Copenhagen Economics

COMPETITION IN THE SWEDISH BANKING SECTOR

2023

Swedish Bankers' Association
October 2023

Preface

Profits for Swedish banks have recently risen. This was the case, in the first two quarters of 2023.[1]

The rising profits have – again – sparked a debate about a possible lack of competition in the banking sector, caused by allegedly high interest margins on mortgages, among other things. [2]

These developments are supposedly driven by a high market concentration due to economies of scale and barriers to entry into the banking market.

In 2019, the Swedish Bankers' Association asked Copenhagen Economics to analyse the competition in the Swedish banking sector, to provide facts for the debate. Examining facts on banking services and comparing the Swedish banking sector to other EU countries, we found no evidence of a lack of competition.

In this analysis, we examine two topics:

- *First,* we update part of our previous analysis, to assess whether the conclusions from 2019 are still valid, or if any changes have occurred to the Swedish banking market.
- *Second*, we analyse the efficiency and profitability of Swedish banks over a business cycle to investigate whether the drivers behind the rising profitability of Swedish banks are a cyclical phenomenon, a result of a structural change, or something else.

The purpose of our analysis is to assess whether competition in the Swedish banking sector is sufficient to secure good quality for consumers regarding the type of product and service as well as the lowest possible prices.

SCOPE AND METHODOLOGY OF ANALYSIS

Throughout the report, "Swedish banks" refer to institutions providing financial services to Swedish banking customers. This includes both retail and corporate lending, both regular credit (loans that are not secured) and mortgage lending. Four banks constitute the majority of the Swedish banking market. These banks all have activities outside Sweden. When assessing the credit market, e.g., market shares and credit growth, only domestic activities are included in the figures. However, due to data restrictions for other types of activity (e.g., asset management), foreign activities are included.

When comparing banking sectors in different countries, we only include banks with more than 1 bn SEK in net loans, and a loan-to-asset ratio larger than 20 percent. This ensures that banking activities are their primary line of business.

Bank-specific data is primarily based on Thomas Reuter Eikon and SCB. In addition, we use aggregated country numbers from the European Central Bank (ECB) and the European Banking Authority (EBA).

In Chapter 1, we compare the performance of the Swedish banking sector to other European countries, with similar structures of the banking market, effective law systems, and stable political environments. Concretely, this is the other three Nordic countries (Finland, Denmark, and Norway), the EU's two largest economies (France and Germany), and the Netherlands and Belgium.

1) The same is seen in other European countries, implying it is not a Swedish phenomenon. / 2) See Copenhagen Economics (2019).

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Executive summary

Financial products have special characteristics implying different competition dynamics are present in the financial market

Financial products are complex and relationship-based. This should be taken into account when assessing the competition in the Swedish banking market. Thus, the competition dynamics in the Swedish banking market should primarily be compared to that of financial sectors in similar countries.

The Swedish banking market has high consumer mobility and market shares shift over time

An indicator of competition is that customers respond if a bank's prices are uncompetitive relative to their quality, i.e., that banking customers change banks if the prices they are paying are higher than the prices charged by competing banks. The European Commission found that from 2017-2022, Sweden had the highest share of customers who have changed providers of financial products - across all types of products. This implies that the Swedish banking market has low barriers to switching banks, which increases the competitive pressure on banks. Further, it is common for Swedes to be customers in more than one bank.

Small banks are gaining market shares in Sweden. From 2010 to 2022 smaller banks had a large share of net credit growth, implying their market share increased over the same period. This suggests a dynamic banking market with sound competition. The same picture is evident in the Swedish mortgage market, as market shares change between banks from year to year.

At the same time, market concentration in the Swedish banking sector is at an average level among comparable countries. If a sector is concentrated, some market participants have strong market power – this does not seem to be the case in Sweden.

Swedish banks are cost-efficient, suggesting they are working to reduce costs due to competitive pressure

The Swedish financial sector appears to be relatively efficient, as Swedish banks have lower operational costs than comparable EU countries.

Further, we find that Swedish banks pass on their low costs to customers. Banking customers in Sweden are thus offered low-priced financial services. Historically, Swedish mortgage rates and interest rates on other loans have been among the lowest in Europe. However, in 2022 interest rates increased faster in Sweden than in comparable countries. This should be seen in the context of the Swedish Central Bank increasing its interest rates earlier than the European Central Bank (ECB).

Profitability for banks varies over the business cycle

Banks' returns are cyclical. Recent increases in profits should be seen in this context. Prices and profits in the Swedish banking market rose during 2022 and the beginning of 2023 – and in general Swedish banks currently have higher returns on equity than banks in other European countries. However, this trend is seen across Europe due to increasing interest rates on lending, stickiness in deposit rates, and no increase in losses yet, impacting the banks' performance positively.

Overall, Swedish banks pass on a higher share of the interest rate increase into their deposit rates than countries in the Euro area, i.e., there is less price stickiness in Sweden.

Sweden has an efficient lending system with low losses

In the period from 2017-2022, annual loss rates for Swedish banks were close to zero – the lowest among benchmark countries. The low losses are an indication of an effective and secure system where banks adjust their assessments of e.g., property values through a business cycle. At the same time, Sweden has an efficient judicial system, and foreclosure auctions can be carried out quickly and easily, securing low losses for banks even in the case of defaults.

The efficient lending system is also expressed in a low yield spread between Swedish mortgage bonds and treasury bonds, which has been 1.7 percentage point on average in the period 2005-2021. One reason is an efficient mortgage financing model. The liquidity of the banks' covered bonds is high and comparable to the liquidity of Swedish government bonds. This stems from investors' high confidence in the Swedish banks. However, the yield spread in Sweden is above yield spreads in Denmark, Germany, and the Netherlands.

Differences in banks' profitability across countries are driven by macroeconomic differences

From 2019-2022 Swedish banks realised a return on equity of around 11 percent, which is the highest in among countries in our comparison. However, international comparisons of profitability are much affected by differences in business cycle situations across Europe: Here Sweden is at the top, while banks in e.g., Germany, France, and the Netherlands have seen higher impairment levels in the period, lowering returns for equity holders.

We also find that the profitability of Swedish banks is below or at average compared to other large listed companies within Sweden.

Overall, we find no evidence of a lack of competition in the Swedish banking sector

Prices and profits for the Swedish banking sector were higher in 2022 and 2023 than in recent years, but this should be seen in the context of a changing macroeconomic environment with increasing interest rates on lending, but not yet elevated losses.

Based on the analysed metrics of competition, we find no clear evidence of a lack of competition in the Swedish banking sector. Instead, it suggests that the Swedish banking sector is relatively efficient compared to other countries.

Introduction

Financial services have special characteristics

Financial services differ from “normal” products in three areas:

First, financial services are complex in at least three ways:

i. They are delivered over time, implying the customer needs to assess the trade-off between current and future needs – this could for instance be mortgage lending that has at least a 30-year time span.

ii. Financial services have embedded risk, and contain several pricing parameters, which the customer must assess, i.e., having a salary account might be for free, but other services related to the account are then charged.

iii. The banks' ability to provide loans depends on the specific consumer, e.g., their credit risk, implying all customers cannot necessarily obtain the same conditions on the loan – for instance, an individual assessment is made for mortgage lending.

Second, financial services are relationship- and trust-based. The relationship between bank advisors and customers will often be closer compared to other sectors, as the financial service is delivered over time. This implies the quality of advice needs to be higher compared to other sectors and price setting sharper. Trust between advisor and customer is important, as most perceive personal financials as a private matter.

Finally, financial services are sold in highly regulated markets, with compliance requirements and prudential regulation to secure the economy against bank defaults. Because of the complex nature of the products and services, there are also consumer protection aspects in the regulation.

Competition dynamics in the financial market differ from other markets

The above-mentioned characteristics of financial product imply that we cannot compare competition in the banking market directly to other sectors of the economy.

For instance, mobility is lower in the banking sector compared to other sectors, and consumers will often use the same bank for different financial services.[1] Also, there are economies of scale in the banking sector. Thus, there are benefits to banks having a certain size, and being able to supply different types of financial services.

In our analysis, we compare the Swedish banking market to banking markets in similar countries, with similar characteristics and thus similar competition dynamics.

We do so by looking at indicators normally used to assess competition in a market. Concretely, we consider the market share of the different financial institutions in the Swedish market and how market shares change over time. We look at market concentration, which gives an indication of the degree of market power banks have, as well as cost-effectiveness and prices charged by banks across selected EU countries.

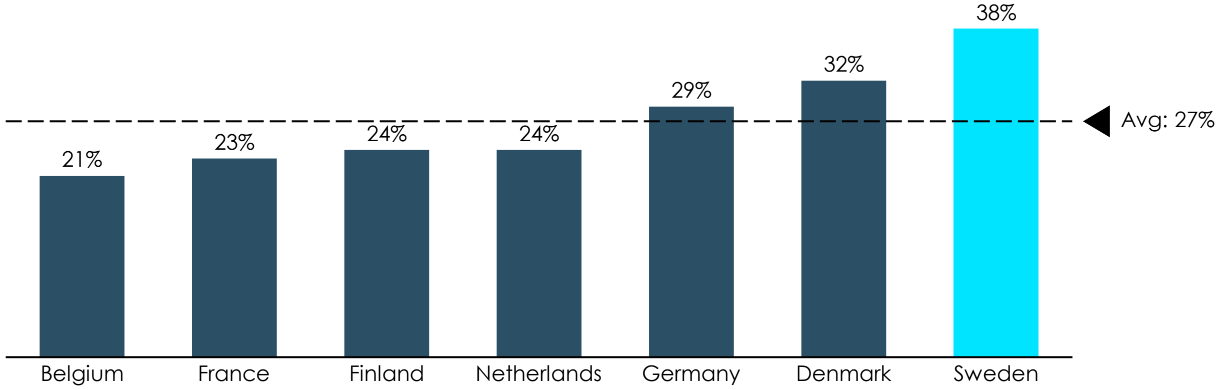
These indicators contribute to our assessment of the competition in the Swedish banking market.

