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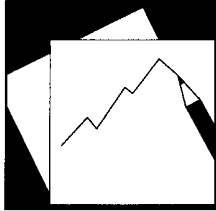

IMF Working Paper

Financial Stability In An Evolving Regulatory And Supervisory Landscape

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Financial Stability In An Evolving Regulatory And Supervisory Landscape

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Abstract

This paper runs qualitative and quantitative analyses of the financial soundness of Danish banks. Helped by a series of Denmark's financial policy initiatives, banks have made progress in improving financial stability. However, vulnerabilities remain. To mitigate risks, banks should continue to build more robust capital and liquidity buffers, and enhance further the transparency of disclosures. The flexibility embedded in EU regulations should be used to design strong prudential policies, treating Basel III and the CRD IV regulations as floors. Crisis prevention and management could be further strengthened by phasing out gradually deferred-amortization mortgage loans and introducing risk-adjusted deposit insurance premia.

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I. INTRODUCTION

Despite some structural strengths of Denmark, Danish banks have been hit by the unprecedented global financial crisis, European crisis, and housing bust. Denmark has a diversified economy with high income per capita, strong institutions, and a triple-A rating. However, in the aftermath of the crises, banks are still struggling to recover. In response, the authorities have launched a series of financial policy initiatives against the backdrop of evolving regulatory and supervisory reforms at both the global and EU levels. This paper aims to assess the financial stability of Danish banks, analyze the national policy initiatives, and look into what additional policies could help strengthen the banking system.

II. FINANCIAL SOUNDNESS OF COMMERCIAL BANKS

Denmark has an outsized and diversified banking sector, which has seen pronounced structural changes. Bank assets are over four times GDP. It is dominated by commercial banks and mortgage banks with the former being about 1.3 times the latter. The sector is characterized by conglomeration, cross-border operations, and concentration. Despite the presence of a large number of small institutions, the sector is highly concentrated. Group 1 (i.e., large) banks account for 81 percent with smaller Group 2 and 3 banks splitting the rest. The largest bank, Danske, accounts for over half and the second largest bank, Nordea Denmark accounts for about 15 percent of the total commercial bank assets. The number of banks has been on a steady decline for decades and stood at 106 as of mid-2012. The reduction has accelerated since the crisis because of the bank failures and the takeover and merger of distressed banks, in line with the regional trend.

To put the financial soundness of Danish banks in perspective, a battery of comparative indictors are constructed. Peers include banks in Austria, Finland, France, Germany, the Netherlands, Norway, Sweden, Switzerland, and the United Kingdom. Indicators include profitability (measured by return on average assets (ROAA), efficiency (measured by cost-to-income ratio), regulatory capital adequacy (measured by the core Tier 1 ratio), leverage (measured by tangible common equity ratio (TCE), asset quality (measured by the non-performing loan (NPL) ratio), and coverage (measured by reserves relative to loan losses). These indicators are weighted by assets for both Danish banks and peers.

The profitability of Danish banks has been low since the crisis and is lower than peers. ROAA of Danish banks is about half the level of peers. Despite some improvement, earnings have been

