The role of good corporate governance through investment decision support and its impact on banking performance with efficiency-based credit quality as intermediation

El papel de una buena gobernanza corporativa en el respaldo de decisiones de inversión y su impacto en el rendimiento bancario, con la calidad crediticia basada en la eficiencia como intermediación

Samani Samani[*], Sugeng Wahyudi, Harjum Muharam

Diponegoro University, Indonesia

Abstract

Conventional commercial banks in Indonesia are experiencing a decline in lending despite overall banking system improvement, highlighting challenges in governance and loan supervision. Inefficient credit regulations struggle to prevent banking crises, and rapid credit expansion can compromise loan quality, leading to higher levels of bad loans. This study aims to provide input on the existence of a gap between the influence of corporate governance as a proxy for institutional ownership, independent commissioners, number of meetings and audit committees on banking performance with Efficiency-Based Credit Quality as a mediating variable, developed by synthesizing monetary theory with production theory. This research was conducted at banking companies on the Indonesia Stock Exchange from 2014 to 2020 with a population of 46 banks. Purposive sampling was used and obtained a sample of 40 banks with 280 observations. Data analysis in this study used path analysis using the WarpPLS analysis tool. The results of this study found that independent commissioners, number of meetings, investment decisions, and liquidity have a direct effect on banking performance with a positive coefficient, institutional ownership

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[*] Corresponding author.

E-mail address: abapolines16@gmail.com (S. Samani).

has no direct effect on banking performance and audit committees have no direct effect on banking performance with a negative coefficient. Second, efficiency-based credit quality can mediate the effect of institutional ownership, independent commissioners, number of meetings, audit committees, investment decisions, and liquidity on banking performance. The three efficiency-based credit qualities have a significant positive effect on banking performance.

JEL Code: G11
Keywords: corporate governance; investment decisions; liquidity; banking performance; efficiency-based credit quality

Resumen

Los bancos comerciales convencionales en Indonesia experimentan una disminución en los préstamos a pesar de mejoras en el sistema bancario en general, destacando desafíos en la gobernanza y supervisión crediticia. Las regulaciones crediticias ineficientes luchan por prevenir crisis bancarias, y la expansión rápida del crédito puede comprometer la calidad de los préstamos, resultando en niveles más altos de préstamos morosos. Este estudio busca proporcionar información sobre la existencia de una brecha entre la influencia de la gobernanza corporativa como un indicador de propiedad institucional, comisionados independientes, número de reuniones y comités de auditoría en el rendimiento bancario, con la calidad crediticia basada en la eficiencia como variable mediadora, desarrollada mediante la síntesis de la teoría monetaria y la teoría de producción. La investigación se llevó a cabo en empresas bancarias en la Bolsa de Valores de Indonesia de 2014 a 2020, con una población de 46 bancos. Se utilizó un muestreo intencional, obteniendo una muestra de 40 bancos con 280 observaciones. El análisis de datos empleó un análisis de senda utilizando la herramienta de análisis SEMPLS. Los resultados encontraron que los comisionados independientes, el número de reuniones, las decisiones de inversión y la liquidez tienen un efecto directo en el rendimiento bancario con un coeficiente positivo. La propiedad institucional no tiene un efecto directo en el rendimiento bancario, y los comités de auditoría no tienen un efecto directo en el rendimiento bancario con un coeficiente negativo. Además, la calidad crediticia basada en la eficiencia puede mediar en el efecto de la propiedad institucional, comisionados independientes, número de reuniones, comités de auditoría, decisiones de inversión y liquidez en el rendimiento bancario. Las tres calidades crediticias basadas en la eficiencia tienen un efecto positivo significativo en el rendimiento bancario.

Código JEL: G11
Palabras clave: gobernanza corporativa; decisiones de inversión; liquidez; rendimiento bancario; calidad crediticia basada en la eficiencia

Introduction

The financial sector, and particularly banking, is expected to serve as a financial intermediary, performing important functions that contribute to a country's economic growth (Kaushal & Ghosh 2017). In the context of banking performance, an analysis that includes efficiency, productivity, competitiveness, and profitability becomes important. Banks, as a central role in financial intermediation, are responsible for providing efficient financial services and generating significant profits. For this reason, an assessment of

the level of banking financial performance is carried out by analyzing financial ratios that have a direct impact on the soundness of the banking system and the level of profitability generated by the company (Ibadil & Haryanto, 2014). Financial ratios are an important tool in evaluating banking performance. For example, efficiency ratios can reveal the extent to which a bank can manage resources efficiently, while productivity ratios provide an overview of the level of income generated by each unit of resources used. Banking activities are heavily involved in financial risks that affect bank performance (Apătăchioae, 2015).

Banking financial culture has a specific business nature (nature of the firm) (Macey & O'Hara, 2003). The nature of such a specific business has sparked a research topic in the banking industry today that leads to the problem of Good Corporate Governance (GCG). GCG plays a crucial role in maintaining healthy and sustainable banking performance. In the banking context, GCG includes risk management practices, effective board of directors' oversight, information transparency, and protection of the interests of stakeholders. One of the important aspects of GCG is making good investment decisions. Supporting investment decisions based on GCG principles helps ensure that banks only make investments that have measurable risks and adequate potential returns. Smart and accountable investment decisions will affect banking performance by increasing the productive assets of the bank, diversifying the portfolio, and reducing risk. In addition, GCG also plays an important role in managing banking liquidity. In situations where there is insufficient liquidity, management decisions regarding liquidity management become very important. With strong GCG principles, banks can implement transparent and accountable policies in managing liquidity, including identifying adequate sources of liquidity and ensuring that available funds are used efficiently.(Beltratti & Stulz, 2012;Erkens et al., 2012;Gupta et al., 2013;Jackowicz et al., 2013).

Investment decisions involve a long-term period with long-term consequences as well, so the decisions taken must be considered carefully. Strong GCG plays an important role in ensuring that investment decisions taken by banks are based on accurate risk evaluation and transparent information. In this case, credit quality is a crucial factor to be considered in making investment decisions. GCG practices will encourage banks to adopt strict standards in evaluating creditworthiness, identifying potential risks, and managing credit portfolios properly. By considering credit quality as a major factor, banks can reduce unwanted credit risk and improve the performance of their credit portfolios. Apart from credit quality, Liquidity is also an important variable affecting banking performance. In this context, GCG acts as a foundation that ensures that banks carry out their financial intermediary function properly, namely collecting funds from parties who have excess funds and providing financing to those who need it. By ensuring good credit quality and high operational efficiency, banks can maintain sound banking performance and achieve the desired level of profitability.

Based on the findings from various researchers' studies, there are numerous conclusions regarding the impact of investment decisions and liquidity on banking performance. Saiful & Ayu, (2019) and Sari et al., (2022), discovered that investment selections had a favorable and significant impact on banking performance. Hutchinson & Gul (2006), on the other hand, find a substantial negative relationship between investment decisions and banking performance. A similar thing happened when it came to the effect of liquidity on banking performance. Several research, like those by (Mokni & Rakhdi, 2014; Muda et al., 2013), discovered that liquidity had a significant positive effect on banking performance. However, studies by Chowdhury et al., (2018), Khaled et al. (2014), and Petria et al. (2015) suggest that there is a significant positive relationship between liquidity and banking performance.

Banking governance in developing countries, such as Indonesia, plays a pivotal role for several compelling reasons. Firstly, the banking sector often holds a dominant position within the financial system of these economies. In many developing nations, banks are not just intermediaries but are central to the entire financial ecosystem, serving as the primary channel for mobilizing and allocating funds. Their stability and sound governance are paramount to ensure the proper functioning of the financial system. Additionally, banking governance influences the stability and resilience of the financial system. Weak governance practices can lead to mismanagement, inadequate risk management, and insufficient regulatory compliance, potentially resulting in financial crises that have far-reaching consequences on the overall economy. Effective governance ensures that these banks are aligned with the broader socioeconomic goals of the nation (King & Levine, 1993; Levines, 2004). When viewed from the current condition of the performance of the banking industry in Indonesia, especially the performance of commercial banks, it can be seen that the banking industry is experiencing very good and positive developments.

