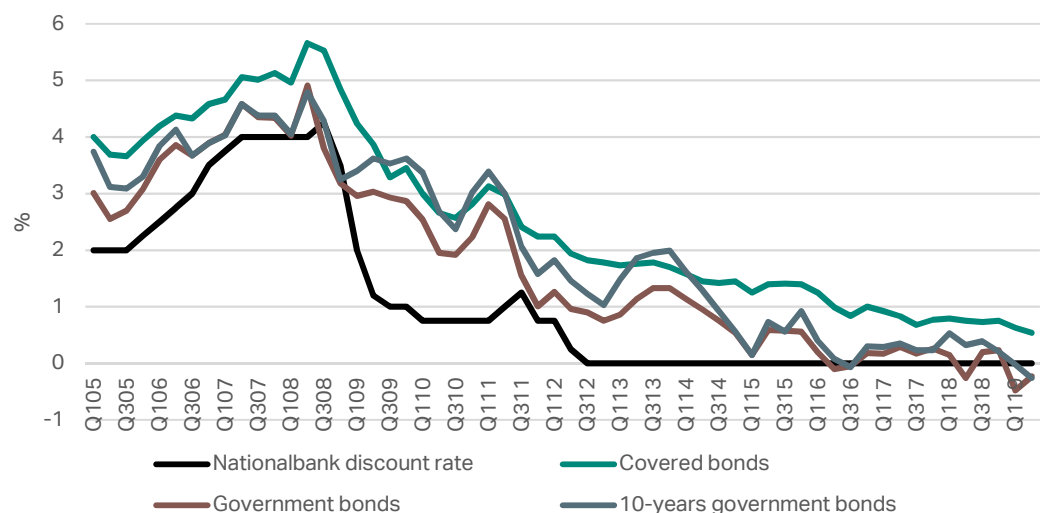
NATIONAL ECONOMY

Weakening European economies have not yet impacted Danish growth, which is supported by the non-cyclical pharmaceutical industry and strong demand for windmills, which in turn contribute to the country's strong current account balance (see Figure 4). However, Denmark is not immune to lower growth in its main trading partners, the two largest being Germany and Sweden, and domestic GDP growth is expected to slow to 1.6% in 2021 from 1.8% in 2019.

There is downside risk to our expectations, though. European economic growth will be negatively affected by a hard Brexit even though the direct effect should be manageable as Danish exports to the UK equal only about 2% of GDP. In addition, the large Danish shipping industry is particularly vulnerable to an international trade war that would affect exports from China and elsewhere in Asia.

However, we believe that the Danish economy would be resilient to an economic slowdown. Denmark's government finances are in surplus and the labour market is well balanced. Unemployment is expected to fall slightly from the current level of 3.6%. Low inflation, at about 1%, helps keep wage growth low at about 2.5%. This, together with the slowing international economy, have made hikes in central bank policy rates less likely in the short term.

Figure 3. Danish interest rates, 2006-2019



Source: Statistics Denmark

Figure 4. Denmark-key national metrics, 2015-2021

	2015	2016	2017	2018	2019e	2020e	2021e
Real GDP growth (%)	1.6	2.0	2.2	1.2	1.8	1.7	1.6
CPI growth (%)	0.5	0.3	1.1	0.7	1.1	1.4	1.6
Unemployment rate (%)	4.6	4.2	4.3	3.6	3.6	3.5	3.4
Current account balance/GDP (%)	8.8	7.3	7.9	6.0	6.3	6.3	6.3
Central bank policy rates	(0.65)	(0.65)	(0.65)	(0.65)	(0.65)	(0.50)	(0.20)