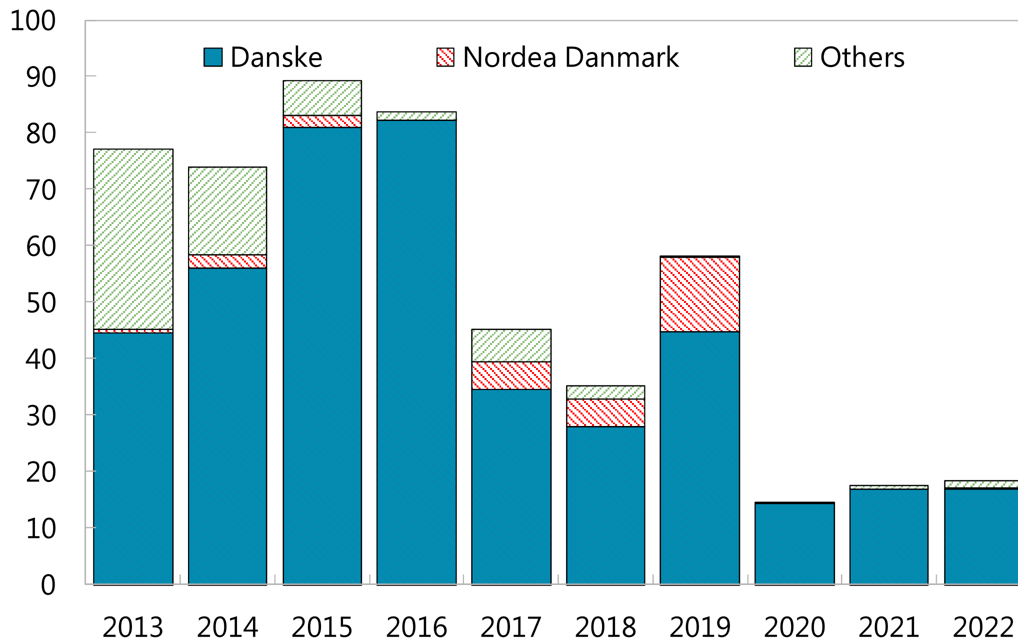
weak as the struggling economy and the burst of the housing bubble has led to low net interest income from reduced lending volume and higher funding costs. The profits of the sector are mainly attributable to group 1 banks with the rest of the sector incurring the fourth consecutive year of losses in 2011 and breaking even in the first half of 2012. In addition, the cost-to-income ratio of the banks is as high as 60 percent, but on par with peers.

The asset quality of Danish banks is much lower while reserves coverage is much higher than peers. Loans are concentrated in retail mortgages, commercial real estate, and agriculture. The NPL ratio is about three time that of the peers. As agriculture, building and construction, and real estate have high loan impairments and smaller banks have more exposures to these sectors, loan loss impairments as percent of loans and guarantees are much higher in small and medium sized banks than in large banks. To build a cushion against weakening quality of assets, reserves coverage of Danish banks is three times higher than peers.

Progress has been made in shoring up bank capital and regulatory capital adequacy, but capital quality and risk weights mask the actual capital position. The core Tier 1 ratio of Danish banks is over 13 percent, well above peers. In the latest EU-wide capital exercise, all four Danish banks passed the test. Group 1 banks have strengthened the capital buffer by market issuance, capital injection, and foregoing dividends. However, the capital buffers of Group 2 banks have been reduced because of losses and restrictions on including additional government capital in the capital calculations. A comparison of stringent capital ratios such as TCE shows that Danish banks' capital position is not as strong as indicated by regulatory ratios, reflecting hybrids and risk weights of banks using Internal Rating Based (IRB) models. The failure of some seemingly well capitalized or profitable banks also suggests that risk weights underestimate actual risks.

Banks' liquidity has also improved, but banks still rely heavily on wholesale funding and some banks face high rollover needs in the short term. Liquid assets account for about 35 percent of total assets. All banks in Group 1 and Group 2 satisfy the "supervisory diamond" (see below) requirement of having an excess liquidity coverage of 50 percent. The customer funding gaps have dropped at both the aggregate and individual levels. About 89 percent of banks have seen funding gaps narrowed. The number of banks having a loan-to-deposit ratio of less than 100 percent has risen from 41 percent in 2008 to 80 percent in mid-2012. However, reliance on wholesale funding remains high and some banks have to refinance a substantial amount of debt maturing in the next couple of years, a challenge currently being addressed through the official liquidity support.

Large banks have significant cross-border exposures, but exposures to the vulnerable European countries remain very limited. Foreign claims of Danish banks represent 35 percent of total bank assets, or about 80 percent of GDP (Table 1). Danish banks are predominately exposed to European developed markets and the US. Exposures to Sweden, the UK, Finland, Norway, and Ireland account for over 80 percent of total foreign claims while exposures to the stressed European countries are small. The latest EU-wide capital exercise also indicates that Danish banks are not significantly exposed to vulnerable sovereign debt issuers, either directly via sovereign bonds or indirectly in the form of credit protection on sovereign exposures. In contrast to Sweden, Danish banks' exposure to emerging markets such as the Baltic countries is insignificant.



