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# FINANCIAL PERFORMANCE OF EUROPEAN PUBLIC BANKS IN 2018-2022

Bachelor Thesis

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Tartu 2024

I have written this Thesis independently. Any ideas or data taken from other authors or other sources have been fully referenced.

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## Introduction

A company's financial results are important for its operations, growth, and success. Good financial results are known to indicate not just the effectiveness of a company's operations and competitiveness but also depict the company's ability to sustain itself during economic uncertainties. Financial performance indicates a company's health and longevity, providing insight into how well a company uses its available resources to generate profits and create value for its shareholders.

For banks financial performance is as equally important but incorporates other significant aspects. Since banks play an essential role in the economy, their financial performance is closely monitored by regulators, investors, and customers. Strong performance indicators suggest a bank's ability to fulfil its obligations and sustain operations over the long term, ensuring stability and reliability.

In the case of public banks, their performance is closely linked to public policy and economic stability. Given that public banks represent significant governmental engagement in the financial industry, their underperformance can lead to diminished public trust. Therefore, the stability of public banks is essential for maintaining people's confidence in the financial system.

Previous research has shown interest in the Indian economy and its banking system. Studies conducted on European banks focus on specific sectors as well as the largest economies in Europe, such as Germany. While existing studies compare public banks to their private counterparts and determine the variables that affect performance, there is no research that specifically focuses on the financial performance of public banks across Europe.

This thesis aims to assess the financial performance of public banks operating in the European Economic Area (EEA). The author examines the period that extends from 2018 to 2022, during which the economic impact from COVID-19 pandemic as well as geopolitical tension rising from the Russo-Ukrainian conflict has significantly affected the financial markets during the past years. By evaluating and examining the financial performance of public banks in EEA, the author intends to provide insight into their operations and financial health, making it a valuable study for those interested in finance and the public sector's role in economic stability and development.

The following tasks set by the author are necessary to complete to achieve the aim of the thesis:

- to discuss the importance of financial performance evaluation;
- to introduce the role of public banks and their peculiarities compared to other banks;

- to map out dimensions and ratios for measuring financial performance;
- to determine which ratios are suitable to measure the financial performance of banks;
- to provide an overview of previous studies focusing on the financial performance of banks;
- to form a sample of EEA public banks and collect their financial reports to calculate the ratios;
- to assess the financial performance of publicly owned banks in the EEA by discussing the results.

The first chapter of the thesis will focus on defining financial performance and the importance in evaluating it. The author will provide a theoretical overview of banks, how public banks can be differentiated, and what is their purpose compared to other financial institutions. Moving onward the author will discuss the dimensions and ratios to measure the financial performance of banks. To identify the research gap, the author will review existing studies, and select the appropriate methodology for their research.

In the second chapter of the thesis, the author will describe the process of collecting the required data, the justification of the chosen methodology and the discussion of the results. The author will conduct empirical research with a sample size of 36 publicly owned banks in the EEA. It must be noted that this research paper is conducted with secondary data found on the internet as well as from the financial reports provided by the institutions in the sample, meaning that the findings are dependent on the accuracy and completeness of the external sources. This reliance on published data may introduce limitations in terms of the availability and timeliness of information, which should be considered when implementing the results and conclusions drawn from this.

**Keywords:** financial performance, public banks, ratio analysis

# 1. Theoretical foundations for evaluating the financial performance of public banks

## 1.1. The importance of corporate financial performance evaluation and the role of public banks

For any company to be successful and have an impact on both economic as well as social well-being, the concept of performance holds an essential role. Moullin (2017) expresses, that performance is critical for helping organisations achieve their desired outcomes, and how it can have a broader effect on economic and social well-being. Historically, organisations have used performance measures to evaluate their success, while scholars have defined ‘performance’ and brought out its importance in multiple ways.

Moullin (2002) defines performance as “evaluating how well organisations are managed and the value they deliver for customers and other stakeholders” (p. 188). Other scholars such as Kennerley and Neely (2003) and Neely et al. (2002), have acquired Moullin's (2002) definition by adding that performance evaluation is as a system of comprising individual measures for assessing the efficiency and effectiveness of past actions. In other words, performance is about providing the relevant information needed for effective management.

Performance evaluation involves multiple aspects and can be divided into different dimension depending on the specific area of interest. Hansen and Mowen (2005), brought out that performance can be differentiated between financial performance and non-financial performance, both being interrelated and affecting companies' financial health (as cited in Almajali et al. 2012). Therefore, financial performance is an imperative part of overall performance, serving as an enabling factor that supports the broader objectives of delivering value and effective management.

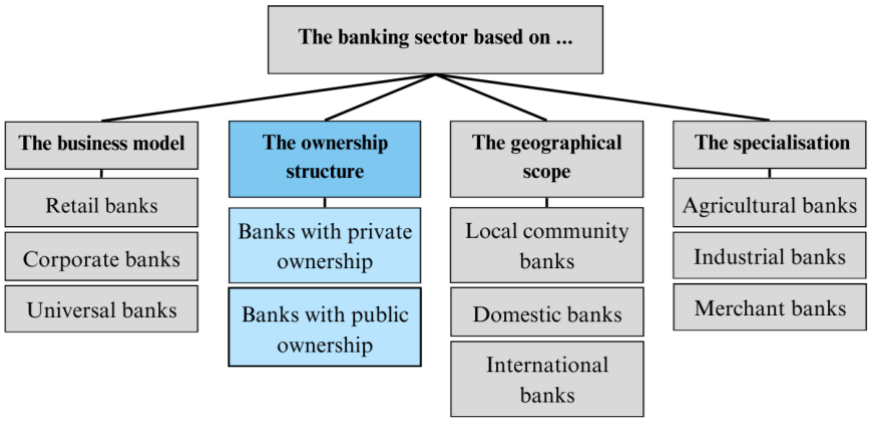
Fatihudin et al. (2018) interpret financial performance as “the company’s ability to manage and control its own resources” (p. 553). However, Singh and Solanki (2020) as well as Fatihudin et al. (2018), emphasising that financial performance mainly concerns the efficient generation of revenues or profits. In other words, the evaluation of financial performance is essential for determining whether a company has achieved its financial objectives with its available resources. Therefore, the importance of evaluating lies in the ability to identify areas of improvement, the consequences of which can foster better decision-making, well-planned resource management, competitive advantages, and overall success of an organisation.

Enad and Gerinda (2022), believe that financial performance is a key element for the development and steadiness of banks. In addition, other scholars also believe that evaluating financial performance of banks is important since it is related to the effective distribution of financial resources, intending to attain high-quality economic growth (Zhu & Guo, 2024). Moreover, Karthikeyan and Dinesh Kumar (2023), have stated that "financial performance of banks is a key indicator of an economy" (p.80). In other words, how well banks perform is essential for ensuring that financial factors, such as investments and loans, are allocated efficiently in the economy, which is crucial to achieving strong and sustainable economic development. That is why it can be assumed that "there is a direct relationship between the good banking system and the economic development. It leads to growth of the country" (Singh & Solanki, 2020, p. 79). Thus, financial performance is not only important for institutions themselves but also for the broader economic context in which they operate.

Banks are a fundamental component of every financial system and play a crucial role in financial markets (Tumpel-Gugerell, 2003). The banking sector is comprised of various types of banks, each serving distinct yet interconnected roles. The banking sector can be categorised in multiple ways. These categorisations help us understand the role and function of different types of banks within the financial system. The following figure depicts how the author believes that the banking sector can be categorised.

Figure 1

*The categorisation of the banking sector*

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In this research paper, the author will be focusing on banks that are categorised based on their ownership structure. Identifying an organisation's ownership structure is important since it can indicate the nature of decisions made within the company. Elvin and Abdul Hamid (2016) have assessed that different countries or businesses might have their own kinds of ownership structures, that support a company's competitiveness and health. Maury (2006)

also has a stance that the performance of a firm is strongly linked to its ownership structure and the practice of corporate governance, as it represents results attained by individuals or teams within the organisation (as cited in Elvin & Abdul Hamid, 2016).

Although Elvin and Abdul Hamid (2016) have made their generalisation based on non-financial organisations, their findings apply to financial institutions such as banks. This is because, like other types of companies, banks also operate under varying ownership structures that influence their strategic decisions, risk management, and operational efficiencies. Moreover, in the banking sector, where trust and financial stability are essential, effective corporate governance plays a vital role in maintaining investor confidence and ensuring regulatory compliance.

The author has independently categorised banks based on their ownership structure in the following ways: private banks and public banks. Due to their different ownership structures, they have different objectives in their operations leading to unique strategies for achieving growth and stability. The ownership structure among private banks is in the hands of a limited number of shareholders, and it is common for managers to be selected among majority shareholders - a shareholder who owns more than 50 per cent of the shares (Samet et al., 2018; Véron, 2017).

Contrary to private banks are public banks. In this research paper, public banks are not defined as those financial institutions whose stocks are publicly traded on the stock exchange. Instead, the author considers public banks those financial institutions operating in the public sector and that are publicly ‘owned’. According to Barrowclough and Marois (2022), and Marois (2023), a financial institution situated in the public sector can be established in various ways – either through their structure of ownership and governance, their commitment to public mandates alone or a combination of both.

Moreover, public ownership can be direct as well as indirect. Both Barrowclough and Marois (2022), and Marois (2023) agree that, primarily, a public bank can be owned directly by the governments, or indirectly through other entities such as public agencies, or state-run enterprises. Alternatively, public control can be asserted through governance based on mandates that serve the public interest, or that are following public laws, as well as through representation on its board that upholds public objectives.

However, despite their peculiarities in ownership and governance structures, like their private counterparts, public banks engage in typical banking activities: accepting deposits, granting loans, accessing capital markets, and sometimes acquiring stakes in commercial ventures (Marois, 2023). McDonald et al. (2021) noted that the focus of public banks can

range from providing financial support for housing, and small businesses or the management of public utilities such as water management (as cited in Marshall and Rochon, 2022). The assessments made by McDonald et al. (2021) were once more confirmed by Marois (2023) and Véron (2017), adding that public banks operate to benefit the public by providing financial support for local government projects, aiding in international development, supporting small businesses and innovation, and offering banking services tailored to public needs.

As was brought out by Marois (2023), public banks are set apart from private banks due to their predominant ownership by governmental bodies or public entities. While situated in the public domain, public banks possess the unique potential to operate differently compared to private banks. Barrowclough et al. (2020) highlighted that unlike private banks, which are under the constant pressure of market dynamics and the demands for immediate shareholder profits, public banks are not bound by these constraints. Marois (2023) also refers to the 'flexibility' aspect of public banks – they can operate based on policies aimed at the public good rather than solely focusing on financial profit.

While Marois (2023) presents a particular viewpoint, Barrowclough et al. (2020) suggest a different perspective, that some public banks do engage in competition and are directed by governments to prioritise profits. Yet, these decisions might be driven by political influences, to pursue objectives more aligned with public interest than with profit generation. Consequently, this positioning allows public banks to provide unique financial services such as loans, credits, and grants in manners that profit-driven banks may not pursue. (Barrowclough et al., 2020) Thus, it can be derived that public banks operate under a broader and more diverse set of principles compared to private sector banks.

Drawing from Moullin (2017), the concept of financial performance is central to the success and broader impact of any organisation. Enad and Gerinda (2022) and Singh and Solanki (2022), emphasised that the assessment of financial performance metrics is not only important for value creation and stakeholder satisfaction but also is significant in depicting the stability and growth of an economy. Based on the literature, the author has concluded that the well-being of the economy is mainly reflected by the financial health and stability of the banking sector and that decisions within are steered by whom financial institutions are governed. Publicly owned banks, with their mandate to serve the public interest, are pivotal in pursuing broader economic and social goals (Maury, 2006; Marois, 2023). Their unique status enables them to fulfil both economic and social mandates, aligning their operations with public good, that private banks might not address due to their profit-driven nature. This

is also supported by Shelly and Singhal (2020), who state that banks which operate in the public sector serve as crucial support for an economy and that their poor performance can impact the general economic well-being.

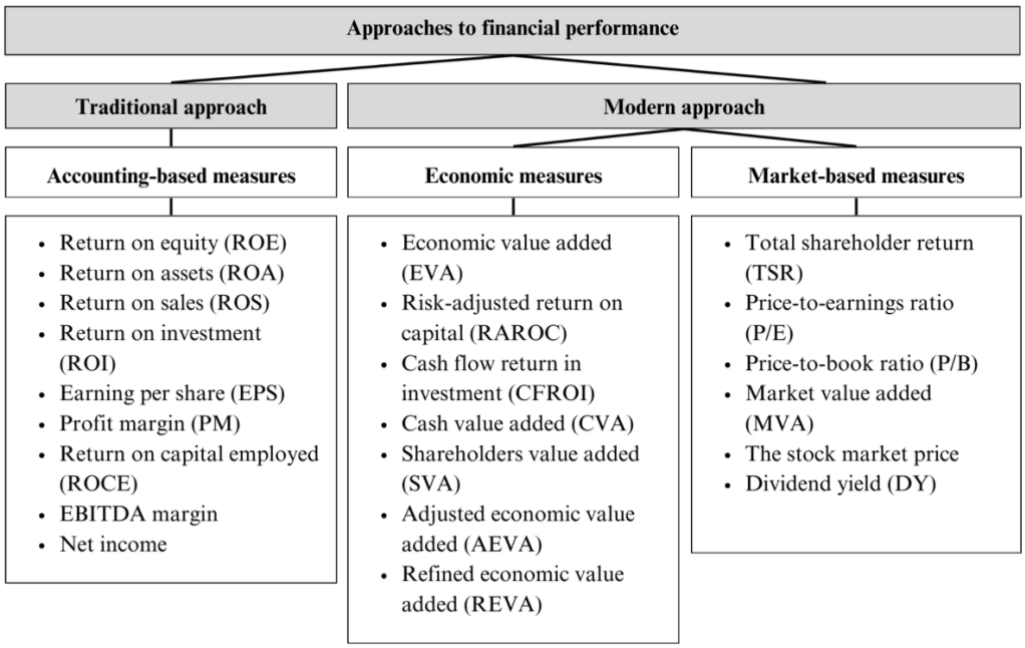
### 1.2. The dimensions and measures of corporate financial performance

Financial performance measures have been developed and applied to supervise whether the organisational strategies are aligned with the set goals and objectives. By establishing benchmarks, they inform stakeholders on whether the organisation is on the right path. In this sub-chapter the author focuses on measures suitable specifically for banks.

Jović & Tomašević (2021) believe that there are two approaches to evaluating the financial performance of a company: a traditional approach focusing solely on financial measures and a modern approach, which incorporates both financial and non-financial measures. In contrast, the European Central Bank (ECB, 2010) noted that performance measures can be categorised into three groups: accounting-based measures, economic measures, and market-based measures. The following figure depicts the categorisation of financial performance measures from three perspectives.

Figure 2

*The approaches and measures for evaluating financial performance*

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Performance measures based on market valuation reflect how capital markets perceive a company's operations concerning its projected accounting or economic worth (ECB, 2010). According to Al-Matari et al. (2014) market-based measures not only highlight a company's current financial health but also have the potential to depict future growth. Market-based

measures consider stock market performance and shareholder value. Since not all banks with public ownership are traded on the public stock exchange and often have objectives beyond maximising shareholder value, it is challenging to assess their financial performance based on market measures.

Economic measures, also known as value-based measures, focus on evaluating a company's ability to create shareholder value within a fiscal year, primarily concentrating on efficiency as a crucial component of performance (ECB, 2010). However, the application of value-based measures in a cross-country analysis should consider the unique economic state of each country. Thus, the comparability and interpretability of financial results may be influenced due to differing levels of market development as well as diverse regulatory environments.

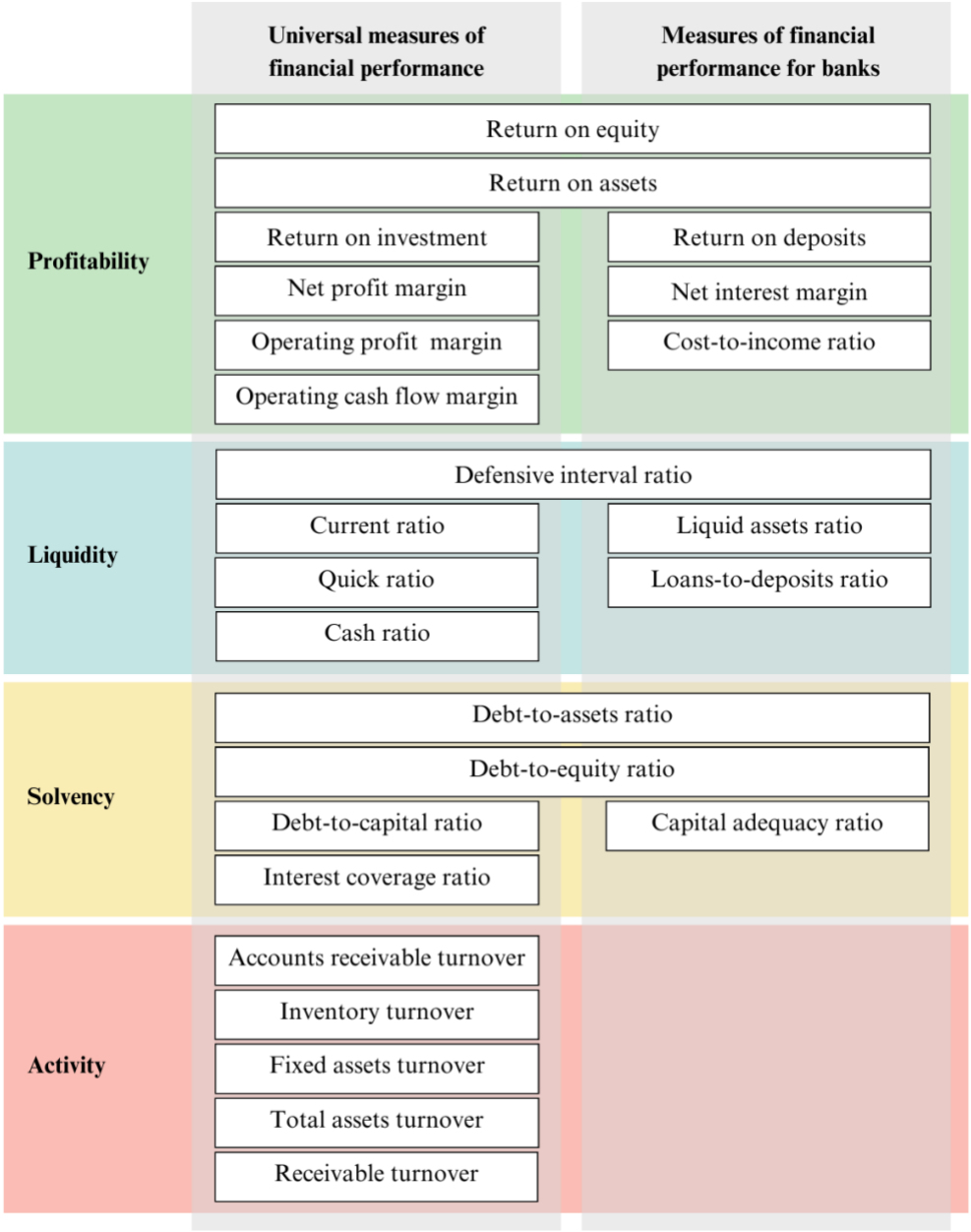
Traditional evaluation of financial performance involves the interpretation of accounting-based metrics, which can be found in companies' financial statements. It is widely recognised that the objective of a company's balance sheet is to accurately present the financial position of an organisation to its stakeholders. However, in contrast to companies, a bank's balance sheet aims to accurately present the balance between the bank's profitability and its associated risks (Blokhin, 2021; Johnson, 2023). The advantage of accounting-based measures lies in their standardised nature, along with their ability to provide insight into various financial dimensions.