1) However, Swedish banking customers have higher mobility than in comparable countries.

1
COMPETITION IN THE SWEDISH BANKING SECTOR

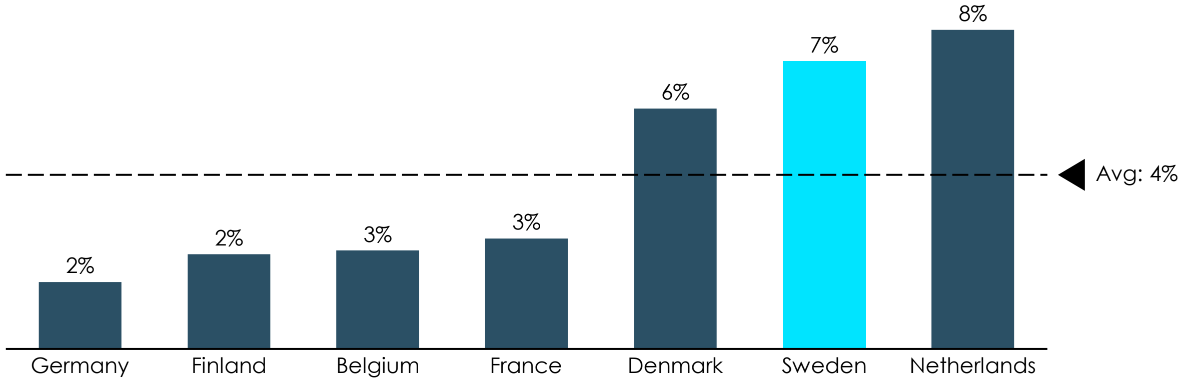
Sweden has high consumer mobility in banking and mortgage lending

Share of customers who have changed provider of one or several financial products in the past five years (2017-2022)
Percent



Source: European Commission (2022)

Share of customers who have changed mortgage loan provider in the past five years (2017-2022)
Percent



Source: European Commission (2022)

Low customer mobility could be a sign of insufficient competition; each bank will have more market power, meaning that they can increase prices with a lower risk of losing customers.

In terms of competition, low customer mobility is only a problem if banks exploit their market power by charging prices way above costs. Thus, the most important things are:

- Customers respond *if* the banking services of one or several banks are uncompetitive, e.g., banking customers change banks if the prices they are paying are higher than the prices charged by competing banks.
- There are no strong barriers for customers to switch banks.

Sweden has high customer mobility in financial services, when compared to other EU countries, see recent results from the European Commission's Eurobarometer on financial services.[1]

Sweden ranks highest in the share of customers who have changed providers of their financial products (across all types of products), see the upper figure. Typically, mortgages are products where customers change providers the least frequently. Looking at the share of customers who have changed their mortgage provider, Sweden is ranked second of the countries in our comparison, see the lower figure.

1) European Commission (2022)

Small banks are gaining market shares in Sweden, suggesting a dynamic banking market with sound competition

Changes in market shares, and the ability of new and smaller banks to enter – and stay – in the banking market, challenge banks to lower their costs and offer good customer service to avoid loss of market share.

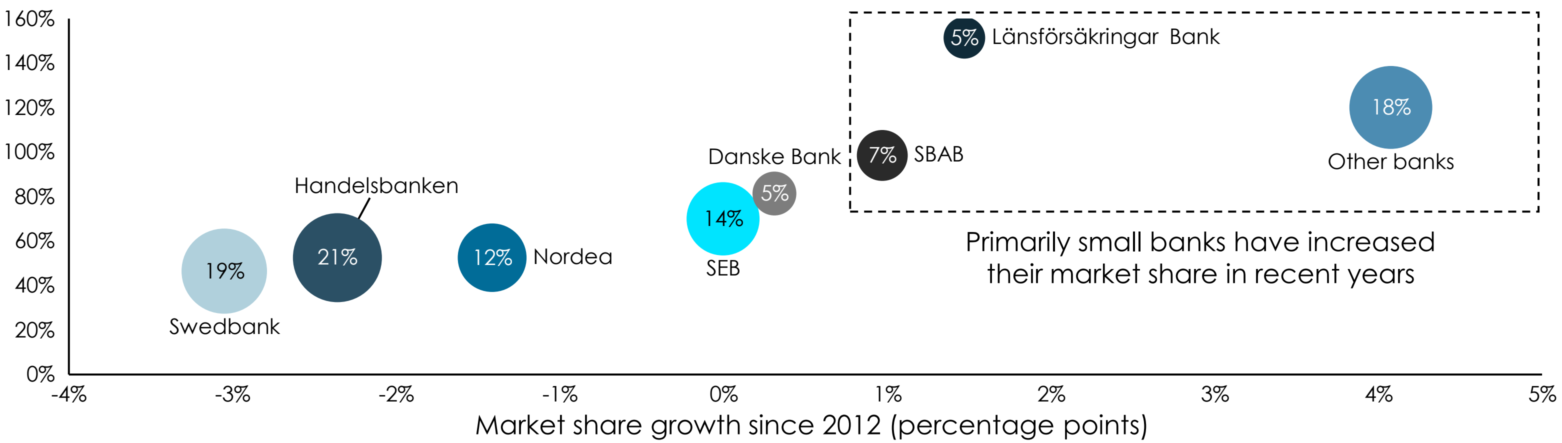
The four biggest banks on the Swedish credit market in 2022 were Handelsbanken, Swedbank, Nordea, and SEB. They account for 66 percent of the Swedish credit market, see the upper figure.

However, smaller banks are gaining market share. Since 2012, three out of the four largest banks have lost market shares, with Swedbank experiencing the biggest decline, by 3 percentage points. SEB is the only one of the four largest banks to have increased its market share marginally. Smaller banks in Sweden have collectively gained market shares since 2012 through large growth in lending, see lower figure.

The fact that smaller banks can expand and gain market share from the larger banks, suggests sound competition in the Swedish banking market. Some consumers do change the provider of financial services, despite the general lower mobility in the financial sectors, compared to other sectors.

Shares of the total credit market in Sweden (including mortgages, corporate loans etc.) in 2022

Credit growth 2012-2022 (percent)

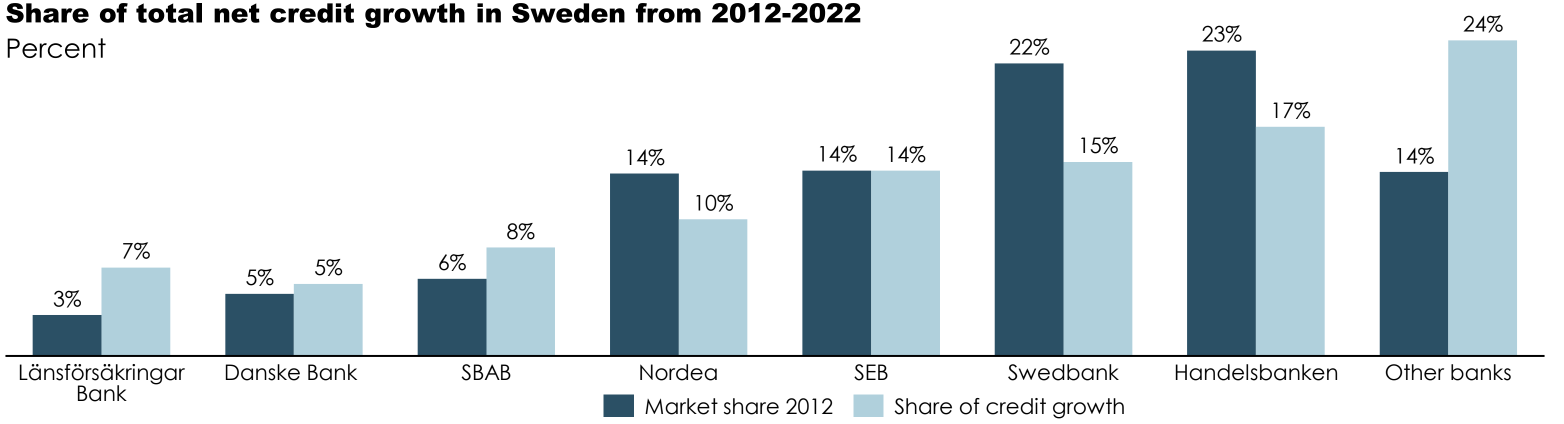


Note: The figure is based on data from SCB. It thereby differs from the Thomas Reuters Eikon database used in the rest of the report, which is based on income statements. Size of circles indicates the share of the credit market in 2022. For example, Swedbank had a 19 percent share of the credit market in 2022. Swedbank's market share in 2022 is around 3 percentage points lower than in 2012 despite a credit growth of 46 percent.

Source: SCB, "Lending to households and non-financial corporations".