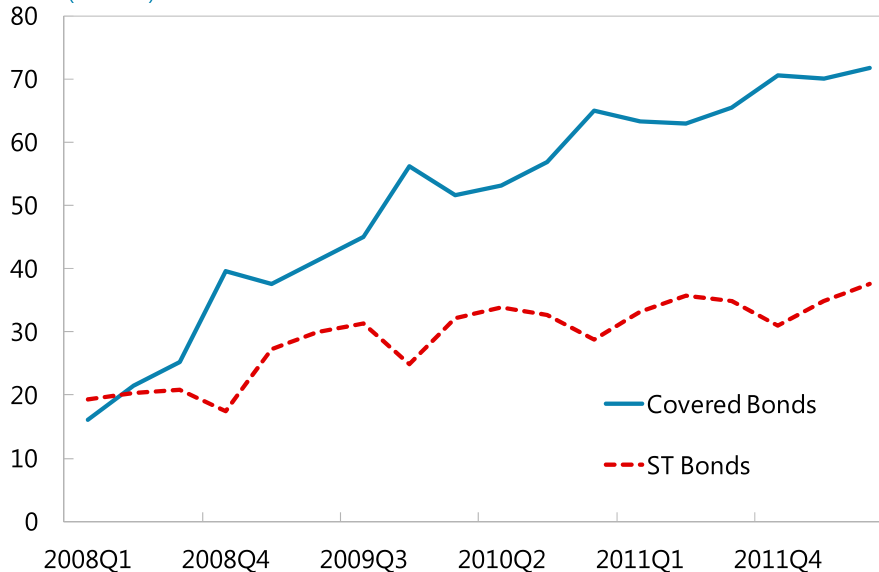
III. Financial Soundness of Mortgage Banks

Danish mortgage banks are specialized institutions and governed by the special legislation. Mortgage banks do not take deposits and cannot access the money market. They only grant loans against a mortgage on real property within a fixed lending limit of 60–80 percent. The valuation of the real property and the calculation of the loan amount have to comply with the rules laid out by the Danish FSA. Loans may be funded solely through the issuance of covered bonds, which is subject to a balance principle aiming to eliminate market risks. The covered bond holders have a preferential status in the event of the bankruptcy of a mortgage bank.

Mortgage lending has held up better and mortgage banks have benefited from increasing administration margins. Bucking the trend on bank lending, mortgage lending has continued to increase. Mortgage banks have also raised administration margins, which has contributed to offsetting loan impairment charges and other costs, and remain profitable.

However, mortgage banks face the challenge of top-up collateral and refinancing risk. The introduction of covered bonds legislation in 2007 has increased the issuance of covered bonds from 16 percent to 70 percent of outstanding mortgage bonds. The legislation requires that loan-to-value (LTV) limits observed throughout the term of each loan, unless the mortgage bank has pledged other collateral. If the drop in the market value of the mortgaged properties leads to a breach of the limit, top-up collateral from the bank is required. The top-up collateral can take the form of capital, proceeds from issuing junior covered bonds, and guarantees from credit institutions, provided that they meet specific requirements. The sharply declining property value in the aftermath of the bust of the housing bubble and stricter requirements from the rating agencies on collateral have significantly increased the need for banks to pledge top-up collateral.

In addition, an increasing share of short maturity mortgage bonds and adjustable-rate loans increase the refinancing risk. The share of bonds maturing in less than one year has almost doubled from 19 percent in 2008 to 37 percent recently. The share of bonds with maturities shorter than adjustable-rate loans has risen to 66 percent. Besides, the refinancing of adjustable-rate loans is concentrated at year-end. Following discussion between the Danmarks Nationalbank (DN) and the industry, some banks spread the refinancing throughout the year to reduce the concentration while the majority of banks have made limited progress.