Dimensions of financial performance provide a comprehensive and detailed assessment of a company's financial health through different ratios. According to the ECB (2010), many indicators are used to evaluate bank performance, and various stakeholders focus on different indicators based on their interests. However, many researchers have standardised the application of the following dimensions when evaluating the financial performance of companies: profitability, liquidity, solvency, and activity (Durrah et al., 2016; Rahman, 2017; Agusta & Hati, 2018; Lee, 2023, Prahendratno, 2023).

Due to the nature of banks business operations, which involves optimisation of risk-taking to foster profitability, the use of standard financial ratios may not always provide an accurate reflection of bank's financial performance (Stanko & Zeller, 1994; Stulz, 2016). Thus, banking-specific metrics must be applied to accurately measure and track their cash flow, asset handling, capital reserves, earnings, and risk management. The following figure shows the dimensions of financial performance and the respective measures, those which are universally used, and which are more suitable for banks.

Figure 3

*The dimensions and measures for evaluating financial performance - their application in the case of banks*




Source: Compiled by the author

According to Johnson (2013) and Wagner (2023), the business model of banks is straightforward: banks gather funds from depositors, shareholders, and businesses and offer interest as compensation. They then use these deposits to purchase securities or provide loans to other businesses and individuals. A bank earns income when the interest it collects from these loans is greater than the interest it pays on deposits. The difference between these two interest rates, known as the interest rate, spread, indicates banks' profitability. (Johnson, 2013; Wagner, 2023)

Profitability indicators provide valuable information to investors, creditors, and stakeholders. According to Durrah et al. (2016), Rahman (2017), and Agusta and Hati (2018) profitability show the company's ability to earn returns on the capital it has invested and generate profits. Moreover, profitability ratios not only portray the competitive landscape in which the company operates but also offer insight into the effectiveness of its management (Rahman, 2017; Prahendratno, 2023). It can be derived that a higher profitability ratio typically indicates that the company is more adept at converting investments into profits, making it more attractive to potential investors. Hence, lower profitability ratios may justify a closer assessment of the company's operations and management practices to identify areas of improvement. Universally known profitability measures are return on investment, net profit margin, operating profit margin, and operating cash flow margin (Durrah et al., 2016; Rahman, 2017; Agusta & Hati, 2018).

One of the most known and used traditional banking profitability measures is the return on equity (ROE). According to Norman (2017), the ROE metric is influenced by two factors: the profitability of a bank's assets and the level of leverage applied to these assets. For banks the ROE should be higher or equal to 15% (Dang, 2011). Norman (2017) and Daniëls and Kamalodin (2016) pointed out that strategies aimed at enhancing ROE often involved higher risks. That is why the use of ROE as a primary performance measure has been challenged.

Moreover, Moussu's (2018) insight adds that while ROE can reflect short-term profitability, it may not accurately represent long-term financial stability or risk management in the banking sector. While ROE is a central performance measure in banks, its role as a predictor for risk during crises indicates that relying solely on ROE could be misleading (Moussu and Petit-Romec, 2018). That is why when analysing the profitability of a bank, measures such as return on assets (ROA), return on deposits (ROD), net interest margin (NIM) and cost to income ratio (CIR) should also be considered.

ROA provides an understanding of how effectively management is utilising the available assets to produce income (Shelly & Singhal, 2020). A higher ROA indicates that the bank is more effective in converting its assets into net profit. According to Dang (2011) a ROA for a bank should be at least 1%. CIR, on the other hand, evaluates the efficiency of a bank in managing its operating expenses in relation to its operating income. A CIR lower than 70% is desirable as it suggests that the bank is generating enough income to cover its expenses with a margin left as profit (Dang, 2011). While ROA and CIR give a broader

understanding of the overall profitability and efficiency, ROD and NIM offer more specific insight into banks' core operations.

ROD measures the efficiency with which a bank can convert depositors' funds into profitable investments or loans, as noted by Sharma & Sharma (2018). It is calculated as the ratio of net profit to total deposits. A higher ROD ratio suggests that the bank is more effective at leveraging the funds it receives from depositors. In contrast, NIM represents the difference between the interest income generated by the banks and the amount of interest paid out to their lenders (such as depositors), relative to the amount of their average total assets (Sharma & Sharma, 2018). Banks should aim for a NIM higher than 4,5%, as stated by Dang (2011). While ROD focuses on the efficiency of generating earnings from the deposits a bank holds, NIM looks at the overall profitability of the bank's lending and borrowing activities.

Liquidity can be considered one of the most important aspects when analysing financial health and determining the ability of a company's ability to pay off short-term liabilities (Yeo, 2016; Lee, 2023). Current ratio, quick ratio, and cash ratio are universal measures that can describe the liquidity position of a company (Durrah et al., 2016; Agusta & Hati, 2018). According to ECB (2023a), banks use their liquidity to fulfil short-term needs such as customer withdrawals and payments, as well as cover the minimum reserve requirement mandated by the central banks. The required minimum reserves for banks are determined to be 1% of certain liabilities listed on their balance sheets, primarily including customer deposits and debt securities that mature in two years (ECB, 2023b). If banks fail to maintain the required reserve minimums, they risk incurring fines from the ECB, therefore, liquidity management is crucial to avoid such penalties.

If a company faces the uncertainty of paying financial liabilities completely and punctually, then the likelihood of liquidity risk arises (Cont et al., 2020). For banks liquidity risk management entails their ability to maintain an optimal balance between avoiding having excessive cash while also ensuring there is no shortfall (Sree Rama Murphy, 2004). In the context of banks, "cash" stands for both the physical currency held by banks and their balances with the Central Bank also known as "central bank reserves" (Sree Rama Murphy, 2004; ECB, 2023a). According to Sree Rama Murphy (2004), by holding on to excess cash, banks miss out on potential profits. Therefore, good liquidity management entails that this surplus is invested in to return generating assets such as loans and securities.

Liquid asset ratio (LAR) is a measure that indicates the percentage of a bank's total assets that are in liquid form, meaning they can be quickly converted into cash to meet immediate demands for payment or to handle unexpected cash shortages. In terms of LAR a

lower percentage is desired, since it exhibits that a bank is more efficient at managing its liquidity. However, a too low LAR can indicate that bank is at the risk of running out of its available cash resources. (Sree Rama Murphy, 2004)

Total loan to customer deposit ratio (L/D) is the financial metric that indicates a bank's capability to timely meet its short-term debt obligations (Lardic &Terraza, 2019). Lardic and Terraza (2019) note, that L/D highlights the degree to which banks finance their loans with stable customer deposits rather than relying on wholesale or market funding. Ideally, L/D should remain under 100% (Lardic and Terraza, 2019). According to Golin and Delhaise (2013), a ratio within the 70-90% range is considered optimal (as cited in Lardic and Terraza, 2019). A ratio above this range could signal insufficient liquidity to meet unexpected funding needs, whereas a ratio below suggests the bank might not be maximising its earning potential. (Lardic and Terraza, 2019).

To depict for how long a company can rely on its liquid assets, the defensive interval ratio (DIR) is calculated. According to Robinson et al. (2015) the DIR indicates the number of days during which a company can cover its expenses using its available liquid assets, without the need to source for external funding (as cited in Durrah et al., 2016). This ratio can be also applied in the case of banks. The higher the DIR the longer a bank can rely on its liquid assets such as cash and cash equivalents or balances with central banks, indicating to stronger financial stability and independence.

Solvency depicts a company's ability to pay off its financial obligations in the long term, including both interest and debt (Rahman, 2017). In other words, the solvency ratio shows the degree of debt used to finance assets and other company's activities (Prahendratno, 2023). The solvency ratio helps companies observe the capital structure of the company and how changes in it might affect the business in the long run. According to Effendie et al. (2022), when a company's assets or capital are inadequate to cover all its debt, the company then is considered insolvent. Hence, if a company is not able to generate sufficient cash flows to cover its long-term financial obligations, solvency risk arises. The most common solvency metrics are debt-to-equity ratio (D/E), debt-to-assets ratio (D/A), debt-to-capital ratio, and interest coverage (Rahman, 2017; Agusta & Hati, 2018; Lee, 2023).

D/E and D/A are measures that help to evaluate the financial structure and the risk of a company. According to Gallo (2015), these ratios determine the proportion of debt used to run a business. Generally, it is more desirable for D/E and D/A ratios to be close to or lower than one (Gallo, 2015; Dhand, 2023). However, the optimal level of debt differs across industries since certain sectors rely more on debt financing than others. Banks tend to have

higher D/E and D/A ratios compared to regular companies due to the nature of their business. Banks heavily depend on debt as their primary source of funding. Therefore, it is common for banks to have D/E ratios exceeding 10 or even 20, while their D/A ratios are often higher than those of non-financial companies (Gallo, 2015).

In the context of banks, the Capital Adequacy Ratio (CAR) stands out as the most critical capital measure. Capital provides liquidity to the banks, lowers the risk of potential losses, and safeguards the interest of the bank's creditors (Lardic &Terraza, 2019). According to Tankler (2017), capital adequacy refers to the sufficient level of capital (funds provided by shareholders) determined by regulatory authorities that a bank is required to maintain in proportion to its assets adjusted to risk. Under the Basel II Framework, banks are required to maintain a minimum solvency ratio of 8% (Dierick et al., 2005), a standard set to strengthen capital requirements by increasing liquidity and decreasing leverage.

The CAR is an important measure for banks, acting as a protective barrier against potential insolvency and excessive leveraging. It plays a key role in preventing financial distress by indicating a bank's capacity to handle various types of market, operational, and financial risks. (Shelly & Singhal, 2020) According to the Federal Reserve Board (FRB, 1997), a financial institution must maintain sufficient capital to offset the risks it encounters. In other words, capital adequacy can be considered as an indicator of insurance for depositors and a form of leverage to maintain financial stability.

In any company, the management needs to determine whether they are making the most out of all the resources at their disposal. Activity, also known as efficiency, analysis is the most applied method to measure and compare the effectiveness of sales, investments, and assets owned by the company (Prahendratno, 2023). In other words, as stated by Kurniani (2021), activity ratios depict a company's operational activities and how sales, as well as income, are acquired through utilising the available resources. Kurniani (2021) believes that a higher activity ratio is associated with an increase in the likelihood of generating profits.

Other than showing how well the available resources have been used, analysing activity ratios can help companies determine the expected need for working capital, cash requirements, and inventories (Magdalena et al., 2021). Commonly used activity ratios include accounts receivable turnover, inventory turnover, total asset turnover, fixed asset turnover, and inventory turnover (Kurniani, 2021; Magdalena et al., 2021; Lee, 2023; Prahendratno, 2023; Sahib et al., 2023).

It is important to differentiate between banks and a company's financial characteristics. To the public eye banks may appear like regular companies, however, in fact,

they are not. Banking is an industry with high leverage, involving regulatory mandates on minimum capital requirements. This is to ensure not only the stability of individual banks but also the overall soundness of the banking system. (Johnson, 2013)

According to Pariente (2023), the composition of assets and liabilities in banks differ significantly from non-financial companies. Bank's assets are primarily financial (intangible), involving loans, deposits, and investments, whereas non-financial companies might have their assets also in physical form such as inventory and machinery (Pariente, 2023). Thus, standard activity measures are not applicable to banks because they do not hold inventory in the same way retail or manufacturing companies do.

Table 1

*Dimensions and formulas for the measures of financial performance*

| Dimension | Ratio | Formula |
|---|---|---|
| Profitability & Activity | Return on equity (ROE) | $\frac{Net\ profit}{Total\ equity}$ |
| | Return on assets (ROA) | $\frac{Net\ profit}{Total\ assets}$ |
| | Return on deposits (ROD) | $\frac{Net\ profit}{Total\ deposits}$ |
| | Net interest margin (NIM) | $\frac{(Interest\ earned - Interest\ expense)}{Avergae\ total\ assets}$ |
| | Cost to income ratio (CIR) | $\frac{Operating\ expenses}{Operating\ income}$ |
| Liquidity | Liquid asset ratio (LAR) | $\frac{Total\ cash\ resources}{Total\ assets}$ |
| | Loan to deposit ratio (L/D) | $\frac{Total\ loans}{Total\ deposits}$ |
| | Defensive interval ratio (DIR) | $\frac{Total\ cash\ resources}{Daily\ operating\ expenses}$ |
| Solvency | Debt to equity ratio (D/E) | $\frac{Total\ debt}{Total\ equity}$ |
| | Debt to assets ratio (D/A) | $\frac{Total\ debt}{Total\ assets}$ |
| | Capital adequacy ratio (CAR) | $\frac{Tier\ 1\ capital + Tier\ 2\ capital}{Risk - weighted\ assets}$ |

Source: Compiled by the author

The author has assessed that a banks activity is highly related to its profitability and liquidity management. Trujillo-Ponce (2012) suggests that the way banks manage the structure and quality of their assets not only increases profitability through interest and investment returns but also ensures they maintain adequate liquidity by balancing incoming and outgoing cash flows. Therefore, a bank's ability to manage its liquidity effectively is a direct indicator of its operational activity and efficiency, showcasing how adept it is at using its assets to not only generate profit but also maintain financial stability and meet the immediate needs of its clients. This relationship underscores the importance of evaluating a bank's activity through the lens of both profitability and liquidity measures.

Due to the nature of banks operations the financial ratios must be tailored specifically to the banking sector. A bank's financial success depends on balancing these measures, emphasizing the importance of effective liquidity management, profitability analysis, and adequate capital reserves.

### 1.3. Financial performance and financial institutions – an overview of previous studies

The assessment of financial performance is a significant research area that has been studied within the context of non-financial and financial institutions. Recognising the wide research already conducted on non-financial institutions, the author has decided to narrow down the focus. For this thesis, the current subchapter will cover the previous studies on the financial performance of banks. By doing so the author will provide a concise overview of the key methodologies suitable for assessing the financial performance of banks and the findings of scholars.

The most common method to evaluate the financial performance of companies is ratio analysis (Sharma & Sharma, 2018). In essence, ratio analysis involves the calculation of various ratios, in which each is designed to provide insight into different aspects of a company’s financial status. In addition to ratio analysis financial performance can be evaluated through different statistical methods, such as dynamic panel data analysis, generalised method of moments (GMM) or data envelopment analysis (DEA) (Lardic & Terraza, 2019; Neves et al., 2020).

To effectively address the intricacies and diverse risk exposures within the banking system, the bank’s overall performance has been assessed by implementing a regulatory banking supervision framework. One such supervisory tool is the CAMEL rating system. (FRB, 1997) The CAMEL system reviews five important aspects of a bank: Capital adequacy (C), Asset quality (A), Management quality (M), Earnings (E), and Liquidity (L) (FRB, 1997). In the CAMEL rating system, every component is assigned a score ranging between 1

(best) and 5 (worst). The lower the score for each component the better the bank's overall health and stability. (Agrawal & Meena, 2020; Shelly & Singhal, 2020)

The author notes that existing research primarily examined Indian banks, highlighting a gap in studies on European banking performance. By addressing this gap, the author hopes to broaden the insight into banking efficiency and health amongst European countries.

