Danish Financial Supervisory Authority

In case of discrepancies to the Danish press release, the Danish version prevails

2 November 2018

# New EU-wide stress test: Large Danish banks withstand severe economic downturn

The EU-wide stress test shows that the four Danish banks will maintain excess capital relative to capital requirements even in the event of a severe economic downturn. Danske Bank, Nykredit, Jyske Bank and Sydbank will maintain Common Equity Tier 1 capital ratios between 11.7 and 15.6 per cent by the end of 2020. Going forward, the results will feed into the supervisory dialogue with the banks on their capital targets and distribution policies.

"The results show that the largest Danish banks are robust even in the event of a severe economic downturn. The assumed economic downturn is significantly more severe than in previous stress tests, and more severe than what we see for Europe overall. Therefore, the capital effect is substantial and higher than in previous stress tests. Results are reassuring from a Danish point of view. Having said that, this conclusion is largely based on a favourable capital position at the starting point and the largest Danish banks should safeguard this going forward by retaining some of their earnings," says Director General, Jesper Berg.

The European Banking Authority (EBA) has coordinated the EU-wide stress test 2018. The stress test aims at assessing the robustness of the EU banking sector against a negative development in macroeconomic conditions. The stress test is based on a common methodology for calculating the consequences. It fosters transparency about the European banking sector's exposures and risks on a harmonised basis. The stress test has been prepared for the first time under the new impairment rules in accordance with IFRS 9, which entered into force on 1 January 2018.

The stress test covers 48 banks in 15 countries, corresponding to over 70 per cent of the European banking sector's total assets. Moreover, national supervisory authorities have chosen to stress test other banks in addition to this sample.

From Denmark, Danske Bank, Nykredit and Jyske Bank participate in the EBA sample of banks. Furthermore, the Danish Financial Supervisory Authority has requested Sydbank to perform a similar stress test in order to achieve a larger coverage of the Danish banking sector. The four Danish participants have all been subject to the same macroeconomic scenarios, methodology, reporting requirements and quality assurance.

Overall, the stress test covers more than 90 per cent of the Danish banking sector's total assets, and all institutions participate at group level. The results are based on the banks' financial accounts and capital positions in 2017 and are calculated assuming a static (unchanged) balance sheet and without allowing for management interventions.

The EU-wide stress test 2018 is coordinated by the EBA in cooperation with the national authorities (in Denmark, the Danish Financial Supervisory Authority), the European Central Bank (ECB) and the European Systemic Risk Board (ESRB).

## Scenarios and assumptions

For Denmark, the adverse scenario reflects a severe economic downturn with negative GDP growth, a significant decline in housing and commercial property prices and rising unemployment. Compared to previous EU-wide stress tests, the Danish adverse scenario is significantly more severe, and more severe than for the EU overall, cf. Table 1. The adverse scenarios for the other Nordic countries, in particular for Sweden, also include a severe economic downturn.

Table 1: Adverse scenarios for Denmark, Sweden, Norway, the EU and the Eurozone

				EBA	EU-wide	stress test	2018			
Scenario variables	Denmark		Sweden		Norway		EU		Eurozone	
Coordina Validados	over	over	over	over	over	over	over	over	over	over
	2 years	3 years	2 years	3 years	2 years	3 years	2 years	3 years	2 years	3 years
Accumulated growth in per cent										
Real GDP	-5.4	-4.1	-8.9	-10.4	-2.1	-1.4	-3.4	-2.7	-2.9	-2.4
Residential property prices	-24.6	-28.1	-47.8	-49.4	-41.1	-38.7	-18.5	-19.1	-16.1	-16.5
Commercial property prices	-27.5	-31.0	-38.0	-42.8	-37.3	-35.0	-17.8	-20.0	-15.7	-17.7
Per cent/percentage points										
Unemployment - level EoY	9.5	11.1	10.9	12.5	5.7	6.3	9.0	9.7	9.7	10.3
Unemployment - change (2017-)	3.8	5.4	4.2	5.8	1.6	2.2	1.5	2.2	0.8	1.4
10Y government bond yeilds - level EoY	1.4	1.7	2.4	2.9	2.4	2.7	2.4	2.6	2.2	2.5
10Y government bond yeilds - change (2017-)	0.9	1.2	1.8	2.2	0.8	1.1	1.2	1.4	1.2	1.4

Note: The adverse scenario covers the period 2018-20. Eurostat's definition of unemployment rate.