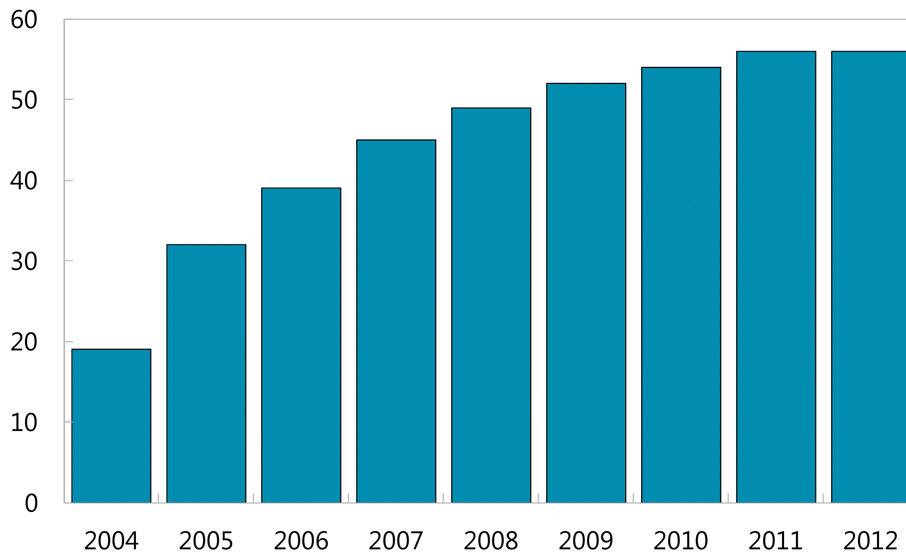
Sources: Danmarks Nationalbank and Fund staff calculations.

Mortgage banks are adjusting their business models to address the challenge. They have made proposals aiming to reduce the risk associated with top-up collateral and refinancing. As pointed out by the DN, each proposal has its pros and cons, depending on the size of the loans and group structures of the bank. Thus, a careful cost-benefit analysis is warranted.

IV. Some Common Issues for Both Commercial and Mortgage Banks

Borrowers having weak balance sheets and using certain type of loans could increase banks' credit risks. Denmark has the largest per-capita mortgage market in the world. Danish households have the highest indebtedness in Europe with a gross debt-to- income ratio of over 300 percent, although it is offset by large household assets consisting largely of illiquid assets such as housing wealth and pension balances. With the decline in home equity to about 115 percent of disposable income, total after-tax net wealth (excluding mortgage loans) over disposable income fell to around 280 percent in 2011. A study by the DN shows that households with the highest income assume most of the debt and they generally have financial assets and pension savings besides housing wealth. However, the share of deferred amortization loans has surged from 19 percent in 2004 to 56 percent of outstanding debt for owner occupied homes recently, which warrants close monitoring. It seems that households

with weaker balance sheets tend to take out this type of loans, although some families who opt for these loans use the lower monthly payments to reduce other more expensive debt.



Sources: Association of Danish Mortgage Banks and Fund staff calculations.

Risks in commercial real estate and agriculture lending remain elevated. A number of small banks with large exposures to commercial properties have failed since 2008. With high vacancy rates and sluggish markets, ordinary sales of commercial properties plunged and enforced sales of commercial properties stayed high in 2011. Risks in agriculture lending result from the increased borrower indebtedness, volatile earnings, and reduced collateral values. The majority of its debt is variable-rate loans, which has surged to 89 percent of debt outstanding. This makes it vulnerable to interest rate increases and increases refinancing risk. Earnings are volatile with high and still rising production costs.

Treatment of covered bonds in new regulations will have an important bearing on liquidity management of Danish banks. In the Basel III proposal on the Liquidity Coverage ratio (LCR), covered bonds are designated as Level 2 assets with a 40 percent cap imposed and subject to a haircut of at least 15 percent while sovereign bonds are designated as Level 1 assets and can make up 60 percent of the buffer. Danish mortgage covered bonds stand at 1.2 times mortgages outstanding and constitute 35 percent of banks' funding sources, reflecting the important role of Danish mortgage banks, which provide approximately two-thirds of total credit to Danish borrowers and are almost fully funded through covered bonds. The DN study shows that Danish covered bonds were very liquid even during the crisis and are subject to a very strict legal structure. Hence, the authorities are concerned about the

ramifications of the proposal for the Danish financial sector as Denmark has a large covered bond market but a small government bond market. Their concerns were addressed in the July 2012 proposal of the European Commission (EC), where the Basel III restrictions were taken out. The EC list a set of criteria to determine how assets should be considered in the LCR and asked the European Banking Authority (EBA) to refine them further by 2015.

V. Financial Policy Initiatives of Denmark

The Danish authorities have provided substantial support to shore up the banking sector since the crisis. As in many other countries, capital injections, liquidity support, and government guarantees have played a crucial role in helping banks ride out the economic and financial storm. In addition, the authorities have strengthened regulation and supervision, introduced a special resolution regime, and reformed deposit insurance. Following the recommendations of the European Systemic Risk Board (ESRB), a new institutional framework for macro prudential policy is also under consideration and a committee on Systemic Important Financial Institutions (SIFIs) is expected to publish a report at the end of 2012.

