

# **Internal Capital Adequacy Assessment Process**

**Saxo Bank Group**

Q3 2019



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# 1. Introduction

The purpose of the Internal Capital Adequacy Assessment Process (ICAAP) is to determine the adequate level of capital to support Saxo Bank A/S' (hereafter "the Bank") and the Saxo Bank Group's (hereafter "the Group") current and expected future risks from the business strategy. This report is fulfilment of the disclosure requirement as according to the Danish Executive Order of 27 March 2014 on Calculation of Risk Exposures, Own Funds and Solvency Need and the Danish Financial Business Act for both the Bank and the Group.

The result of the ICAAP shown in this report is based on figures as of 30 September 2019.

The ICAAP determined Solvency Need for the Group amounted to DKK 2,252 million equal to 13.4% of the total Risk Exposure Amount (REA) with REA totalling DKK 16,779 million. The Group's Total capital amounted to DKK 4,666 giving the Group an excess capital of 1,769 million including the combined buffer requirement of DKK 577 million and MREL requirement of DKK 68 million. The Group's CET1 and Total capital ratios were 19.2% and 27.8%, respectively.

The ICAAP determined Solvency Need for the Bank amounted to DKK 1,799 million equal to 12.4 % of the total Risk Exposure Amount (REA) with REA totalling DKK 14,463 million. The Bank's Total capital amounted to DKK 5,373 million giving the Bank an excess capital of DKK 3,136 million including the combined buffer requirement of DKK 368 million and MREL requirement of DKK 68 million. The Bank's CET1 and Total capital ratios were 27.2% and 37.2%, respectively.

The ICAAP Q3 2019 Report is a supplement to the Group's Risk Report 2018 and has been approved by the Board of Directors in the Group. The Risk Report contains detailed descriptions of the Group's risk and capital management and is available at [www.home.saxo/about-us/investor-relations](http://www.home.saxo/about-us/investor-relations).

## 2. Capital Adequacy Assessment

The Group's primary capital adequacy assessment tool is the ICAAP; rooted in the Danish implementation of Capital Requirement Directive's (CRD IV), including "ICAAP guideline issued by DFSA" which applied from December 2018, (Guideline of 05/12/2018) and the Danish Financial Business Act.

The ICAAP assesses the Group's Solvency Need through three approaches: minimum capital requirement calculation (Pillar I) using the Danish implementation of the Capital Requirements Regulation (CRR), internal assessment of capital requirement (Pillar II) and capital requirement adequacy testing through internal models and stress testing (Pillar II). Pillar III contains the disclosure aspect and is covered by the Group's Risk Report 2018 and this ICAAP Report.

### 2.1 Internal Capital Adequacy Assessment Process

The Group's ICAAP process follows five steps:

- Step 1. Minimum capital requirement (Pillar I)
- Step 2. Internal assessment of whether additional capital requirements are needed above and over Pillar I using quantitative approaches and/or management judgement (Pillar II)
- Step 3. Capital requirement adequacy testing through stress testing and scenario analysis; if vulnerabilities, not covered in step 2 and 3, are found with sufficient plausibility and severity, an assessment is made whether an add-on (Pillar II) has to be made or addressed in the capital planning
- Step 4. Capital adequacy determination based on the three previous steps (Pillar II)
- Step 5. Disclosure (Pillar III)

A full ICAAP is performed as often as required, but at least once a year and reported to Danish FSA quarterly.

### 2.2 Business activities covered by the ICAAP

The primary business activity of the Group is facilitating online trading, investment and other investment services within capital markets to private, corporate institutional clients including white label clients. These activities are driven through Saxo Bank A/S and subsidiaries hereof.

The business activities involve different types of risk and concern different risk areas in the ICAAP as shown in the table below.

Activities/Risk categories	Credit Risk	Market Risk	Operational Risk	Business Risk	Liquidity Risk	Leverage Risk
Trading activities	√	√	√	√	√	√

The different risk types the Group is exposed to, have been examined and split into ICAAP risk categories as shown in the table below. Different methods are applied to assess the Group's capital need within each category.

Risk Types/Risk categories	Credit Risk	Market Risk	Operational Risk	Business Risk	Liquidity Risk	Leverage Risk
Earnings		√		√		
Credit growth						
Credit risk	√					
Market risk		√				
Concentration risk	√	√		√		
Group risks	√	√	√	√	√	√
Liquidity risk					√	
Leverage risk						√
Operational risk			√			
Control risk			√			
Settlement risk	√		√			
Strategic risk				√		
Reputational risk			√	√		
Non-trading interest rate risk		√				
External risk	√		√	√	√	√
Stress testing	√	√	√	√	√	

The Risk Report 2018, available at [www.home.saxo/about-us/investor-relations](http://www.home.saxo/about-us/investor-relations), provides more details on each of the Risk categories.