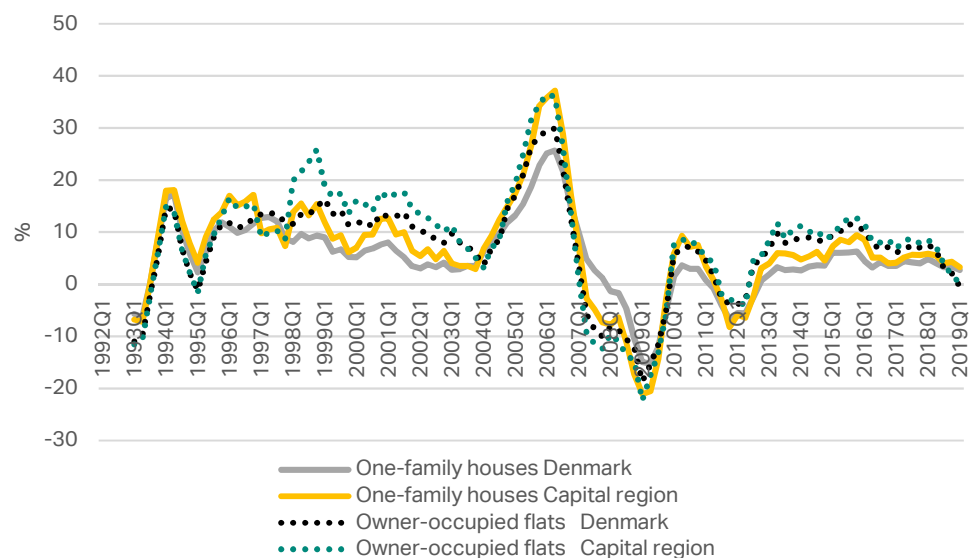
Based on data from the Economist Intelligence Unit and Danmark Nationalbank and NCR consensus estimates. e-estimate.

HOUSING MARKET

The Danish housing market went through boom and bust before and during the 2008-2009 financial crisis. However, housing prices have stabilised in recent years and were on average up by 3.4% in 2018 supported by low unemployment and low interest rates. A protracted period of low interest rates would continue to support the housing market, which is expected to remain well balanced despite tighter credit controls and increasing homebuilding activity.

Changes in the Danish property tax law, which will take effect from 2021, could have a negative impact on housing prices for higher value properties, with some analysts estimating general price falls of 5-10% in Copenhagen and Aarhus. The associated property valuations will be rolled out starting in the third quarter of 2019, through 2020, with the initial tax implications for individual borrowers starting from 2021. Once the new valuations are available, the impact of future taxation could have an immediate effect on pricing.

Figure 5. Annual change in Danish housing prices by region and type, 1992-2019



Source: Statistics Denmark

CREDIT GROWTH

Total mortgage and bank lending to Danish households has been moderate since the 2008-2009 financial crisis and there has been modest de-leveraging in real terms. While mortgage loan growth has been in positive territory, non-mortgage bank lending has been falling by 2.5% annually over the past five years. This decline is mainly apparent at the larger banks, while mid-size banks have increased lending due to expansion into growth areas. Danish corporations have shown stronger demand for loans than households after a period of de-leveraging following the financial crisis, but growth remains at a moderate level.

According to the Danish Financial Supervisory Authority, Denmark has a higher credit-to-GDP ratio than other EU member states, at about 163% compared with about 130% in Sweden and 90% in Finland. The high credit-to-GDP ratio in Denmark is a reflection of a high level of home ownership and is offset by the considerable financial assets held by households, such as pension assets. Currently, many banks have capacity to increase lending, which has intensified competition for corporate customers and put pressure on credit standards.

Figure 6. 12-month growth in private-sector loans by sector and deposits, 2004-2019