The DN has expanded liquidity support facilities. In 2011, the DN expanded the collateral basis to include the banks' credit claims of good quality. In addition, the option of pledging as collateral shares in the companies jointly owned by the banks was temporarily reopened. Expansion of the collateral base was to supplement banks' access to raise liquidity and thus support the transition as individual state guarantees will expire in 2012 and 2013. Moreover, the DN introduced 6-month monetary policy loans offered monthly and offered banks the option of taking out loans with a three-year term based on DN's collateral base twice. These facilities have been made available to ensure that banks have sufficient flexibility in their adjustment to a business model that is viable in the long run, and they may be used by all banks following a commercial assessment. So far, the 6-month facility was only drawn on in February 2012 with a total amount of DKK 0.1 billion. The 3-year loans were first offered in March 2012 with total borrowing of DKK 18.9 billion and offered again in September 2012 with DKK 37 billion.

The Danish FSA introduced the "supervisory diamond" in 2010, which sets limit values for banks in a number of special risk areas. The limit values are stipulated to balance the trade-off between risk taking and financing the economy. They were adjusted to reflect the European regulatory changes and are phased in to end-2012. The five limit values currently are:

- Sum of large exposures less than 125 percent of total capital;
- Lending growth less than 20 percent per year;
- Commercial property exposure less than 25 percent of total loans;
- Stable funding less than 1; and
- Excess liquidity coverage greater than 50 percent.

After the phase-in, the FSA will implement systematic monitoring of the benchmarks mentioned in the "supervisory diamond" and take laddered supervisory actions. When the limit values are breached, the FSA will enter into a dialogue with the bank and take corresponding supervision measures. These measures include: stricter monitoring, risk information provision and immediate publication, account preparation and inspection, orders, publication on the FSA website, and a possible increase in the solvency need.

The FSA also set new rules on loan impairment charges early this year. These rules have tightened the range of impairments due to subjective judgment and led to increasing impairments. New rules contribute to harmonization and transparency and help improve the reporting quality.

Denmark is the first EU country to introduce the resolution, including the bail-in framework. It established a resolution regime for banking institutions through 'Bank Rescue Packages" 3–5. Each package is tailored to tackle a different set of problems for smaller banks, covering failing banks, banks with guarantees, and banks with funding problems. Bank rescue package 3 was first used in 2011 for the Amagerbanken, which triggered a senior debt loss. Bank rescue package 4 introduced two different models to create greater incentives for sound banks to take over, in full or in part, the activities of a distressed bank before resolution under Bank rescue Package 3 became necessary. Bank rescue package 5 enabled the establishment of an institution for funding the agricultural sector. The established financing bank for agriculture will provide funding for farms and acquire viable agriculture exposures from the Financial Stability Company other banks. It allowed the Financial Stability Company to take over FIH Erhvervsbank's property exposures.

The deposit insurance scheme has been reformed. The Danish Parliament this year adopted a legislative amendment requiring that the bank department of the Guarantee Fund for Depositors and Investors to be funded ex ante. The amendment arising from the political agreement on Bank Rescue Package 4, is to ensure that the banks' contributions to the fund will be more evenly distributed and predictable. The amendments entered into force in March 2012. Before the legislation, the funding of the Fund was based on commitments from the banks, but only a minor share of the Fund's assets was contributed ex ante. The legislation requires banks' contributions to the Fund's bank department to be funded at a fixed annual rate of 2.5 per thousand of the net deposits covered as October 1 in the previous year (about DKK 1.8 billion in March 2012). The contribution obligation ends if the bank department's assets exceed one per cent of the net deposits covered (about DKK 7.5 billion). However, the board of the fund may, or act at the order of the Danish FSA (in consultation with the DN), raise the annual contributions if warranted by the finances of the bank department.