Table 1
Performance of Indonesian Conventional Commercial Banks for the 2010-2019 period

Year	Total Assets (Billion IDR)	Third Party Funds (TPF) (Billion IDR)	Credit (Billion IDR)	LDR (%)	CAR (%)	ROA (%)	Npls (%)	NIM (%)
2010	3,008,853	2,338,824	1,765,845	75,21	17,18	2.86	2.56	5,73
2011	3,652,832	2,784,912	2,200,094	78,77	16.05	3.03	2.77	5,91
2012	4,262,587	3,225,198	2,725,674	83.58	17,43	3,11	1.87	5,49
2013	4,954,467	3,663,968	3,319,842	89.70	18,13	3.08	1.77	4.89
2014	5,615,150	4,114,420	3,706,501	89.42	19.57	2.86	2,16	4,23
2015	6,095,908	4,413,056	4,092,104	92,11	21.39	2.32	2.48	5,39
2016	6,729,799	4,836,758	4,413,414	90,70	22.93	2,23	2.93	5,63

2017	7,387,634	5,289,377	4,781,931	90.04	23,18	2.45	2.35	5,32
2018	7,913,491	5,630,448	5,358,012	94.7	22.97	2.55	2.67	5,14
2019	8,562,974	5,998,648	5,683,757	94,43	23,40	2.47	2.77	4.91

Source: Indonesian Banking Statistics (OJK, 2020)

The performance of commercial banks for the 2010-2019 period showed positive growth with fluctuations. Commercial bank assets continue to grow every year. The average bank capital adequacy ratio is above the minimum standard, namely 16.05% -23.40%. The level of profitability of commercial banks as measured by ROA is also above 2%, although it fluctuates. Credit risk remains low with NPL below 5%. Banking liquidity is still adequate even though credit expansion is faster than deposit growth. The LDR ratio is above the threshold of 92%, with a rupiah LDR of 92.68% and a foreign currency LDR of 97.42%. Liquid banking tools experienced a decline due to their use to support credit expansion.

Based on Table 1, shows that the Net Interest Margin (NIM) of conventional commercial banks in Indonesia is between 4% to 6%, when compared with neighboring countries in the region, this profit margin figure is very high. The profitability of Indonesian banking is the highest among neighboring countries, even when compared with Thai banking, where the average NIM is only 2.84% and Indonesian banking margin is around 5.19% What's unique is that Thai banking has always been openly used as a benchmark. by the Indonesian monetary and financial services authority. This condition shows the fact that Indonesian banks have too high a profit margin. As a result, credit distribution is less than optimal domestic business efficiency is low, the competitiveness of Indonesian products is weak and Indonesia's economic growth rate is hampered.

It raises problems related to GCG and the supervision of disbursed loans. Efficiently implemented credit regulations in developing countries are still not effective enough in preventing banking crises. Rapid credit growth can also reduce credit quality due to increased risk, which hurts the level of bad loans. The objective of this study is to develop a middle model as a solution to bridge the inconsistencies in the results of empirical research regarding the effect of GCG on banking performance in Indonesia. Besides that, this study is also to test empirically and analyze the effect of GCG, investment decisions, and funding liquidity on banking performance as well as to test empirically and analyze the effect of efficiency-based credit quality in mediating the influence of GCG, investment decisions, and funding liquidity on banking performance. Thus, this research will contribute to deepening understanding of the relationship between these factors and banking performance, as well as formulating practical implications for improving good banking governance and efficiency in the banking industry in Indonesia.

Literature review

Theoretical background

Jensen & Meckling (1976) explained that agency theory is a collection of contracts (nexus on contract) between the manager (agent) who is responsible for the management and use of resources and the owner of the economic resource (principal). Agency theory explains the delegation of authority between managers and company owners, where the owner has the hope that the actions chosen by the manager are based on the interests of the company owner. However, the fact is that each party will act based on their interests, thus creating conflicting interests that are not in line. GCG is a framework for fostering trust and transparency, an environment of accountability, related to agency problems due to the splitting of agents (eg, managers) and shareholders. GCG is an important tool in minimizing conflicts between agents and those that may influence the company's capital structure (Detthamrong et al., 2017). The main objective of effective GCG is to assure shareholders that managers are working to obtain the results the shareholders desire (Arora & Sharma, 2016). Effective governance practices stem from an agency theory perspective, where the main responsibility of the board is to monitor management and protect shareholders from any conflicts of interest that arise due to the separation of ownership and control (Jensen & Meckling, 1976).

The difference in the goals of managers and shareholders leads to agency costs. Agency costs become acute when the company's performance is poor (Bebchuk & Fried, 2003). Effective monitoring can lower these agency costs, thereby improving company performance. Board monitoring functions can include ratification of major decisions, threat entrenchment management, CEO succession planning, and rewarding management (Conyon & Peck, 1998; Eisenhardt, 1989). Companies with weak governance tend to have worse performance than companies with strong governance (Jiraporn et al., 2012). Strong corporate governance mechanisms help reduce agency costs by ensuring that agents can manage funds in a way that maximizes firm value. This is achieved through providing guidance and resolving disputes between agents, which in turn creates the trust of investors and interested parties in the company (Detthamrong et al., 2017).

Hypothesis development

Ownership structure is one of the main dimensions of corporate governance (La Porta et al., 1998). The ownership structure is determined by the distribution of equity concerning votes and capital but also by the identity of the equity owners (Jensen & Meckling, 1976). The relationship between firm performance

and identity ownership comes from agency theory. Ngoc & Ramstetter (2004) revealed that the company's performance will be influenced by who is the owner of the company. Research by (Arouri et al., 2011)found that institutional ownership has a positive effect on company performance. Another study by Fazlzadeh et al. (2011) in Iran, and Ahmad et al. (2014) in Malaysia also supports these findings. The results of this study indicate that institutional ownership has a positive and significant relationship with performance indicators such as Tobin's Q and stock prices. The involvement of institutional investors in monitoring and supervising companies helps reduce agency conflicts and improve company performance. Hypothesis 1 in this study is as follows:

H1: Institutional ownership has a positive effect on company performance

Independent commissioners are members of the commissioners who are not affiliated with other members of the board of commissioners and controlling shareholders, are not affiliated with the directors, and are not related to business relationships or other relationships that may affect the ability to act solely for the benefit of the company or act independently. Greater board independence allows its members to make moderate decisions and also compensates management according to their performance (James & Joseph, 2015). An independent commissioner (also known as an outside director) plays an important role in monitoring the company's management team. In this regard, the independent board of commissioners can work effectively to attract investors to what extent (Muniandy & Hillier, 2015). Research by Terjesen et al. (2016) and Malik & Makhdoom (2016) show that independent commissioners have a positive influence on company performance. Terjesen et al. (2016) examined the effect of independent commissioners and gender diversity on company performance, while Malik and Makhdoom (2016) examined the effect of corporate governance in general. Both studies found that independent commissioners have a positive impact on company performance. Terjesen et al. (2016) used Tobin's Q and ROA as performance indicators, while Malik and Makhdoom (2016) used Tobin's Q, ROA, and stock return as the dependent variable. Hypothesis 2 in this study is as follows:

H2: Independent Commissioner has a positive effect on company performance

Stewardship theory describes a condition in which senior managers are not motivated by individual goals, but focus on organizational goals (Arora & Sharma, 2016; Malik & Makhdoom, 2016). One example of behavior according to this theory can be seen in the meetings held by the board of directors supervised by the board of commissioners, where the meeting is an effective means of communication to produce decisions that lead to the development of company performance. Arora & Sharma (2016) examined the effect of the number of meetings on company performance using a sample of 20 large manufacturing companies in India in the 2001-2010 period. The hypothesis 3 is as follows:

H3: The number of meetings will improve banking performance

The audit committee protects against fraud and ensures compliance with standards and best practices within the company (Aldamen et al., 2012). Research has shown that audit committees have a positive influence on company performance (Aldamen et al., 2012; Arslan et al., 2014; Yasser et al., 2015). The study by (Yasser et al., 2015) showed that the audit committee has a significant positive effect on company performance in terms of return on equity, ROE, and profit margins. Research by (Aldamen et al., 2012) found that audit committees had a positive effect on company performance during the global financial crisis. (Arslan et al., 2014)also found that the audit committee has a positive influence on firm performance. Based on the above explanation, it can be developed into hypothesis 4 as follows:

H4: Audit Committee has a positive effect on company performance

Optimal company performance is a company goal that can be achieved through the implementation of the financial management function. Financial decisions, including investment decisions, have an impact on firm value and can provide a positive signal about the company's future growth (signaling theory) (Fama et al., 1998). Research by Sircar et al. (2000) shows a significant and positive relationship between investment and firm performance. Research by Lukorito et al. (2014) tested the impact of investment decisions on the financial performance of companies in Kisi City. The sample consists of 225 retail establishments in Kota Kisi. Financial performance is measured by ROA and ROE as the dependent variable. The independent variable in this study is the capital expansion decision which is calculated by the ratio of capital to business growth, as well as income replacement calculated from income. The results of the study show that the investment decisions that are proxied by capital expansion decisions and income replacement have a significant effect on ROA and ROE. Hypothesis 5 in this study is:

H5: Investment decisions have a positive effect on company performance

Banks in the modern era have serious concerns and challenges related to liquidity risk (Arif & Nauman Anees, 2012). Even though a bank has strong income, sufficient capital, and good asset quality, failure can occur if liquidity is not maintained properly. Therefore, liquidity has an important relevance to bank performance. Research by Almazari (2014)examined the relationship between liquidity and bank performance in 23 banks in Saudi Arabia and Jordan during the 2005-2011 period. The results of the study show that liquidity as proxied by liquidity risk (LQR) has a significant effect on company performance as measured by ROA. Research by Mokni & Rakhdi (2014) also supports the relationship between liquidity and firm performance. This study used a sample of 15 Islamic banks in the MENA region during the 2002-2009 period. The results show that liquidity has a significant effect on company performance as measured by ROA, with a positive direction. Hypothesis 6 in this study is:

H6: Liquidity has a significant influence on banking performance

Efficiency can limit or prohibit certain bank activities that are considered very risky. Concerning permitted activities, prudential regulation can indirectly influence a company's decision to take risks by mandating a minimum amount of capital that a regulated company must hold (Claessens & Yurtoglu, 2013). Lee & Chih (2013) examined the influence of Chinese banking regulations on bank efficiency and risk-taking. This study finds that regulations, such as capital requirements, leverage, and liquidity imposed by the CBRC, affect a bank's efficiency and risk-taking. In this case, the size of the bank can affect the effect of regulation on the bank. Kale et al. (2015) researched the effect of regulation on the performance of the banking sector in Turkey. This study uses OLS regression and shows that strict regulation, monitoring, restrictions, strong oversight, capital increases, and reforms have a positive impact on bank efficiency and productivity. Hypothesis 7 in this study is:

H7: Efficiency-based credit quality can mediate the effect of institutional ownership on company performance

Agyei-Mensah (2017) concluded that effective corporate governance mechanisms, such as director share ownership, institutional ownership, public record-keeping, and active board of commissioner's presence, contribute to improving the quality of bank loans in developing countries. This has happened through better monitoring, better risk management, as well as reductions in NPLs, exchange rate depreciation, and improvements in net interest margins. In agency theory, the presence of a board of commissioners and independent commissioners is considered important to oversee management and protect the interests of shareholders (Fama et al., 1998). Tao & Hutchinson (2013) emphasize that an effective board of commissioners must be active in monitoring decisions and risk management. Research by Lee & Chih (2013) shows that banking regulations implemented by the CBRC in China, including strict requirements regarding capital, leverage, and liquidity, affect the efficiency and risk-taking of bank activities. A study by Kale et al. (2015) regarding the effect of regulation on the performance of the banking sector in Turkey shows that stricter regulations, monitoring, restrictions, strong oversight, capital increases, and reforms have a positive impact on efficiency. Hypothesis 8 in this study is:

H8: Efficiency-based credit quality can mediate the influence of independent commissioners on company performance

A higher number of meetings reflects a better level of communication and coordination between different parts of the company. Through meetings, management can identify problems related to credit and make the right decisions to increase efficiency in the credit-granting process. Thus, increased efficiency achieved through meetings can contribute to improving credit quality. Research conducted by Eluyela et al. (2018) found a relationship between meeting frequency and performance company, which is a measure of the quality of the monitoring role seen by the Activities Board of Commissioners. The

more active the board of commissioners, the more effective the company's performance will be. Hypothesis 9 in this study is:

H9: Efficiency-based credit quality can mediate the effect of the number of meetings on company performance

By carrying out its duties effectively, the Audit Committee can identify potential problems related to credit, provide appropriate advice or recommendations to management, and ensure the implementation of appropriate policies and procedures. Through strict supervision and continuous monitoring, the company's operational efficiency in terms of credit can be improved. Better credit quality, which is obtained through the audit committee's supervisory-based efficiency, is expected to have a positive impact on the company's overall performance. By having a quality credit portfolio and managing credit risk well, companies can reduce credit losses and obtain more stable income (Rose & Hudgins, 2012; Cargi, 2011; Bradbury et al., 2006). This can increase investor confidence, reduce financial costs associated with credit risk, and strengthen the company's position in the market. Hypothesis 10 in this study can be arranged as follows:

H10: Efficiency-based credit quality can mediate the influence of the Audit Committee on company performance

Through efficient investment decision management, companies can influence better credit quality. Better credit quality is then expected to have a positive impact on the company's overall performance. Smart and efficient investment decisions can help companies choose projects that are profitable and have the potential to generate stable cash flows. By carrying out careful risk analysis and adopting strict investment evaluation criteria, companies can avoid projects that are high risk and have a high potential for default. This can reduce credit risk and improve the quality of the company's credit portfolio. Poor credit quality is often a signal of excessive credit risk (Berger & Udell, 2004; Bernauer & Koubi, 2004; Jimenez & Saurina, 2005). Better credit quality, which is obtained through efficient investment decisions, is expected to have a positive impact on the company's overall performance. By having a quality credit portfolio, companies can reduce credit risk and losses associated with non-performing loans. In addition, better credit quality can also help companies obtain funding with lower interest rates, increase investor confidence, and strengthen the company's position in the market. Hypothesis 11 in this study is:

H11: Efficiency-based credit quality can mediate the effect of investment decisions on company performance

Liquidity is a good dimension to determine profit growth. Increased liquidity will also increase bank profit growth (Vodová, 2011). Several studies have tested empirically the impact of operating efficiency, liquidity, capital, credit risk, and market risk on bank financial performance. The results of the

study show that market risk and operating efficiency have a significant effect on the bank's financial performance. Meanwhile, credit, capital, and liquidity risks have no significant effect on the bank's financial performance (Kusuma & Manda, 2022), so the concept of liquidity requires a middle concept to be able to have an impact on banking performance. So the proposition of the influence of liquidity on performance through efficient credit mediation becomes logical in this study. Hypothesis 12 in this study is:

H12: Efficiency-Based Credit Quality can mediate the influence of Liquidity on company performance

Previous research has shown that companies with good credit quality and high operational efficiency tend to achieve better performance. Good credit quality reduces credit risk and potential losses faced by companies, while high operational efficiency enables optimal resource management and good cost control. By considering these factors, it is expected that companies that have high efficiency-based credit quality will show better performance compared to companies that do not pay attention to this aspect. Efficiency-based credit quality can provide a competitive advantage for companies in facing lower credit risk, optimizing the use of resources, and increasing profitability. Shahroudi & Assimi (2010) stated that in evaluating the performance of banking institutions, various financial ratios can be used by combining non-parametric techniques such as DEA. So in this research proposition, the effect of efficiency-based credit becomes logical and coherent and has a significant influence on banking performance. Hypothesis 13 in this study is:

H13: Efficiency-Based Credit Quality affects company performance

Methodology

This study used panel data from all national-scale commercial banking companies in Indonesia that registered with Bank Indonesia between 2014 and 2020. Population and sample data were obtained from Commercial Bank Bank-published financial reports available on Bank Indonesia's website. A total of 46 banks listed on the Indonesia Stock Exchange make up the population, with the sample consisting of 40 banks (Annex table A1) that meet the criteria as shown in Table 2. Data is collected using the documentation method, which collects data from existing documents. The total observations in this study were 280.

Table 2
Sample Selection Process

	Criteria	Number of Banks
1.	Population of banking companies registered on the IDX for the 2014 – 2020 period	46
2.	Banking companies that are inconsistently registered on the IDX and do not report their financial reports consistently for the period 2014 – 2020	(6)
3.	Banking companies that are registered on the IDX and submit their financial reports consistently in 2014 – 2020	40
	Observed Items (7 years)	280

Source: Sam'ani et al, 2022

This study's main variables are independent, dependent variables, and mediating variables. Corporate governance proxies with institutional ownership, audit committee, number of meetings, and independent commissioners are the variables that are independent in this study, whereas liquidity and investment decisions are the control variables. The performance of banking companies is the dependent variable in this study. Meanwhile, in this study, the mediating variable is efficiency-based credit.

This research uses path analysis to analyze the effect of mediating variables. Path analysis is the development of multiple linear regression which is used to examine the relationship between complex variables. In path analysis, there is more than one dependent variable, so a series of regression equations is needed. Path analysis satisfies all the assumptions that apply in linear regression and allows analysis of the direct and indirect effects of the independent variables (Hair et al., 2012). The path analysis diagram is displayed in the form of a causal model equation which involves more than one equation as follows:

$$KKBE = \alpha + \beta_1 KEINS + \beta_2 KOMIN + \beta_3 JR + \beta_4 KOA + \beta_5 KEPIN + \beta_6 LIKU + \varepsilon_1$$

$$ROE = \alpha + \beta_1 KEINS + \beta_2 KOMIN + \beta_3 JR + \beta_4 KOA + \beta_5 KEPIN + \beta_6 LIKU + \beta_7 KKBE \, \varepsilon_1$$

Information:

KEINS = institutional ownership

KOMIN = independent commissioner

JR = number of meetings

KOA = audit committee

KEPIN = investment decision

TURN = liquidity

ROE = banking performance

KKBE = efficiency-based credit quality

ε = errors
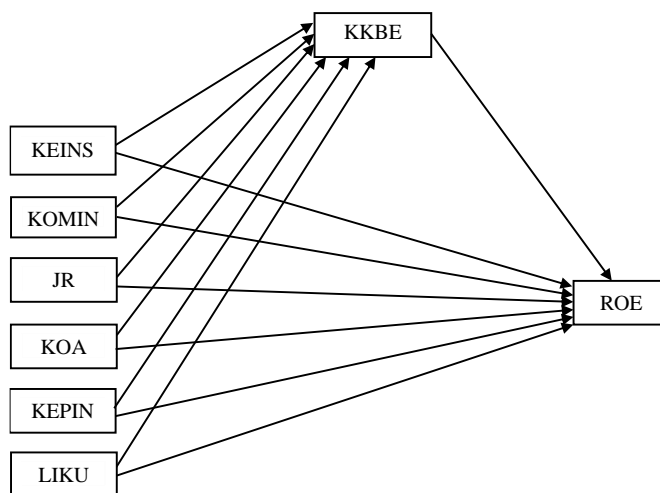
Figure 1. Path Diagram – Model Specification
Source: Sam'ani et al. (2022)

Covariance or correlation matrix observation input is measured by goodness of fit which measures conformity with the predictions of the proposed model (Hair et al., 2012). Several measures of goodness of fit will be used in this study as shown in Table 3 below.