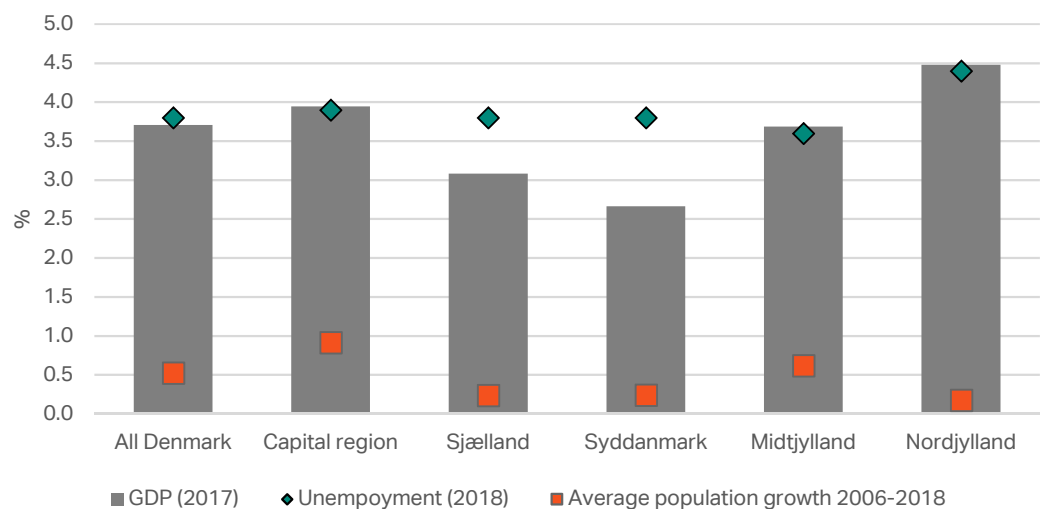


*Annualised. Source: Statistics Denmark

REGIONAL ANALYSIS

A trend of urbanization has benefited the Capital region (Copenhagen) as well as Aarhus in Midtjylland, where we see higher-than-average population and economic growth. Less urbanized Nordjylland, which had the lowest domestic regional economic growth in the aftermath of the crisis showed strong growth in 2018. Denmark is relatively small with good communications, and thus the regions' economic growth is less dependent on the performance of local industries. Moreover, agriculture is a major industry in Denmark, increasing the importance and vitality of rural areas. Thus, there are very small differences in unemployment between regions and regional housing prices tend to be strongly correlated, albeit with somewhat higher volatility in the Capital region.

Figure 7. Danish unemployment, annual GDP and population growth, by region



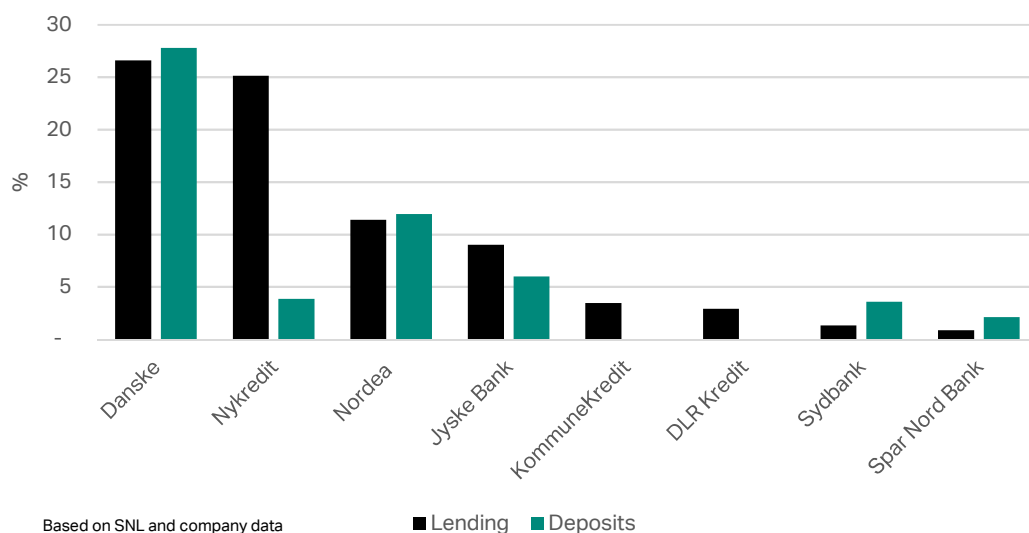
Source: Statistics Denmark

BANKING MARKET

The Danish market consists of a combination of large banking groups and mortgage companies and smaller regional savings banks. The mortgage market overshadows the banking market structure given the volume of residential and commercial mortgage loans which are concentrated on a few covered bond issuers. Many customers of local and regional banks keep their savings in their local banks, but obtain mortgage loans from Nykredit, primarily through subsidiary Totalkredit, and DLR Kredit. As such, Denmark's four largest banks represent over 70% of domestic lending, though only 50% of customer deposits.

Danske Bank is the market's largest entity by loans and deposits, with its customers' own mortgage loans mostly issued by its subsidiary, Realkredit Danmark. Of all Danish banks, Danske Bank is the only one with significant international business, primarily as a full-scale bank in the other Nordic countries. Jyske Bank, which acquired BRFkredit in 2014, operates similarly, though it also has a number of mortgage loans from other banks in its mortgage bank, which has been renamed Jyske Realkredit. Nordea operates as a branch of its Finnish parent as well as a domestic mortgage institution, Nordea Kredit Realkredit.