Over 2 years refer to 2018-19, over 3 years to 2018-20.

Source: ESRB and own calculations.

In the stress test, banks have to project credit and market risk related losses over the course of the adverse scenario. Furthermore, the methodology underlying the EU-wide stress test includes restrictions (caps and floors) on the development of e.g. earnings and the risk exposure amount of banks in order to ensure a minimum degree of conservatism in the stress test. Overall, the stress test is assessed to be very severe for the Danish banks by its design.

### The Danish results

The Danish banks' capital positions are affected substantially by the negative macroeconomic conditions in the adverse scenario. Across banks, the decline in the Common Equity Tier 1 capital ratio falls in the range of approximately 4-5 percentage points in the adverse scenario when compared to 2017 and excluding transitional arrangements of CRR/CRD4 and IFRS 9. For most institutions, capital impacts are significantly larger than in the EU-wide stress test from 2016. This is explained by, among other things, a significantly more severe adverse scenario in this year's stress test. The Common Equity Tier 1 ratio of Danske Bank shows a particularly large drop in the adverse scenario. This is due to, inter alia, the fact that Danske Bank in the adverse scenario incorporates assumed conduct costs in relation to the ongoing money laundering investigation of the bank's Estonian branch. The assumed conduct costs are consistent with the decision of the Danish Financial Supervisory Authority of 4 October 2018 concerning "Danske Bank's follow-up to the Danish FSA's decision on the Estonian case on 3 May 2018".

Excess capital relative to capital requirements can be calculated under both transitional and fully loaded CRR/CRD4 and IFRS 9. For example, transitional arrangements for the capital impact of IFRS 9 allow banks who make use of these arrangements (Danske Bank and Sydbank) to add back to their capital a transitional amount. Under fully loaded CRR/CRD4 and IFRS 9, results are presented without these transitional arrangements, i.e., assuming that the capital impact of IFRS 9 and CRR4/CRD4 is fully phased-in at the reporting date (although transitional arrangements may still be in effect at that date). The latter can give an impression of whether banks at a given point in time are able to fulfil fully loaded capital requirements up-front.

On a *transitional basis*, the Danish banks hold a Common Equity Tier 1 ratio in the range of 11.7-15.6 per cent in the adverse scenario end 2020. All four banks maintain excess capital relative to the CET1 capital requirement in the stress test, cf. Figure 1 (red vs. blue bar). This reflects relatively favourable capital ratios and excess capital levels at the starting point in 2017 (CET1 capital ratios in the range of 16.4-20.7 per cent).<sup>1</sup>

On a fully-loaded basis (yellow vs. blue bar), a small capital shortfall is observed for Danske Bank in relation to the capital conservation buffer in the

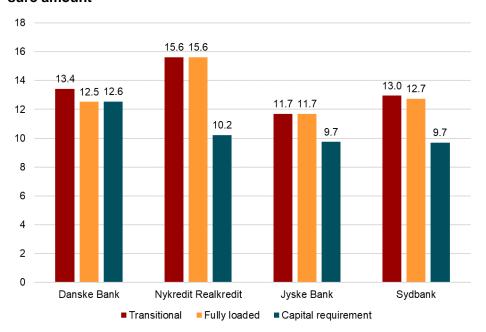
<sup>&</sup>lt;sup>1</sup> Detailed information on capital etc. can be found in the Appendix.

worst year of the stress test which for Danske Bank is end 2019 (fully phased in CET1 capital ratio of 12.5 per cent against a capital requirement including capital buffers of 12.6 per cent). Danske Bank's capital requirement include a Pillar II add-on, reflecting the compliance and reputational risks assessed by the bank in relation to the Estonian AML case, consistent with the Danish Financial Supervisory Authority's decision of 4 October 2018.

Danske Bank's CET1 capital remains above the solvency need and SIFIbuffer by a significant margin.