Table 3
Summary of Goodness of Fit Criteria

Goodness of Fit Index	Cutoff Value
Average Path Coefficient(APC)	≤ 0.05
Average R-Square(ARS)	≤ 0.05
Average Adjusted R-Square(AARS)	≤ 0.05
Average BlockVIF (AVIF)	acceptable if ≤ 5, ideally ≤ 3.3
Average Full CollinearityVIF (AFVIF)	acceptable if ≤ 5, ideally ≤ 3.3
Tenenhaus Gof(Goff)	small ≥ 0.1, medium ≥ 0.25, large ≥ 0.36

Source: Hair et al., 2012

Result and discussion

The sample used in this research consists of banking companies listed on the Indonesia Stock Exchange between 2014 and 2020. Based on the results of data collection utilizing panel data, the population is 46 banking companies, with 6 banking companies failing to meet the standards, therefore the number of samples in this study was 40 with 280 observations. Table 4 below is presenting the descriptive statistic of the observations.

Table 4
Descriptive Statistics of Research Variables

	Min	Max	Mean	Std. Deviation
KEINS (%)	5,3500	100,0000	66,6494	27,0372
KOMIN (%)	16,6667	100,0000	45,6548	16,2728
JR (%)	13,1100	82,61000	49,3685	14,2937
KEPIN (X)	-0,4811	1,1941	0,1384	0,1966
LIKU (%)	39,3320	171,2510	90,0015	21,3318
KKBE	0,2868	1,0000	0,8363	0,1855
ROE (%)	-11,1444	11,2235	0,8671	2,1002
N		280		

Source: Sam'ani et al., 2022

Based on Table 4, KEINS (Institutional Ownership) variable, it was found that the average institutional ownership value was 66.6494%, with a standard deviation of 27.0372%. Banks such as BCIC, MEGA, NISP, DNAR, and BRIS have the highest institutional ownership value at 100.00%, indicating little variation in the data. In contrast, the KOMIN (Independent Commissioner) variable has an average of 45.6548% with a standard deviation of 16.2728%, indicating lower data variation. The number of meetings (JR) has an average of 49.3685%, with a standard deviation of 14.2937%, indicating small data variations. The KEPIN (Investment Decision) variable has a mean of 0.1384 with a standard deviation of 0.1966, indicating large data variations. Liquidity (LIKU) has the highest value of 171.2510% and the lowest value of 39.3320%, with a standard deviation of 21.3318%, indicating relatively small data variations. KKBE (Efficiency Based Credit Quality) has an average value of 0.8363 and a standard deviation of 0.1855, indicating small data variations. Lastly, the ROE (Return on Equity) variable has the lowest value of -11.1444%, suggesting poor company performance with big data variability due to the standard deviation being larger than the average, reaching 2.1002%. The disparity in ROE values between the lowest and greatest is large, as seen for PNBS banks in 2017 and AMAR in 2015.

In this study, the structural model evaluation test (goodness of fit) used the Average Path Coefficient (APC), Average R-square (ARS), Average Adjusted R-square (AARS), Average Block VIF (AVIF), Average Full Collinierity VIF (AFVIF) and Tenenhaus GoF (GoF). The results of adjusted R^2 indicate that variations in the KKBE (Efficiency-Based Credit Quality) variable can be explained by variations in the independent variables, namely KEINS (Institutional Ownership), KOMIN (Independent Commissioner), JR (Number of Meetings), KOA (Audit Committee), KEPIN (Investment Decision) and LIKU (liquidity) of 50.9% while the remaining 49.1% is explained by factors outside the model which are not included in this study. As for variations in the ROE (Bank Performance) variable, it can be explained by independent variables (KEINS, KOMIN, JR, KOA,

Table 5
Result of Goodness of Fit Model Calculation

Provision	Conclusion
Average Path Coefficient (APC) = 0.157, P=0.002	fit
Average R-Square (ARS) = 0.241, P < 0.001	fit
Average Adjusted R-Square (AARS) = 0.223, P < 0.001	fit
Average Block VIF (AVIF) = 1.087, acceptable if ≤ 5, ideally ≤ 3.3	fit
Average Full Collinearity VIF (AFVIF) = 1.185, acceptable if ≤ 5, ideally ≤ 3.3	fit
Tenenhaus GoF = 0.491, small ≥ 0.1, medium ≥ 0.25, large ≥ 0.36	fit

Source: Sam'ani et al., 2022

The research model was declared fit based on the results of the fit and quality indices models as presented in Table 4, showing the APC value = 0.157 with P = 0.002; ARS value = 0.241 with P < 0.001; and AARS value = 0.223 with P < 0.001. Probability values (P) for APC, ARS, and AARS which are recommended as model fit are <0.05 (Hair et al., 2012). It is supported by an AVIF value of 1.087 and an AFVIF value of 1.185 which is less than 3.3, indicating that there is no multicollinearity between exogenous variables and between indicators. The predictive power of the model is shown by the GoF value of 0.491 so it can be concluded that the model prediction is very large because it is greater than 0.360.

Full model test

Path analysis in this study was conducted to examine the effect of mediating variables. In Table 6, the results of testing the first hypothesis show that Institutional Ownership (KEINS) as a proxy for Corporate Governance has a positive but not significant effect on banking performance (ROE). The KEINS coefficient value is 0.057 with a P value = 0.123. Thus, the first hypothesis is rejected because it is not significant. The results of the second hypothesis test show that the Independent Commissioner (KOMIN) as a proxy for Corporate Governance has a significant positive influence on banking performance (ROE). The KOMIN coefficient is 0.145 with a P value = 0.001 (significant at the 1% level). This shows consistency with the second hypothesis, so the second hypothesis is accepted.

In the third hypothesis, the test results show that the number of Commissioners and Directors (JR) Meetings as a proxy for Corporate Governance has a significant positive effect on banking performance. The JR coefficient is 0.134 with a P value = 0.003 (significant at the 1% level). This is following the third hypothesis and concludes that the third hypothesis is accepted. The results of testing the fourth hypothesis indicate that the Audit Committee (KOA) as a proxy for Corporate Governance has an insignificant negative effect on banking performance. The KOA coefficient is -0.009 with a P value =

0.427. In this case, there is no consistency in the fourth hypothesis test because the coefficient value is negative and not significant. Therefore, the fourth hypothesis is rejected.

The fifth hypothesis test shows that Investment Decision (KEPIN) has a significant positive effect on banking performance. The KEPIN coefficient is 0.179 with a P value <0.001. This shows consistency with the fifth hypothesis so that the fifth hypothesis is accepted. The results of the sixth hypothesis test show that Liquidity (LIKU) has a significant positive effect on banking performance. The Liquidity Coefficient is 0.154 with a P value = 0.001 (significant at the 1% level). Therefore, the sixth hypothesis is accepted. The thirteenth hypothesis test shows that Efficiency-Based Credit Quality (KKBE) has a significant positive effect on banking performance. The KKBE coefficient is 0.524 with a P value <0.001 (significant at the 1% level). Therefore, the model test results are consistent with the thirteenth hypothesis and it can be concluded that the thirteenth hypothesis is accepted. The results of the full model test, as shown in Figure 2, reveal a causal relationship between the variables. The Independent Commissioner (KOMIN) shows the best influence in improving banking performance, with a direct effect coefficient value of KOMIN to ROE of 0.145, coefficient of KOMIN to KKBE of 0.247, and coefficient of KKBE to ROE of 0.524. The indirect effect value is 0.129 and the total effect is 0.274. with a direct effect coefficient value of KOMIN to ROE of 0.145, coefficient of KOMIN to KKBE of 0.247, and coefficient of KKBE to ROE of 0.524. The indirect effect value is 0.129 and the total effect is 0.274. with a direct effect coefficient value of KOMIN to ROE of 0.145, coefficient of KOMIN to KKBE of 0.247, and coefficient of KKBE to ROE of 0.524. The indirect effect value is 0.129 and the total effect is 0.274.
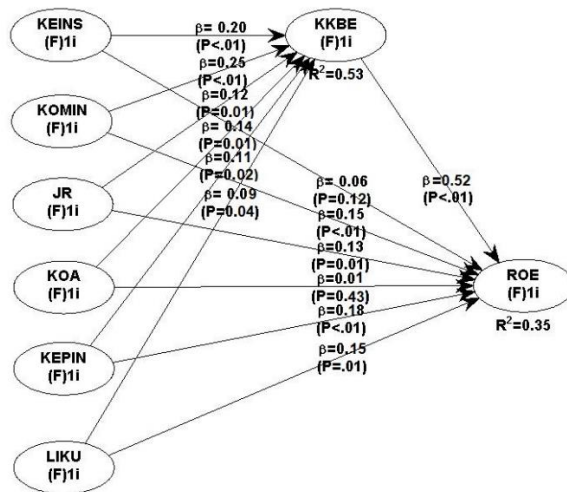
Figure 2. Full Research Model
Source: Sam'ani et al., 2022