Table 2

*Comparative summary of studies on the financial performance of banks*

| Authors | Focus of the study | Findings |
|---|---|---|
| Antoun et al. (2018) | Determinants of financial performance in CEE countries | • The size of the bank negatively affects its asset quality and earnings;<br>• Income diversification improves asset quality and increases earnings;<br>• High operating expenses lead to increased capital adequacy and liquidity. |
| Sharma and Sharma (2018) | Comparative assessment of Indian public sector banks | • ROD, ROA and NIM highlighted the efficiency and the profitability of the stronger banks;<br>• Higher CAR indicated a stronger risk management position. |
| Lardic and Terraza (2019) | Ratio analysis of the German banking sector | • Higher CAR leads to better performance;<br>• A positive size-profit relationship – larger banks can achieve higher profitability levels. |
| Jagdish and Raiyani (2020) | The CAMEL rating comparison across banks in India | • Private banks show better asset quality – effective at managing credit risk;<br>• Public banks lead in earnings quality – good at generating profit from core operations. |
| Neves et al. (2020) | The performance and efficiency of European Bank's | • Profitability and efficiency explained by bank-specific characteristics;<br>• Macroeconomic conditions influence the performance of banks. |
| Shelly and Singhal (2020) | The CAMEL rating of Indian public sector banks | • Banks are constantly working towards maintaining the required CAR;<br>• Indian public banks are in the need of innovative ideas to support economic growth. |
| Suresh and Pradhan (2023) | Evaluating financial performance of Indian banks using CAMEL | • Private banks outperform public banks in several financial measures;<br>• A higher CAR is associated with a lower NPA – indicating effective risk management. |

Source: Compiled by the author

Anton et al. (2018) explored the determinants of bank financial performance in Central and Eastern Europe. The analysis was based on the CAMEL framework, examining bank-specific, industry-specific, and macroeconomic factors of bank financial performance. Their findings revealed that both internal and external factors significantly influenced bank performance. Anton et al. (2018) uncovered many relationships, for example, that diversification of income improved asset quality and provided greater earnings, or that increased operating expenses are linked to higher capital adequacy and liquidity. Moreover, bank size can have an impact on performance, meaning that smaller banks may have benefitted more from economies of scale compared to larger ones. Based on their study it could be derived that the performance of banks was significantly influenced by the economic conditions of a country. Factors such as economic growth, inflation, and the concentration of the banking sector directly affected key banking metrics such as capital adequacy, liquidity, asset quality, and earnings. (Anton et al., 2018)

Sharma and Sharma (2018) provided a detailed comparison of the financial performance of three major Indian public sector banks: State Bank of India (SBI), Punjab National Bank (PNB), and Canara Bank, for the fiscal year 2016-2017. Through ratio analysis Sharma and Sharma (2018) highlighted SBI's strong performance in key financial metrics, including ROA, REO, and NIM. Through ratio analysis Sharma and Sharma (2018) brought the financial performance of each institution to the same scale, ensuring that the comparisons were fair and unbiased, regardless of the bank's size or capital base. The study emphasised the importance of efficient asset management, income diversification, and operational efficiency. Additionally, it provided insight into the strategic financial decisions that contributed to SBI's leading position. (Sharma &Sharma, 2018)

The study by Lardic and Terraza (2019) investigated the determinants of bank performance in the German banking sector, analysing solvency, liquidity, and risk behaviours across various bank types before and during the financial crisis. Lardic and Terraza (2019) examined a broad sample of 1624 banks, covering commercial, cooperative and savings banks. They found that total assets did not significantly impact the overall profitability of banks. However, for commercial banks, a relationship between size and profit emerged, particularly before the 2008 financial crisis, suggesting that larger banks could have leveraged their assets more effectively during certain periods. (Lardic & Terraza, 2019)

Moreover, Lardic and Terraza (2019) detected a negative relationship between credit risk and profitability, which emphasised the significance of credit risk management. They highlighted that cooperative banks' risk-averse strategies, focusing on improving credit

screening and monitoring, were effective in maintaining profitability. In the case of solvency analysis, cooperative banks showed stronger results during the financial crisis due to high capital adequacy ratios. Lardic and Terraza (2019) were able to determine the importance of maintaining adequate capital to mitigate risks and ensure sustainability. Loan to deposit ratio and customer-loan ratio were applied to determine liquidity management practices and their impact on profitability. They found a positive relationship between liquidity measures and return on equity for both cooperative and savings banks, indicating effective liquidity management strategies. (Lardic & Terraza, 2019)

There had been multiple studies conducted by scholars that applied the CAMEL model to assess the financial performance of banks in India. Jagdish and Raiyani (2020) provided an evaluation of the financial performance of public, private, and foreign banks based on the CAMEL model measures. They discovered that foreign banks maintained higher capital adequacy ratios, demonstrating their stronger capital base and resilience compared to domestic banks. From the aspect of asset quality, private banks showed fewer non-performing assets (NPAs) depicting better credit risk management. On the other hand, public banks excelled in earning quality, with higher net interest margins suggesting effective interest income management. With their research Jagdish and Raiyani (2020) were able to illustrate how different banking sectors leveraged their strengths and manage weaknesses. (Jagdish & Raiyani, 2020)

Neves et al. (2020) analysed the efficiency and performance of 94 commercial banks listed in Eurozone countries, covering the period from 2011 to 2016. Their research aimed to investigate how bank-specific characteristics influenced bank profitability and efficiency under varying macroeconomic conditions. Ratios such as return on average assets (ROAA), net loans to total assets (NLTA), equity to total assets (ETA), cost to income ratio (CIR) and bank size (measured by the logarithm of the number of employees) were applied. Through the assessment of selected metrics, Neves et al. (2020) were able to highlight the importance of strategic cost management, efficient asset utilisation, and the maintenance of financial stability for improving bank performance. (Neves et al., 2020)

Neves et al. (2020) were able to confirm that bank-specific factors significantly impacted profitability and efficiency, with notable differences under varying macroeconomic conditions. Specifically, the CIR was a critical determinant of profitability, highlighting that efficient cost management was crucial for enhancing bank performance. Moreover, Neves et al. (2020) found a negative relationship between bank size and profitability, suggesting that larger banks, possibly due to higher salary expenses and operational inefficiencies, tend to

have lower operating profitability. They concluded that cost management efficiency is crucial for banks wanting to protect their performance in a challenging economic environment characterised by low interest rates, intense competition, and higher operating costs. (Neves et al., 2020)

Shelly and Singhal (2020) included 21 Indian public sector banks in their analysis, covering the period during as well as the post-financial crisis from 2008 till 2019. They were able to uncover that most public sector banks in their sample were able to meet and maintain the capital requirements set by the Reserve Bank of India (RBI). However, the elevated ratios of gross NPAs depict deficiencies in asset quality and highlight potential vulnerabilities in risk management. Moreover, Shelly and Singhal (2020), highlighted operational inefficiencies in the Indian public sector banks, which were attributed to slow sector penetration and market loss to private banks, foreign banks, and Non-Banking Financial Companies (NBFCs). They suggested a proactive approach towards exceeding regulatory capital requirements, improving management efficiency, and fostering a culture of innovation. By applying the CAMEL model Shelly and Singhal (2020) were able to provide an insight into the specific challenges and areas of improvement that the public banking sector in India had to face. (Shelly & Singhal, 2020)

One of the most recent studies on Indian banks by Suresh and Pradhan (2023) compared and evaluated the financial aspects of Public Sector Undertaking Banks (PSUB) and Private Sector Banks (PSB) post-COVID-19 pandemic. The applied CAMEL approach was evidence that PSBs outperformed PSUBs in areas such as CAR, non-performing assets to net advances (NPA to NA), profit per employee (PPE), ROA, and liquid assets to total deposits. Although the study did not explicitly detail the direct effects of COVID-19, the findings indicate that PSBs, which typically had more flexible operational models and may have been more responsive to market conditions, were able to navigate better through the challenges presented during this period. (Suresh & Pradhan, 2023)

The review of previous studies provided insight into the findings and relationships identified, as well as the different methodologies for analysing the financial performance of banks across various regions. The author of the thesis has established a better understanding of how different factors could influence the financial performance of banks. For example, diversification of income and efficient asset management enhanced both asset quality and earnings. Or that increased focus on managing operating expenses and strategic cost control led to improved capital adequacy and liquidity. However, all the studies implied that adaption

in a constantly changing environment and strategic management were key to enduring financial success and stability in the banking industry.

## 2. Evaluating the financial performance of European public banks

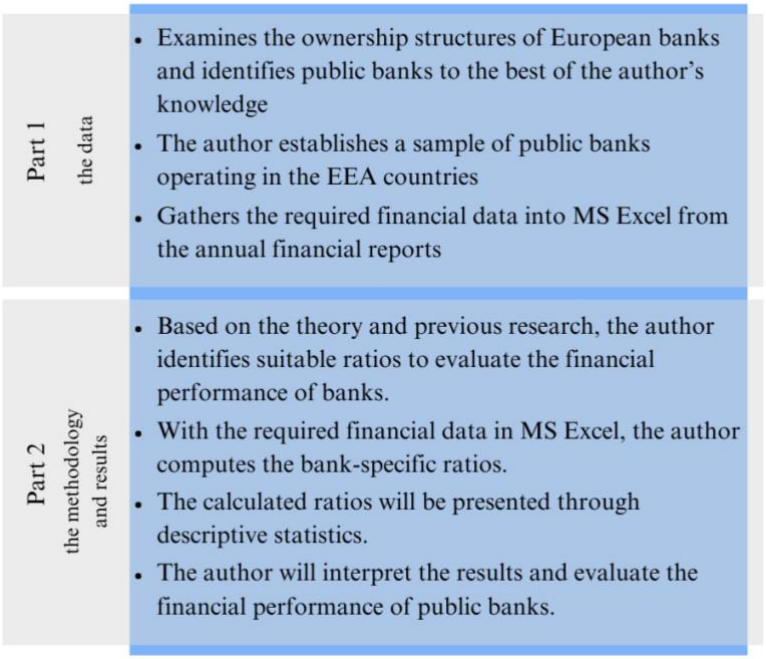
### 2.1. Data and methodology

In the previous chapter the author has established theoretical foundations upon which they will conduct their research. The author intends to evaluate the financial performance of publicly owned banks in Europe for the period 2018 to 2022. The five-year period will cover significant global events such as the outbreak and pandemic of COVID-19 from 2019 to 2020, as well as the ongoing military conflict between Russia and Ukraine that began on February 24, 2022. Both of those events have significantly influenced the economic conditions of multiple countries leading to high interest rates and disruptions in business operations due to the set sanctions against Russia and other counterparties associated with it.

For this thesis, the author will divide the empirical part into two sections. The first part describes the collection and limitations of available data. The second part will focus on the justification of the chosen methodology as well as the results of the study. The author will also address the potential limitations and reliability concerns of the analysis. The following figure depicts the tasks fulfilled by the author to achieve the aim of the thesis.

Figure 4

*The outline of tasks for achieving the aim of the thesis*




Source: Compiled by the author

The first part concentrates on collecting a sample and data. The sample was established by examining banks that operate in the Euro-region and identifying publicly owned banks based on their ownership structure. To provide a more concentrated framework for the study, the author has decided to focus on public banks located within the countries of the European Economic Area (EEA). EEA is a partnership between the 27 member states of the European Union (EU) and three of the European Free Trade Association (EFTA) countries: Iceland, Liechtenstein, and Norway (López & Razauskas, 2023).

The author of the thesis has selected the public banks for the sample using their utmost knowledge and skill, relying on publicly accessible information (published financial and managerial reports) found online. The distinction of "public ownership" was made with the help of the information available on the homepages – under the description of the bank or in the information provided for investors in the form of stakeholder or ownership structure. Out of the 30 member countries of the EEA, the author of the thesis has identified 36 public banks operating in 21 of EEA countries (see Appendix A).

In this research the author uses secondary data that was collected from the annual financial statements published by the banks from 2018 to 2022. In total, the author worked through 180 annual reports. 35 reports were in another language, which the author had to work through with the help of a translating platform such as *DeepL Translate*. The author must exercise critical judgement in this process, recognising that banks compile annual reports differently and provide varied data, which may be influenced by the regulatory state or specific accounting requirements they comply with. Banks present their annual reports for a given year in the following year. This means the annual reports for 2023 are expected in 2024 after the fiscal year has been concluded. Therefore, the research will focus on the data up to the year 2022, as the annual reports for 2023 will not be available.

Based on the previous literature the author has established, that public ownership can be obtained directly and indirectly. In this study the sample consists of banks that have direct state ownership, indirect ownership through a state governing body as well as a mixed ownership structure. The owners of the banks are presented in Appendix B. The author has decided to group banks into three groups: state ownership less than 50% (minority ownership), state ownership more than 50% but less than 100% (majority ownership), and state ownership 100% (sole ownership). The table below lists the banks in the sample, categorized by total state ownership and their respective countries.

Table 3

*The state ownership in the EEA public banks*

| State ownership | Nr. | The bank | Country |
|---|---|---|---|
| Minority ownership | 1. | ABN AMRO Bank | The Netherlands |
| | 2. | Banca Monte dei Paschi di Siena (MPS) | Italy |
| | 3. | Bpifrance | France |
| | 4. | Eksportfinans | Norway |
| | 5. | Hrvatska Poštanska Banka (HPB) | Poland |
| | 6. | Kommunalkredit Austria | Austria |
| | 7. | Landesbank Hessen – Thüringen (Helaba) | Germany |
| | 8. | NLB Group | Slovenia |
| Majority ownership | 1. | Bayerische Landesbank (BayernLB) | Germany |
| | 2. | Cassa Depositi e Prestiti (CDP) | Italy |
| | 3. | EximBank Romania | Romania |
| | 4. | FMO | The Netherlands |
| | 5. | Landesbank Baden – Württemberg (LBBW) | Germany |
| | 6. | Landesbank Saar (SaarLB) | Germany |
| | 7. | Landsbankinn | Iceland |
| | 8. | Landesbank (LLB) | Liechtenstein |
| | 9. | Norddeutsche Landesbank (NORD/LB) | Germany |
| Sole ownership | 1. | Bank Gospodarstwa Krajowego (BGK) | Poland |
| | 2. | Belfius Bank | Belgium |
| | 3. | BNG Bank | The Netherlands |
| | 4. | Bulgarian Development Bank (BDB) | Bulgaria |
| | 5. | Caixa Geral de Depósitos (CGD) | Portugal |
| | 6. | CEC Bank | Romania |
| | 7. | De Volksbank | Germany |
| | 8. | Eximbanka SR | Slovakia |
| | 9. | Eximbank Hungary | Hungary |
| | 10. | Instituto de Crédito Oficial (ICO) | Spain |
| | 11. | KfW Bankengruppe | Germany |
| | 12. | Kommunalbanken (KBN) | Norway |
| | 13. | La Poste Group | France |
| | 14. | MFB Hungarian Development Bank | Hungary |
| | 15. | Národní Rozvojová Banka (NRB) | Czech Republic |
| | 16. | SBAB Bank | Sweden |
| | 17. | SFIL | France |
| | 18. | Spuerkeess | Luxembourg |
| | 19. | Svenska Skeppshypotek | Sweden |

Source: Compiled by the author

The second part covers the methodology, results, and the authors discussion. Dimensions and ratios applied are based on the theory (see subchapter 1.2. Table 1). The author acknowledges that due to the different accounting methods some information can be presented differently or missing, leading to variations in financial results. In this study, the author would like to evaluate the financial performance of public banks relying on accounting-based measures specifically tailored for banks for several reasons. Firstly, accounting-based metrics are widely recognised and understood within the financial industry. While this familiarity makes the data more interpretable and meaningful to the broad audience, the application of bank specific accounting-measures brings additional value and relevance to the study. Additionally, accounting-based measures provide a straightforward assessment of an organisation's financial health. Lastly, due to their standardised nature, they provide easy comparison across different entities and time periods.

The methodology was selected based on the previous research conducted (see subchapter 1.3. Table 2). All previous research was quantitative; thus, the author has also selected a quantitative methodology – ratio analysis (Sharma & Sharma, 2018). The chosen methodology is suitable for the current bachelor thesis due to the following reasons:

- has a clear and a direct approach;
- relies on publicly available financial statements;
- provides in-depth evaluation without the need of complex data sets;
- grasps the basic financial principles while also provides a comprehensive overview of a company’s financial condition;
- highlights trends and biggest changes over a specified period.

By implementing the ratio analysis, the author intends to uncover key trends and significant results. Discussing the results provides an understanding of how profitability, liquidity, and solvency are interconnected and influence the banks’ overall financial performance.

**2.2. Results and discussion**

In the preceding subchapter the author introduced their sample and argued for the suitability of the chosen methodology. In the current chapter the author will provide an overview of the EEA public banks and discusses the results of the research. Before diving into the financial performance dimensions, the author would like to provide a general overview of the sample.

The author has established a sample size of 36 public banks, of which 19 banks are fully owned by the state. As of 2021 there are approximately 5 263 banks operating in the European Union (European Banking Federation [EBF], 2023), indicating that publicly owned banks are not as prominent in the EU. The countries that had the highest number of public banks is Germany (6), the Netherlands (4) and France (3), while other countries represented in the sample had one or two operating public banks (see Appendix A). Hence, the number of public banks across the EEA countries may depend on the financial policies of each country – whether a country has a history of stronger state intervention in the economy, differing regulatory environments, or varying degrees of financial liberalisation.

The bank with the lowest state involvement, by owning only 0.20% shares, is the Kommunalkredit Austria. Despite such a small share ownership, the author has decided to keep the bank in their sample, since majority of their business activities is related to the public sector through infrastructure and energy financing. However, on average the state ownership among 36 public banks in the EEA is 81.52%, indicating a high state involvement in the banks' operations.

The author found a noticeable trend that profitability and higher returns are associated with more aggressive and potentially riskier financial strategies, such as higher leverage and lower liquidity levels. These findings highlight that banks must maintain their balance between risk and reward. In the upcoming paragraphs the author will evaluate the following dimensions: profitability with activity, liquidity, and solvency.

**Profitability and Activity.** Public banks in the EEA show different profitability results over the past five years (2018-2022), with some banks remaining profitable throughout the period and others experiencing negative returns (see Appendix C). The results vary and differ significantly from bank to bank. The differences in profitability and activity results can be related to the banks' size or their ability to generate additional income from operations that cover their costs.

As the theory suggests, there is a significant emphasis on ROE results in the financial reports – ROE is considered one of the key financial measures for banks. The ROE results for public banks indicate that they are not primarily focused on profitability. The only two banks that surpass the 15% benchmark are Romania's EximBank (in 2020; 23.58%) and Kommunalkredit Austria (in 2022; 22.30%) (see Appendix F).

Table 4

*The characteristics of ROE (%) in the sample of public banks*

| | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| average | 4.70 | 4.70 | 3.27 | 5.24 | 4.60 |
| median | 4.80 | 4.55 | 4.19 | 5.34 | 5.04 |
| minimum | -33.30 | -12.33 | -29.14 | -6.72 | -27.46 |
| maximum | 13.74 | 14.54 | 23.58 | 14.29 | 22.30 |

Source: Compiled by the author

The ROE averages indicate that the banks maintain a relatively good profitability position up until 2020 (see Table 4). From 2018 to 2019, the ROE averages remain consistent. For most of the banks, the ROE ratio begins to decline in 2019, and by 2020, there is a significant increase in negative ROE results. Eight out of 36 banks suffer losses, resulting in negative ROE. Consequently, due to negative net profits, both ROA and ROD results are also negative. BDB (Bulgaria), MPS (Italy), and FMO (the Netherlands) record the highest negative ratios in ROE, ROA, and ROD.

To better understand the trends among banks and their overall profitability from 2018 to 2022, the author calculates five-year averages (see Appendix C). Although most public banks do not suffer financial losses during 2020, some have incurred losses previously, and for others, the effects of COVID-19 are realized or continue into 2021. The bank that suffers losses for most of the five-year period is NORD/LB (Germany), which displays negative ROE, ROA, and ROD ratios from 2018 to 2022, only recovering slightly in 2021. In contrast, Kommunalkredit Austria consistently increases its ROE, ROA, and ROD results, demonstrating excellent performance throughout the five-year period.