The other participating Danish banks maintain excess capital also on a fully loaded basis.

Figure 1: Common Equity Tier 1 capital (CET1) and CET1 capital requirements in the worst year of the adverse scenario, per cent of risk exposure amount



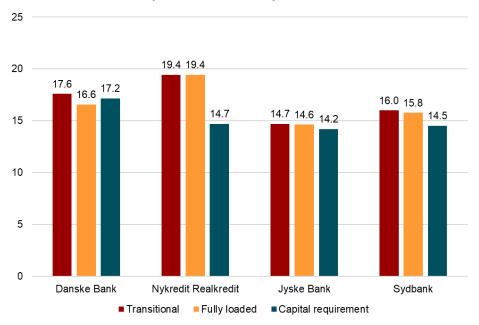
Note: The capital requirement in the adverse scenario is calculated as the minimum requirement (4.5 per cent) + the CET1 share of the Pillar II add-on + capital conservation buffer + SIFI-buffer (depending on the institution). Loss-absorbing AT1 and T2 capital is not included. Worst year refers to the year in the adverse scenario with the lowest amount of excess capital. For Danske Bank end 2019. For the other institutions end 2020.

A similar picture for the Danish institutions emerges when looking at total capital, cf. Figure 2. Nykredit, Jyske Bank and Sydbank maintain excess capital relative to capital requirements on both a transitional and a fully loaded basis. However, excess capital is generally lower for all institutions.

Danske Bank maintains excess capital on a transitional basis, while a capital shortfall of 0.6 per cent of risk exposure amount (=16.6-17.2) is observed in the worst year (end 2019).

As mentioned above, the starting point of the stress test is the institutions' capital position at the end of 2017. During the first half of 2018, several institutions have made changes to their capital position due to e.g. capital issuances and share buy-backs, and all institutions have earned a net profit. When including these adjustments during the first half of 2018 the capital position for all institutions improves. For Danske Bank, the capital shortfall is eliminated by a narrow margin by the adjustments from the first half of 2018, cf. the Appendix.

Figure 2: Total capital and total capital requirements in the worst year of the adverse scenario, per cent of risk exposure amount



Note: The capital requirement in the adverse scenario is calculated as the minimum requirement (8 per cent) + Pillar II add-on + capital conservation buffer + SIFI-buffer (depending on institution). Worst year refers to year in the adverse scenario with the lowest amount of excess capital. For Danske Bank end 2019. For the other institutions end 2020.

### Assessment of results

EBA has not set a threshold level for the capital that the participating institutions should comply with in the stress test. Instead, the results of the test must be included in the ongoing supervisory assessments, including when assessing whether the level of capital of the individual institutions is adequate.

The Danish results have not given rise to immediate supervisory reactions, but results will be part of the forward-looking dialogue with banks on capital targets and distribution policies.

The Danish Financial Supervisory Authority has carried out a quality assurance of the results in order to ensure sufficiently prudent results in the adverse scenario. By a varying degree, the quality assurance process has changed results in a more prudent direction. The quality assurance has taken into account differences in institutions' business models, including the extent of mortgage lending and foreign exposures.

# **Appendix** (in per cent of risk exposure amount)

Danske Bank Group  1. Capital	Actual 2017	Transistional CRR/CRD4 & IFRS9			Fi	Memo <sup>3)</sup>		
		2017 (IFRS9 restated)	Baseline (end 2020)	Adverse (worst year²)	2017 (IFRS9 restated)	Baseline (end 2020)	Adverse (worst year²)	Adverse (worst year²)
Common Equity Tier 1	17,6%	17,6%	16,4%	13,4%	17,3%	16,2%	12,5%	12,7%
Tier 1 capital	20,1%	20,0%	18,7%	15,5%	19,8%	18,5%	14,6%	15,3%
Total capital	22,6%	22,6%	20,9%	17,6%	22,0%	20,7%	16,6%	17,3%
Capital requirement <sup>1)</sup> Common Equity Tier 1	9,5%	9,5%	13,8%	12,6%	12,0%	15,2%	12,6%	12,6%
Tier 1 capital	11,5%	11,5%	15,8%	14,5%	13,9%	17,2%	14,5%	14,5%
Total capital	14,1%	14,1%	18,5%	17,2%	16,6%	19,8%	17,2%	17,2%
3. Excess capital (12.) Common Equity Tier 1	8,1%	8,1%	2,5%	0,9%	5,3%	1,0%	-0.0%	0,1%
Tier 1 capital	8,6%	8,5%	2,9%	1,0%	5,8%	1,4%	0,1%	0,8%
Total capital	8,5%	8,4%	2,5%	0,4%	5,5%	0,9%	-0,6%	0,1%
Memo: Binding excess capital	8,1%	8,1%	2,5%	0,4%	5,3%	0,9%	-0,6%	0,1%