Table 6
Coefficient Results and Significance Value

Track		Coefficient	P Value
KEINS ⟶	ROE	0.057	0.123
KOMIN ⟶	ROE	0.145	0.001***
JR ⟶	ROE	0.134	0.003***
KOA ⟶	ROE	-0.009	0.427
KEPIN ⟶	ROE	0.179	<0.001***
TURN ⟶	ROE	0.154	0.001***
KEINS ⟶	KKBE	0.202	<0.001***
KOMIN ⟶	KKBE	0.247	<0.001***
JR ⟶	KKBE	0.122	0.007***
KOA ⟶	KKBE	0.139	0.003***
KEPIN ⟶	KKBE	0.109	0.013**
TURN ⟶	KKBE	0.086	0.040**
KKBE ⟶	ROE	0.524	<0.001***

Source: Sam'ani et al., 2022

Indirect effect and total effect testing

The mediation influence test was used to test the effect of Corporate Governance which was proxied by Institutional Ownership (KEINS), Independent Commissioners (KOMIN), Number of Commissioners and Board of Directors (JR), and Audit Committee Meetings (KOA), Investment Decisions (KEPIN) and Liquidity (LIKU) on banking performance (ROE) is mediated by Efficiency-Based Credit Quality (KKBE).

Table 7
Indirect Effect Testing

			Coefficient	P-Value
KEINS ⟶	KKBE ⟶	ROE	0.106	0.001
KOMIN ⟶	KKBE ⟶	ROE	0.129	<0.001
JR ⟶	KKBE ⟶	ROE	0.064	0.002
KOA ⟶	KKBE ⟶	ROE	0.073	0.001
KEPIN ⟶	KKBE ⟶	ROE	0.057	0.001
TURN ⟶	KKBE ⟶	ROE	0.045	0.021

Table 8
Total Effect Testing

Track	Coefficient	P Value
KEINS ⟶ ROE	0.163	<0.001***
KOMIN ⟶ ROE	0.274	<0.001***
JR ⟶ ROE	0.198	<0.001***
KOA ⟶ ROE	0.064	<0.001***
KEPIN ⟶ ROE	0.236	<0.001***
TURN ⟶ ROE	0.199	0.004***
KEINS ⟶ KKBE	0.308	0.001***
KOMIN ⟶ KKBE	0.376	<0.001***
JR ⟶ KKBE	0.186	<0.001***
KOA ⟶ KKBE	0.212	0.096*
KEPIN ⟶ KKBE	0.166	<0.001***
TURN ⟶ KKBE	0.131	<0.001***
KKBE ⟶ ROE	0.524	<0.001***

Source: Sam'ani et al., 2022

Table 7 and Table 8 describe the results of the direct effect and indirect effect tests to obtain the total effect. The results of the total effect as shown in Table 6 show that the Independent Commissioner (KOMIN) has the most dominant influence on Banking Performance (ROE). This means that the best path in the path analysis test results of this research is the KOMIN to KKBE then KKBE to ROE path with an indirect effect value of 0.129 and a total effect of 0.376. Completely testing the results of the hypothesis in this study can be seen in Table 9.

Table 9
Research Hypothesis Testing Results

No	Hypothesis Testing Results	P Value	Information
1.	Institutional Ownership has an insignificant positive impact on Banking Performance	0.123	Rejected
2.	Independent Commissioners have a significant positive impact on Banking Performance	<0.001	Accepted ***
3.	The number of Board of Commissioners and Board of Directors meetings has a significant positive impact on Banking Performance	0.003	Accepted ***
4.	The Audit Committee has an insignificant negative impact on Banking Performance	-0.427	Rejected
5.	Investment decisions have a significant positive impact on banking performance	<0.001	Accepted ***
6.	Liquidity has a significant positive impact on banking performance	0.001	Accepted ***
7.	Efficiency-Based Credit Quality as a mediator of the impact of Institutional Ownership on Banking Performance	0.001	Accepted ***

8.	Efficiency-Based Credit Quality as a mediator of the impact of Independent Commissioners on Banking Performance	<0.001	Accepted ***
9.	Efficiency-Based Credit Quality as a mediator of the impact of the Number of Board of Commissioners and Board of Directors Meetings on Banking Performance	0.002	Accepted ***
10.	Efficiency-Based Credit Quality as a mediator of the impact of the Audit Committee on Banking Performance	0.001	Accepted ***
11	Efficiency-Based Credit Quality as a mediator of the impact of Investment Decisions on Banking Performance	0.005	Accepted ***
12.	Efficiency-Based Credit Quality as a mediator of the impact of Liquidity on Banking Performance	0.021	Accepted **
13.	Efficiency-Based Credit Quality has a significant positive impact on Banking Performance	<0.001	Accepted ***

Source: Sam'ani et al., 2022
Information:
***Sig at 1% **Sig at 5%

The first hypothesis states that institutional ownership has a positive effect on banking performance. The hypothesis statement is meant to test KEINS on banking performance proxied by return on equity (ROE). Measurement of institutional ownership has been used by previous studies, namely (Arora & Sharma, 2016; Kao et al., 2019; Lin & Fu, 2017; Saghi-Zedek, 2016). Hypothesis 2 statement of independent commissioners has a positive impact on banking performance. Measurement of independent commissioners by the number of independent commissioners divided by the entire board of commissioners as used by (Arora & Sharma, 2016). This hypothesis refers to the assumption that the independent commissioner is a proxy for corporate governance as a management oversight or agent in running the company by existing rules and commitment to advancing the company. The results of testing on hypothesis 2 found evidence that independent commissioners have a significant positive influence on the performance of banks listed on the Indonesia Stock Exchange.

Hypothesis 3 in this study is the number of meetings has a positive effect on bank performance. The number of meetings is measured by the number of Board of Commissioners and Directors meetings according to research from Eluyela et al. (2018). This hypothesis statement is used to test the effect of the number of meetings on bank performance (ROE). The results of hypothesis testing 3 found that there was a significant positive effect on the number of meetings on the performance of banks listed on the Indonesian Stock Exchange, so the results of this research have evidence to support that the effect of meetings held by the board of directors and board of commissioners at banks in Indonesia as a proxy of corporate governance can directly influence the performance of the bank. The role of number of meetings held by directors and commissioners in this study has a significant influence on improving bank performance.

Hypothesis 4 states that the audit committee has a positive effect on bank performance. The hypothesis statement is used to test the effect of the audit committee, the number of auditor committee members adopted from (Alqatamin, 2018; Dakhlallh et al., 2020) on the performance of banks listed on the Indonesia Stock Exchange. However, hypothesis 4 found results that proved something different. The test results of the fourth hypothesis found evidence that audit committees affect bank performance negatively but not significantly. These findings are by empirical research from (Haddad et al., 2021, 2022) which shows that there is an insignificant negative effect of the audit committee on company performance. The results of this research found that the role of the audit committee caused banking performance to decline. This is possible because the audit committee as measured by the number of auditors has not carried out their audit obligations properly and seriously or maybe the audit committee is still affiliated with the board of directors so the results only please the board of directors.

The fifth hypothesis states that investment decisions have a positive effect on banking performance. The results of the fifth hypothesis test show that investment decisions affect the performance of banks listed on the Indonesia Stock Exchange in a significantly positive way. It is stated that the fifth hypothesis is accepted based on the testing of empirical evidence. This finding means that the investments made by the banking samples were able to improve banking performance significantly. Bank investment in assets properly and optimally utilized will be able to increase performance to the maximum as well (Rahman & Akhter, 2021).

The results of the 6th hypothesis test show that liquidity has a significant positive effect on banking performance. This means that the banks in Indonesia that are the sample can manage liquidity well so that they can improve their performance (Duan et al., 2021). Banking in Indonesia as a sample is capable of being a good intermediary institution, especially in maintaining its liquidity. The more liquid a bank is, the healthier the bank's financial condition and the higher its performance.