Denmark is in the process of reforming its institutional framework for macroprudential policy. In line with ESRB's requirements, the Danish parliament is expected to pass a proposal to establish a Systemic Risk Council that will be in charge of recommendations on macro prudential policies. The council will identify and monitor systemic risks in Denmark and communicate its observations, warnings and recommendations to the relevant parties, mainly the FSA, and the government in case of new legislations. The reform does not change existing competences and the council plays an advisory role. It is up to the individual

authorities to consider and maybe act on recommendations from the council. If a recommendation is not followed, justification must be publicly explained in accordance with the comply-or-explain principle. In case of a confidential recommendation to ensure financial stability, the justification for not following the recommendation would not be disclosed, but solely be addressed to the council. The council should address systemic risks within the financial area, but not developments in the general economic policy (such as fiscal, tax, and monetary policy) and sector policy outside the financial area. It will have at disposal a wide range of instruments allowed under the forthcoming CRD IV directive.

The new setup represents an improvement over the existing one, but could be strengthened further with experience. As of today, financial stability responsibilities in Denmark are spread among DN, the FSA and the economic ministries (the Ministry of Business and Growth, the Ministry of Finance, and the Ministry of Economic Affairs and the Interior). The FSA is responsible for the supervision of financial institutions and markets to ensure financial stability. One of the main objectives of the DN is to contribute to financial stability through stress tests and reports on financial stability. The economic ministries also monitor the financial stability and the economy in general. The Ministry of Business and Growth is responsible for the financial regulation and legislation, financial crisis management as well as financial institutions in distress. The new Systemic Risk Council is composed of two representatives from the DN (with the Chairman of the Board of Governors being chairman of the council), two representatives from the FSA, three representatives from the economic ministries and three independent external experts with special knowledge about financial matters. The three economic ministries and the FSA do not have the right to vote, but merely the right to speak, in relation to observations, warnings and recommendations addressed to the government. The council will be evaluated within three years after the establishment, based on experience gained and international developments. The institutional reform is essential, and the council could benefit from well-defined coordination and information-sharing arrangements and the concerned entities should have clear roles and responsibilities, consistent with their institutional mandates.

An interagency committee was created early 2012 to develop prudential arrangements for SIFIs. The committee consists of four independent members (including chairman), and one member each from the Ministry of Business and Growth, Ministry of Finance, DN, and FSA. It aims to clarify criteria to be met for a bank to be designated as a Danish SIFI, requirements to be set for SIFIs to ensure fair competition, and instruments to be used for SIFIs with difficulties. The committee is expected to consider whether (i) asset size is a good indicator in the Danish context; (ii) additional requirements may cover capital, liquidity, recovery and resolutions plans, corporate governance, and supervision; and (iii) there is a possible need to complement the current Danish resolution framework with additional tools. The committee will take into account developments in international and EU regulations and report its findings to the Ministry of Business and Growth by end-2012. The creation of the committee is a positive step and the potential inclusion of a bail-in framework would keep Denmark at the forefront of bank resolution regimes in the EU.

VI. Policy Implications

The banking sector has made progress in improving financial stability against the backdrop of the authorities' policy initiatives. The sector is in the process of restructuring, consolidating, and adapting to a new regulatory and supervisory environment. Banks have shored up capital and liquidity base, partly achieved by the support from the government and the DN.

However, vulnerabilities remain. The peer comparison reveals that profitability is weak, asset quality is low, and capital buffers are not as robust as indicated by regulatory ratios. In some cases, capital requirements are fulfilled by hybrids and low risk weights that do not reflect actual risks. Banks still rely heavily on wholesale funding. A small group of banks may have potential solvency problems and some smaller banks may have funding problems with the expiration of state guarantee in 2012 and 2013. The high indebtedness of borrowers would lead small changes in debt service costs such as an interest rate increase on variable-rate mortgages and small decreases in income to have an amplifying impact on banks' loan performance. Certain mortgage products, such as deferred amortization mortgage loans, if used extensively by borrowers with weak balance sheets, could increase banks' credit risks.

To mitigate risks, banks should continue to build more robust capital and liquidity buffers and enhance further the transparency of disclosures. The flexibility embedded in EU regulations should be used to design strong prudential policies, treating Basel III and the CRD IV regulations as floors. As support from the government and the DN has a time frame and constraints, reliance on them by banks should be reduced over time. Banks that depend heavily on the DN lending facilities should seek a more sustainable funding structure by increasing deposits and lengthening maturities. In addition, banks should boost capital organically by retaining earnings, restraining dividends, and raising equity. Demark is ahead of other countries in disclosing pillar II requirements, but given the more stringent future requirements and market expectations, large banks would benefit from making regular disclosures regarding the new regulatory indicators, in particular loss absorbing capital and risk-weighted assets under Basel III once it is fully implemented. In light of the large differences in risk weights between the Basel IRB and standardized approach, a parallel calculation of risk-weighted assets under the standardized approach could be useful.