### **2.3 Internal Assessed Capital Requirement**

The internal set level of capital needed reflects the Group's assessment of its capital requirement. The purpose of the internal assessment is to identify and incorporate risks not covered by Pillar I or found to not being conservative enough.

Assessment is initiated by identifying the relevant risk-areas and exposures in the Group not covered by the minimum capital requirement. For each identified risk, it is assessed by the Group whether the risk is covered by Pillar I and, if so, whether it is sufficiently conservative. It is based on internal, quantitative approaches and, if relevant, internal expert input and management judgements.

Furthermore, the Group uses stress testing to test whether the capital requirement is conservative enough and ensuring that the assessed adequate capital level for the Group is sufficient to withstand unlikely, but not impossible, stress scenarios.

A number of stress scenarios have been outlined in the various single risk areas. Furthermore, a stress scenario has been implemented to create a very severe and highly unlikely stress-scenario. Where it is applicable, mitigating measures, like contingency plans and insurance coverage, are applied. The Group also conducts an income sensitivity analysis to ensure that business risks are covered adequately in the budgeted income.

The stress scenarios are updated and reviewed according to changes in the market and economic environment, and at least once a year.

### **2.4 Capital planning**

Part of the ICAAP is planning future capital needs in relation to the business environment, growth and strategic plans in the years to come. Potential major changes to the risk profile, and thereby the future changes in capital requirements are estimated. These could be changes in the business strategy or competitive landscape, significant increases in traded volumes, fundamental changes in the market conditions, changes in the internal organisation, material changes in regulatory requirements or introductions of new products. This input is used in the strategic decision-making process by the Board of Management and the Board of Directors.

### 3. ICAAP Results Q3 2019

#### Internal Solvency Need Assessment Breakdown

Saxo Bank Group							Saxo Bank A/S						
Risk Type DKKm	Total REA	ICAAP	Total Combined Buffer	MREL	Total Capital Req.	ICAAP pct. of Total REA	Risk Type DKKm	Total REA	ICAAP	Total Combined Buffer	MREL	Total Capital Req.	ICAAP pct. of Total REA
Credit Risk	5.897	629			629	4,3 %	Credit Risk	7.627	715			715	4,9 %
Market Risk	3.442	661			661	4,6 %	Market Risk	3.366	476			476	3,3 %
Operational Risk	7.439	882			882	6,1 %	Operational Risk	3.470	528			528	3,6 %
Business Risk		80			80	0,6 %	Business Risk		80			80	0,6 %
Combined Buffer			577		577	4,0 %	Combined Buffer			419		419	2,9 %
MREL				68	68	0,5 %	MREL				68	68	0,5 %
<b>Total</b>	<b>16.779</b>	<b>2.252</b>	<b>577</b>	<b>68</b>	<b>2.897</b>	<b>20,0 %</b>	<b>Total</b>	<b>14.463</b>	<b>1.799</b>	<b>419</b>	<b>68</b>	<b>2.286</b>	<b>15,8 %</b>

  

Capital Composition	DKKm	% of REA
CET1	3.226	19,2 %
Tier 1	3.561	21,2 %
Total Capital	4.666	27,8 %

  

Capital requirement buffer	DKKm	% of REA
CET1 excess capital	1.747	10,4 %
Tier 1 excess capital	2.237	13,3 %
Total excess capital	1.769	10,5 %

  

Capital Composition	DKKm	% of REA
CET1	3.933	27,2 %
Tier 1	4.268	29,5 %
Total Capital	5.373	37,2 %

  

Capital requirement buffer	DKKm	% of REA
CET1 excess capital	2.868	19,8 %
Tier 1 excess capital	3.284	22,7 %
Total excess capital	3.087	21,3 %

The combined buffer consists of the capital conservation buffer of 2.5% of REA and the countercyclical capital buffer of country-specific buffer-rates.

The current guidelines from Danish FSA allow the Group to use excess trigger capital, (Additional Tier 1 capital with trigger and Tier 2 capital with trigger not used to cover the minimum requirements), to cover a part of the Pillar II add-on requirement.

Additional information on the Group's capital management, the regulatory landscape and more, is disclosed in the Risk Report 2018 available at [www.home.saxo/about-us/investor-relations](http://www.home.saxo/about-us/investor-relations).