<sup>1)</sup> Includes maximum counter-cyclical capital buffer (CCyB), i.e. 2.5 per cent, in the baseline scenario fully-loaded CRR/CRD4 & IFRS9. CCyB of 0 per cent in the adverse scenario. Additional pillar II add-on in the projections in acordance with the FSA order of 4 October 2018.

<sup>&</sup>lt;sup>3)</sup>Fully-loaded CRR/CRD4 & IFRS9 after capital measures and net profit in the 1st half of 2018

Nykredit Rrealkredit Group  1. Capital	Actual 2017	Transistional CRR/CRD4 & IFRS9			Fi	Memo <sup>3)</sup>		
		2017 (IFRS9 restated)	Baseline (end 2020)	Adverse (worst year²)	2017 (IFRS9 restated)	Baseline (end 2020)	Adverse (worst year <sup>2</sup> )	Adverse (worst year <sup>2</sup> )
Common Equity Tier 1	20,7%	20,5%	22,0%	15,6%	20,5%	22,0%	15,6%	16,4%
Tier 1 capital	21,8%	21,6%	23,1%	16,5%	21,6%	23,1%	16,5%	17,3%
Total capital	25,3%	25,2%	26,6%	19,4%	25,1%	26,6%	19,4%	20,2%
Capital requirement <sup>1)</sup> Common Equity Tier 1	8,2%	8,2%	11,2%	10,2%	10,2%	12,7%	10,2%	10,2%
Tier 1 capital	10,1%	10,1%	13,1%	12,1%	12,1%	14,6%	12,1%	12,1%
Total capital	12,6%	12,6%	15,7%	14,7%	14,7%	17,2%	14,7%	14,7%
3. Excess capital (12.) Common Equity Tier 1	12,5%	12,4%	10,7%	5,4%	10,2%	9,2%	5,4%	6,2%
Tier 1 capital	11,7%	11,6%	9,9%	4,4%	9,4%	8,4%	4,4%	5,1%
Total capital	12,7%	12,5%	10,9%	4,7%	10,4%	9,4%	4,7%	5,5%
Memo: Binding excess capital	11,7%	11,6%	9,9%	4,4%	9,4%	8,4%	4,4%	5,1%

<sup>1)</sup> Includes maximum counter-cyclical capital buffer (CCyB), i.e. 2.5 per cent, in the baseline scenario fully-loaded CRR/CRD4 & IFRS9. CCyB of 0 per cent in the adverse scenario. Constant solvency need (end 2017 level) in the projection.

<sup>2)</sup> Worst year refers to the year in the adverse scenario with the lowest amount of excess capital. For Danske Bank end 2019.

<sup>&</sup>lt;sup>2)</sup> Worst year refers to the year in the adverse scenario with the lowest amount of excess capital. For Nykredit end 2020.

<sup>&</sup>lt;sup>3)</sup>Fully-loaded CRR/CRD4 & IFRS9 after capital measures and net profit in the 1st half of 2018