Share of total net credit growth in Sweden from 2012-2022

Percent

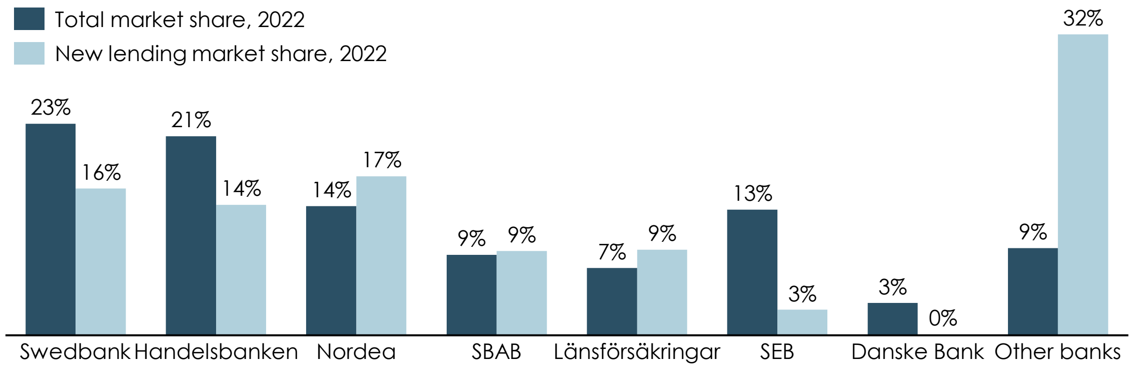


Note: The figure is based on data from SCB on "Lending to households and non-financial corporations". It thereby differs from the Thomas Reuters Eikon database used in the rest of the report, which is based on income statements.

Source: SCB, "Lending to households and non-financial corporations"

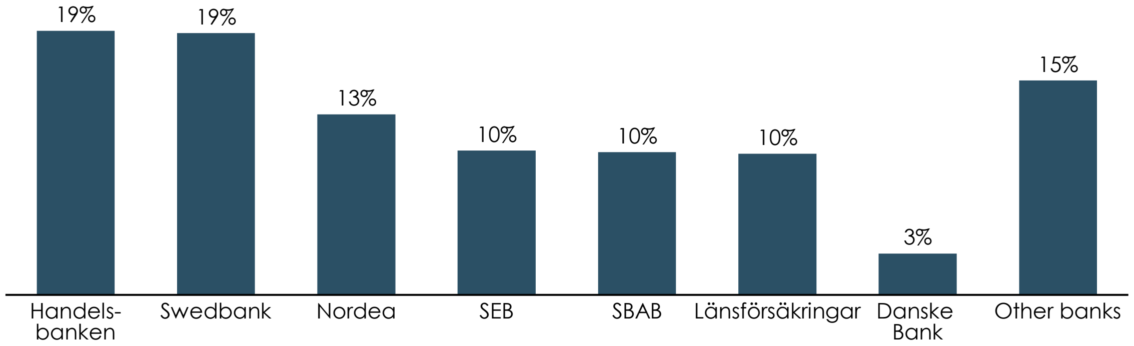
The Swedish mortgage market is dynamic as market shares shift over time

Mortgage market shares Sweden, 2022
Share of total mortgages



Note: Danske Bank is excluded from the calculation of mortgage growth from 2021 to 2022 due to its negative mortgage growth between those years.
Source: SCB, "Lending, Sweden, Collateral housing, Households"

Share of credit growth between 2012 and 2022 on the mortgage market for different Swedish banks
Percent



Source: SCB, "Lending, Sweden, Collateral housing, Households"

Mortgages in Sweden are one of the most important financial products, and consumers often gather their bank business at the bank where they have a mortgage. Thus, it is important for banks to attract and retain mortgage customers.

In Sweden, there are several big actors in the market. The four largest banks (Swedbank, Handelsbanken, Nordea, and SEB) are also the biggest providers of mortgages, see the upper figure. However, smaller banks are increasingly gaining market share. In 2022 "other banks" (i.e., not part of the seven biggest banks in Sweden) constituted 32 percent of the total new mortgage lending, higher than their 9 percent market share.

Since 2012, smaller banks have also had a larger share of the credit growth than their respective market share entails. Two of the largest banks, Handelsbanken and Swedbank, have also performed well, each with a 19 percent share of the credit growth, see the lower figure.

The ability of smaller banks to gain market shares points towards sound competition in the mortgage market, where customers choose the best bank measured on quality and price.

Two factors contribute to the intensifying competition in the Swedish mortgage market:

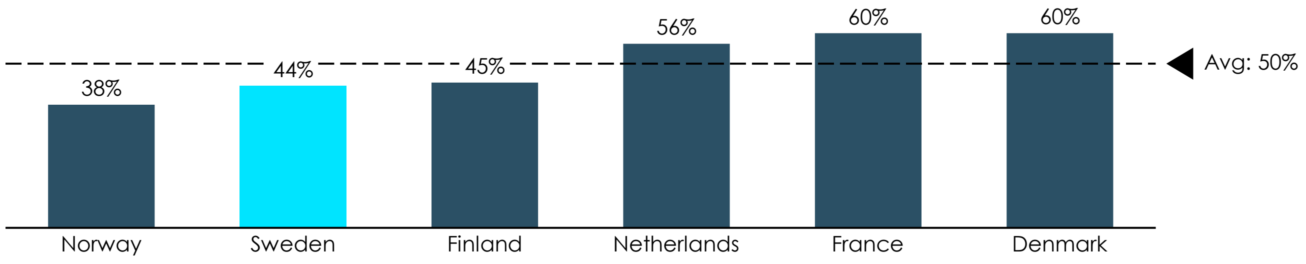
1) Swedish mortgages are the same product, making it easy for Swedish banking customers to compare prices; they compare apples to apples.

2) Online price comparisons and applications have made it easy for customers to find the mortgage institute with the lowest costs. Further, consumers are encouraged to compare mortgages to find the lowest prices.

Swedish banking market concentration is at average among comparable countries

Market shares for the two largest banks per country, 2022

Percent

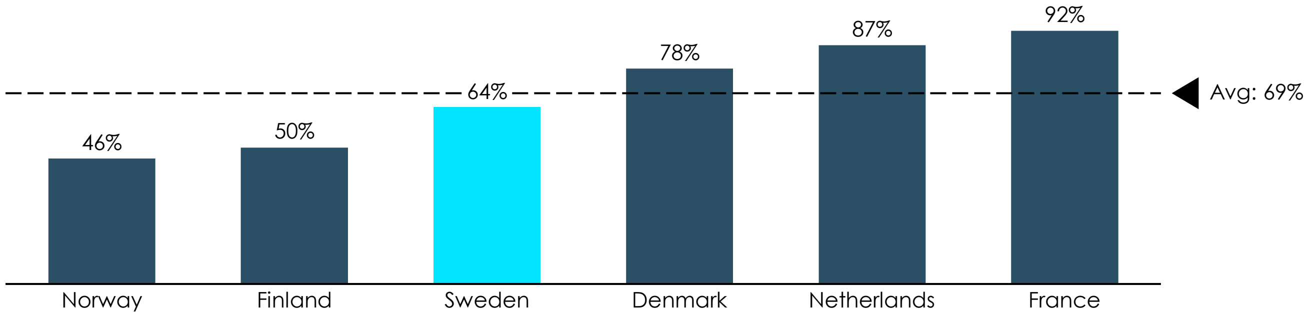


Note: Market shares are calculated based on net loans (TR.NetLoans) from the Eikon database, where they are defined as: "Represents total loans to customers, reduced by possible default losses and unearned interest income". These figures differ from the figures on pages 7 and 8 which are based on the SCB. Germany and Belgium are excluded in the figures due to data constraints.

Source: Thomas Reuters Eikon (2023) and EBA transparency exercise (2022)

Market shares for the four largest banks per country, 2022

Percent



Note: Market shares are calculated based on net loans (TR.NetLoans) from the Eikon database, where they are defined as: "Represents total loans to customers, reduced by possible default losses and unearned interest income". These figures differ from the figures on pages 7 and 8 which are based on the SCB. Germany and Belgium are excluded in the figures due to data constraints.

Source: Thomas Reuters Eikon (2023) and EBA transparency exercise (2022)

If a sector is highly concentrated, market participants tend to have strong market power. However, in banking, low concentration could also be a sign of low competition, see the fact box below.

Looking at the market share of respectively the two and four largest banks in Sweden, we find the concentration of the Swedish banking sector to be around average. Thus, looking at market concentration, there does not seem to be insufficient competition in the Swedish banking sector.

The banking sector concentration in Norway is low due to many smaller savings banks often covering a limited geographical area.

Fact box: Concentration index – an ambiguous measure in banking

Concentration indices are standard measures of competition. High concentration in a market is normally a sign of weak competition. For example, if one bank had a monopoly, it could set the price high, without losing too many customers, as there would still be a need for banking services. In contrast, if there are more banks, customers can more easily switch to other banks, meaning that each bank has less market power.

However, because of economies of scale, a banking market with many small banks and low concentration could be a sign of insufficient competitive pressure; in a more competitive market, small banks would be pushed out of the market by larger banks better able to exploit the economies of scale.[1] ECB calls concentration indices in banking an "ambiguous measure" of competition.[2]

Thus, the "optimal" concentration in the banking sector would be to have enough banks such that each individual bank does not have too much market power, but where each bank is large enough to realise economies of scale.

1) Claessens and Laeven (2004) found that bank concentration and competition were positively correlated. / 2) ECB (2007) p. 7

Swedish banks are cost-efficient suggesting they are working to reduce costs due to competitive pressure

Efficiency within a market can serve as an indicator of healthy competition, signalling limited space for ineffective companies due to competitive pressure. In such an environment, companies with higher costs must either reduce expenses to retain customers or exit the market altogether.