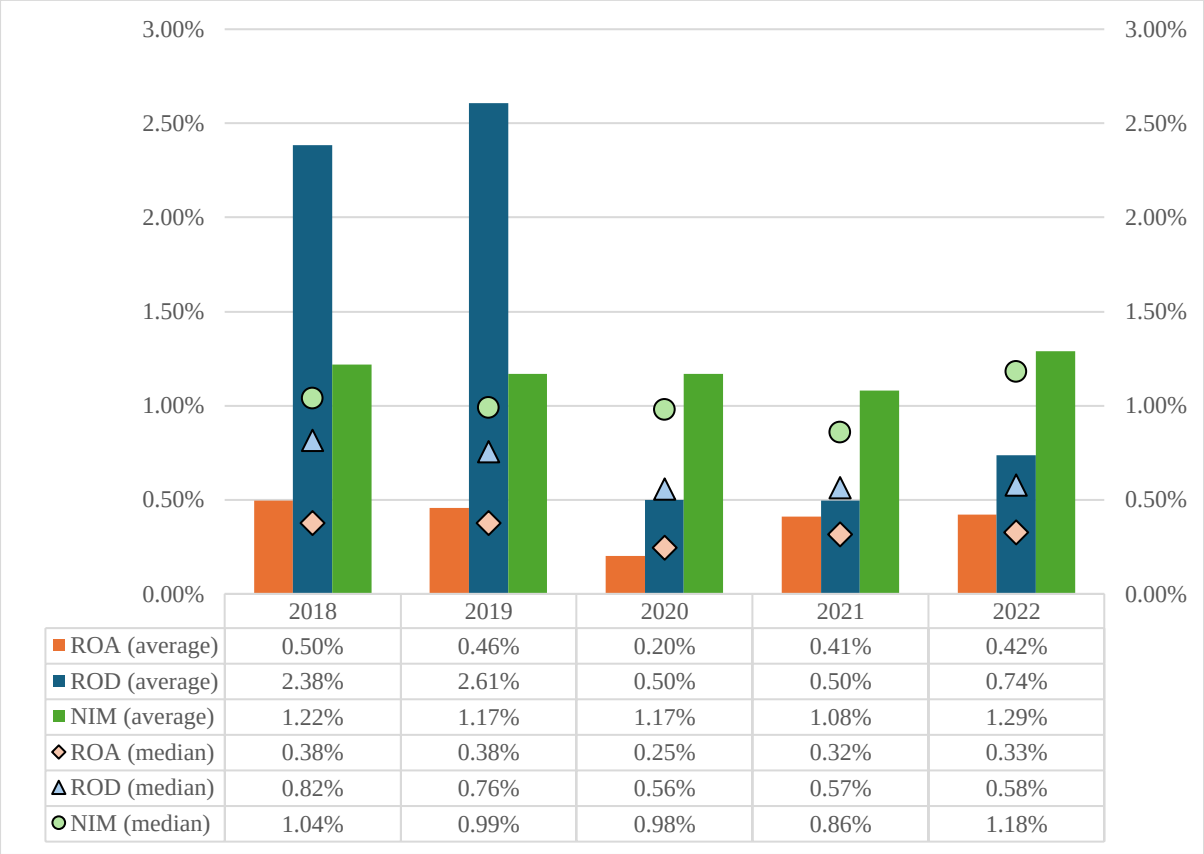
In 2022, only four banks record negative results for ROE, ROA, and ROD (see Appendix C). One of these banks is SBAB Bank (Sweden), which, despite strong ROE performance from 2018 to 2021, experiences a significant drop in all three financial metrics in 2022, with a particularly sharp decline in ROE (see Appendix F). In contrast to these negative outcomes, some public banks in EEA countries maintain solid profitability throughout the five years. CEC Bank (Romania) and NLB Group (Slovenia) demonstrate ROE, ROA, and ROD ratios that are higher than both the average and median from 2018 to 2022 (see Appendices F, G, & H)

The following figure (see Figure 5) shows the averages for ROA, ROD, and NIM along with their respective median values. The number of banks with negative net profits decreased in 2021, leading to a noticeable recovery of ROA and ROD in 2021 and 2022.

Figure 5 depicts that, NIM maintains the most stable position, indicating a consistent management of net interest margins despite varying economic environments.

Figure 5

*The average and median of ROA, ROD, and NIM values of public banks 2018-2022*




| | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| ROA (average) | 0.50% | 0.46% | 0.20% | 0.41% | 0.42% |
| ROD (average) | 2.38% | 2.61% | 0.50% | 0.50% | 0.74% |
| NIM (average) | 1.22% | 1.17% | 1.17% | 1.08% | 1.29% |
| ROA (median) | 0.38% | 0.38% | 0.25% | 0.32% | 0.33% |
| ROD (median) | 0.82% | 0.76% | 0.56% | 0.57% | 0.58% |
| NIM (median) | 1.04% | 0.99% | 0.98% | 0.86% | 1.18% |

Source: Compiled by the author

When considering the 1% benchmark for ROA, only a few banks manage to exceed it. The Dutch FMO bank achieves the highest ROA value of 5.27% in 2021, which is an exceptionally high result, followed by the Romanian EximBank in 2020 (see Appendix G). Although there are other banks with an ROA higher than 1%, on average, public banks do not achieve an ROA higher than 0.50% (see Figure 5). In addition to low ROA results, the low ROD results suggest that public banks are not particularly efficient at generating income from their deposits (see Appendix H). These outcomes indicate that public banks exhibit inefficient asset management as well as conservative lending practices.

Based on the decline in averages in 2020 and the increase in the number of negative results for ROE, ROA, and ROD, the author assumes that the COVID-19 pandemic significantly affects banks' operations. 2020 was also the year when the profitability results fluctuated the most among banks. Generally, ROE and ROD are the ratios that vary most

frequently each year among the banks (see Appendices F & H). This variation suggests that banks have different risk profiles or strategic priorities.

Regarding the efficiency of banks in utilizing their interest-bearing activities, the NIM is remarkably stable, with the average varying from 1.08% to 1.29% (see Figure 5). This stability can be interpreted as public banks consistently managing their lending operations. However, none of the banks achieved a NIM higher than 4.5% (see Appendix I). The average NIM drops to its lowest value in 2021 but rebounds to its highest in 2022 (see Figure 5). Therefore, despite the Russo-Ukrainian conflict, public banks are still able to continue their operations and even achieve better results compared to previous years.

The only banks that record negative NIM results are two French banks – Bpifrance (from 2021 to 2022) and La Poste Group (in 2022) – as well as a Spanish bank ICO (from 2018 to 2019), as seen in Appendix I. This is due to their interest expenses exceeding their interest income. In contrast, four public banks maintain NIM values above the average from 2018 to 2022, with their five-year averages ranging from 2.17% to 3.05% (see Appendix C). Since only four banks approach the 4.5% benchmark, this suggests the non-profit-driven nature of public banks. Nonetheless, such low NIM results can still be considered indicative of profitability issues among EEA public banks.

The CIR is another important measure that illustrates both profitability and operational efficiency. On average, the annual CIR for public banks exceeds 50%, indicating that these banks spend over half of their income on operational costs. This is applicable to half of the public banks in the sample, as reflected by the median value (see Table 5).

Table 5

*The characteristics of CIR (%) in the sample of public banks*

| | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| average | 65.02 | 70.63 | 70.37 | 62.89 | 71.17 |
| median | 61.11 | 63.32 | 66.72 | 62.93 | 59.29 |
| minimum | 6.55 | 5.13 | 5.74 | 6.95 | 8.14 |
| maximum | 306.42 | 294.95 | 299.01 | 246.16 | 297.80 |

Source: Compiled by the author

In terms of efficiency, public banks effectively maintain their CIR at or below 70%. The number of banks with a high CIR is at its lowest in 2021 (see Appendix J). The years 2019 and 2022 record the highest average CIRs, at 70.63% and 71.17%, respectively. Most banks with a CIR higher than 60% in 2019 suffer losses in 2020 and exhibit negative or lower ROE, ROA, and ROD results. In essence, the higher the CIR the lower the profitability.

During the five-year period, nine banks consistently show poor CIR results (see Appendix J). BDB (Bulgaria), Bpifrance (France), and BGK (Poland) have extremely high CIR ratios almost every year from 2018 to 2022. Their CIRs are higher than 100% and, in some years, reach 300%, indicating that their operating costs significantly exceed their generated income. An excess of operating expenses indicates that public banks struggle to keep their costs lower relative to the income they generate, which can be perceived as an issue in terms of sustainability.

On the contrary, banks such as CDP (Italy), BNG Bank (the Netherlands), and Kommunalbanken (Norway) show high efficiency levels with the lowest CIR results. Their CIR varies from 5% to 20%, meaning that for each euro of income, they need to spend approximately five to 20 cents. In addition to their low CIR results, CDP Bank, BNG Bank, and Kommunalbanken also have ROE and ROD results higher than the averages for each year. While there are public banks, that showcase concerning CIR results, the general perception is that public banks are efficient in managing costs and income derived from their core activities, illustrated by the average value (see Table 5).

**Liquidity.** Liquidity measures depict that public banks in the EEA have varying liquidity profiles, reflecting different appetites for liquidity risk. While high liquidity is generally perceived as a positive attribute for banks, an excess of liquid assets can be seen as a passive approach to generating additional income.

Based on the LAR public banks have different levels of available liquidity. Starting in 2018 the average LAR is very low but improved significantly starting from 2020 until 2022 (see Table 6). This increase in the amount of liquid assets that banks hold on to can be seen as a protective measure during uncertain times, when the likelihood of sudden withdrawals and cash outflows is much higher.

Table 6

*The characteristics of LAR (%) in the sample of public banks*

| | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| average | 8.27 | 8.93 | 13.77 | 13.27 | 11.76 |
| median | 5.20 | 7.09 | 11.67 | 13.10 | 9.89 |
| minimum | 0.06 | 0.09 | 0.02 | 0.07 | 0.05 |
| maximum | 45.39 | 44.39 | 109.81 | 44.75 | 41.74 |

Source: Compiled by the author

Based on the minimum and maximum values, it can be interpreted that the LAR varies a lot from bank to bank. During 2018 to 2022 there are seven banks which were able to maintain an adequate level of liquid assets ranging from 10% to 29% (see Appendix K)

Among these seven banks, only the FMO bank (the Netherlands) maintains its LAR under 20% for the entire five-year period, with a minimum LAR of 10.65% in 2018 and a maximum of 15.28% in 2019. However, multiple other public banks, such as Kommunalkredit Austria, Bpifrance, ABN AMRO (the Netherlands), and CEC Bank, are improving their LAR in 2019 or 2020. The bank with the highest LAR throughout the period is CDP Bank (Italy), with the highest LAR value of 45.39% in 2018. CDP Bank gradually decreases its LAR to 41.74% in 2022, yet still maintains an extremely high liquidity position (see Appendix K).

Contrary to the adequate liquid asset levels maintained by most public banks, some still exhibit weak liquidity levels. This is seen as an area for improvement in terms of liquidity management. Based on the minimum values, which range from 0.02% to 0.09%, it is evident that not all banks have readily accessible funds to respond to unexpected cash demands (see Table 6). There are 12 banks whose LAR falls below 1% at some point from 2018 to 2022 (see Appendix K). Kommunalbanken (Norway) shows the lowest levels of LAR throughout the five-year period, ranging from 0.04% to 0.10%.

The variability of the liquidity position among banks can also be seen with the L/D ratio. In this thesis, the author decides to present the L/D results in decimal points. More than half of the banks have an L/D ratio higher than 1 (in other words, higher than 100%), indicating that most public banks in the EEA rely heavily on non-deposit funding, which is considered riskier (see Table 7).

Table 7

*The characteristics of L/D in the sample of public banks*

| | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| average | 4.09 | 4.55 | 3.12 | 3.61 | 3.28 |
| median | 1.13 | 1.17 | 1.12 | 1.10 | 1.13 |
| minimum | 0.09 | 0.18 | 0.08 | 0.16 | 0.16 |
| maximum | 25.12 | 69.68 | 25.16 | 54.94 | 49.42 |

Source: Compiled by the author

The banks which have a L/D ratio bellow 100%, showcase that their loans are deployed mainly from customers deposits. However, a ratio under 70% can be seen as a lower level of activity in terms of loans handed out, thus resulting in a missed opportunity to earn profits. The NRB bank (Czech Republic) showcased the lowest L/D ratios from 2018 to 2022 (see Appendix L and minimum values in Table 7). This can be seen as extremely low activity in terms of loans deployed and a potential indication to liquidity risk.

While there are only three banks that have L/D ratios lower than 50%, most public banks maintain a stable L/D ratio higher than 100% throughout the five-year period (see Appendix L). In terms of activity, this can be interpreted as public banks trying to use as much of their funds as possible to give out loans. From the liquidity perspective, public banks are comfortable operating with a lower level of liquid assets.

There is a big difference between the average and median values (see Table 7), which is due to some banks in the sample having extremely high L/D ratios. The banks that showcase such high L/D results are the KfW Bankengruppe (Germany), the BNG Bank (the Netehrlands), the Eximbanka SR (Slovakia) in 2018, and both Norwegian banks: Eksportfinans and Kommunalbanken. Their exceptionally high five-year average L/D ratios varying from 13.49 to 44.47, indicate high leverage as well as aggressive lending practices (see Appendix D). Banks with such high L/D ratios might be seeking high returns; however, in the long run, the increase in liquidity risk can expose these banks to greater vulnerability during uncertain times.

The DIR is another liquidity ratio that differs among banks due to their varying levels of liquidity. The author has found that the DIR is closely related to the LAR. The more liquid assets a bank retains, the longer it can function without incoming cash flows or the need to obtain external funding. In essence, the higher the LAR, the higher the DIR. However, the adequate level of LAR and DIR varies from bank to bank, due to amount of assets a bank holds and its daily operational expenses.

Table 8

*The characteristics of DIR (the number of days) in the sample of public banks*

| | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| average | 10 877 | 10 826 | 13 972 | 17 395 | 16 880 |
| median | 2 206 | 2 763 | 3 438 | 4 351 | 4 361 |
| minimum | 66 | 24 | 6 | 115 | 104 |
| maximum | 282 486 | 230 100 | 326 007 | 332 641 | 234 489 |

Source: Compiled by the author

EEA public banks can operate without income from operations and external financing for, on average, more than 30 years (see Table 8). However, only half of the banks have a DIR higher than the median, which varies from six to 12 years. The significant difference between the average and median values is influenced by the banks that are very liquid, thus having extremely high DIR values. The number of public banks whose DIR is above 10,000 days (approximately 27 years) increases from 2020 to 2022 (see Appendix M). This can be seen as a strategic adaptation acquired by banks after the COVID-19 pandemic. By

improving their liquidity, banks aim to enhance their resilience, enabling them to withstand future financial shocks.

There are 11 banks whose DIR exceeds 10,000 days during the five-year period. For more than three years, KfW Bankengruppe, CDP, BGK, ICO, and Svenska Skeppshypotek exhibit exceptionally high DIR values (see Appendix M). CDP and BGK are also among the banks with the highest LAR and the lowest L/D, indicating that they prefer holding onto their liquid assets rather than deploying them into loans (see Appendix D). Since holding onto cash does not generate as much interest income as lending does, both banks exhibit a low Net Interest Margin (NIM).

Despite a positive trend in the DIR, the sample includes banks that could continue their operations for less than a year if they were solely reliant on their liquid assets and not sourcing external funding (see Appendix M). In total, there are eight banks with a DIR of less than 365 days from 2018 to 2022. While others improve their DIR position by 2022, the most concerning results come from NRB Bank, Bpifrance, and SaarLB – with a DIR of less than half a year (183 days) for most of the five-year period. This indicates a desperate requirement to change their liquidity management practices.

**Solvency.** The Solvency ratios depict that the EEA public banks are highly leveraged, some a lot more than others. In terms of banks, high results for leverage ratios are acceptable. When comparing public banks' financial ratios annually, there is a greater degree of variation in their D/E ratios than in their D/A ratios. Essentially, the D/E ratios are less consistent and exhibit wider fluctuations from one bank to another each year (see Table 9), while the D/A ratios are more stable across different banks during the same period (see Figure 5). This could indicate that public banks have a more uniform approach to managing their assets relative to debt, resulting in more consistent D/A ratios. However, their approaches to managing equity relative to debt may differ significantly, leading to more variability in their D/E ratios.

Table 9

*The characteristics of D/E in the sample of public banks*

| | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| average | 10.97 | 10.62 | 11.14 | 11.11 | 10.68 |
| median | 7.94 | 7.34 | 9.11 | 9.48 | 9.73 |
| minimum | 0.82 | 0.59 | 0.68 | 0.66 | 0.09 |
| maximum | 39.20 | 38.54 | 38.63 | 38.70 | 34.35 |

Source: Compiled by the author

The D/E ratio average has been stable during the five years, maintaining it in the range of 10.62 and 11.14 (see Table 9). Due to the nature of banks' operations and their

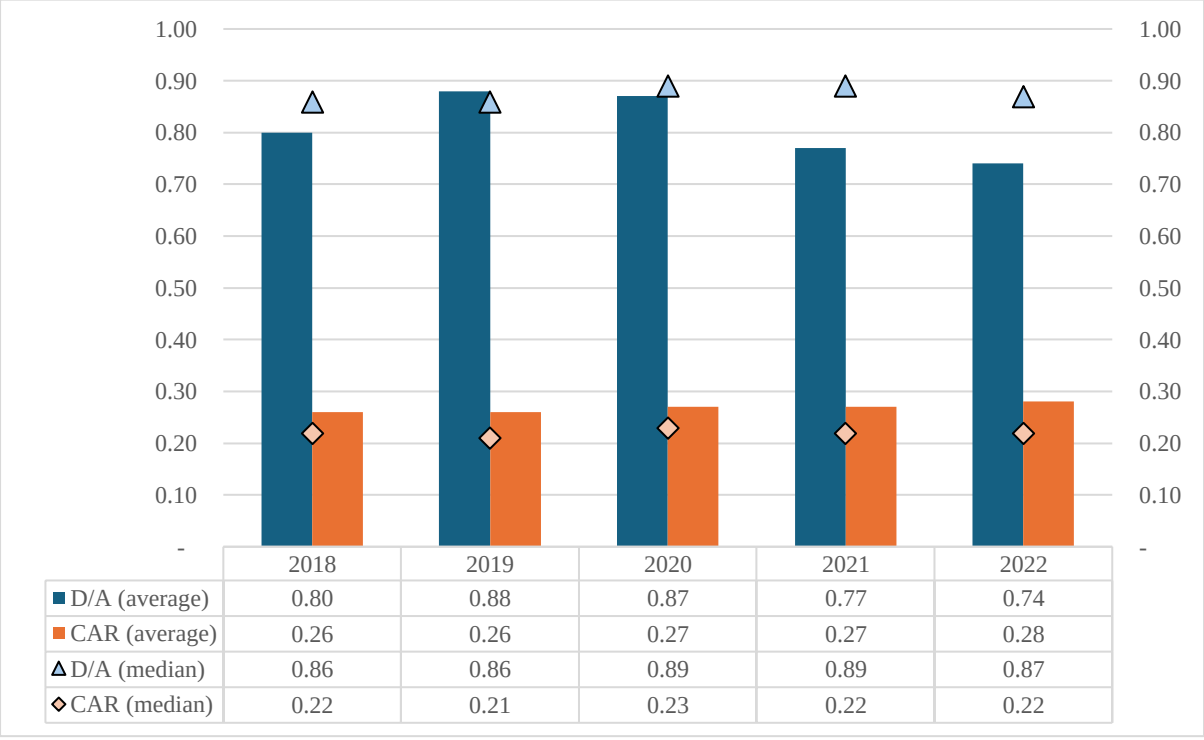
business models, the high D/E ratios are considered a normal characteristic, since they utilise a larger portion of debt to fund their lending activities and generate profits. 2019 and 2021 are the years where most of the public banks had an increase in their D/E ratio in respect to the preceding year (see Appendix N).