Jyske Bank Group  1. Capital	Actual	Transistional CRR/CRD4 & IFRS9			F	Memo <sup>3)</sup>		
	2017	2017 (IFRS9 restated)	Baseline (end 2020)	Adverse (worst year²)	2017 (IFRS9 restated)	Baseline (end 2020)	Adverse (worst year <sup>2</sup> )	Adverse (worst year²)
Common Equity Tier 1	16,4%	16,0%	16,6%	11,7%	16,0%	16,6%	11,7%	12,1%
Tier 1 capital	18,0%	17,7%	18,0%	13,0%	17,4%	17,9%	12,9%	13,3%
Total capital	19,8%	19,5%	19,9%	14,7%	19,4%	19,8%	14,6%	15,0%
Capital requirement <sup>1)</sup> Common Equity Tier 1	7,9%	7,9%	10,7%	9,7%	9,8%	12,2%	9,7%	9,7%
Tier 1 capital	9,8%	9,8%	12,7%	11,7%	11,7%	14,2%	11,7%	11,7%
Total capital	12,4%	12,4%	15,2%	14,2%	14,2%	16,7%	14,2%	14,2%
3. Excess capital (12.)								
Common Equity Tier 1	8,4%	8,1%	5,8%	2,0%	6,3%	4,3%	2,0%	2,4%
Fier 1 capital	8,2%	7,9%	5,4%	1,4%	5,7%	3,8%	1,2%	1,6%
Total capital	7,5%	7,1%	4,7%	0,5%	5,1%	3,1%	0,4%	0,8%
Memo: Binding excess capital	7,5%	7,1%	4,7%	0,5%	5,1%	3,1%	0,4%	0,8%

<sup>1)</sup> Includes maximum counter-cyclical capital buffer (CCyB), i.e. 2.5 per cent, in the baseline scenario fully-loaded CRR/CRD4 & IFRS9. CCyB of 0 per cent in the adverse scenario. Constant solvency need (end 2017 level) in the projection.

<sup>&</sup>lt;sup>3)</sup>Fully-loaded CRR/CRD4 & IFRS9 after capital measures and net profit in the 1st half of 2018

	Actual	Transistional CRR/CRD4 & IFRS9			Fu	Memo <sup>3)</sup>		
	2017	2017 (IFRS9 restated)	Baseline (end 2020)	Adverse (worst year²)	2017 (IFRS9 restated)	Baseline (end 2020)	Adverse (worst year²)	Adverse (worst year²)
Common Equity Tier 1	17,3%	17,2%	18,6%	13,0%	17,0%	18,3%	12,7%	11,9%
Tier 1 capital	17,7%	17,7%	18,8%	13,1%	17,0%	18,3%	12,7%	13,0%
Total capital	20,8%	20,8%	22,1%	16,0%	20,5%	21,8%	15,8%	16,0%
2. Capital requirement <sup>1)</sup>								
Common Equity Tier 1	8,0%	8,0%	10,7%	9,7%	9,7%	12,2%	9,7%	9,7%
Tier 1 capital	10,1%	10,1%	12,8%	11,8%	11,8%	14,3%	11,8%	11,8%
Total capital	12,9%	12,9%	15,5%	14,5%	14,5%	17,0%	14,5%	14,5%
3. Excess capital (12.)								
Common Equity Tier 1	9,2%	9,2%	7,9%	3,3%	7,3%	6,1%	3,0%	2,2%
Tier 1 capital	7,6%	7,6%	6,0%	1,4%	5,2%	4,0%	1,0%	1,2%
Total capital	7,9%	7,9%	6,6%	1,5%	6,0%	4,8%	1,3%	1,5%
Memo: Binding excess capital	7,6%	7,6%	6,0%	1,4%	5,2%	4,0%	1,0%	1,2%

<sup>1)</sup> Includes maximum counter-cyclical capital buffer (CCyB), i.e. 2.5 per cent, in the baseline scenario fully-loaded CRR/CRD4 & IFRS9. CCyB of 0 per cent in the adverse scenario. Constant solvency need (end 2017 level) in the projection.

Binding excess capital < 0.5 pct.
Binding excess capital < 0 pct.

<sup>&</sup>lt;sup>2)</sup> Worst year refers to the year in the adverse scenario with the lowest amount of excess capital. For Jyske Bank end 2020.

<sup>&</sup>lt;sup>2)</sup> Worst year refers to the year in the adverse scenario with the lowest amount of excess capital. For Sydbank end 2020.

<sup>&</sup>lt;sup>3)</sup>Fully-loaded CRR/CRD4 & IFRS9 after capital measures and net profit in the 1st half of 2018