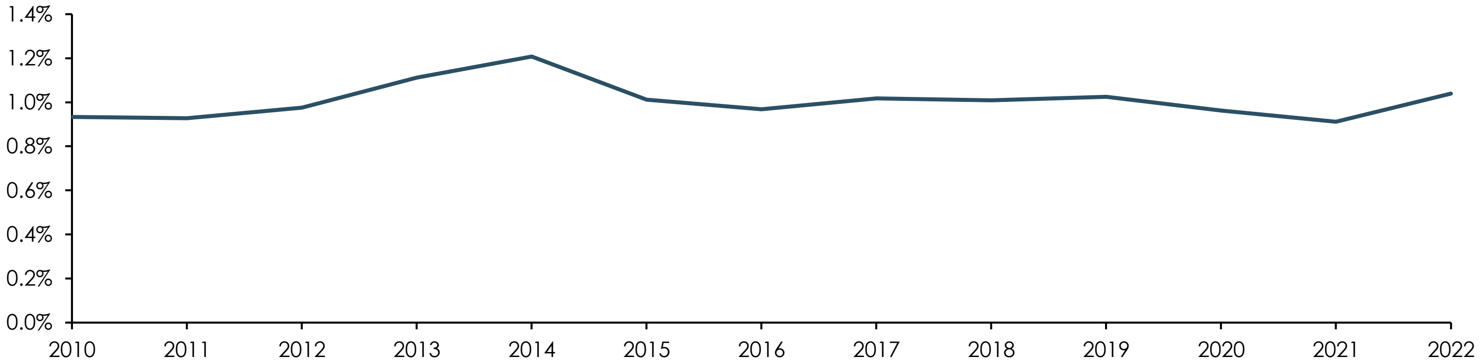
Overall, the Swedish financial sector appears to be efficient. Swedish banks have low and stable operational costs of around 1 percent of their asset value in the period from 2010 to 2022, see the upper figure, suggesting that they have already reached a lower threshold for costs. While additional regulations and compliance requirements have been introduced in the period[1], Swedish banks have maintained their low-cost structure.

At the same time, Sweden has lower operational costs (as a percent of total assets) compared to our benchmark countries, see the lower left figure. However, it is important to note that operational costs can vary for different types of assets. For example, a loan to a start-up company requires a more rigorous risk assessment than a standard mortgage. Consequently, variations in operational costs could be affected by the differences in asset composition across the benchmark countries.

One of the reasons for the low costs in the Swedish banking sector could be the high usage of digital banking services by Swedish customers. This allows Swedish banks to reduce their costs while maintaining a high service level.

Operational costs in Swedish banks, 2010-2022

Percent of total assets

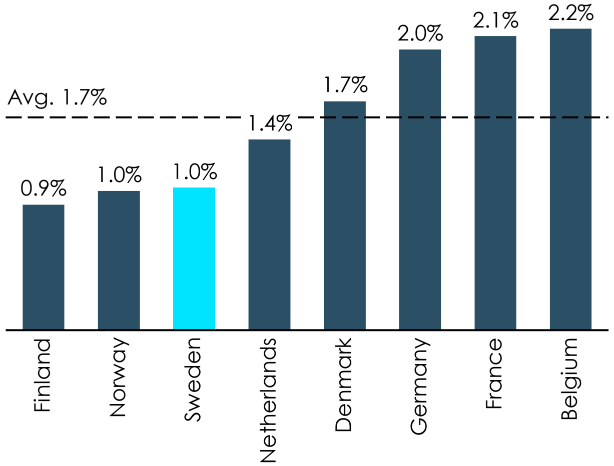


Note: Based on the four largest banks in Sweden

Source: Thomson Reuters Eikon (2023)

Operational costs, 2022

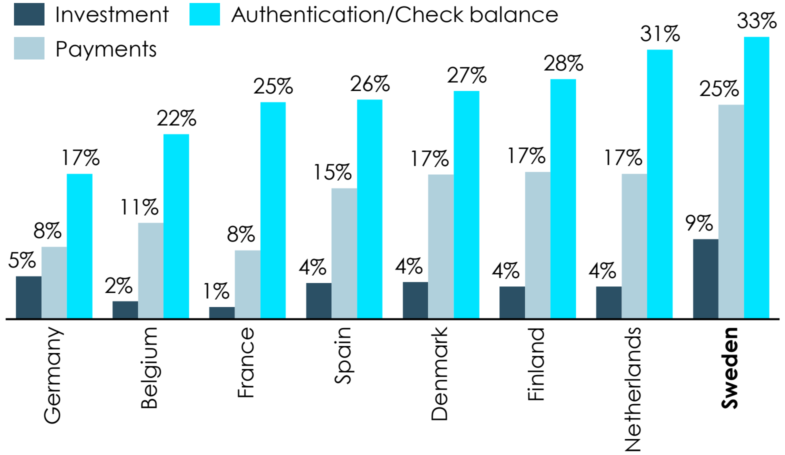
Operational costs as percent of total assets



Source: Thomson Reuters Eikon (2023)

Share of respondents using digital banking services at least once a day

Percent



Source: European Commission (2022)

1) Capital requirements was increased in the aftermath of the financial crisis. In addition, anti-money laundering compliance and ESG requirements have been sharpened during the period.

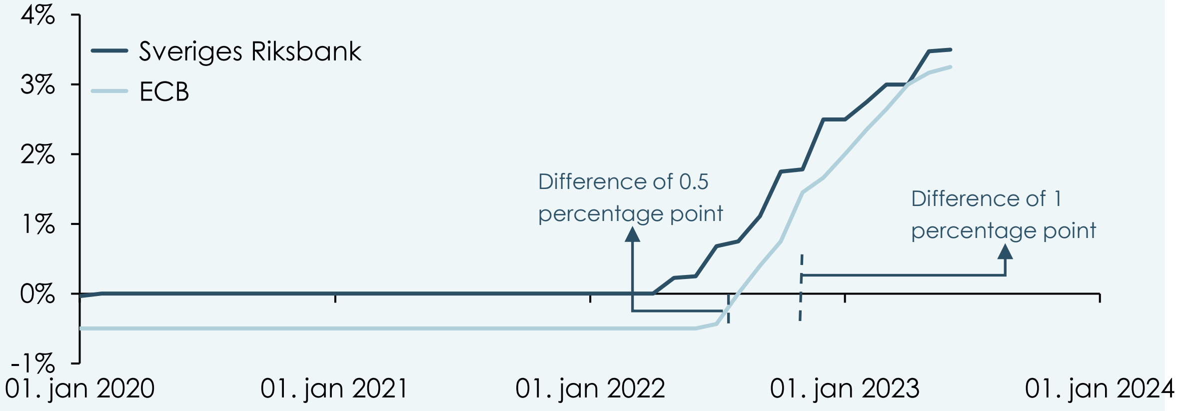
Banking customers in Sweden are offered low-priced financial services

Low prices indicate healthy competition in a market, as companies compete on different aspects such as quality and pricing. When there is strong competition, businesses strive to attract and keep customers by offering the lowest possible prices. This creates a cycle of ongoing improvement and value optimization, ensuring customer satisfaction remains a top priority.

Historically, interest rates in Sweden have been among the lowest in Europe.[1] We find relatively low-interest rates in Sweden for corporates and SMEs in 2020, see figure to the right, despite the central bank interest rate being 0,5 percentage points higher than in the euro area. The relatively low Swedish interest rates are partly due to low funding costs for the Swedish banks, which reflects a high level of trust in the Swedish banks, and due to an efficient banking system with low-cost margins, as outlined in the previous slide.

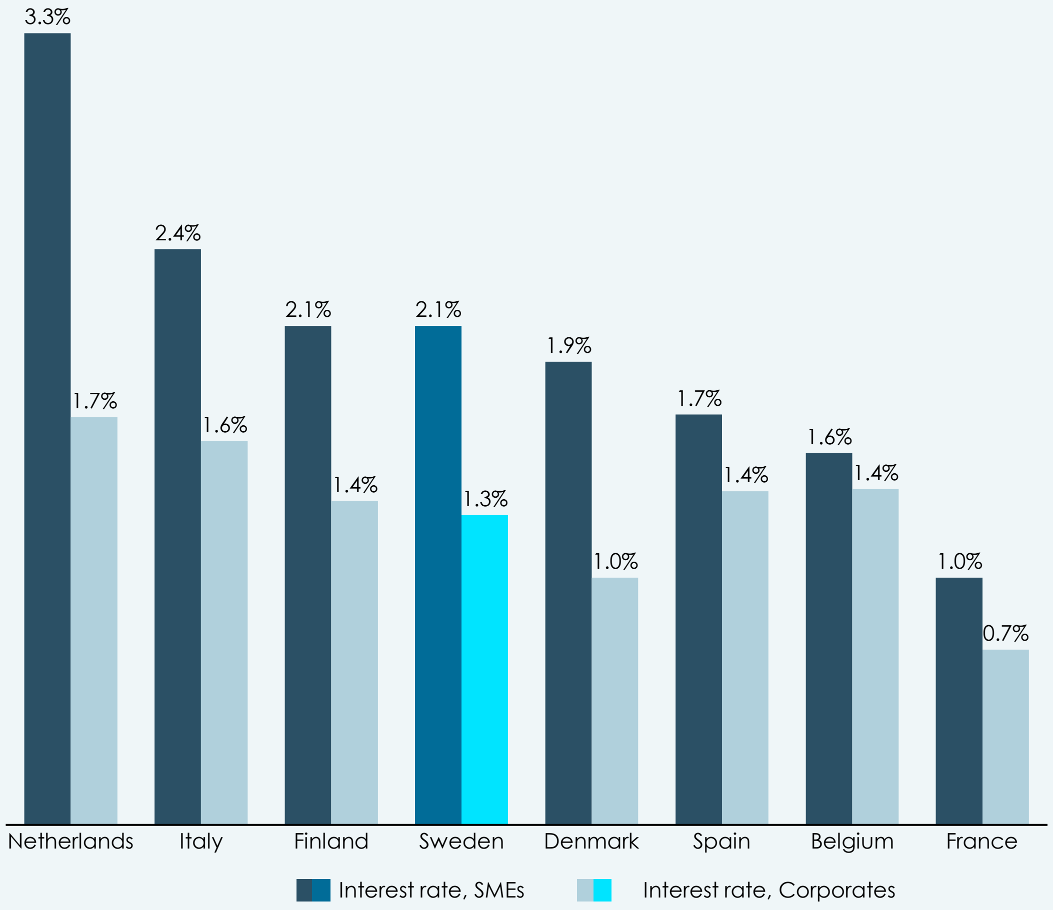
Several factors influence interest rates, such as money market rates and the nature of the credit provided. Therefore, the level of the interest rates cannot be used as a stand-alone measure of banking sector efficiency. The interest rate level in Sweden was higher in 2022 than in previous years, which is partly due to the Swedish central bank increasing its interest rate earlier than the ECB through the last year, see figure below.