SIFL (France) maintains the highest D/E ratio for four years (2019-2022) with a five-year average of 37.56. Essentially, the higher the D/E ratio, the greater the level of debt the bank uses to finance its operations compared to its equity. While leverage can amplify profits, it also increases the risk of financial instability and potential default. In contrast, Eximbank SR (Slovakia) has the lowest D/E ratio, with a five-year average of 0.89 (see Appendix E). A leverage ratio that is too low can be interpreted as a lack of appetite for risk, thus limiting the bank's ability to generate higher returns. The substantial difference in the D/E results demonstrates significant variations in the capital structures and risk strategies employed.

For data presentation and interpretation reasons, the author decides to position the D/A and CAR average and median results on the same scale. The CAR is typically measured as a percentage; however, in the following figure, the CAR is presented as a decimal.

Figure 6

*The average and median of D/A and CAR values of public banks 2018-2022*




| | 2018 | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|---|
| D/A (average) | 0.80 | 0.88 | 0.87 | 0.77 | 0.74 |
| CAR (average) | 0.26 | 0.26 | 0.27 | 0.27 | 0.28 |
| D/A (median) | 0.86 | 0.86 | 0.89 | 0.89 | 0.87 |
| CAR (median) | 0.22 | 0.21 | 0.23 | 0.22 | 0.22 |

Source: Compiled by the author

The average D/A value drops in 2022, and changes in the D/A ratio among banks are very gradual (see Figure 5). The D/A average decreases from 0.80 in 2018 to 0.74 in 2022, a

change of 7.5% (see Figure 5). However, there is a noticeable spike for SFIL in 2019—the ratio increases from 0.83 to 4.88 (an approximate increase of 488%) and remains high until 2021 before dropping down to 0.87 (see Appendix O). This is due to a sudden drop in its total assets from 2019 until 2020, while the total debts remain relatively unchanged for the period (see External appendix).

While for most of the banks the D/A ratio is below 1, Kommunalkredit Austria and Bpifrance showcase D/A results higher than 1 (see Appendix O). Based on their high D/A ratios, it can be inferred that, compared to other banks, Kommunalkredit Austria and Bpifrance have a higher appetite for risk. However, in the long run, such high D/A ratios can lead to solvency issues. In contrast, the average D/A of the whole sample is lower than 1, signifying that most of the public banks maintain more conservative financial strategies, prioritising stability, and lower risk levels in their operations.

Another indicator that solidifies the public banks' solvency position is the CAR. The EEA public banks maintain a very good capital position from 2018 to 2022. Over these five years, all the banks maintain the capital adequacy level above the Basel III requirements (see Appendix P). From 2018 to 2022, the public bank with the lowest CAR is CEC Bank (Romania) with a five-year average of 11.28%, and the public bank with the highest CAR is Eksportfinans (Norway) with a five-year average of 139.75% (see Appendix E).

In general, the average value for the CAR is very stable, increasing from 25.67% to 28.21% (see Figure 5). This positive trend illustrates that more banks are improving their capital adequacy positions in 2022 compared to 2018. Based on the high CAR results, it can be derived that public banks in the EEA are generally very well-capitalised, indicating stability to withstand financial stress and meet regulatory requirements. This strong capital base helps to build trust among investors and customers.

The results and discussion reveal that while most public banks maintain conservative financial strategies and exhibit a high degree of capital adequacy, there is significant variability in terms of liquidity and leverage among them. The results highlight the important balance that public banks must maintain between risk and reward, with some banks leveraging aggressive financial strategies that may yield higher returns but also carry increased risks. These findings underscore the ongoing challenges banks face in managing liquidity, particularly in the wake of external shocks like the COVID-19 pandemic, which has prompted banks to adapt their strategies to ensure greater financial stability. While EEA’s public banking sector shows a general trend towards stability and solid capital adequacy, the

varied approaches to liquidity and debt management reflect differing economic strategies and regulatory environments across countries.

## Conclusion

Financial performance characterises how effectively the company uses its available resources to achieve its' financial goals. Financial performance evaluation is important for any organisation because it sheds light on both the strong and the weak aspects of a company. Therefore, diligent monitoring and balancing of financial performance measures, and improving any areas of weakness are essential in securing the longevity of a company's operations and its sustained success.

Since performance is strongly dependent on the internal decisions made and the strategic changes applied within the organisation, the ownership structure can significantly impact the direction of a company. Different ownership structures, whether they are private or public, can influence the way strategic decisions are prioritised and implemented. While the privatisation of firms is trending among many economies, the thesis highlights the role of public banks as indicators of the broader financial health and stability of an economy, emphasising the government's involvement in the financial sector.

Based on the literature and previous studies conducted, the author has assessed an interest towards the Indian banking sector. The lack of research conducted on the banks operating in Europe presented a research gap, which the author intended to fill. Therefore, the aim of the thesis was to evaluate the financial performance of publicly owned banks in Europe since their underperformance and instability can influence investors' confidence as well as public trust. The author has uncovered suitable financial performance measures for financial institutions. Financial institutions, such as banks, operate under a unique set of conditions and regulations that set them apart from non-financial companies. The primary difference lies in their assets and liabilities; banks deal with financial assets, which are subject to market fluctuations and risks not faced by non-financial entities. Moreover, the regulatory environment for banks is much stricter, with numerous specific requirements regarding capital adequacy, risk management, and liquidity.

In this study, public ownership is defined as the state's involvement in the ownership and control of financial institutions. State ownership can be present in multiple ways: directly, indirectly through a state governing body, or a combination of both. Moreover, the shares acquired by the state can vary, and the amount of shares allocated to the state can also be seen as a strategic decision made by the management board since the voting right goes to

the majority shareholder. However, the majority of public banks in the sample are fully owned by the state.

By covering the period from 2018 until 2022, the author evaluated the financial performance of public banks during economically unstable periods, such as COVID-19, which spread to Europe at the beginning of 2020, and the Russian invasion of Ukraine on February 24th, 2022. Because of those turbulent times, many companies suffered losses, and banks weren't left unaffected. The results of the thesis provide insight into the financial performance of public banks from 2018 to 2022. Overall, public banks in the EEA exhibit diverse levels of financial health. This can be due to different asset profiles, strategic goals, and risk appetites. Furthermore, the author observed relationships between financial dimensions and their corresponding ratios, highlighting that healthy financial performance results from balancing profitability, liquidity risk, and solvency management. The public banks that manage to find this balance tend to perform better and demonstrate greater resilience when facing financial challenges.

Although public banks might not be as strongly oriented on profitability compared to private banks, the empirical findings confirm that public banks are profitable throughout the five-year period. However, the COVID-19 and the military conflict between Russia and Ukraine took a toll on the banks net profits. Despite these events, public banks demonstrated good results in terms of efficiency and activity. Exceptionally high loan-to-deposit turnover ratios uncover that public banks have a high appetite for liquidity risk and are cofortable operating with lower leves of liquidity. However, post COVID-19, these banks gradually increased their liquid assets year by year, indicate their adaptation to changing economic conditions by enhancing their liquidity buffers.

The thesis concludes that despite the non-profit-oriented nature of public banks, they showcase stable profitability results. While public banks exhibit different levels of debt financing and liquidity, the empirical results of financial performance evaluation have demonstrated that public banks operate effectively and showcase strong levels of capital adequacy. The strong capital adequacy levels are important for protecting depositors' funds and maintaining public confidence in the banking system, especially during periods of economic uncertainty.

The author believes that this topic has multiple future research opportunities that can provide valuable insights into the field of finance and the public sector. While the current study evaluates public banks from their financial perspective, there is a lack of measures that can provide insights into the effectiveness of governance practices and social impact

initiatives. Future research could focus on the nuances of public ownership and whether a state's stake in the ownership structure can be a determinant of financial performance. Conducting comparative research between European public and private banks could add additional depth and understanding to different management practices, potentially revealing whether the state's involvement impacts strategic decision-making and the overall financial health.

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APPENDIX A

The sample of public banks in the EEA

| Country | Nr. | The bank |
|---|---|---|
| Austria | 1. | Kommunalkredit Austria |
| Belgium | 2. | Belfius Bank |
| Bulgaria | 3. | Bulgarian Development Bank (BDB) |
| Croatia | 4. | Hrvatska Poštanska Banka (HPB) |
| Czech Republic | 5. | NRB (Národní Rozvojová Banka) |
| France | 6. | SIFL (Société de financement local) |
| | 7. | La Poste Groupe |
| | 8. | Bpifrance (Banque publique d'investissement) |
| Germany | 9. | KfW Bankengruppe |
| | 10. | Bayerische Landesbank (BayernLB) |
| | 11. | Landesbank Baden – Württemberg (LBBW) |
| | 12. | Landesbank Hessen – Thüringen GZ (Helaba) |
| | 13. | Landesbank Saar (SaarLB) |
| | 14. | Norddeutsche Landesbank (NORD/LB) |
| Hungary | 15. | Eximbank Hungary |
| | 16. | MFB Hungarian Development bank |
| Iceland | 17. | Landsbankinn |
| Italy | 18. | Cassa Depositi e Prestiti (CDP) |
| | 19. | Banca Monte deo Paschi di Siena (MPS) |
| Liechtenstein | 20. | Landesbank (LLB) |
| Luxembourg | 21. | Spuerkeess |
| The Netherlands | 22. | FMO |
| | 23. | BNG Bank |
| | 24. | ABN AMRO Bank |
| | 25. | De Volksbank |
| Norway | 26. | Eksportfinans |
| | 27. | Kommunikalbanken (KBN) |
| Poland | 28. | Bank Gospodarstwa Krajowego (BGK) |
| Portugal | 29. | Caixa Geral de Depósitos (CGD) |
| Romania | 30. | CEC Bank |
| | 31. | EximBank Romania |
| Slovakia | 32. | Eximbanka SR |
| Slovenia | 33. | NLB Group (Nova Ljubljanska Banka) |
| Spain | 34. | Instituto de Crédito Oficial (ICO) |
| Sweden | 35. | SBAB Bank |
| | 36. | Svenska Skeppshypotek |

*Note:* The following countries are those that do not have operating publicly owned banks: Cyprus, Denmark, Estonia, Finland, Greece, Ireland, Latvia, Lithuania, and Malta.
Source: Compiled by the author

APPENDIX B

The ownership stake of the state in the public banks

| **The bank** | |
|---|---|
| Ownership stake (%) | The shareholder |
| **Kommunalkredit Austria AG** | |
| 0.20 | Association of Austrian municipalities |
| **Belfius Bank SA/NV** | |
| 100 | The Belgian state through the Federal Holding and Investment Company |
| **Bulgarian Development Bank AD** | |
| 100 | The Bulgarian state |
| **Hrvatska Poštanska Banka PLC** | |
| 44.8989 | The Republic of Croatia |
| **NRB (Národní Rozvojová Banka) AS** | |
| 100 | The Czech Republic |
| **SIFL (Société de financement local) S.A.** | |
| 99.99 | Caisse des Dépôts et Consignations |
| one share | The French government |
| **La Poste Groupe S.A.** | |
| 66 | Caisse des Dépôts et Consignations |
| 34 | The French government |
| **Bpifrance (Banque publique d'investissement) S.A.** | |
| 49.18 | Caisse des Dépôts et Consignations |
| 50 | The French government through EPIC Bpifrance |
| **KfW Bankengruppe** | |
| 20 | The German federal states |
| 80 | The Federal government |
| **Bayerische Landesbank (BayernLB)** | |
| 75 | The free state of Bavaria |
| **Landesbank Baden – Württemberg (LBBW)** | |
| 24.988 | The federal state of Baden-Württemberg |
| 18.932 | The state capital of Stuttgart |
| 15.546 | The federal state of Baden-Württemberg through the Landesbeteiligungen Baden-Württemberg GmbH |
| **Landesbank Hessen – Thüringen GZ (Helaba)** | |
| 8.10 | The state of Hessen |
| 4.05 | The free state of Thuringia |
| **Landesbank Saar (SaarLB)** | |
| 74.90 | The federal state of Saarland |
| **Norddeutsche Landesbank (NORD/LB)** | |
| 56.76 | The state of Lower Saxony |
| **Eximbank Hungary PLC** | |
| 100 | The Hungarian State |
| **MFB Hungarian Development bank PLC** | |
| 100 | The Hungarian state |
| **Landsbankinn hf.** | |
| 98.20 | The National Treasury of Iceland |

| | |
|---|---|
| **Cassa Depositi e Prestiti (CDP) S.p.A.** | |
| 82.77 | The Ministry of Economy and Finance |
| **Banca Monte deo Paschi di Siena (MPS) S.p.A.** | |
| 39.23 | The Ministry of Economy and Finance |
| **Landesbank (LLB) AG** | |
| 56.30 | The principality of Liechtenstein |
| **Spuerkeess** | |
| 100 | The state of Luxembourg |
| **FMO (Financierings-Maatschappij voor Ontwikkelingslanden) N.V.** | |
| 51 | The Dutch state |
| **BNG Bank N.V.** | |
| 50 | The local government |
| 50 | The Dutch state |
| **ABN AMRO Bank N.V.** | |
| 49.5 | The Dutch state through NL Financial Investments |
| **De Volksbank N.V.** | |
| 100 | The Dutch state through NL Financial Investments |
| **Eksportfinans ASA** | |
| 15 | The state of Norway through the Ministry of Trade, Industry and Fisheries |
| **Kommunalbanken AS** | |
| 100 | The Norwegian central government |
| **Bank Gospodarstwa Krajowego (BKG)** | |
| 100 | The state of Poland |
| **Caixa Geral de Depósitos (CGD) S.A.** | |
| 100 | The Republic of Portugal |
| **CEC Bank** | |
| 100 | The state of Romania |
| **EximBank Romania S.A.** | |
| 95.03 | The state of Romania through the Ministry of Finance |
| **Eximbanka SR** | |
| 100 | The state of Slovakia |
| **NLB Group (Nova Ljubljanska Banka)** | |
| 25 | The Republic of Slovenia |
| **Instituto de Crédito Oficial (ICO)** | |
| 100 | The state of Spain |
| **SBAB Bank AB (publ)** | |
| 100 | The state of Sweden |
| **Svenska Skeppshypotek** | |
| 100 | The state of Sweden |

APPENDIX C

The five-year averages of Profitability and Activity measures

| The bank | ROE | ROA | ROD | NIM | CIR |
|---|---|---|---|---|---|
| Kommunalkredit Austria | 13.08 | 0.48 | 1.11 | 1.46 | 61.35 |
| Belfius Bank | 7.76 | 0.41 | 0.79 | 1.11 | 57.36 |
| Bulgarian Development Bank (BDB) | (4.97) | (1.80) | (7.23) | 1.83 | 112.03 |
| Hrvatska Poštanska Banka (HPB) | 6.80 | 0.64 | 0.76 | 2.16 | 64.12 |
| Národní Rozvojová Banka (NRB) | 1.78 | 0.26 | 0.37 | 1.44 | 97.63 |
| SIFL | 3.85 | 0.20 | | 0.41 | 65.95 |
| La Poste Groupe | 7.05 | 0.30 | 0.67 | 0.42 | 95.91 |
| Bpifrance | 0.87 | 0.53 | 0.97 | (0.21) | 100.00 |
| KfW Bankengruppe | 4.32 | 0.27 | 3.91 | 0.45 | 46.30 |
| BayernLB | 7.28 | 0.26 | 0.37 | 0.77 | 61.78 |
| LBBW | 4.60 | 0.09 | 0.15 | 0.68 | 66.08 |
| Helaba | 3.63 | 0.17 | 0.33 | 0.64 | 70.64 |
| SaarLB | 3.60 | 0.14 | 0.21 | 0.93 | 69.29 |
| NORD/LB | (6.83) | (0.43) | (0.65) | 0.78 | 84.52 |
| Eximbank Hungary | 0.45 | 0.06 | 0.18 | 1.57 | 56.96 |
| MFB Hungarian Development bank | 0.31 | 0.06 | 0.07 | 1.29 | 78.26 |
| Landsbankinn | 7.16 | 1.21 | 2.25 | 2.74 | 49.62 |
| Casa Depositi e Prestiti (CDP) | 10.21 | 0.65 | 0.71 | 0.75 | 6.50 |
| Banca Monte deo Paschi di Siena (MPS) | (6.09) | (0.25) | (0.33) | 1.07 | 71.09 |
| Landesbank (LLB) | 5.78 | 0.50 | 0.62 | 0.67 | 69.50 |
| Spuerkeess | 4.20 | 0.38 | 0.47 | 0.80 | 26.02 |
| FMO | 3.23 | 1.21 | 8.54 | 2.48 | 59.73 |
| BNG Bank | 5.12 | 0.18 | 4.83 | 0.27 | 17.55 |
| ABN AMRO Bank | 6.82 | 0.39 | 0.57 | 1.53 | 66.42 |
| De Volksbank | 6.07 | 0.32 | 0.41 | 1.30 | 68.90 |
| Eksportfinans | 0.15 | (0.03) | 5.42 | 0.97 | 65.21 |
| Kommunikalbanken (KBN) | 5.96 | 0.22 | 13.82 | 0.38 | 69.51 |
| Bank Gospodarstwa Krajowego (BGK) | 3.38 | 0.54 | 0.77 | 0.98 | 278.33 |
| Caixa Geral de Depósitos (CGD) | 7.17 | 0.68 | 0.88 | 1.23 | 50.89 |
| CEC Bank | 10.25 | 0.92 | 1.05 | 3.05 | 67.48 |
| EximBank Romania | 8.76 | 0.92 | 1.06 | 1.67 | 67.41 |
| Eximbanka SR | (1.17) | (0.63) | (0.90) | 2.64 | 30.36 |
| NLB Group | 13.63 | 1.46 | 1.77 | 2.17 | 59.08 |
| Instituto de Crédito Oficial (ICO) | 2.04 | 0.33 | 1.14 | 0.08 | 79.62 |
| SBAB Bank | 2.31 | 0.17 | 0.64 | 0.77 | 34.07 |
| Svenska Skeppshypotek | 3.38 | 0.54 | 0.77 | 0.98 | 278.33 |

*Note:* The profitability and activity measures are presented in percentage terms (%). The ROD is missing for SIFL banks since they do not offer depositing services to their customers. Numbers in brackets (…) have a negative value.