Crisis prevention and management could be further strengthened. As deferred-amortization mortgage loans appear to have contributed to excessive volatility in housing markets and could increase banks' credit risks, they could be phased out gradually. The reinforcement of deposit insurance is crucial, but risk-adjusted deposit insurance premia could be introduced to encourage sound risk management and discourage risky behavior.

References

Danmarks Nationalbank, 2012, Financial Stability 2012.

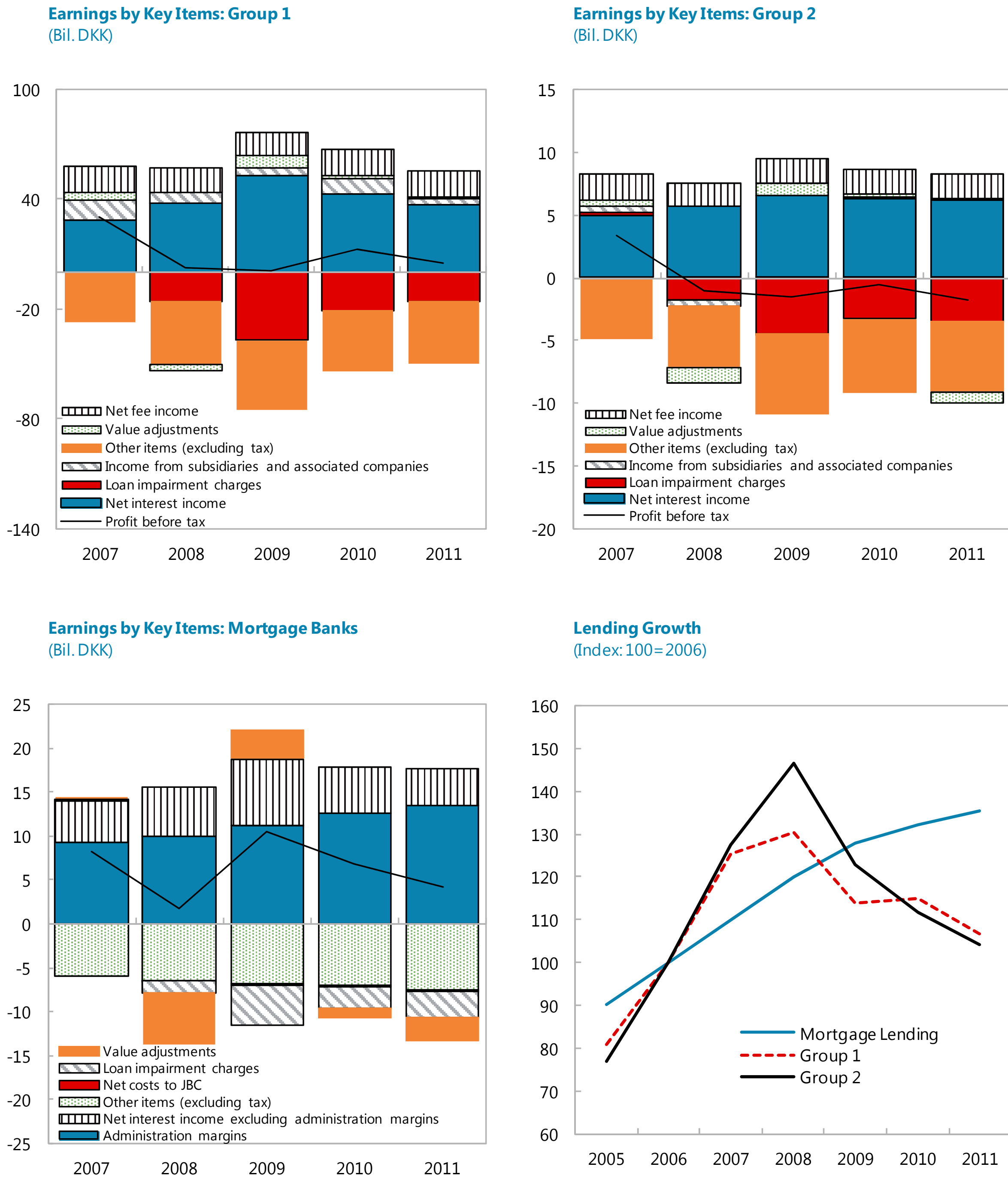
Danmarks Nationalbank, 2012, Monetary Review 2012.