Figure 8. Market shares of eight largest banks in Denmark, 2018



The Danish banking market is still feeling the repercussions of revelations that Danske Bank contributed to money laundering of up to €200 billion via its Estonian subsidiary. The bank is still managing the uncertain legal consequences, resulting costs, management changes, customer dissatisfaction and a falling share price, all of which have contributed to downward revisions of expectations for Danske Bank's 2019 financial performance. We believe that international focus on the Danish regulator will contribute to higher costs for the entire sector over the near term.

Relatively slow credit growth in Denmark has increased competition for new customers and pressured margins. Despite Jyske Bank receiving international recognition in August 2019 for negative coupons on 10-year covered bonds and negative yields on covered bonds with tenors of up to 20 years, mortgage banks are still able to earn a relatively stable margin and collect refinancing fees from customers seeking to lock in mortgages at historically low interest rates.

However, Denmark has had negative interest rates since 2015 and deposit margins are under pressure, particularly for deposit-funded banks. In August 2019, Jyske Bank announced negative interest rates on retail customer deposits in excess of €1 billion which could lead to more banks taking similar

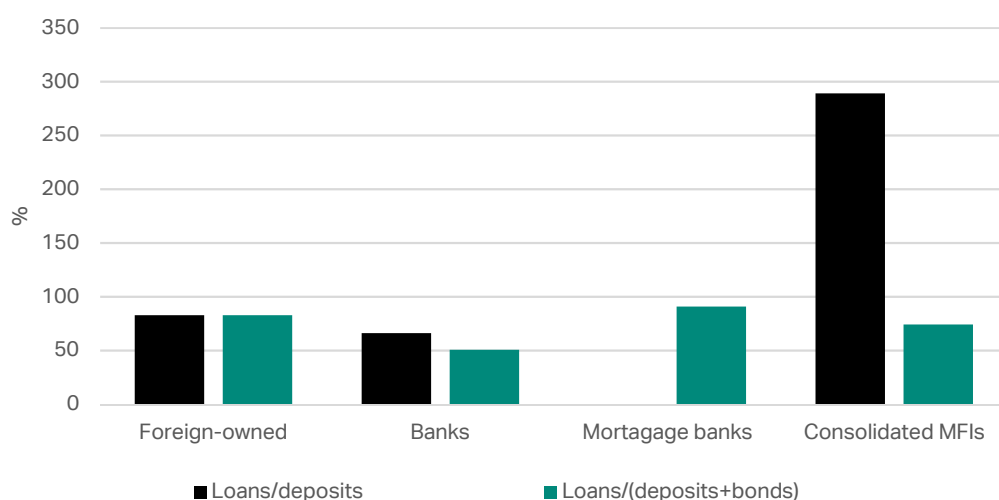
measures for less-wealthy retail customers and small businesses which have thus far been protected by the implicit 0% deposit floor. Given shifting global economic conditions, NCR expects that margin pressure and slow credit growth will continue to affect banks' earnings forcing them to pursue digital solutions and automation or to accelerate consolidation to reduce costs.

AVAILABLE STABLE FUNDING

Denmark has an extremely well-functioning covered bond market, which accounts for a huge proportion of overall MFI financing (about 60% of customer deposits and debt issued). As a result, the consolidated market has a very high loan-to-deposit ratio of over 250%. However, this ratio falls to 85% when covered bonds are considered. The availability of mostly domestic stable funding stands out positively in the Nordic markets. We view the Danish covered bond market as a stable source of financing, a property it has demonstrated throughout its long history. This is attributable to the "balance principle", which reduces market risk and currency mismatches, and the lack of refinancing risk for bonds issued since 2014. For banks, household deposits are enough to finance both corporate and retail borrowing, with non-financial corporate deposits as excess, reducing vulnerability outside the mortgage market.

The share of foreign ownership of Danish covered bonds is around 15%, a much lower level than in Norway and Sweden and the financing is fed by the fully-funded Danish pension system, which contributes new assets to invest into the covered bond market, even in periods of financial stress, making it considerably more stable than domestic deposits historically.