Central bank interest rates in Sweden and euro area, 2020 - 2023
Percent



Source: Copenhagen Economics based on Riksbanken (2023), see link and ECB (2023a), see link

Average interest rates for SMEs and Corporates, 2020
Percent



Source: OECD (2020)

1) Not covering Central Bank rates. Source, see for instance Copenhagen Economics (2019).

Swedish banks pass on their low costs to customers

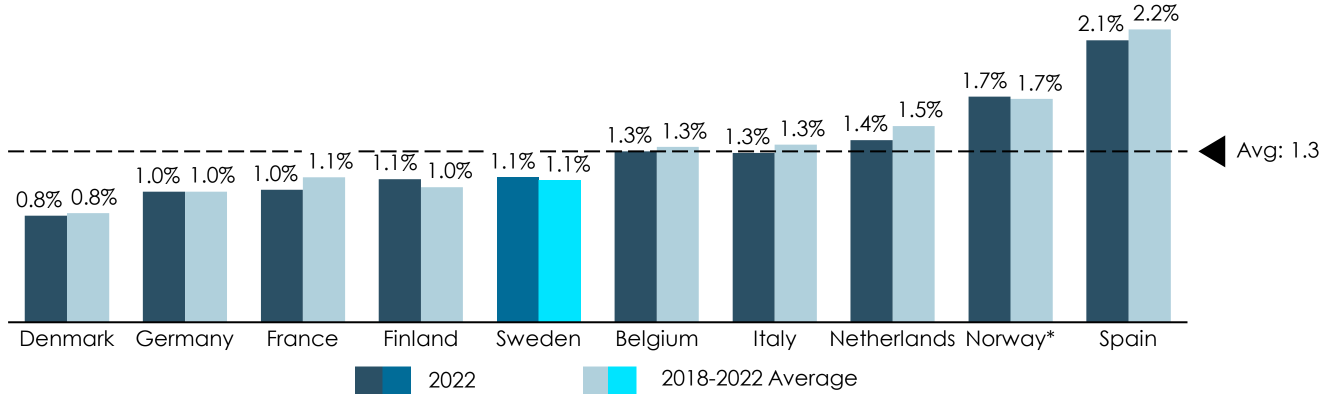
Pass-through of costs is a measure of competition. On one hand, if banks in the market have market power, they may be less likely to reflect low(er) costs in lower prices to banking customers, resulting in higher end-user prices. On the other hand, if prices are cost-driven, it is a sign of strong competition, where each individual bank has little market power.

Swedish banks have low interest margins – lower than average across the analysed countries – and below many other European countries, particularly in Southern Europe, see the upper figure. This, suggests that Swedish banks are passing on their low costs to customers, i.e., charging lower prices, instead of using cost-effectiveness to increase their margins.

Sweden has above-average operational profit (before impairments) as a share of assets among the benchmark countries, see the lower figure. This measure reflects the margin between the revenue and the average costs of banks. Moreover, this measure provides a broader measure of the cost pass-through in the banking sector since it includes all types of business and not just credit transmission.

Net interest margin, 2022

Percent of total credit

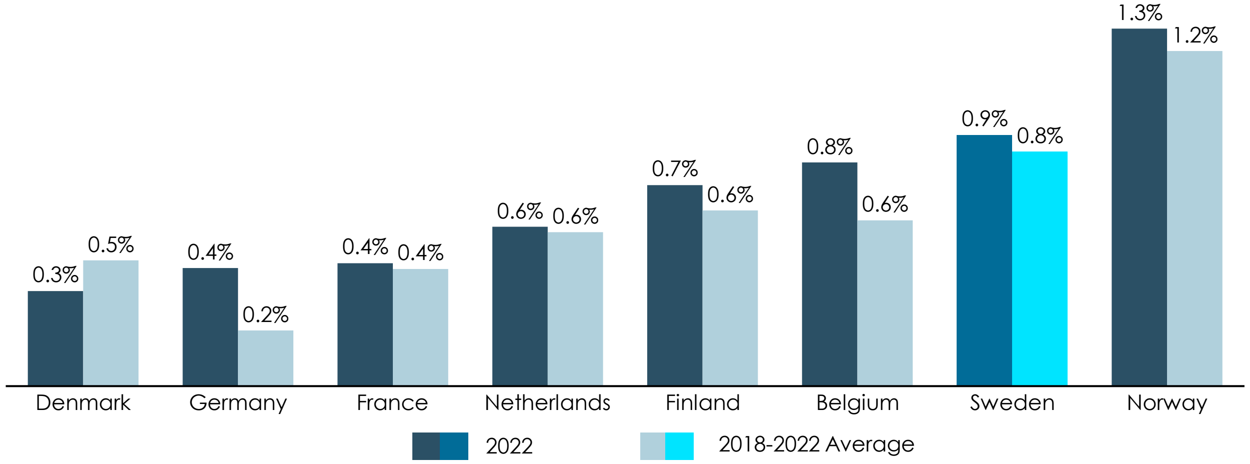


Note: EBA Risk Dashboard does not include data from Norwegian banks from June 2021 to March 2022 due to the implementation of the reporting framework based on CRR2/CRD5 taking place only in Q2 2022.

Source: EBA Risk Dashboard (2023).

Operational profit (before impairment), 2022

Percent of total assets



Source: Thomson Reuters Eikon (2023).

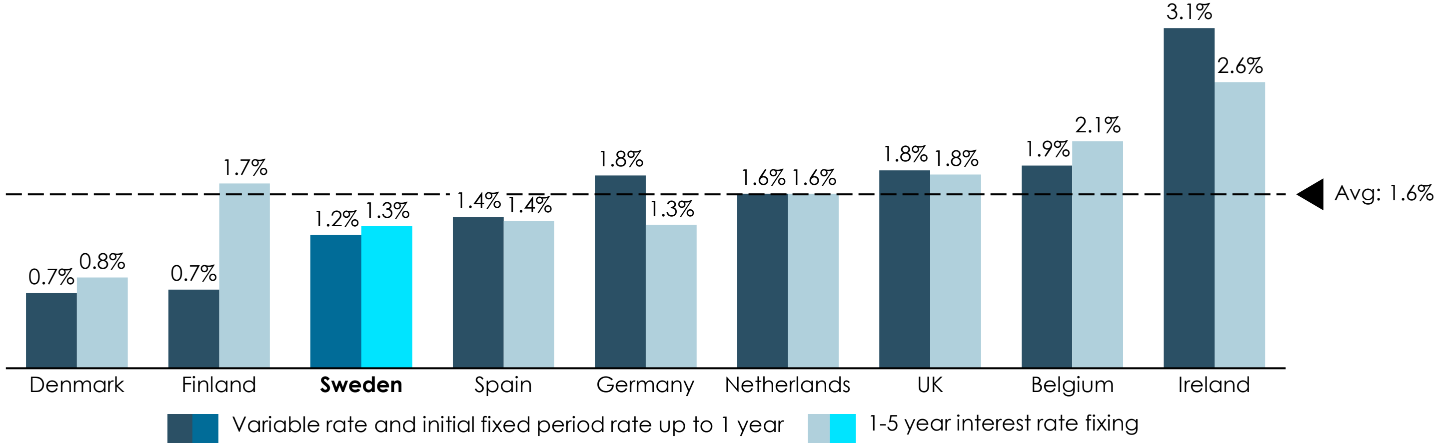
Swedish mortgage rates have historically been among the lowest in Europe, but have increased during 2022

Sweden has long been known for its historically low mortgage rates compared to other European countries,[1] and only Denmark and Finland have had lower interest rates on floating rate loans in 2021, see the upper figure. The mortgage rate has for a long time been below countries in the Euro area.

However, a shift occurred in 2022 as central banks began raising interest rates, marking a departure from the low-rate environment. Notably, the Swedish central bank acted swiftly in this regard, outpacing the ECB as shown on page 12. This contributes to a faster increase in Swedish banks' floating rates compared to benchmark countries.[2] This led to higher interest rates in 2022 in Sweden of 2.7-3.2 percent, see the lower figure.

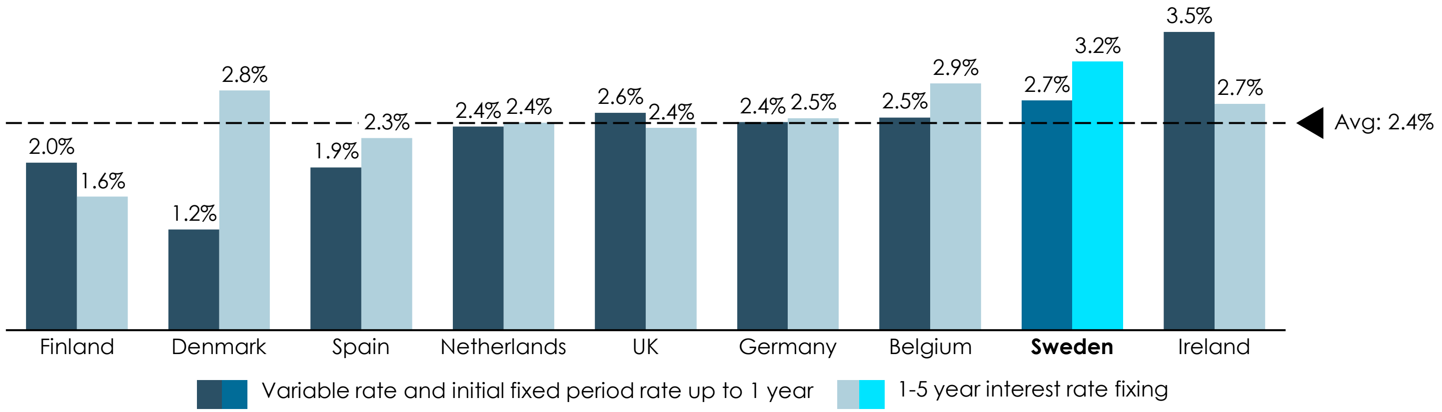
We find that for the Swedish mortgage market, Swedish banks has in a historical context offered competitive prices to their customers, indicating a healthy and competitive landscape. The low interest rates underline the presence of sound competition within the financial sector.