Hypothesis 7 test results found evidence of efficiency-based credit quality (KKBE) able to mediate the influence of institutional ownership on bank performance. The findings of this empirical research show that role efficiency-based credit quality is important for banks listed on the IDX. Efficiency-based credit quality is significant in mediating the effect of institutional ownership on bank performance as the direct effect of institutional ownership on bank performance is not significant, but when included Efficiency-based credit quality, it has a significant effect (Lin & Fu, 2017). This means that the loans disbursed by the sampled banks are right on target so that they are of good quality and effective in improving bank performance. Efficiency-based credit quality itself is a synthesis between loans given as measured by 1-NPL (non-performing loans) and efficiency as measured using, where the input data consists of total savings, labor costs, and fixed assets, and the output data consists of total loans disbursed and total income (Abedin et al., 2022).

The findings of hypothesis 8 show that there is a significant role of efficiency-based credit quality (KKBE). Companies that add the number of independent commissioners aim to improve company performance. The existence of an independent board of commissioners can control bank credit policies and make efficiency on inputs and outputs, in this case, total savings, labor costs, and fixed assets, to total loans disbursed and total income which has an impact on improving bank performance (Aldamen et al., 2012; Alqatamin, 2018). The supervisory function of the board of commissioners is to ensure that the quality and efficiency of the loans disbursed are achieved so that the objectives of the banking sample to achieve improved performance can be achieved. The bank's business is how to channel party funds to those who need funds and carry out efficiently, so the independent commissioner should be able to exercise strict control over the bank which functions as an intermediary institution so that it does not harm customers and shareholders, but must provide benefits to customers and owners. by increasing bank performance as a proxy for ROE.

The findings in hypothesis 9 are consistent with agency theory, where the board of commissioners plays a role in implementing corporate governance, that is, one that supervises the performance of the board of directors or agents (Haddad et al., 2021; Tao & Hutchinson, 2013). This means that there are meetings between the board of commissioners and the directors of banks in Indonesia that are listed on the IDX, so the board of commissioners can ask for an explanation and assess management's performance on the work that has been done and what is planned for the future, especially in channeling credit so that it is not bad so that it can increase income and can more efficient in terms of input and output comparisons so that the performance of banks in Indonesia listed on the IDX can increase significantly (Eluyela et al., 2018).

The research results of hypothesis 10 support previous research by (Arslan et al., 2014; Haddad et al., 2022). The research findings show that there is a mediating role of efficiency-based credit quality in the relationship between audit commitment and bank performance means that the banks in Indonesia that are the sample in providing credit are good at processing customer credit applications by paying attention to the health of the bank so that bad credit does not occur and can carry out efficiency in several posts, especially in terms of manpower operations, so that the supervision carried out by the audit committee also runs as it should and the bank's goal of achieving high performance can be achieved.

Hypothesis 11 states that efficiency-oriented credit quality is capable of mediating the influence of investment decisions on bank performance. The results of hypothesis test 11 found evidence that credit quality can mediate the effect of investment decisions on banking performance in Indonesia which is listed on the Indonesia Stock Exchange. This means that the investments made by banks in Indonesia as a sample, loans distributed to people who need them, and efficient use of funds by management are appropriate, to increase bank performance (Sathyamoorthi et al., 2020). From the results of testing

hypothesis 11, it can be concluded that hypothesis 11 is accepted. This means that banks in Indonesia that are listed on the IDX can achieve high financial performance by investing in productive assets in a timely and responsible manner in channeling funds from the public in the form of savings, deposits, and others the form of credit to parties who need funds by minimizing risk. bad credit and being able to make efficiency between input and output.

The results of the hypothesis 12 test found that efficiency-based credit quality was able to mediate the effect of liquidity on the performance of banks listed on the Indonesia Stock Exchange. These findings indicate the role of credit quality which is very significant because it can act as a mediator in the relationship between liquidity and bank performance. Banks as intermediary institutions are required to maintain good liquidity or healthy liquidity conditions. This means that banks must manage funds from the public and distribute them to those who need them proportionally regarding existing regulations (Almazari, 2014).

Testing on hypothesis 13 shows that there is a significant positive effect of efficiency-based credit quality on the performance of banks listed on the Indonesia Stock Exchange. This means that hypothesis 13 is accepted. (Masood & Javaria, 2017; Purwohandoko & Iriani, 2021) stated that in evaluating the performance of banking institutions, various financial ratios and non-parametric techniques such as DEA are used. In the context of this study, efficiency-based credit quality (KKBE) has a significant influence on banking performance. KKBE is an important factor in improving the performance of banks in Indonesia that are listed on the Indonesia Stock Exchange. Banks that can manage credit well, control credit risk, and optimize operational cost efficiency, especially labor costs, will have better bank performance, measured by return on assets (ROE). KKBE is a bank's ability to carry out the intermediary function by extending credit based on the principle of prudence by banking regulations, to improve company performance. In this study, it was found that efficiency-based credit quality has a significant positive impact on company performance. In other words, the better the efficiency-based credit quality of a bank, the bank's performance will increase significantly. it was found that efficiency-based credit quality had a significant positive impact on company performance. In other words, the better the efficiency-based credit quality of a bank, the bank's performance will increase significantly. it was found that efficiency-based credit quality had a significant positive impact on company performance. In other words, the better the efficiency-based credit quality of a bank, the bank's performance will increase significantly

Conclusions

The research conducted revealed that efficiency-based credit quality (KKBE) has a significant impact on increasing banking performance as assessed by Return on Equity (ROE). These findings indicate that

banking management decisions on the distribution of quality credit while preserving efficiency might increase bank performance. KKBE also serves as a significant positive correlation between corporate governance elements such as institutional ownership, independent commissioners, meeting frequency, audit committees, investment decisions, and liquidity and banking performance. The optimum approach to improve banking performance, according to path analysis, is through independent commissioners to KKBE, and then from KKBE to ROE. These findings suggest KKBE as a feasible option and address a study need in the area of corporate governance and banking performance.

The research findings align with the stated objective, which aimed to provide a comprehensive model addressing inconsistencies in empirical research regarding the impact of Corporate Governance (GCG) on banking performance in Indonesia. The study successfully establishes efficiency-based credit quality (KKBE) as a crucial factor positively affecting banking performance, specifically measured by Return on Equity (ROE). The identified correlation between KKBE and various elements of corporate governance, investment decisions, and liquidity further strengthens the proposed model's validity.

In comparing these findings with other research papers, it becomes apparent that the study contributes to the existing literature by emphasizing the significant role of KKBE in mediating the relationship between various governance elements and banking performance. While some research may focus solely on individual factors, this study integrates GCG, investment decisions, liquidity, and KKBE into a cohesive model, providing a more holistic understanding of their interplay. The identified pathway from independent commissioners to KKBE and then to ROE, as revealed through path analysis, serves as a unique contribution to the literature. This pathway suggests that the effectiveness of independent commissioners in enhancing banking performance is optimized when channeled through KKBE. These findings contribute to the broader discourse on corporate governance and banking performance by offering practical insights for banking management to enhance decision-making processes, particularly regarding credit quality and efficiency.

The results of this research have significant practical implications for bank management in carrying out financial functions, especially in implementing corporate governance, investment decisions and liquidity. Several factors must be considered by bank management. First, institutional ownership has no substantial impact on bank performance, highlighting the importance of institutional owners increasing their supervisory role over management. Second, independent commissioners have a strong favorable influence on banking performance, suggesting the board of commissioners' vital role in supervising management. Third, the number of meetings between the board of directors and commissioners has a considerable favorable effect on bank performance, emphasizing the importance of decision-making coordination. Fourth, the research findings indicate that the best number of audit committee members is six, implying that management should limit the number. Apart from that, prudent investment decisions,

efficiency-based credit quality (KKBE), and adequate liquidity all have a favorable impact on banking performance. It is recommended that bank management concentrate on investing in productive assets, managing liquidity in accordance with statutory restrictions, and applying KKBE in credit management. Overall, this study suggests that KKBE is a useful tool for optimizing the relationship between corporate governance, investment decisions, liquidity, and bank performance.