Figure 9. Loans as a share of deposits, bond and covered-bond financing for Danish banks, 2018



Based on NCR data

Figure 10. Denmark–key credit metrics, 2012–2018

	2012	2013	2014	2015	2016	2017	2018
Credit to households (%)	130.5	127.7	125.1	120.5	118.7	116.5	115.4
Credit to non-financial corporations (%)	119.4	111.7	114.9	117.3	117.3	111.8	111.3
Growth in credit to the private non-financial sector (%)	1.0	(10.5)	0.6	(2.3)	(1.6)	(7.8)	(1.6)
Household savings/disposable income (%)	0.1	2.3	(2.9)	3.9	4.5	6.2	7.0
Debt service ratios of households (%)	19.2	18.4	17.7	16.7	16.2	15.4	15.0
Nominal residential property prices, 2010 = 100	95.7	99.4	103.1	110.3	116.1	121.3	126.8
Real residential property prices, 2010 = 100	90.9	93.7	96.7	102.9	108.1	111.7	115.8

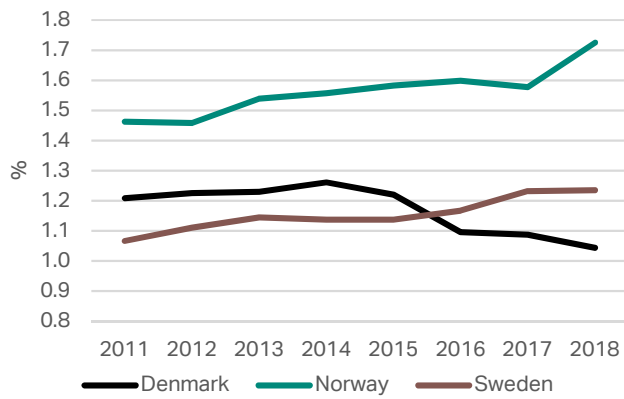
Source: BIS

Figure 11. Denmark–key banking market metrics, 2012–2018

	2012	2013	2014	2015	2016	2017	2018
Net interest margin (%)	1.2	1.2	1.3	1.2	1.1	1.1	1.0
Net interest & fee income/op. income (%)	89.4	92.2	97.2	94.4	87.8	80.9	85.5
Cost to income (%)	58.0	60.1	58.7	56.2	52.7	50.5	56.4
Pre-provision profit/avg. RWA (%)	2.2	2.0	2.1	2.3	2.4	3.0	2.4
ROAA (%)	0.1	0.2	0.3	0.4	0.5	0.6	0.5
ROAE (%)	2.5	4.5	4.9	7.2	9.5	11.2	8.2
Loan loss provision/avg. gross loans (%)	0.7	0.5	0.4	0.2	0.1	(0.0)	0.0
Problem loans/gross loans (%)	4.1	4.0	3.9	2.9	2.9	2.3	2.2
Problem loan growth (%)	(3.2)	(2.2)	1.3	(23.8)	(10.7)	(20.2)	1.7
CET1 ratio (%)	14.0	14.7	15.3	16.5	16.8	18.1	17.9
Capital ratio (%)	18.7	19.2	18.3	19.6	20.9	21.9	21.4
IFRS Tier 1 leverage ratio (%)	4.5	4.8	4.9	5.2	5.0	5.0	5.0
Net loans/deposits (%)	261.0	252.2	261.0	279.3	280.6	262.3	267.6

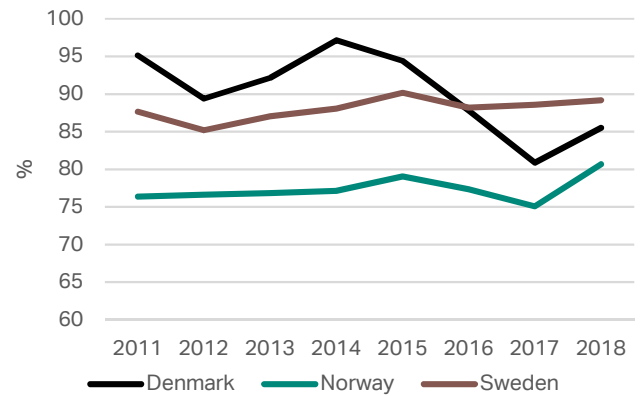
Source: Aggregated bank financials. RWA–Risk-weighted assets. ROAA–Return on average assets. ROAE–Return on average equity. CET1–Common equity Tier 1. IFRS–International Financial Reporting Standards.