Denmark, 2012, Report on Systemic Risk Council.

Xiao, Yingbin, 2011, "French banks amid the global financial crisis," *International Journal of Banking and Finance* 8(1): 1-19.

Figure 1. Danish Banks: Peer Comparison

Sources: Bloomberg LP. and Fund staff calculations.



Sources: Danmarks Nationalbank, Finanstilsynet, and Fund staff calculations.

Table 1. Foreign Claims of Banks on Individual Countries, March 2012 (Immediate Borrower Basis)

(in billions of US dollars unless otherwise indicated)

	Denmark	Finland	Sweden
All countries	260.5	25.7	891.1
in percent of total bank assets	35.3	2.8	67.4
in percent of GDP	78.3	9.8	165.0
Mature market (MM) countries	247.5	22.6	778.4
in percent of total bank assets	33.5	2.5	58.9
in percent of GDP	74.4	8.6	144.2
of which:			
Denmark	..	1.0	187.6
Sweden	68.0	..	..
Finland	38.2	..	171.0
Norway	33.5	1.5	144.1
United Kingdom	49.0	3.4	42.6
Ireland	14.6	0.6	2.0
Luxembourg	13.5	0.2	9.6
Other developed countries	11.9	0.9	89.6
United States	10.0	0.4	84.9
France	4.7	3.3	10.3
Germany	3.8	2.5	78.2
Netherlands	3.1	2.5	10.2
Switzerland	3.0	0.4	4.0
Spain	1.8	1.1	3.8
Italy	0.3	0.5	1.3
Greece	0.1	..	0.3
Portugal	0.1	0.2	0.2
Offshore Centers	9.0	0.2	30.2
in percent of total bank assets	1.2	0.0	2.3
in percent of GDP	2.7	0.1	5.6

Sources: BIS, Haver Analytics, IFS, IMF World Economic Outlook, and Fund staff calculations

Table 1. Foreign Claims of Banks on Individual Countries, March 2012 (Immediate Borrower Basis) (concluded)

(in billions of US dollars unless otherwise indicated)

	Denmark	Finland	Sweden
Emerging market (EM) countries	4.0	0.7	81.0
in percent of total bank assets	0.5	0.1	6.1
in percent of GDP	1.2	0.3	15.0
Africa & Middle East	0.7	0.0	4.4
in percent of total bank assets	0.1	0.0	0.3
in percent of EM claims	18.1	3.8	5.5
of which:			
Liberia	0.2	..	2.0
Egypt	0.1	..	0.1
Qatar	0.1	..	0.4
Tanzania	0.1	..	0.2
South Africa	0.1	..	0.1
United Arab Emirates			
Asia & Pacific	0.7	0.0	11.7
in percent of total bank assets	0.1	0.0	0.9
in percent of EM claims	16.6	5.1	14.5
of which:			
China	0.2	0.0	4.8
India	0.1	..	1.3
Thailand	0.1	0.0	0.1
Central and Eastern Europe	2.1	..	61.4
in percent of total bank assets	0.3	..	4.6
in percent of EM claims	53.4	..	75.9
of which:			
Poland	1.4	..	12.2
Turkey	0.4	..	1.2
Russia	0.3	..	10.6
Czech Republic	0.1	..	0.1
Latvia	0.0	..	16.5
Lithuania	-0.2	..	18.2
Estonia	0.1	..	17.0
Latin America/Caribbean	0.5	..	3.4
in percent of total bank assets	0.1	..	0.3
in percent of EM claims	11.9	..	4.2
of which:			
Paraguay	0.1	..	..
Brazil	0.1	..	1.3
Mexico	0.1	..	1.2
Memorandum items:			
Total Bank Assets	738.0	903.6	1321.7
GDP (current prices)	332.8	263.5	539.9

Sources: BIS, Haver Analytics, IFS, IMF World Economic Outlook, and Fund staff calculations