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Annex

Table A1

Stock Ticker	Year	KEINS	KOMIN	JR	KOA	KEPIN	LIKU	KKBE	ROE
BBHI	2014	91,5700	33,3333	74,80	3	0,2333	93,4342	0,4866	0,6805
	2015	91,5700	33,3333	63,33	4	0,0290	94,4262	0,5483	-2,2431
	2016	72,6600	33,3333	47,16	3	-0,0099	89,1606	0,9810	0,3426
	2017	72,6600	33,3333	53,03	3	0,1945	99,7914	0,7545	0,4588
	2018	75,1400	33,3333	46,34	3	-0,0792	94,9054	0,8176	-5,2146
	2019	73,7100	33,3333	66,67	3	0,1162	84,2993	0,9607	-1,5257
	2020	75,1400	33,3333	60,78	3	0,0235	86,8906	0,9825	1,4475
AMAR	2014	99,0000	33,3333	50,87	3	-0,4811	86,4173	0,9946	-6,6806
	2015	99,0000	50,0000	43,24	3	0,0811	80,0000	0,9881	11,2235
	2016	99,0000	33,3333	32,07	3	0,0081	66,7808	0,9825	6,2446
	2017	99,0000	16,6667	52,94	3	0,5439	95,6458	0,9686	0,5354

	2018	99,0000	33,3333	37,83	2	1,1941	94,2360	0,9939	1,2055
	2019	98,7000	33,3333	60,00	3	0,8597	92,0359	0,9670	2,3140
	2020	98,7000	33,3333	32,72	3	0,1754	74,7552	0,9520	0,2286
INPC	2014	51,1700	50,0000	48,00	6	0,1073	87,6187	0,9831	0,5033
	2015	51,1700	50,0000	46,67	6	0,0706	80,7529	0,9875	0,2935
	2016	53,5400	50,0000	52,17	6	0,0438	86,3888	0,9856	0,2838
	2017	44,2200	50,0000	58,53	6	0,0575	82,8873	0,9570	0,2525
	2018	44,2200	50,0000	54,76	5	-0,0614	76,5808	0,9261	0,1995
	2019	44,2200	50,0000	53,96	3	-0,0189	67,8372	0,8005	-0,2263
	2020	44,2200	50,0000	74,57	4	0,1956	48,7935	0,9686	0,0762
BTPS	2014	70,0000	33,3333	38,89	4	0,1009	122,1240	0,8317	2,4462
	2015	70,0000	33,3333	45,28	5	0,5111	149,0380	0,7038	2,9375
	2016	70,0000	33,3333	25,64	5	0,4094	150,9110	0,6228	6,5896
	2017	70,0000	33,3333	42,85	4	0,2503	147,2200	0,4668	8,1333
	2018	70,0000	33,3333	36,84	4	0,3148	145,4490	0,3769	9,1085
	2019	70,0000	33,3333	33,05	5	0,2777	147,9420	0,3212	10,2080
	2020	70,0000	33,3333	34,82	3	0,0684	151,7500	0,4309	5,3719
BTPN	2014	65,8800	50,0000	50,00	4	0,0774	98,2065	0,5789	2,5830
	2015	68,3800	50,0000	54,02	5	0,0797	97,8797	0,9960	2,1805
	2016	68,3800	50,0000	52,68	4	0,1275	96,2132	0,7312	2,0325
	2017	60,0000	50,0000	52,68	4	0,0451	97,0281	0,7719	1,3067
	2018	59,8800	50,0000	51,08	4	0,0613	95,8525	0,7224	1,8681
	2019	93,6000	50,0000	33,11	3	0,7923	162,6700	0,9960	1,8182

	2020	92,4300	50,0000	39,85	4	0,0084	135,1500	0,9950	0,9590
BNBA	2014	90,9000	16,6667	39,85	3	0,2743	79,4454	0,4586	1,1266
	2015	90,9000	16,6667	57,78	3	0,2739	82,7849	0,6485	0,9716
	2016	90,9000	33,3333	52,63	3	0,0843	79,0305	0,6494	1,1507
	2017	90,9000	33,3333	44,44	3	-0,0150	82,1001	0,7030	1,2670
	2018	90,9000	33,3333	38,80	3	0,0403	84,2612	0,6564	1,2982
	2019	90,9000	33,3333	34,84	5	0,0425	87,0767	0,6514	0,6866
	2020	90,9000	33,3333	29,98	4	0,0039	76,5690	0,5705	0,4599
BACA	2014	25,9100	33,3333	51,35	3	0,2960	58,4030	0,9976	0,9139
	2015	45,5100	33,3333	51,42	3	0,3141	55,9007	0,9925	0,8483
	2016	33,3800	33,3333	52,94	3	0,1685	55,3502	0,9706	0,7089
	2017	33,3700	33,3333	54,54	3	0,1508	50,6113	0,9757	0,5638
	2018	45,7300	33,3333	55,38	3	0,1022	51,9583	0,9311	0,6197
	2019	42,5200	33,3333	57,14	3	0,0522	60,5517	0,9866	0,0859
	2020	39,6500	33,3333	52,00	3	0,0667	39,3320	1,0000	0,3135
BBCA	2014	47,1500	50,0000	61,11	3	0,1145	79,3359	0,9980	3,1418
	2015	47,1500	50,0000	62,50	3	0,0745	83,4813	0,9980	3,1404
	2016	89,0000	50,0000	61,53	3	0,1386	80,2286	0,9970	3,2422
	2017	54,9400	50,0000	52,63	3	0,1087	83,2318	0,9960	3,2669
	2018	54,9400	50,0000	52,41	3	0,0992	88,1464	0,9960	3,2830
	2019	54,9400	50,0000	52,84	3	0,1142	86,7844	0,9950	3,2762
	2020	54,9400	50,0000	48,55	3	0,1704	70,9796	0,9930	2,7205
MCOR	2014	18,6000	33,3333	61,11	3	0,2340	84,3662	0,4761	0,5982

	2015	16,8200	33,3333	59,18	3	0,0327	86,8562	0,7574	0,6786
	2016	60,8600	50,0000	49,12	3	0,2149	86,4650	0,6758	0,1985
	2017	60,0000	50,0000	48,78	3	0,2881	79,5217	0,8327	0,3558
	2018	60,0000	33,3333	47,88	4	0,0129	88,3535	0,7477	0,5655
	2019	60,0000	33,3333	73,49	3	0,1814	107,7490	0,7967	0,4527
	2020	68,2100	33,3333	60,00	3	0,3357	62,7800	0,9808	0,2265
BNGA	2014	97,1300	66,6667	31,00	6	0,0653	101,1070	0,9424	1,0364
	2015	97,9400	66,6667	46,73	6	0,0244	99,4419	0,8857	0,1813
	2016	94,0900	66,6667	49,49	9	0,0114	99,7746	0,9784	0,8666
	2017	92,5000	66,6667	22,87	4	0,1024	97,7911	0,9539	1,1726
	2018	96,1100	66,6667	32,27	4	0,0018	98,8033	0,8339	1,3065
	2019	96,7000	66,6667	39,37	4	0,0288	99,3033	0,8449	1,3469
	2020	96,6700	66,6667	39,53	3	0,0236	84,2071	0,8637	0,7247
BDMN	2014	74,1600	50,0000	47,36	6	0,0629	119,3670	0,5853	1,3703
	2015	74,1800	50,0000	32,31	6	-0,0396	112,3550	0,6102	1,2469
	2016	73,9500	50,0000	40,98	5	-0,0724	117,9730	0,5843	1,4728
	2017	79,0300	50,0000	43,37	5	0,0219	122,9060	0,9820	2,0877
	2018	73,8300	50,0000	32,56	4	0,0477	124,9060	0,9810	2,1490
	2019	94,1000	50,0000	28,49	4	0,0363	128,4280	0,9800	2,1423
	2020	92,4700	50,0000	38,52	4	0,0380	108,4280	0,9910	0,5109
BGTG	2014	84,0700	33,3333	52,78	3	0,0723	67,9918	0,4322	0,1450
	2015	84,0700	33,3333	54,54	3	-0,0756	75,9330	0,4291	0,2652
	2016	67,4700	33,3333	59,61	3	1,1454	88,9269	0,7430	1,2622

	2017	51,4100	50,0000	57,69	3	0,0817	85,8477	0,6996	1,1599
	2018	51,4100	33,3333	61,11	4	-0,0185	87,8390	0,6535	0,1234
	2019	42,2800	33,3333	73,33	4	0,0695	82,7558	0,8014	0,2545
	2020	42,2800	33,3333	82,61	4	0,1155	63,9975	0,7606	0,0629
BINA	2014	57,6200	33,3333	55,89	4	0,3920	77,0240	0,9920	0,9418
	2015	57,6200	33,3333	48,65	4	0,0664	83,9533	0,9992	0,8369
	2016	95,0200	33,3333	63,63	4	0,1333	76,5232	0,9771	0,8213
	2017	94,7800	33,3333	63,63	4	0,3240	77,6167	0,9752	0,6690
	2018	89,8200	33,3333	68,63	4	0,2340	69,2767	0,9794	0,3266
	2019	87,3900	33,3333	78,69	4	0,3654	62,9369	0,9690	0,1561
	2020	85,2800	33,3333	69,23	4	0,6034	41,2616	0,9980	0,2829
BCIC	2014	99,9600	33,3333	49,03	7	-0,1295	71,1389	0,5125	-4,8689
	2015	99,9700	33,3333	58,65	3	0,0390	84,9960	0,7241	-5,2257
	2016	99,9800	33,3333	41,07	5	0,2186	96,3307	0,8204	-4,9145
	2017	99,9700	50,0000	37,69	5	0,0688	88,8743	0,8813	0,7313
	2018	99,9700	33,3333	51,04	4	0,0380	77,4350	0,8884	-2,2923
	2019	92,3560	33,3333	37,88	4	-0,0287	48,7731	0,7053	0,2817
	2020	99,9800	33,3333	38,95	3	-0,0639	56,2622	0,7403	-2,8908
BMRI	2014	39,6500	66,6667	45,25	6	0,1663	85,1101	0,9956	2,5025
	2015	38,7700	66,6667	30,92	5	0,0644	89,9843	0,9940	2,3041
	2016	38,3600	66,6667	33,88	6	0,1414	88,6793	0,9862	1,4170
	2017	39,1400	66,6667	47,53	6	0,0828	92,3795	0,9862	1,9081
	2018	39,9100	66,6667	45,18	6	0,0690	96,4732	0,9894	2,1500