Figure 12. Banks' net interest margin, 2011–2018



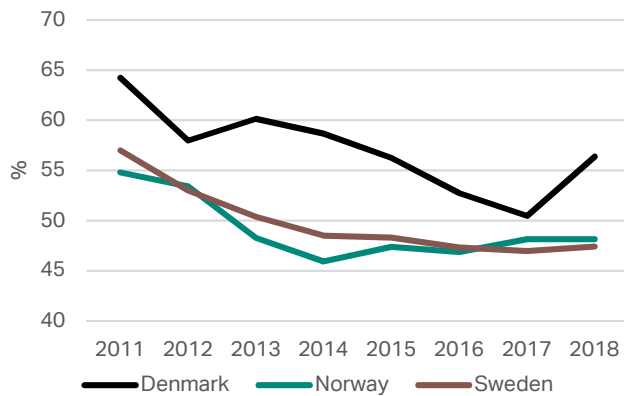
Source: Aggregated bank data

Figure 13. Banks' net interest and fees to operating income, 2011–18



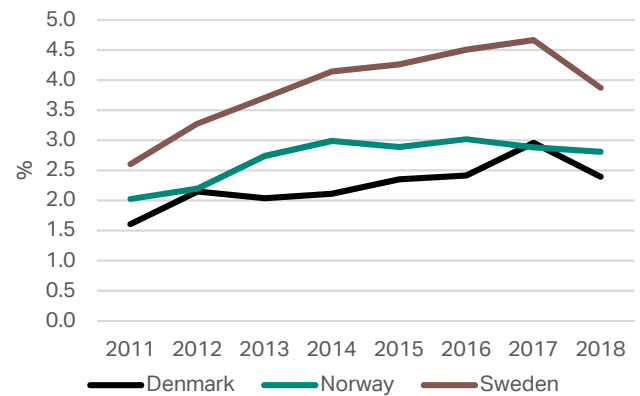
Source: Aggregated bank data

Figure 14. Banks' cost-to-income ratios, 2011–2018



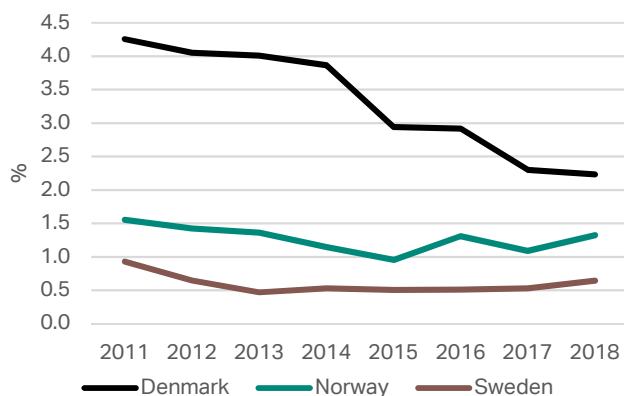
Source: Aggregated bank data

Figure 15. Banks' pre-provision profit to avg RWAs, 2011–2018



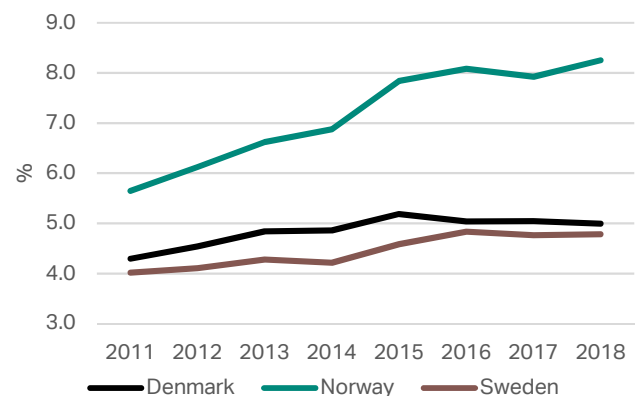
Source: Aggregated bank data

Figure 16. Banks' problem loans to gross loans, 2011–2018



Source: Aggregated bank data

Figure 17. Banks' leverage ratios, 2011–2018



Source: Aggregated bank data

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