Mortgage rate across selected EU countries, 2021
Percent



Note: The vast majority of Swedish home-owners have variable rate loans or loans with a short interest rate fixing
Source: EMF (2022)

Mortgage rate across selected EU countries, 2022
Percent



Note: The vast majority of Swedish home-owners have variable rate loans or loans with a short interest rate fixing
Source: EMF (2022)

1) See EMF quarterly report for the last couple of years. For multiple years in a row, Sweden has had the lowest interest rate in Europe with the exception of Denmark. / 2) See for instance OECD (link), which shows an increase in Swedish interest rates on short-term government bonds.

2
EFFICIENCY AND PROFITABILITY OF THE BANKING SECTOR OVER BUSINESS CYCLES

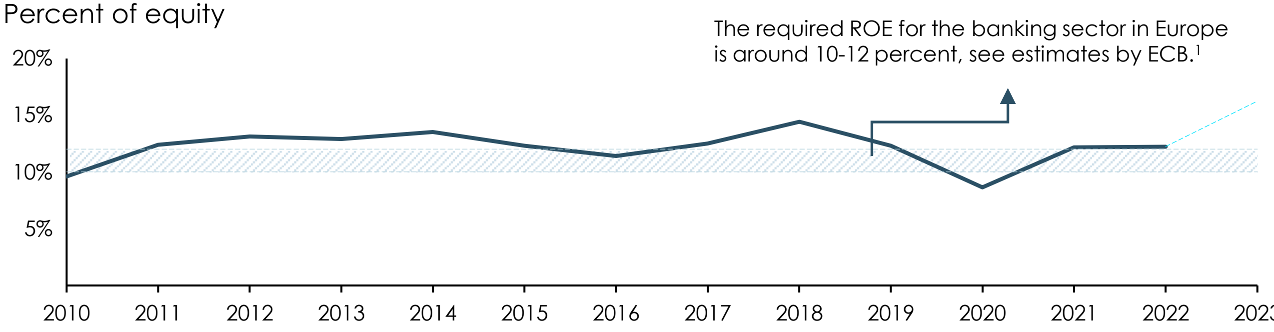
Profitability for banks varies over the business cycle

Profitability can be a relevant measure of competition in a market

In markets with sound competition, profits would not be higher than what is required by investors. This amounts to the risk-free interest rate plus the given market risk premium of the sector. If profits were higher, and investors were able to achieve an abnormal return through a longer period, new companies would enter the market, offering lower prices than incumbents to gain market share. This would happen until profitability in the sector again is aligned with the required return.

Return on equity for Swedish banks, 2010 - 2022

Percent of equity



Note: The dark blue line is based on data from annual reports in Thomas Reuters Eikon. The turquoise blue-dotted line is based on numbers from the largest Swedish banks' quarterly reports and is thus not consolidated yet. Source: Thomson Reuters Eikon (2023) and 2023 Q1 reports for the four largest banks in Sweden.

Deposit betas for European countries, January 2022 to July 2023[2]

	Deposit rate January 2022	Deposit rate July 2023	Increase in deposit rate	Increase in policy rate	Deposit beta
Sweden	0.14	2.03	1.89	3.75	50%
Euro area	0.17	0.92	0.75	4.00	19%
Belgium	0.04	0.62	0.58	4.00	15%
Finland	-0.01	0.91	0.92	4.00	23%
France	0.45	1.56	1.11	4.00	28%
Germany	0.04	0.79	0.75	4.00	19%
Netherlands	0.00	1.10	1.10	4.00	28%

Banks are pro-cyclical

In general, profits and thereby Return On Equity rise when the economy is performing well, and defaults and losses are low. Contrary, profits decrease in times of economic challenges, as defaults tend to increase (e.g., due to lower asset prices and higher unemployment rates), and losses for banks thereby increase.

Thus, conclusions about whether profits are abnormal or not should not be based on a single or few years, but throughout an entire business cycle. When comparing the profitability of banks across countries, the business cycle should be considered, see upper figure.

Profits for Swedish banks rose at the beginning of 2023

Central banks have recently increased interest rates significantly to combat inflation, as shown in Chapter 1. Banks are following, and lending rates have thus increased during 2022. At the same time, there is some stickiness in the development of deposit rates, but we expect these to increase over time. The stickiness has led to increased income for Swedish banks – see upper figure – as well as for banks in other countries.

The Swedish banks pass on close to 50 percent of the interest increase to their deposit rates (deposit beta), see table, which is higher than the average for banks in the euro area, which passed on 19 per cent of the interest rate increase to their deposit rates on average.[2] Swedish banks have on average increased their deposit rates by 1.89 percentage points since the beginning of 2022, while the policy rate increased by 3.75 percentage points. The average deposit rate has increased around 0.75 percentage points in the euro area and the ECB policy rate has increased by 4.00 percentage points. This suggest that the price stickiness among Swedish banks is less than for most other European countries including Germany, Belgium, Finland and the Netherlands.

The Swedish economy is still strong, i.e., there is no economic downturn. Increasing income has thereby led to increasing profitability of the banks. It is however expected that banks will also see at least higher losses compared to the low levels in recent years.

1) ECB (2021) measures the cost of equity of euro area banks and find, via estimations from 9 different models, that required return from investors (providing the equity) is around 10-12 percent. / 2) Based on deposit rate betas for large banks numbers from January 2022 to May 2023, see ECB (2023b), Financial Times (2023). The Swedish number is based on the Central bank interest rate from Riksbanken (2023) with an interest rate increase of 3.75 percentage points in the period and SCB: Finansmarknadsstatistik with an interest rate increase of approximately 1.89 percentage points. Between January 2022 and July 2023, the deposit beta for the Euro area was 19 percent, for Germany 19 percent, Belgium 15 percent, Finland 23 percent, France 28 percent and the Netherlands 28 percent. These numbers are based on deposit rates and policy rates from ECB. Denmark is not a Euro area and therefore not included.

Sweden has an efficient lending system with low losses

The findings from Chapter 1 show that Swedish banks are cost-efficient. Signs of an efficient banking system are also found in low default- and loss rates.

Banks in Sweden[1] experience low default rates on loans for both corporate and retail customers (the majority of which is mortgages) - respectively 0.2 percent and 0.1 percent on average per year from 2017-2022. This is the lowest level among the benchmark countries, see the figure below.

The low level of defaults was sustained also during the Covid-19 crisis, where banks in many countries – especially in Southern Europe - experienced higher losses. However, rising housing prices over the last 15 years in Sweden also contribute to the low default rates as the mortgage security did not lose value.

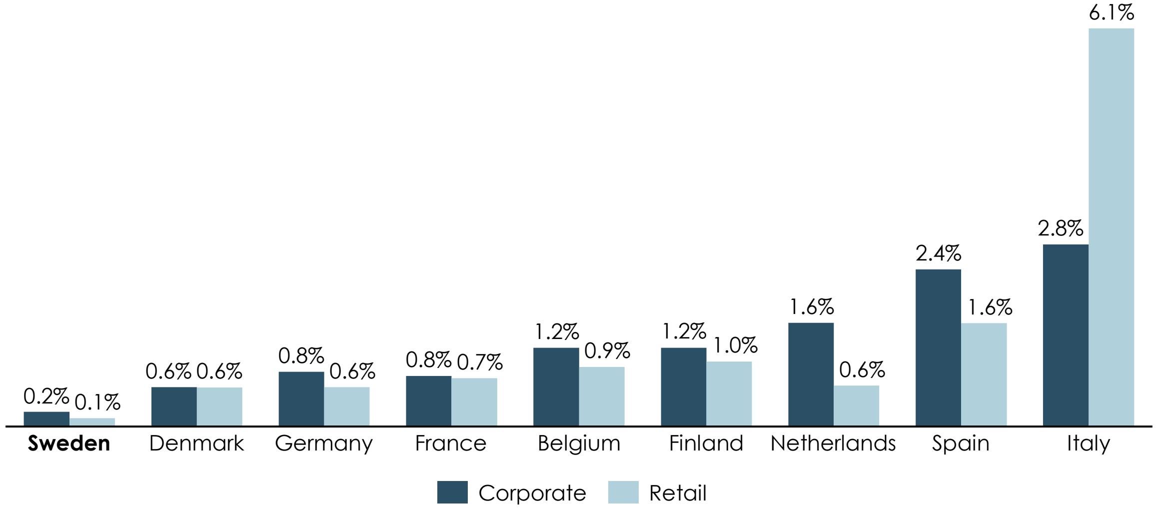
Banks in Sweden also experience low losses on both corporate and retail loans. In the period from 2017-2022, average yearly loss rates for Swedish banks were close to zero – the lowest among benchmark countries, see the figure below.