APPENDIX D

The five-year averages of Liquidity measures

| **The bank** | **LAR (%)** | **L/D** | **DIR** |
|---|---|---|---|
| Kommunalkredit Austria | 12.93 | 1.84 | 3 704 |
| Belfius Bank | 10.83 | 1.22 | 4 978 |
| Bulgarian Development Bank (BDB) | 11.11 | 1.62 | 3 141 |
| Hrvatska Poštanska Banka (HPB) | 18.99 | 0.68 | 3 639 |
| Národní Rozvojová Banka (NRB) | 0.86 | 0.14 | 228 |
| SIFL | 6.78 | | 7 265 |
| La Poste Groupe | 4.64 | 0.83 | 315 |
| Bpifrance | 11.67 | 2.13 | 110 |
| KfW Bankengruppe | 6.86 | 1 3.49 | 9 537 |
| BayernLB | 3.27 | 1.16 | 2 000 |
| LBBW | 9.35 | 1.02 | 5 179 |
| Helaba | 8.20 | 1.34 | 5 013 |
| SaarLB | 26.47 | 1.24 | 77 |
| NORD/LB | 3.31 | 0.96 | 1 591 |
| Eximbank Hungary | 3.20 | 1.45 | 56 869 |
| MFB Hungarian Development bank | 3.26 | 0.69 | 1 187 |
| Landsbankinn | 4.34 | 1.58 | 973 |
| Casa Depositi e Prestiti (CDP) | 44.18 | 0.30 | 269 967 |
| Banca Monte deo Paschi di Siena (MPS) | 2.93 | 1.00 | 631 |
| Landesbank (LLB) | 26.20 | 0.69 | 7 314 |
| Spuerkeess | 19.56 | 0.64 | 10 259 |
| FMO | 13.95 | 3.76 | 3 727 |
| BNG Bank | 3.15 | 17.02 | 15 070 |
| ABN AMRO Bank | 13.26 | 0.99 | 3 448 |
| De Volksbank | 7.34 | 1.04 | 2 898 |
| Eksportfinans | 3.34 | 14.00 | 1 790 |
| Kommunikalbanken (KBN) | 0.06 | 44.47 | 440 |
| Bank Gospodarstwa Krajowego (BGK) | 17.72 | 0.34 | 13 017 |
| Caixa Geral de Depósitos (CGD) | 13.87 | 0.74 | 5 388 |
| CEC Bank | 15.44 | 0.66 | 2 582 |
| EximBank Romania | 17.97 | 0.61 | 3 726 |
| Eximbanka SR | 16.84 | 5.95 | 4 869 |
| NLB Group | 19.48 | 0.64 | 3 794 |
| Instituto de Crédito Oficial (ICO) | 9.73 | 2.01 | 26 793 |
| SBAB Bank | 1.81 | 3.03 | 2 640 |
| Svenska Skeppshypotek | 10.21 | 1.29 | 13 938 |

*Note:* The L/D is missing for SIFL banks, since they do not offer depositing services to their customers.

APPENDIX E

The five-year averages of Solvency measures

| **The bank** | **D/E** | **D/A** | **CAR (%)** |
|---|---|---|---|
| Kommunalkredit Austria | 16.15 | 1.09 | 22.49 |
| Belfius Bank | 2.40 | 0.15 | 19.07 |
| Bulgarian Development Bank (BDB) | 2.31 | 0.69 | 35.19 |
| Hrvatska Poštanska Banka (HPB) | 9.80 | 0.90 | 21.82 |
| Národní Rozvojová Banka (NRB) | 5.13 | 0.83 | 23.75 |
| SIFL | 37.73 | 2.38 | 31,34 |
| La Poste Groupe | 1.36 | 0.06 | |
| Bpifrance | 2.33 | 1.56 | 23.45 |
| KfW Bankengruppe | 13.14 | 0.82 | 22.94 |
| BayernLB | 2.40 | 0.12 | 19.21 |
| LBBW | 18.07 | 0.93 | 21.88 |
| Helaba | 19.77 | 0.95 | 18.22 |
| SaarLB | 23.81 | 0.95 | 16.55 |
| NORD/LB | 21.62 | 0.84 | 18.06 |
| Eximbank Hungary | 1.42 | 0.24 | 20.88 |
| MFB Hungarian Development bank | 2.50 | 0.45 | 20.80 |
| Landsbankinn | 10.42 | 0.91 | 20.04 |
| Casa Depositi e Prestiti (CDP) | 1.06 | 0.07 | |
| Banca Monte deo Paschi di Siena (MPS) | 17.85 | 0.94 | 16.86 |
| Landesbank (LLB) | 10.42 | 0.91 | 20.04 |
| Spuerkeess | 10.21 | 0.91 | 21.87 |
| FMO | 1.91 | 0.66 | 24.98 |
| BNG Bank | 27.67 | 0.96 | 38.00 |
| ABN AMRO Bank | 16.79 | 0.94 | 23.02 |
| De Volksbank | 18.15 | 0.95 | 32.56 |
| Eksportfinans | 1.13 | 0.50 | 139.75 |
| Kommunikalbanken (KBN) | 25.44 | 0.94 | 23.50 |
| Bank Gospodarstwa Krajowego (BGK) | 5.24 | 0.83 | 29.87 |
| Caixa Geral de Depósitos (CGD) | 9.66 | 0.91 | 19.24 |
| CEC Bank | 10.77 | 0.92 | 11.28 |
| EximBank Romania | 9.84 | 0.89 | 23.74 |
| Eximbanka SR | 0.89 | 0.62 | |
| NLB Group | 8.33 | 0.89 | 17.32 |
| Instituto de Crédito Oficial (ICO) | 5.33 | 0.84 | 37.93 |
| SBAB Bank | 23.77 | 0.96 | 18.34 |
| Svenska Skeppshypotek | 3.14 | 0.76 | 24.78 |

*Note:* CAR was not calculated for those banks whose financial reports missed the required information of Tier 1 and Tier 2 capital as well as risk weighted assets (RWA).

APPENDIX F

The return on equity (ROE) of public banks

| **The bank** | **2018** | **2019** | **2020** | **2021** | **2022** |
|---|---|---|---|---|---|
| Kommunalkredit Austria | 6.10 | 11.20 | 11.60 | 14.20 | 22.30 |
| Belfius Bank | 7.50 | 7.40 | 5.60 | 9.20 | 9.10 |
| BDB | 3.26 | 1.45 | (17.60) | (13.72) | 1.78 |
| HPB | 7.57 | 6.07 | 7.67 | 7.63 | 5.07 |
| NRB | 0.39 | 0.77 | 0.49 | 0.54 | 6.68 |
| SIFL | 4.03 | 3.08 | 2.64 | 4.51 | 5.00 |
| La Poste Groupe | 6.86 | 6.17 | 8.32 | 7.95 | 5.95 |
| Bpifrance | 1.17 | 1.67 | (1.39) | 1.80 | 1.63 |
| KfW Bankengruppe | 5.40 | 4.35 | 1.65 | 6.48 | 3.73 |
| BayernLB | 9.40 | 6.70 | 1.90 | 7.90 | 10.50 |
| LBBW | 4.30 | 4.60 | 1.90 | 6.00 | 6.20 |
| Helaba | 3.29 | 5.51 | 4.63 | 2.15 | 2.58 |
| SaarLB | 3.28 | 2.47 | 4.32 | 5.67 | 2.26 |
| NORD/LB | (33.30) | (0.50) | (0.20) | 0.20 | (0.35) |
| Eximbank Hungary | 4.53 | 1.03 | (4.54) | 0.58 | 0.63 |
| MFB | 1.82 | 0.18 | (2.43) | 0.98 | 1.00 |
| Landsbankinn | 8.04 | 7.36 | 4.07 | 10.23 | 6.09 |
| CDP | 10.18 | 10.97 | 10.88 | 9.35 | 9.67 |
| MPS | 3.35 | (12.33) | (29.14) | 5.07 | 2.59 |
| LLB | 4.23 | 5.99 | 5.14 | 6.15 | 7.38 |
| Spuerkeess | 4.38 | 4.50 | 3.13 | 4.61 | 4.39 |
| FMO | 5.07 | 3.85 | (7.09) | 14.29 | 0.03 |
| BNG Bank | 6.75 | 3.34 | 4.34 | 4.66 | 6.50 |
| ABN AMRO Bank | 11.00 | 9.53 | (0.21) | 5.61 | 8.18 |
| De Volksbank | 7.50 | 8.01 | 5.04 | 4.65 | 5.15 |
| Eksportfinans | 1.11 | 1.64 | 0.69 | (2.56) | (0.15) |
| KBN | 9.70 | 7.82 | 6.25 | 6.33 | (0.32) |
| BGK | 2.67 | 2.09 | 1.53 | 3.54 | 7.05 |
| CGD | 5.99 | 9.06 | 5.65 | 6.28 | 8.89 |
| CEC Bank | 13.74 | 9.59 | 7.53 | 9.51 | 10.90 |
| EximBank Romania | 10.87 | 2.50 | 23.58 | 3.44 | 3.42 |
| Eximbanka SR | 0.16 | 0.21 | 0.21 | (6.72) | 0.27 |
| NLB Group | 12.60 | 11.48 | 13.81 | 11.37 | 18.89 |
| ICO | 1.43 | 2.04 | 1.51 | 2.59 | 2.63 |
| SBAB Bank | 12.45 | 14.54 | 9.31 | 2.72 | (27.46) |
| Svenska Skeppshypotek | 2.48 | 5.01 | 4.40 | 3.35 | 5.42 |

*Note:* The ROE is presented in percentage terms (%). Numbers in brackets (…) have a negative value.

APPENDIX G

The return on assets (ROA) of public banks

| **The bank** | **2018** | **2019** | **2020** | **2021** | **2022** |
|---|---|---|---|---|---|
| Kommunalkredit Austria | 0.01 | 0.28 | 0.50 | 0.56 | 1.07 |
| Belfius Bank | 0.39 | 0.40 | 0.29 | 0.48 | 0.51 |
| BDB | 0.83 | 0.35 | (6.15) | (4.68) | 0.66 |
| HPB | 0.72 | 0.60 | 0.75 | 0.73 | 0.39 |
| NRB | 0.08 | 0.16 | 0.08 | 0.07 | 0.92 |
| SIFL | 0.09 | 0.39 | 0.30 | 0.10 | 0.13 |
| La Poste Groupe | 0.32 | 0.29 | 0.35 | 0.33 | 0.19 |
| Bpifrance | 0.89 | 1.28 | (1.45) | 1.17 | 0.75 |
| KfW Bankengruppe | 0.34 | 0.27 | 0.10 | 0.40 | 0.25 |
| BayernLB | 0.38 | 0.21 | 0.09 | 0.21 | 0.41 |
| LBBW | 0.15 | 0.10 | 0.04 | 0.08 | 0.07 |
| Helaba | 0.17 | 0.23 | 0.19 | 0.12 | 0.14 |
| SaarLB | 0.16 | 0.10 | 0.17 | 0.19 | 0.10 |
| NORD/LB | (1.58) | (0.37) | (0.23) | 0.07 | (0.03) |
| Eximbank Hungary | 0.73 | 0.19 | (0.80) | 0.09 | 0.11 |
| MFB | 033 | 0.03 | (0.43) | 0.18 | 0.21 |
| Landsbankinn | 1.45 | 1.28 | 0.67 | 1.67 | 0.95 |
| CDP | 0.69 | 0.71 | 0.68 | 0.57 | 0.62 |
| MPS | 0.23 | (0.77) | (1.12) | 0.23 | 0.17 |
| LLB | 0.37 | 0.54 | 0.47 | 0.55 | 0.59 |
| Spuerkeess | 0.38 | 0.38 | 0.27 | 0.44 | 0.41 |
| FMO | 1.78 | 1.28 | (2.28) | 5.27 | 0.01 |
| BNG Bank | 0.25 | 0.11 | 0.14 | 0.16 | 0.27 |
| ABN AMRO Bank | 0.62 | 0.55 | (0.01) | 0.31 | 0.49 |
| De Volksbank | 0.44 | 0.44 | 0.26 | 0.22 | 0.26 |
| Eksportfinans | 0.37 | 0.73 | 0.32 | (1.46) | (0.10) |
| KBN | 0.33 | 0.28 | 0.23 | 0.26 | (0.01) |
| BGK | 0.61 | 0.39 | 0.23 | 0.44 | 1.04 |
| CGD | 0.56 | 0.90 | 0.54 | 0.56 | 0.82 |
| CEC Bank | 1.21 | 1.16 | 0.82 | 0.72 | 0.69 |
| EximBank Romania | 1.66 | 0.37 | 2.10 | 0.24 | 0.22 |
| Eximbanka SR | 0.13 | 0.13 | 0.12 | (3.69) | 0.14 |
| NLB Group | 1.60 | 1.37 | 1.38 | 1.10 | 1.85 |
| ICO | 0.21 | 0.34 | 0.23 | 0.37 | 0.49 |
| SBAB Bank | 0.48 | 0.66 | 0.43 | 0.12 | (0.86) |
| Svenska Skeppshypotek | 0.55 | 1.12 | 1.21 | 0.92 | 1.23 |

*Note:* The ROA is presented in percentage terms (%). Numbers in brackets (…) have a negative value.

APPENDIX H

The return on deposits (ROD) of public banks

| **The bank** | **2018** | **2019** | **2020** | **2021** | **2022** |
|---|---|---|---|---|---|
| Kommunalkredit Austria | 0.02 | 0.76 | 1.15 | 1.38 | 2.25 |
| Belfius Bank | 0.82 | 0.78 | 0.56 | 0.90 | 0.90 |
| BDB | 1.91 | 0.97 | (23.41) | (17.64) | 2.03 |
| HPB | 0.93 | 0.69 | 0.90 | 0.87 | 0.42 |
| NRB | 0.12 | 0.28 | 0.12 | 0.10 | 1.26 |
| SIFL | | | | | |
| La Poste Groupe | 0.41 | 0.38 | 1.01 | 0.98 | 0.58 |
| Bpifrance | 1.62 | 2.60 | (2.06) | 1.78 | 0.92 |
| KfW Bankengruppe | 7.97 | 5.46 | 0.75 | 3.74 | 1.61 |
| BayernLB | 0.56 | 0.31 | 0.12 | 0.28 | 0.57 |
| LBBW | 0.25 | 0.17 | 0.06 | 0.12 | 0.13 |
| Helaba | 0.35 | 0.50 | 0.35 | 0.21 | 0.26 |
| SaarLB | 0.23 | 0.14 | 0.24 | 0.30 | 0.13 |
| NORD/LB | (2.36) | (0.58) | (0.37) | 0.10 | (0.04) |
| Eximbank Hungary | 1.45 | 0.32 | (1.21) | 0.16 | 0.19 |
| MFB | 0.39 | 0.03 | (0.59) | 0.24 | 0.27 |
| Landsbankinn | 2.65 | 2.41 | 1.25 | 3.18 | 1.74 |
| CDP | 0.74 | 0.77 | 0.73 | 0.62 | 0.67 |
| MPS | 0.31 | (1.06) | (1.41) | 0.28 | 0.21 |
| LLB | 0.45 | 0.67 | 0.58 | 0.68 | 0.73 |
| Spuerkeess | 0.48 | 0.48 | 0.33 | 0.54 | 0.50 |
| FMO | 13.17 | 8.77 | (15.82) | 36.53 | 0.08 |
| BNG Bank | 5.82 | 2.93 | 3.94 | 5.22 | 6.25 |
| ABN AMRO Bank | 0.94 | 0.83 | (0.02) | 0.43 | 0.69 |
| De Volksbank | 0.56 | 0.56 | 0.32 | 0.28 | 0.33 |
| Eksportfinans | 16.51 | 22.60 | 31.43 | (41.05) | (2.37) |
| KBN | 12.38 | 28.75 | 8.36 | 20.51 | (0.91) |
| BGK | 1.00 | 0.61 | 0.31 | 0.57 | 1.37 |
| CGD | 0.79 | 1.18 | 0.68 | 0.74 | 1.00 |
| CEC Bank | 1.36 | 1.35 | 0.94 | 0.83 | 0.77 |
| EximBank Romania | 2.02 | 0.45 | 2.34 | 0.26 | 0.24 |
| Eximbanka SR | 4.52 | 0.46 | 0.34 | (10.18) | 0.37 |
| NLB Group | 1.95 | 1.67 | 1.64 | 1.34 | 2.23 |
| ICO | 0.73 | 1.13 | 0.65 | 1.37 | 1.83 |
| SBAB Bank | 1.72 | 2.40 | 1.62 | 0.47 | (3.00) |
| Svenska Skeppshypotek | 0.72 | 1.44 | 1.68 | 1.27 | 1.60 |

*Note:* The ROD is presented in percentage terms (%). Numbers in brackets (…) have a negative value.