The low losses are an indication of an effective and secure system that is capable of conducting correct assessments of the value of e.g., properties behind mortgages through a business cycle. At the same time, it is a function of Sweden having an efficient judicial system, and that foreclosure auctions can be carried out quickly and easily – this secures low losses for banks even in the case of defaults.

However, we expect losses to increase in the coming time, due to the increasing interest rates and thereby increased financing costs for Swedish homeowners.[2] Higher interest rates will also affect the housing market, where all-else-equal, prices will fall.

Average rate of default for corporates and retail, 2017-2022

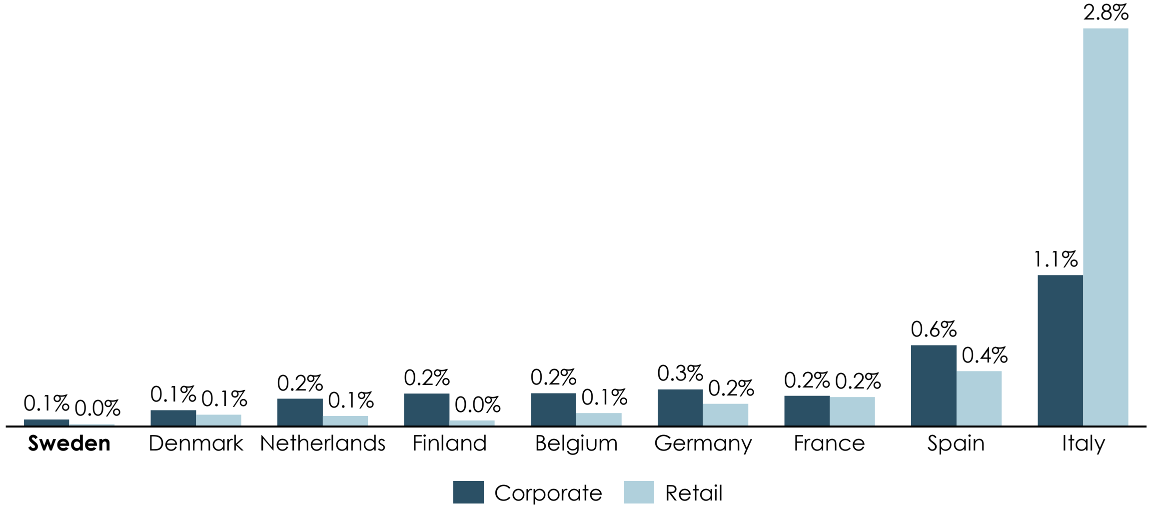
Percent



Note: Values shown are the averages of the default rate for the time period. The data is from the Transparency Exercise and covers Kommuneinvest, Länsförsäkringar Bank AB, SBAB Bank, Skandinaviska Enskilda Banken, Svenska Handelsbanken, and Swedbank for Sweden.
Source: EBA Risk Dashboards (2017-2022).

Average losses for corporates and retail, 2017-2022

Percent



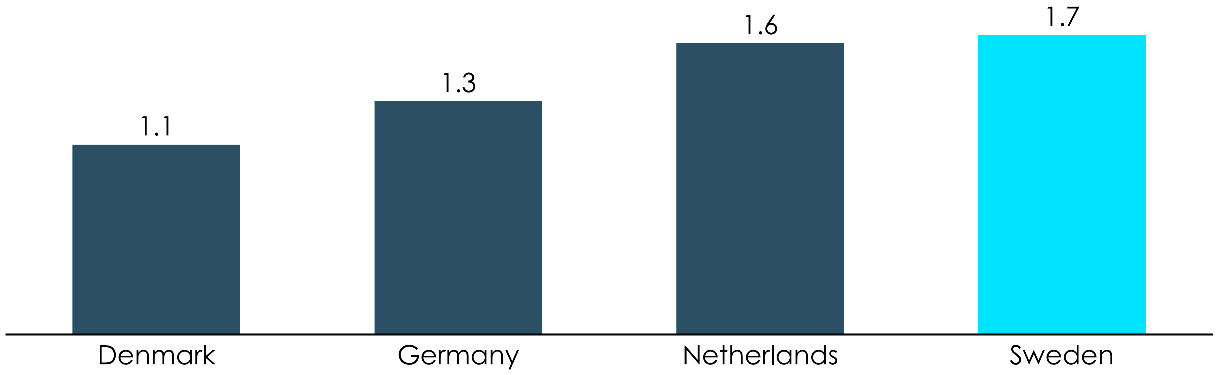
Note: Values shown are the product of the weighted average of default rate and weighted average of loss rate for the time period. Loss rates for Finland is missing for the following quarters 2019 Q3, 2021 Q3 and 2022 Q1
Source: EBA Risk Dashboards (2017-2022).

1)Banks analysed are Kommuninvest Group, Länsförsäkringar Bank, SBAB, SEB, Svenska Handelsbanken and Swedbank. 2)In Sweden almost 90 percent of all homeowners have mortgage loans with variable interest rates or interest rates fixed for less than five years, implying most homeowners will be affected by the increasing interest rates in the coming time.

The Swedish banking system provides credit – also in time of crisis – at a slightly higher cost than in the Netherlands, Germany and Denmark

Interest yield spread between government bonds and mortgage loans

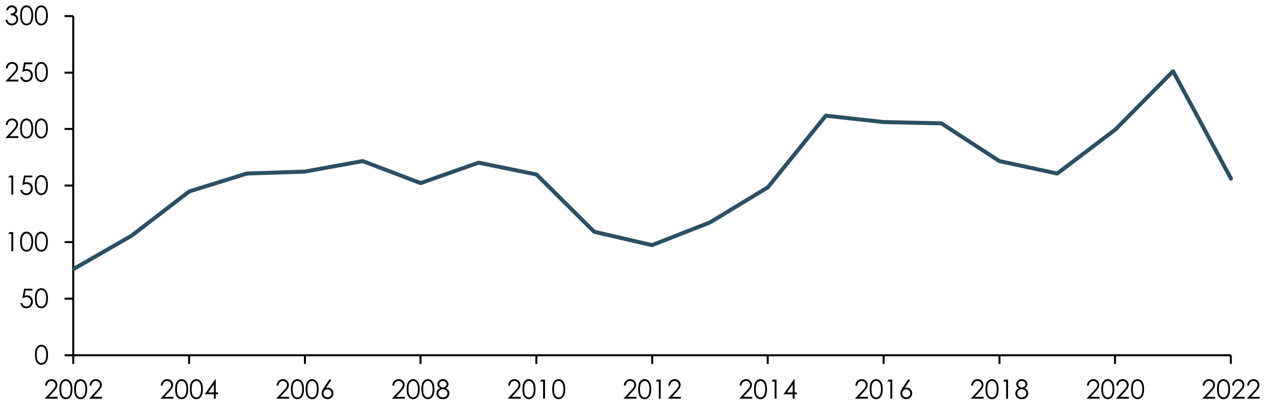
Percentage point, absolute average, 2005 - 2021



Note: The figure depicts the average absolute interest spread between short-term 3-months maturity treasury bonds and the short-term mortgage rate for Denmark and Sweden, and 10-year interest government bonds rates and 10-year mortgage rates for Germany and the Netherlands, due to differences in mortgages offered.
Source: Copenhagen Economics based on OECD (2023) and European Mortgage Federation (2022)

Development in stock of mortgages in Sweden, 2001-2022

Year-to-year changes in stock, Billion SEK



Source: Copenhagen Economics based on SCB, "Lending, Sweden, Collateral housing, Households"

The market for mortgage bonds is an important part of the credit system – and a low interest *yield spread* between mortgage loans and government bonds suggest an efficient, low-cost mortgage system.

The Swedish yield spread was 1.7 percentage points on average from 2005-2021, see the upper figure. This means that on average, Swedish homeowners can borrow money at an interest rate that is 1.7 percentage point higher than what the Swedish government pays to borrow money. The yield spread is an expression of an efficient lending system with such high liquidity in mortgage bonds that it is comparable to the liquidity of Swedish government bonds – due to high investor confidence. Another explanatory factor behind the low yield spread is the low losses experienced in the Swedish banking sector, which help ensure that homeowners' financing costs are relatively low.

However, the yield spread between Swedish mortgage loans and government bonds has on average been 0.1-0.6 percentage points higher in Sweden compared to Denmark, Germany, and the Netherlands in the period 2005-2021. The Swedish yield spread is still lower than the yield spread in many other European countries.[1]

In an economic downturn, it is key that banks are strong enough to continue financing investments for companies and households. If they are not, the economy risks a downward spiral with lower asset prices and more restrictive lending. The Swedish banking system provides mortgages throughout business cycles and thereby contributes to macroeconomic stability in Sweden. In the aftermath of the financial crisis (2010-2014) the mortgage stock in Sweden was still growing with around SEK 80-150 bn per year, see the lower figure. This shows that new loans given out were higher than amortisations.

1) Copenhagen Economics based on OECD (2023) and European Mortgage Federation (2022)

Differences in banks profitability across countries is driven by macroeconomic differences

A prolonged period of unusually high profits can be a sign of weak competition. From 2019-2022 Swedish banks realised a return for their investors of around 11 percent, which together with Norway is the highest in Europe, see upper figure.

However, international comparisons of profitability are much affected by differences in business cycle situations across Europe: Here Sweden is at the top e.g., with a strong housing market and low losses.