APPENDIX I

The net interest margin (NIM) of public banks

| **The bank** | **2018** | **2019** | **2020** | **2021** | **2022** |
|---|---|---|---|---|---|
| Kommunalkredit Austria | 1.12 | 1.25 | 1.45 | 1.33 | 2.14 |
| Belfius Bank | 1.13 | 1.13 | 1.11 | 1.05 | 1.12 |
| BDB | 1.96 | 1.99 | 1.78 | 1.60 | 1.83 |
| HPB | 2.53 | 2.40 | 2.18 | 1.96 | 1.71 |
| NRB | 1.57 | 1.61 | 1.12 | 0.93 | 1.97 |
| SIFL | 0.18 | 0.31 | 0.99 | 0.36 | 0.24 |
| La Poste Groupe | 0.89 | 0.85 | 0.49 | 0.18 | (0.33) |
| Bpifrance | 0.22 | (0.02) | (1.07) | (0.09) | (0.10) |
| KfW Bankengruppe | 0.47 | 0.47 | 0.48 | 0.43 | 0.39 |
| BayernLB | 0.80 | 0.78 | 0.73 | 0.71 | 0.81 |
| LBBW | 0.63 | 0.67 | 0.66 | 0.70 | 0.74 |
| Helaba | 0.67 | 0.64 | 0.55 | 0.64 | 0.69 |
| SaarLB | 0.86 | 0.24 | 1.78 | 1.56 | 0.24 |
| NORD/LB | 0.75 | 0.70 | 0.97 | 0.68 | 0.80 |
| Eximbank Hungary | 1.48 | 1.22 | 1.27 | 1.27 | 2.62 |
| MFB | 0.76 | 0.70 | 0.79 | 0.88 | 3.32 |
| Landsbankinn | 3.24 | 2.88 | 2.55 | 2.37 | 1.74 |
| CDP | 0.97 | 0.67 | 0.79 | 0.69 | 0.63 |
| MPS | 1.27 | 1.13 | 0.90 | 0.84 | 1.19 |
| LLB | 0.76 | 0.66 | 0.67 | 0.63 | 0.73 |
| Spuerkeess | 0.78 | 0.80 | 0.79 | 0.77 | 0.88 |
| FMO | 2.39 | 2.40 | 2.62 | 2.52 | 2.45 |
| BNG Bank | 0.31 | 0.17 | 0.21 | 0.24 | 0.42 |
| ABN AMRO Bank | 1.70 | 1.41 | 1.52 | 1.31 | 1.39 |
| De Volksbank | 1.49 | 1.03 | 1.30 | 1.11 | 1.17 |
| Eksportfinans | 0.64 | 0.95 | 0.97 | 0.76 | (2.37) |
| KBN | 0.43 | 0.41 | 0.35 | 0.33 | (0.91) |
| BGK | 1.12 | 1.29 | 0.73 | 0.58 | 1.47 |
| CGD | 1.32 | 3.62 | 1.19 | 1.00 | 1.36 |
| CEC Bank | 3.56 | 1.31 | 2.98 | 2.34 | 2.74 |
| EximBank Romania | 1.69 | 2.15 | 2.32 | 1.85 | 1.19 |
| Eximbanka SR | 1.75 | 2.37 | 2.93 | 3.10 | 3.26 |
| NLB Group | 2.51 | (0.08) | 1.78 | 1.99 | 2.21 |
| ICO | (0.25) | 0.75 | 0.07 | 0.29 | 0,37 |
| SBAB Bank | 0.78 | 1.53 | 0.76 | 0.77 | 0.78 |
| Svenska Skeppshypotek | 1.36 | 2.88 | 1.40 | 1.30 | 1.59 |

*Note:* The NIM is presented in percentage terms (%). Numbers in brackets (…) have a negative value.

APPENDIX J

The cost to income ratio (CIR) of public banks

| **The bank** | **2018** | **2019** | **2020** | **2021** | **2022** |
|---|---|---|---|---|---|
| Kommunalkredit Austria | 73.59 | 68.03 | 59.94 | 52.56 | 52.65 |
| Belfius Bank | 63.45 | 58.34 | 56.04 | 54.64 | 54.33 |
| BDB | 46.17 | 222.03 | 113.65 | 119.01 | 59.27 |
| HPB | 60.21 | 61.27 | 65.18 | 63.58 | 70.36 |
| NRB | 98.82 | 98.61 | 99.03 | 99.38 | 92.33 |
| SIFL | 60.33 | 65.48 | 62.22 | 51.80 | 89.92 |
| La Poste Groupe | 96.33 | 96.48 | 99.68 | 90.34 | 96.71 |
| Bpifrance | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |
| KfW Bankengruppe | 50.23 | 44.06 | 41.76 | 45.88 | 49.56 |
| BayernLB | 61.90 | 65.48 | 66.00 | 59.00 | 56.20 |
| LBBW | 72.80 | 71.80 | 70.40 | 64.70 | 50.70 |
| Helaba | 78.30 | 71.10 | 73.50 | 71.00 | 59.30 |
| SaarLB | 66.07 | 78.50 | 68.70 | 57.00 | 76.20 |
| NORD/LB | 94.80 | 71.70 | 64.50 | 94.00 | 97.60 |
| Eximbank Hungary | 41.93 | 110.07 | 68.85 | 31.99 | 31.97 |
| MFB | 70.84 | 120.37 | 83.92 | 65.14 | 51.01 |
| Landsbankinn | 44.40 | 46.57 | 67.04 | 41.52 | 48.56 |
| CDP | 6.55 | 5.13 | 5.74 | 6.95 | 8.14 |
| MPS | 71.50 | 71.03 | 74.25 | 70.68 | 67.97 |
| LLB | 76.53 | 68.77 | 71.28 | 65.70 | 65.22 |
| Spuerkeess | 29.36 | 28.19 | 27.33 | 23.59 | 21.64 |
| FMO | 37.41 | 32.43 | 163.64 | 20.18 | 44.97 |
| BNG Bank | 13.10 | 16.01 | 20.04 | 20.23 | 18.37 |
| ABN AMRO Bank | 58.85 | 61.22 | 66.40 | 76.42 | 69.19 |
| De Volksbank | 63.57 | 61.79 | 70.64 | 80.65 | 67.88 |
| Eksportfinans | 48.37 | 38.43 | 50.59 | 72.88 | 115.79 |
| KBN | 9.48 | 12.46 | 14.23 | 13.61 | 297.80 |
| BGK | 306.42 | 294.95 | 299.01 | 246.16 | 245.11 |
| CGD | 56.05 | 51.22 | 51.35 | 43.60 | 52.21 |
| CEC Bank | 62.26 | 64.50 | 67.44 | 70.74 | 72.45 |
| EximBank Romania | 66.96 | 62.14 | 67.96 | 68.57 | 71.40 |
| Eximbanka SR | 39.94 | 38.37 | 29.76 | 23.66 | 20.04 |
| NLB Group | 58.52 | 58.68 | 58.26 | 62.29 | 57.65 |
| ICO | 77.15 | 77.16 | 80.42 | 81.76 | 81.59 |
| SBAB Bank | 31.98 | 33.71 | 35.81 | 36.20 | 32.66 |
| Svenska Skeppshypotek | 46.51 | 16.47 | 18.59 | 18.75 | 15.46 |

*Note:* The CIR is presented in percentage terms (%).

APPENDIX K

The liquid assets ratio (LAR) of public banks

| **The bank** | **2018** | **2019** | **2020** | **2021** | **2022** |
|---|---|---|---|---|---|
| Kommunalkredit Austria | 9.04 | 12.16 | 19.68 | 12.84 | 10.92 |
| Belfius Bank | 5.06 | 3.89 | 13.53 | 16.47 | 15.21 |
| BDB | 9.88 | 7.96 | 13.19 | 7.32 | 17.22 |
| HPB | 17.91 | 11.66 | 14.36 | 22.17 | 28.85 |
| NRB | 2.80 | 0.09 | 0.02 | 0.54 | 0.88 |
| SIFL | 2.67 | 9.47 | 13.52 | 5.34 | 3.02 |
| La Poste Groupe | 1.64 | 8.55 | 0.60 | 6.74 | 5.68 |
| Bpifrance | 9.86 | 10.86 | 10.74 | 13.14 | 13.72 |
| KfW Bankengruppe | 3.60 | 5.57 | 8.09 | 7.70 | 9.35 |
| BayernLB | 1.51 | 3.77 | 3.65 | 6.58 | 0.83 |
| LBBW | 10.25 | 7.14 | 4.93 | 13.06 | 11.37 |
| Helaba | 4.51 | 7.03 | 12.05 | 17.24 | 0.17 |
| SaarLB | 10.47 | | 109.81 | 12.09 | |
| NORD/LB | 0.99 | 2.47 | 4.77 | 6.04 | 2.25 |
| Eximbank Hungary | 0.39 | 6.41 | 0.20 | 0.10 | 8.91 |
| MFB | 1.36 | 0.82 | 3.74 | 7.06 | 3.33 |
| Landsbankinn | 5.34 | 4.90 | 4.32 | 4.77 | 2.36 |
| CDP | 45.39 | 44.39 | 44.62 | 44.75 | 41.74 |
| MPS | 0.73 | 0.63 | 1.16 | 1.68 | 10.43 |
| LLB | 24.94 | 24.04 | 28.49 | 28.70 | 24.84 |
| Spuerkeess | 13.92 | 17.24 | 18.69 | 22.81 | 25.13 |
| FMO | 10.65 | 15.28 | 14.94 | 15.00 | 13.89 |
| BNG Bank | 1.16 | 0.85 | 1.44 | 6.23 | 6.09 |
| ABN AMRO Bank | 9.55 | 7.58 | 15.64 | 17.04 | 16.49 |
| De Volksbank | 1.34 | 3.22 | 6.92 | 14.28 | 10.95 |
| Eksportfinans | 2.24 | 3.22 | 3.52 | 3.55 | 4.20 |
| KBN | 0.06 | 0.10 | 0.04 | 0.07 | 0.05 |
| BGK | 19.66 | 22.61 | 20.12 | 24.58 | 1.59 |
| CGD | 6.20 | 8.52 | 11.28 | 22.08 | 21.28 |
| CEC Bank | 9.05 | 13.44 | 12.46 | 16.70 | 25.54 |
| EximBank Romania | 10.19 | 20.23 | 19.20 | 20.14 | 20.09 |
| Eximbanka SR | 22.32 | 11.47 | 12.73 | 14.25 | 23.41 |
| NLB Group | 13.57 | 15.95 | 21.14 | 23.99 | 22.77 |
| ICO | 4.61 | 2.46 | 7.93 | 24.82 | 8.85 |
| SBAB Bank | 0.63 | 1.30 | 1.46 | 1.92 | 3.72 |
| Svenska Skeppshypotek | 4.14 | 6.08 | 16.69 | 15.97 | 8.15 |

*Note:* The LAR is presented in percentage terms (%). SaarLB did not report their total cash resources in 2019 and 2022.

APPENDIX L

The loan to deposit (L/D) of public banks

| **The bank** | **2018** | **2019** | **2020** | **2021** | **2022** |
|---|---|---|---|---|---|
| Kommunalkredit Austria | 2.60 | 1.92 | 1.53 | 1.69 | 1.47 |
| Belfius Bank | 1.38 | 1.38 | 1.21 | 1.12 | 0.99 |
| BDB | 1.15 | 1.60 | 1.85 | 1.98 | 1.51 |
| HPB | 0.67 | 0.71 | 0.77 | 0.68 | 0.56 |
| NRB | 0.09 | 0.18 | 0.08 | 0.16 | 0.16 |
| SIFL | | | | | |
| La Poste Groupe | 0.91 | 0.83 | 0.91 | 0.72 | 0.76 |
| Bpifrance | 2.51 | 2.87 | 2.10 | 2.00 | 1.17 |
| KfW Bankengruppe | 23.56 | 19.42 | 7.79 | 9.54 | 7.14 |
| BayernLB | 1.19 | 1.17 | 1.12 | 1.10 | 1.23 |
| LBBW | 1.07 | 1.05 | 1.01 | 0.90 | 1.08 |
| Helaba | 1.34 | 1.37 | 1.12 | 1.41 | 1.46 |
| SaarLB | 1.13 | 1.28 | 1.32 | 1.25 | 1.24 |
| NORD/LB | 0.87 | 0.91 | 0.86 | 1.05 | 1.13 |
| Eximbank Hungary | 1.77 | 1.34 | 1.27 | 1.47 | 1.40 |
| MFB | 0.60 | 0.84 | 0.73 | 0.66 | 0.61 |
| Landsbankinn | 1.56 | 1.57 | 1.57 | 1.58 | 1.61 |
| CDP | 0.30 | 0.28 | 0.28 | 0.30 | 0.32 |
| MPS | 0.60 | 1.08 | 1.05 | 1.02 | 0.83 |
| LLB | 0.68 | 0.66 | 0.60 | 0.61 | 0.66 |
| Spuerkeess | 0.66 | 0.68 | 0.64 | 0.61 | 0.60 |
| FMO | 4.16 | 3.66 | 3.67 | 3.55 | 3.73 |
| BNG Bank | 14.70 | 16.02 | 15.87 | 19.85 | 18.68 |
| ABN AMRO Bank | 1.12 | 1.10 | 0.93 | 0.90 | 0.91 |
| De Volksbank | 1.12 | 1.11 | 1.05 | 0.95 | 0.98 |
| Eksportfinans | 21.22 | 14.40 | 25.16 | 5.08 | 4.13 |
| KBN | 25.12 | 69.68 | 23.20 | 54.94 | 49.42 |
| BGK | 0.50 | 0.48 | 0.28 | 0.22 | 0.23 |
| CGD | 0.87 | 0.78 | 0.71 | 0.68 | 0.65 |
| CEC Bank | 0.72 | 0.72 | 0.62 | 0.62 | 0.64 |
| EximBank Romania | 0.56 | 0.59 | 0.61 | 0.63 | 1.84 |
| Eximbanka SR | 20.98 | 2.61 | 2.15 | 2.18 | 0.66 |
| NLB Group | 0.68 | 0.66 | 0.60 | 0.61 | 2.13 |
| ICO | 2.16 | 2.13 | 1.81 | 1.81 | 2.90 |
| SBAB Bank | 2.94 | 2.94 | 3.12 | 3.23 | 1.26 |
| Svenska Skeppshypotek | 1.25 | 1.25 | 1.34 | 1.33 | 1.61 |

*Note:* The L/D is missing for SIFL banks, since they do not offer depositing services to their customers.

APPENDIX M

The defensive interval ratio (DIR) of public banks

| **The bank** | **2018** | **2019** | **2020** | **2021** | **2022** |
|---|---|---|---|---|---|
| Kommunalkredit Austria | 2 448 | 3 641 | 5 965 | 3 592 | 2 873 |
| Belfius Bank | 2 898 | 1 688 | 6 337 | 7 819 | 6 150 |
| BDB | 4 734 | 3 154 | 688 | 479 | 6 648 |
| HPB | 2 983 | 1 981 | 2 606 | 4 426 | 6 200 |
| NRB | 695 | 24 | 6 | 170 | 247 |
| SIFL | 6 383 | 4 022 | 6 388 | 12 680 | 6 853 |
| La Poste Groupe | 66 | 362 | 53 | 627 | 468 |
| Bpifrance | 159 | 81 | 87 | 118 | 104 |
| KfW Bankengruppe | 4 553 | 7 796 | 12 124 | 10 668 | 12 541 |
| BayernLB | 898 | 2 149 | 2 243 | 4 212 | 500 |
| LBBW | 5 087 | 3 705 | 2 856 | 7 468 | 6 780 |
| Helaba | 1 950 | 3 811 | 7 199 | 11 990 | 115 |
| SaarLB | 193 | | 77 | 115 | |
| NORD/LB | 548 | 1 300 | 2 357 | 2 758 | 989 |
| Eximbank Hungary | 5 736 | 36 606 | 5 157 | 2 356 | 234 489 |
| MFB | 235 | 240 | 1 421 | 2 643 | 1 393 |
| Landsbankinn | 1 080 | 1 062 | 962 | 1 163 | 596 |
| CDP | 282 486 | 230 100 | 326 007 | 332 641 | 178 597 |
| MPS | 148 | 133 | 291 | 402 | 2 180 |
| LLB | 6 811 | 6 387 | 7 992 | 8 412 | 6 967 |
| Spuerkeess | 7 139 | 8 835 | 9 645 | 12 229 | 13 444 |
| FMO | 3 086 | 4 374 | 3 407 | 4 467 | 3 301 |
| BNG Bank | 7 641 | 5 750 | 8 622 | 31 677 | 21 659 |
| ABN AMRO Bank | 2 483 | 1 971 | 4 298 | 4 277 | 4 212 |
| De Volksbank | 488 | 1 288 | 2 615 | 5 634 | 4 464 |
| Eksportfinans | 1 763 | 1 945 | 2 058 | 1 613 | 1 572 |
| KBN | 482 | 665 | 272 | 441 | 338 |
| BGK | 10 445 | 12 867 | 15 878 | 24 347 | 1 550 |
| CGD | 2 016 | 2 763 | 4 506 | 11 038 | 6 617 |
| CEC Bank | 1 357 | 1 963 | 2 325 | 2 948 | 4 320 |
| EximBank Romania | 2 227 | 4 512 | 3 469 | 4 268 | 4 153 |
| Eximbanka SR | 4 772 | 3 332 | 4 015 | 4 680 | 7 547 |
| NLB Group | 2 186 | 2 738 | 5 137 | 4 548 | 4 361 |
| ICO | 13 779 | 6 687 | 22 304 | 72 319 | 18 875 |
| SBAB Bank | 991 | 1 896 | 2 044 | 2 628 | 5 640 |
| Svenska Skeppshypotek | 629 | 9 074 | 21 561 | 24 370 | 14 056 |

*Note:* SaarLB did not report their total cash resources in 2019 and 2022.

APPENDIX N

The debt to equity (D/E) of public banks

| **The bank** | **2018** | **2019** | **2020** | **2021** | **2022** |
|---|---|---|---|---|---|
| Kommunalkredit Austria | 17.32 | 17.22 | 17.75 | 15.15 | 13.29 |
| Belfius Bank | 2.84 | 2.63 | 2.27 | 2.01 | 2.23 |
| BDB | 2.90 | 3.13 | 1.86 | 1.93 | 1.70 |
| HPB | 9.03 | 9.03 | 9.28 | 9.50 | 12.15 |
| NRB | 3.96 | 3.87 | 5.16 | 6.41 | 6.23 |
| SIFL | 38.43 | 38.54 | 38.63 | 38.70 | 34.35 |
| La Poste Groupe | 1.95 | 2.36 | 0.68 | 0.66 | 1.15 |
| Bpifrance | 1.98 | 1.99 | 2.49 | 2.56 | 2.65 |
| KfW Bankengruppe | 13.81 | 13.33 | 13.00 | 13.00 | 12.56 |
| BayernLB | 2.56 | 2.54 | 2.61 | 2.38 | 1.89 |
| LBBW | 17.28 | 17.46 | 18.76 | 18.89 | 17.97 |
| Helaba | 18.26 | 22.77 | 23.80 | 16.89 | 17.12 |
| SaarLB | 19.18 | 24.66 | 23.87 | 28.73 | 22.59 |
| NORD/LB | 39.20 | 19.78 | 17.82 | 16.35 | 14.94 |
| Eximbank Hungary | 2.03 | 1.22 | 0.89 | 1.50 | 1.46 |
| MFB | 2.65 | 3.14 | 2.02 | 2.42 | 2.26 |
| Landsbankinn | 4.53 | 4.76 | 5.06 | 5.12 | 5.40 |
| CDP | 0.82 | 0.88 | 1.06 | 1.20 | 1.35 |
| MPS | 13.51 | 14.97 | 25.00 | 21.34 | 14.41 |
| LLB | 10.39 | 10.00 | 10.03 | 10.22 | 11.46 |
| Spuerkeess | 10.51 | 10.77 | 10.66 | 9.47 | 9.65 |
| FMO | 1.85 | 2.01 | 2.11 | 1.71 | 1.87 |
| BNG Bank | 26.55 | 29.63 | 30.46 | 28.45 | 23.28 |
| ABN AMRO Bank | 16.85 | 16.47 | 17.85 | 17.14 | 15.64 |
| De Volksbank | 16.19 | 17.38 | 18.64 | 19.83 | 18.73 |
| Eksportfinans | 1.99 | 1.25 | 1.17 | 0.76 | 0.48 |
| KBN | 25.76 | 26.85 | 25.79 | 23.76 | 25.05 |
| BGK | 3.41 | 4.39 | 5.70 | 6.95 | 5.75 |
| CGD | 9.75 | 9.01 | 9.50 | 10.20 | 9.81 |
| CEC Bank | 10.36 | 7.30 | 8.20 | 13.13 | 14.86 |
| EximBank Romania | 5.55 | 5.74 | 10.25 | 13.27 | 14.41 |
| Eximbanka SR | 2.16 | 0.59 | 0.78 | 0.82 | 0.09 |
| NLB Group | 6.86 | 7.38 | 8.93 | 9.31 | 9.19 |
| ICO | 5.86 | 4.93 | 5.56 | 5.99 | 4.33 |
| SBAB Bank | 25.01 | 21.03 | 20.63 | 21.38 | 30.81 |
| Svenska Skeppshypotek | 3.46 | 3.49 | 2.64 | 2.66 | 3.43 |

APPENDIX O

The debt to assets (D/A) of public banks

| **The bank** | **2018** | **2019** | **2020** | **2021** | **2022** |
|---|---|---|---|---|---|
| Kommunalkredit Austria | 1.11 | 1.11 | 1.09 | 1.08 | 1.05 |
| Belfius Bank | 0.17 | 0.16 | 0.13 | 0.12 | 0.14 |
| BDB | 0.74 | 0.76 | 0.65 | 0.66 | 0.63 |
| HPB | 0.86 | 0.90 | 0.90 | 0.90 | 0.92 |
| NRB | 0.80 | 0.79 | 0.84 | 0.87 | 0.86 |
| SIFL | 0.83 | 4.88 | 4.41 | 0.87 | 0.89 |
| La Poste Groupe | 0.09 | 0.11 | 0.03 | 0.03 | 0.04 |
| Bpifrance | 1.52 | 1.52 | 1.88 | 1.66 | 1.22 |
| KfW Bankengruppe | 0.86 | 0.83 | 0.76 | 0.81 | 0.83 |
| BayernLB | 0.13 | 0.13 | 0.12 | 0.11 | 0.10 |
| LBBW | 0.95 | 0.95 | 0.95 | 0.95 | 0.86 |
| Helaba | 0.95 | 0.96 | 0.96 | 0.94 | 0.94 |
| SaarLB | 0.92 | 0.96 | 0.96 | 0.97 | 0.96 |
| NORD/LB | 0.87 | 0.83 | 0.82 | 0.83 | 0.85 |
| Eximbank Hungary | 0.33 | 0.22 | 0.16 | 0.24 | 0.25 |
| MFB | 0.48 | 0.49 | 0.36 | 0.45 | 0.47 |
| Landsbankinn | 0.82 | 0.83 | 0.83 | 0.84 | 0.84 |
| CDP | 0.05 | 0.06 | 0.07 | 0.07 | 0.09 |
| MPS | 0.93 | 0.94 | 0.96 | 0.96 | 0.94 |
| LLB | 0.91 | 0.91 | 0.91 | 0.91 | 0.92 |
| Spuerkeess | 0.91 | 0.92 | 0.91 | 0.90 | 0.91 |
| FMO | 0.65 | 0.67 | 0.68 | 0.63 | 0.65 |
| BNG Bank | 0.96 | 0.97 | 0.97 | 0.97 | 0.96 |
| ABN AMRO Bank | 0.94 | 0.94 | 0.95 | 0.94 | 0.94 |
| De Volksbank | 0.95 | 0.95 | 0.95 | 0.96 | 0.95 |
| Eksportfinans | 0.67 | 0.56 | 0.54 | 0.43 | 0.32 |
| KBN | 0.87 | 0.96 | 0.96 | 0.96 | 0.96 |
| BGK | 0.77 | 0.81 | 0.85 | 0.87 | 0.85 |
| CGD | 0.91 | 0.90 | 0.90 | 0.91 | 0.91 |
| CEC Bank | 0.91 | 0.88 | 0.89 | 1.00 | 0.94 |
| EximBank Romania | 0.85 | 0.85 | 0.91 | 0.93 | 0.94 |
| Eximbanka SR | 1.78 | 0.37 | 0.44 | 0.45 | 0.05 |
| NLB Group | 0.87 | 0.88 | 0.89 | 0.90 | 0.90 |
| ICO | 0.85 | 0.83 | 0.85 | 0.86 | 0.81 |
| SBAB Bank | 0.96 | 0.95 | 0.95 | 0.96 | 0.97 |
| Svenska Skeppshypotek | 0.78 | 0.78 | 0.73 | 0.73 | 0.77 |

APPENDIX P

The capital adequacy ratio (CAR) of public banks

| **The bank** | **2018** | **2019** | **2020** | **2021** | **2022** |
|---|---|---|---|---|---|
| Kommunalkredit Austria | 24.26 | 21.28 | 23.21 | 22.61 | 21.11 |
| Belfius Bank | 19.65 | 18.03 | 19.53 | 19.06 | 19.07 |
| BDB | 35.96 | 27.75 | 32.79 | 35.82 | 43.65 |
| HPB | 17.86 | 20.17 | 21.84 | 25.65 | 23.57 |
| NRB | 24.07 | 22.54 | 23.47 | 21.52 | 27.16 |
| SIFL | 25.90 | 25.20 | 29.90 | 35.30 | 40.40 |
| La Poste Groupe | | | | | |
| Bpifrance | 13.76 | 14.75 | 30.70 | 30.52 | 27.55 |
| KfW Bankengruppe | 20.09 | 21.28 | 24.25 | 23.93 | 25.15 |
| BayernLB | 16.80 | 17.90 | 18.50 | 21.57 | 21.30 |
| LBBW | 22.02 | 22.98 | 22.83 | 21.43 | 20.13 |
| Helaba | 20.60 | 19.00 | 19.10 | 16.40 | 16.00 |
| SaarLB | 16.76 | 17.14 | 16.45 | 16.51 | 15,87 |
| NORD/LB | 12.78 | 20.76 | 19.24 | 19.89 | 17.62 |
| Eximbank Hungary | 19.88 | 22.35 | 19.91 | 18.22 | 24.06 |
| MFB | 27.40 | 20.93 | 22.49 | 16.60 | 16.56 |
| Landsbankinn | 24.94 | 25.79 | 25.11 | 26.6 | 24.69 |
| CDP | | | | | |
| MPS | 15.21 | 16.69 | 15.75 | 16.12 | 20.52 |
| LLB | 19.00 | 19.60 | 21.60 | 20.30 | 19.70 |
| Spuerkeess | 22.71 | 21.15 | 21.40 | 22.10 | 22.00 |
| FMO | 26.16 | 23.14 | 25.46 | 24.48 | 25.65 |
| BNG Bank | 38.00 | 38.00 | 39.00 | 38.00 | 37.00 |
| ABN AMRO Bank | 22.19 | 25.89 | 23.71 | 22.37 | 20.95 |
| De Volksbank | 37.09 | 37.77 | 36.14 | 26.31 | 25.47 |
| Eksportfinans | 113.94 | 125.47 | 124.45 | 156.60 | 178.31 |
| KBN | 22.95 | 22.63 | 23.27 | 24.20 | 24.45 |
| BGK | 31.50 | 27.54 | 33.04 | 28.36 | 25.47 |
| CGD | 15.90 | 19.49 | 20.92 | 19.73 | 28.91 |
| CEC Bank | 10.69 | 10.61 | 10.95 | 11.73 | 20.17 |
| EximBank Romania | 31.00 | 27.00 | 20.70 | 21.00 | 12.40 |
| Eximbanka SR | | | | | |
| NLB Group | 16.75 | 16.28 | 16.63 | 17.78 | 19.00 |
| ICO | 40.70 | 41.07 | 37.21 | 36.97 | 19.15 |
| SBAB Bank | 18.10 | 20.10 | 17.60 | 18.10 | 33.69 |
| Svenska Skeppshypotek | 22.60 | 22.07 | 28.46 | 28.88 | 17.80 |

*Note:* The CAR is presented in percentage terms (%). La Poste Group, Casa Depositi e Prestiti and Eximbanka SR did not report CAR results.

EXTERNAL APPENDIX

Excel file: Anna-NicoleInnesOfEdingight_BachelorThesisData2024.

The file includes Sheet 1, Sheet 2, and Sheet 3

**Sheet 1 – Profitability (2018-2022)**

1. The countries in the sample – Column A
2. The number of a bank in the sample – Column B
3. The banks in the sample – Column C
4. Net profit – Columns D, S, AH, AW, BL
5. Total equity – Columns E, T, AI, AX, BM
6. Total assets (preceding year) – Columns F, U, AJ, AY, BN
7. Total assets (current year) – Columns G, V, AK, AZ, BO
8. Average assets – Columns H, W, AL, BA, BP
9. Total deposits – Columns I, X, AM, BB, BQ
10. Interest earned – Columns J, Y, AN, BC, BR
11. Interest expense – Columns K, Z, AO, BD, BS
12. Operating expenses – Columns L, AA, AP, BE, BT
13. Operating income – Columns M, AB, AQ, BF, BU
14. Return on equity (ROE) – Columns N, AC, AR, BG, BV
15. Return on assets (ROA) – Columns O, AD, AS, BH, BW
16. Return on deposits (ROD) – Columns P, AE, AT, BI, BX
17. Net interest margin (NIM) – Columns Q, AF, AU, BJ, BY
18. Cost to income ratio (CIR) – Columns R, AG, AV, BK, BZ

**Sheet 2 – Liquidity (2018-2022)**

1. The countries in the sample – Column A
2. The number of a bank in the sample – Column B
3. The banks in the sample – Column C
4. Total assets – Columns D, M, V, AE, AN
5. Operating expenses – Columns E, N, W, AF, AO
6. Daily operating expenses – Columns F, O, X, AG, AP
7. Total loans – Columns G, P, Y, AH, AQ
8. Total deposits – Columns H, Q, Z, AI, AR
9. Total cash resources – Columns I, R, AA, AJ, AS
10. Liquid asset ratio (LAR) – Columns J, S, AB, AK, AT
11. Loan to deposit ratio (L/D) – Columns K, T, AC, AL, AU

12. Defensive interval ratio (DIR) – Columns L, U, AD, AM, AV

**Sheet 3 – Solvency (2018-2022)**

1. The countries in the sample – Column A
2. The number of a bank in the sample – Column B
3. The banks in the sample – Column C
4. Total debt – Columns D, M, V, AE, AN
5. Total equity – Columns E, N, W, AF, AO
6. Total assets – Columns F, O, X, AG, AP
7. Tier 1 Capital – Columns G, P, Y, AH, AQ
8. Tier 2 Capital – Columns H, Q, Z, AI, AR
9. Risk weighted assets (RWA) – Columns I, R, AA, AJ, AS
10. Debt to equity ratio (D/E) – Columns J, S, AB, AK, AT
11. Debt to assets ratio (D/A) – Columns K, T, AC, AL, AU
12. Capital adequacy ratio (CAR) – Columns L, U, AD, AM, AV

## Resümee

EUROOPA AVALIKE PANAKADE FINANTSTULEMUSLIKUS AASTATEL 2018-2022

Anna-Nicole Innes of Edingight

Iga ettevõtte jaoks on oluline finantstulemuslikkuse hindamine ja mõõtmine. Lähtuvalt tulemustest saavad ettevõtted kohandada vajalikke strateegiaid ja arendada olemasolevaid nõrgemaid kohti. Finantstulemuslikkus määrab, kas ettevõte saavutab seatud eesmärgid ning liigub pikaajalise edukuse ja stabiilsuse suunas. Tähtis on ka pankade hindamine ning kohati võib nende finantstulemuslikkus mõjutada suuremat pilti rohkem kui tava ettevõte.

Pangad on tihedalt seotud majanduse seisuga ning on tugevalt reguleeritud. Panganduse tulemusi jälgivad mitmed erinevad huvirühmad: reguleerivad asutused, aktsionärid ja kliendid. Sarnaselt ettevõtetele tegutsevad ka pangad enda huvirühmade huvides. Vastuvõetud otsused võivad olla mõjutatud organisatsioonisiseste liikmete ja enamusosanike poolt. Avalikke pankasid (riigi pankasid) iseloomustab riigi osalus aktsionäride seas ja selle kontroll. Riigi pangad tegutsevad avalikus mõjualas ning kasumlikkus ei ole nende peamine prioriteet. Arvestades, et riigipangad esindavad märkimisväärset valitsuse osalust finantssektoris, võib nende puudulik tegevus viia avalikkuse usalduse vähenemiseni.

Pankade finantstulemuslikkuse hindamine erineb ettevõtetest, kuna pangandussektori ärimudelid erinevad oluliselt tavalistest äri ettevõtetest mitmetel põhjustel. Esiteks on pangad tugevalt reguleeritud asutused, mille tegevust jälgivad mitmed finantsjärelevalve organid, et tagada süsteemi stabiilsus ja usaldusväärsus. Seevastu tavalised ettevõtted võivad tegutseda vabamalt - kohanedes turutingimustega ilma range riikliku sekkumiseta. Teiseks, pangad toetuvad suurel määral intressituludele ning laenuandmisele, samas kui tavaliste ettevõtete tuluallikad võivad olla mitmekesisemad, hõlmates toodete müüki, teenuste pakkumist või tehnoloogilisi uuendusi.

Antud bakalaureusetöö hindab avalike pankade finantstulemuslikkust aastatel 2018 kuni 2022. Periood 2018-2022 hõlmab mitmeid turbulentseid sündmusi nagu 2020. aasta alguses Euroopasse levinud COVID-19 ja Venemaa sissetung Ukrainasse 24.02.2022 aastal. Sellistel majanduslikult ebastabiilsetel aegadel kannatasid mitmed ettevõtted ning samuti olid mõjutatud pangad. Varasemad finantstulemuslikkuse uuringud keskenduvad peamisel India pangandussektorile ning Euroopa pankade näitel on määratud kindlaks tulemuslikkust mõjutavad tegurid. Sellepärast on olnud autori eesmärgiks hinnata riiklike pankade finantstulemuslikkust üle kogu Euroopa, Euroopa Majanduspiirkonna riikide näitel.

Autor tuvastas 36 avalik-õiguslikku panka ning majanduslikest aruannetest saadud finantsandmete põhjal arvutas pangandus-spetsiifilised suhtarvud. Empiirilised tulemused kinnitavad, et riiklikud pangad ei orienteeru põhiliselt kasumi suurendamisele. COVID-19 tagajärjena pankade kasumlikkuse näitajad halvenesid 2020. aastal märkimisväärselt. Hoolimata sellest näitasid avalikud pangad häid tulemusi efektiivsuse osas ja tugevat kapitali adekvaatsust. Tugev kapitali adekvaatsuse tase on oluline hoiustajate vahendite kaitsmiseks ja üldsuse usalduse säilitamiseks pangandussüsteemi vastu, eriti majanduslikult ebakindlatel perioodidel.

Likviidsuse ja finantsvõimenduse tulemused riiklike pankade seas on väga erinevad, mis viitab sellele, et pankadel on erinevad finantsjuhtimise strateegiad tulenevalt nende varade mahust, strateegilistest eesmärkidest ja riskiisust. Erakordselt kõrged laenude ja hoiuste suhtarvud viitavad sellele, et riigipankade likviidsusriski isu on kõrge. Sellest tulenevalt on riigi pankadel madalad likviidsete varade suhtarvud. Mõned pangad kasutavad agressiivseid finantsjuhtimise strateegiaid, mis võivad anda suuremat tulu, kuid nendega kaasnevad ka suuremad riskid koheselt saadavate varade puudulikkuse tõttu. Kuid see viitab sellele, et riigipangad toimetavad stabiilselt edasi, isegi madala likviidsusega. COVID-19 pandeemia järgselt on riiklikud pangad iga aastaga suurendanud oma likviidsusreserve, mis näitab, et pangad kohanevad ja muudavad enda strateegiaid vastavalt majanduse oludele.

Autor järeldas, et hoolimata riigipankade mittetulunduslikust iseloomust, tegutsesid nad efektiivselt 2018-2022 perioodil. Kuigi riiklikel pankadel on kalduvus kõrgema likviidsusriski poole, on nad muutnud enda strateegiaid peale väliseid šokke nagu COVID-19. Samuti on riiklike pankade kapitali adekvaatsuse tase kõrge, mis viitab nende stabiilsusele isegi majanduslikult turbulentsetel aegadel.

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***09/05/2024***