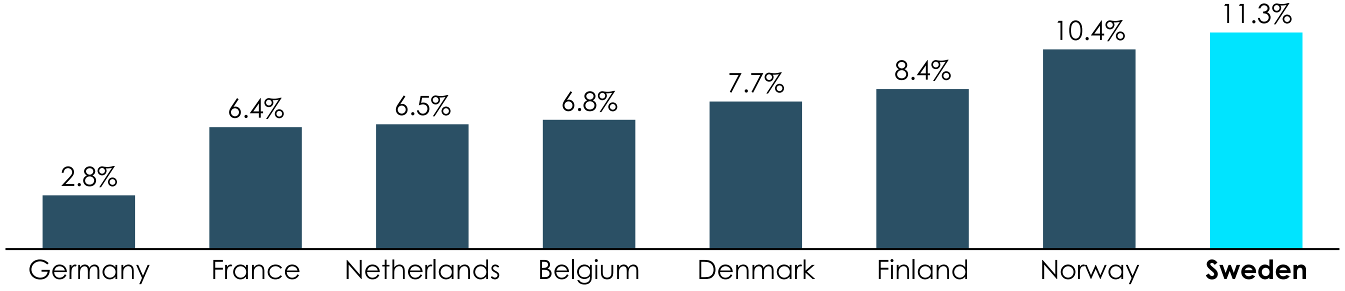
Meanwhile, banks in southern Europe are still struggling with high defaults and correspondingly high losses – i.e., Italy and Spain have significantly higher losses than the rest of the benchmarking countries shown on the previous slides. Germany, France, and the Netherlands have also seen high impairment levels in the period, lowering returns for equity holders.

Sweden also have a strong job market with low unemployment and was not among the worst hurt economically by the Covid-19 crisis. Further, Sweden has in general had a long period of low interest rates and strong macroeconomic development.

When looking ahead, most of the larger European banks are expected to have increasing net interest income in 2023 compared to 2022, see lower figure. This could be due to a general lag effect in interest rate changes across European banks. While many of the larger European banks also expect increasing net interest income in 2024, the net interest incomes for the largest Swedish banks are expected to stay constant or lower than for 2023.

Return on equity, 2019-2022

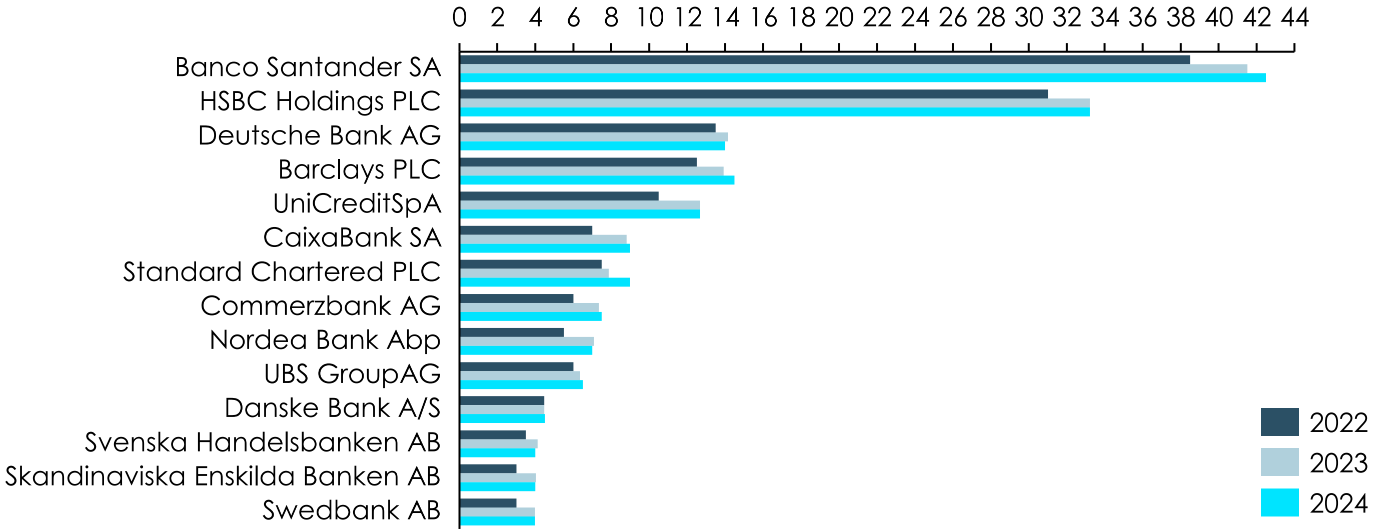
Net profit as percent of equity



Source: Thomson Reuters Eikon (2023)

Net interest income estimates for some of Europe's largest banks

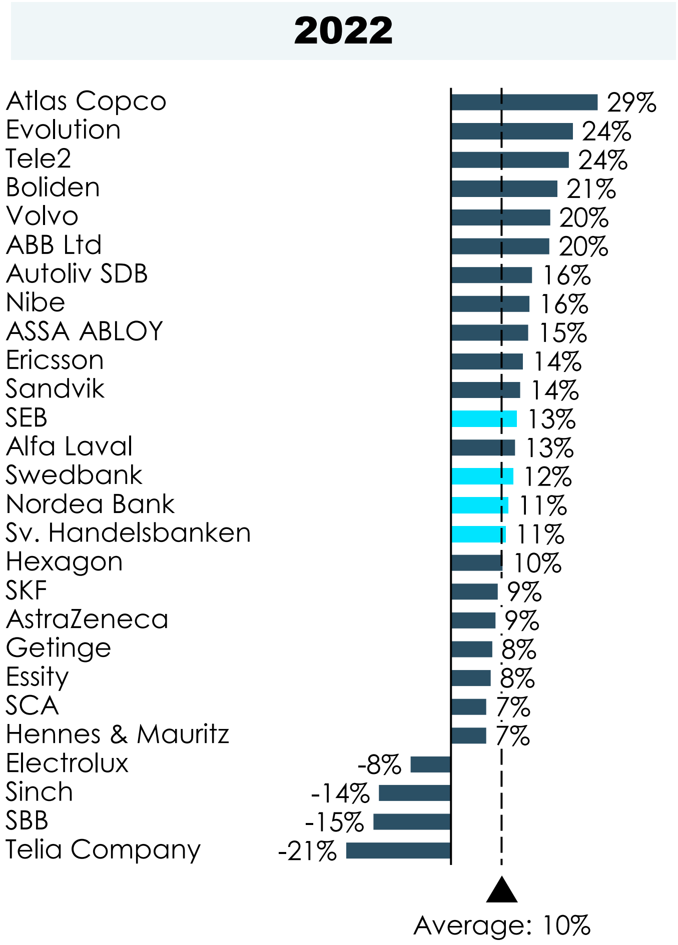
Billion EUR

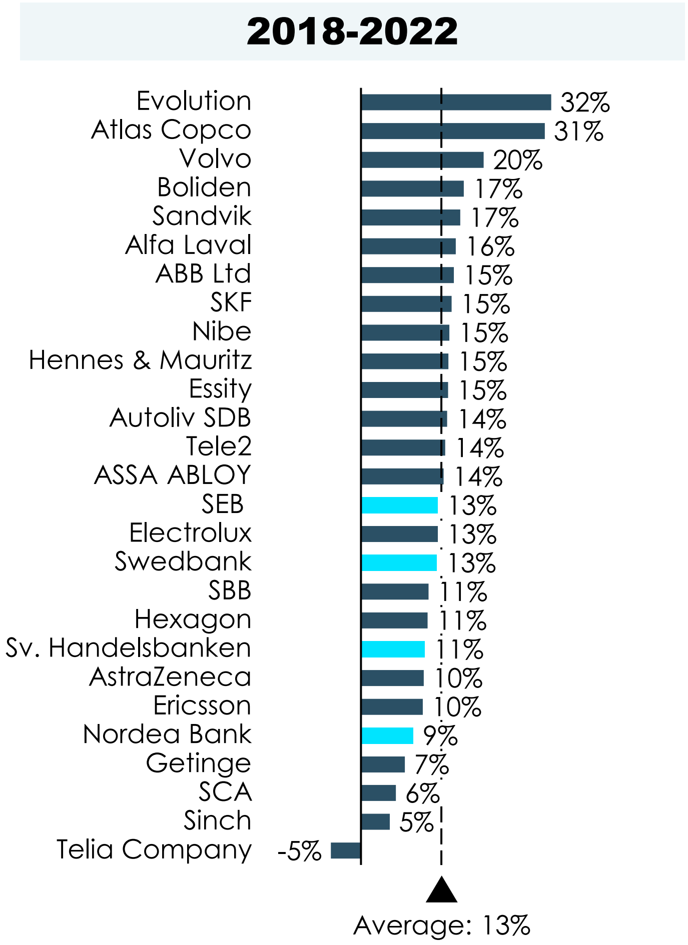


Source: S&P Global (2023)

Return on equity of Swedish banks is lower than the average of the 27 largest Swedish companies

Return on equity for top 27 largest listed companies in Sweden, 2022 and average 2018-2022
Percent of equity





Note: Kinnevik and Investor are not included in the figure, as their profits are mainly driven by equity investments.
Source: Dagens Industri (2023), "OMX Stockholm Large Cap"

Overall, the Return On Equity (ROE)[1] for Swedish banks is close to the average of other large listed companies in Sweden, across different sectors.

In 2022, the average ROE for the 27 largest listed Swedish companies was 10 percent. In comparison the return on equity for the four largest Swedish banks was in the range of 11-13 percent, i.e., slightly higher, see figure. For the period 2018-2022, the four banks' returns were slightly lower than average.

Nevertheless, the figure shows that earnings in Swedish banks are in line with other Swedish sectors.

1) ROE is affected by the current business situation at the different companies, which fluctuates from year to year. In addition, the risk profiles of the companies are an important driver of the required return on equity from investors.

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AUTHORS:

Henrik Ballebye Okholm	Managing Partner
Morten May Hansen	Senior Economist
Astrid Leth Nielsen	Economist
Manohar Gannavarapu	Analyst

Copenhagen Economics
Langebrogade 3C
DK-1411 Copenhagen K

www.copenhageneconomics.com