	2019	39,0500	66,6667	44,22	6	0,0965	95,3682	0,9933	2,1807
	2020	38,4300	66,6667	45,84	7	0,0843	87,9497	0,9916	1,2461
BMAS	2014	88,7500	33,3333	75,00	5	0,1585	77,1966	0,9304	0,5593
	2015	88,7600	33,3333	78,57	5	0,1060	92,9572	0,9950	0,7899
	2016	90,3000	33,3333	75,53	4	0,0257	99,8753	0,9919	1,2592
	2017	90,3200	33,3333	65,31	4	0,1046	97,1407	0,9862	1,2048
	2018	90,3300	33,3333	64,70	3	0,1056	100,8740	0,9790	1,1140
	2019	90,3300	33,3333	57,69	3	0,1308	94,1317	0,9773	0,8378
	2020	90,3300	33,3333	60,61	3	0,3357	84,1848	0,9832	0,7578
MAYA	2014	75,8200	33,3333	55,17	3	0,5071	81,2455	0,9844	1,4260
	2015	87,5700	33,3333	58,33	3	0,3070	82,9937	0,9748	1,5624
	2016	87,0300	33,3333	56,41	3	0,2861	91,3961	0,9878	1,5168
	2017	87,0300	33,3333	61,76	3	0,2286	90,0797	0,9580	0,9963
	2018	87,0300	50,0000	61,76	3	0,1636	91,8324	0,9674	0,5410
	2019	87,0300	66,6667	56,76	3	0,0740	93,3423	0,9837	0,5856
	2020	87,0300	50,0000	61,76	3	-0,0095	77,8003	0,9840	0,0690
BNII	2014	97,2900	50,0000	44,66	5	0,0201	104,3560	0,8138	0,4988
	2015	97,2900	50,0000	50,36	4	0,0994	97,4389	0,9758	0,7569
	2016	97,2900	50,0000	53,62	4	0,0575	97,3127	0,9665	1,1928
	2017	97,2900	50,0000	44,87	3	0,0394	105,5730	0,9828	1,0614
	2018	97,2900	50,0000	59,55	3	0,0247	116,2140	0,8954	1,2512
	2019	97,2900	50,0000	54,08	3	-0,0476	112,7140	0,7846	1,0631
	2020	97,2900	50,0000	46,51	3	0,0245	91,5379	0,6777	0,7399

MEGA	2014	100,0000	33,3333	59,18	3	0,0016	65,8822	0,6139	0,8539
	2015	100,0000	33,3333	61,68	3	0,0247	65,1354	0,6152	1,5619
	2016	57,8200	33,3333	77,95	3	0,0338	55,3651	0,5900	1,6691
	2017	58,0100	33,3333	33,56	3	0,1668	57,4754	0,6614	1,7013
	2018	58,0100	50,0000	55,38	3	0,0178	69,5692	0,6376	1,9262
	2019	58,0100	50,0000	32,44	3	0,2035	72,8330	0,5501	2,1702
	2020	64,0900	50,0000	76,22	3	0,1131	61,2309	0,5601	2,8246
BBMD	2014	89,4400	33,3333	35,48	4	0,0966	101,2950	0,5978	2,8569
	2015	89,4400	16,6667	56,41	3	0,0846	101,6050	0,6412	2,6627
	2016	89,4400	33,3333	58,62	3	0,1252	80,9342	0,4871	1,7928
	2017	89,4400	33,3333	54,23	3	0,1162	81,0158	0,6089	2,3543
	2018	89,4400	33,3333	56,25	3	0,0233	86,9281	0,5542	2,2238
	2019	89,4400	33,3333	68,48	4	0,0667	87,8315	0,5236	1,9811
	2020	89,4400	33,3333	60,61	2	0,0976	72,7176	0,4613	2,4090
BABP	2014	43,2600	33,3333	61,76	4	0,1549	80,9010	0,9614	-0,6201
	2015	94,5300	33,3333	66,67	4	0,2870	72,5460	0,9757	0,0758
	2016	71,6800	33,3333	68,54	4	0,0758	77,3189	0,9762	0,0742
	2017	53,9100	33,3333	68,00	4	-0,1801	78,8120	0,9718	-5,7667
	2018	55,5300	33,3333	59,68	5	0,0139	88,6856	0,9657	0,5289
	2019	70,9100	33,3333	31,45	5	-0,0228	89,6007	0,9643	0,1904
	2020	80,4800	33,3333	46,37	4	0,0985	77,3558	0,7006	0,0936
NOBU	2014	52,1400	33,3333	57,41	4	0,4900	53,9863	1,0000	0,3278
	2015	66,2000	33,3333	54,65	4	0,1603	72,5349	0,8950	0,2918

	Year								
	2016	71,9200	33,3333	53,93	4	0,3414	53,0037	0,9999	0,3862
	2017	77,7100	50,0000	25,00	5	0,2253	51,5670	0,9995	0,3497
	2018	77,3500	50,0000	17,65	5	0,0704	75,3470	0,9956	0,3923
	2019	77,3500	50,0000	30,51	5	0,1148	79,0983	0,9792	0,3672
	2020	88,3200	50,0000	25,00	5	0,0449	76,3082	0,7367	0,3988
BBNI	2014	41,0200	66,6667	50,00	4	0,0774	89,1779	0,8864	2,6848
	2015	37,4100	83,3333	45,33	5	0,2209	90,4206	0,9910	1,9600
	2016	38,3000	83,3333	28,52	3	0,1857	92,2622	0,9960	2,0400
	2017	39,1900	66,6667	52,51	3	0,1763	88,5519	0,9414	2,0751
	2018	38,8200	83,3333	64,82	4	0,1399	92,8453	0,9920	1,9784
	2019	37,9600	83,3333	67,29	4	0,0458	93,7601	0,9880	1,8601
	2020	33,1100	100,0000	66,32	5	0,0541	88,9099	0,9910	0,3777
BBYB	2014	95,7100	33,3333	48,65	4	0,1743	86,1031	0,6152	0,4770
	2015	95,8900	33,3333	48,93	4	0,2701	88,9528	0,6183	0,8142
	2016	95,8100	33,3333	68,92	4	0,2097	95,7905	0,8406	1,8004
	2017	96,1000	33,3333	65,38	4	0,2104	94,5689	0,8804	0,3156
	2018	95,2100	33,3333	74,67	4	-0,0941	107,6600	0,7161	-2,8723
	2019	91,5700	33,3333	72,34	4	0,1301	94,1545	0,7879	0,3314
	2020	98,6450	33,3333	55,00	4	0,0581	92,9470	0,7193	0,3010
NISP	2014	85,0800	66,6667	55,55	4	0,0573	93,8990	0,8997	1,3280
	2015	85,0800	66,6667	56,25	4	0,1685	98,3946	0,9922	1,3425
	2016	85,0800	66,6667	55,17	3	0,1470	90,1532	0,9923	1,3839
	2017	99,8600	83,3333	48,48	3	0,1127	93,7489	0,9928	1,4904

	Year							
	2018	99,8600	83,3333	50,79	4	0,1288	93,8471	0,9918	1,6117
	2019	99,8500	100,0000	50,00	4	0,0410	94,3902	0,9922	1,6592
	2020	99,8000	83,3333	44,05	3	0,1416	72,2497	0,9921	1,0861
DNAR	2014	94,6900	33,3333	54,05	4	0,9202	71,1259	0,4537	0,2461
	2015	94,6900	33,3333	58,06	4	0,2633	77,2881	0,7241	0,7547
	2016	100,0000	33,3333	65,52	4	0,1146	82,4942	0,9315	0,5967
	2017	99,0000	33,3333	50,00	3	0,0969	69,8023	0,9789	0,4160
	2018	99,0000	16,6667	57,69	3	0,7892	151,7540	0,5060	0,8947
	2019	93,6600	33,3333	73,17	4	0,1263	140,2010	0,6321	-0,3509
	2020	92,2600	33,3333	66,67	4	0,2283	135,8970	0,6937	0,1384
PNBN	2014	38,8200	50,0000	62,22	4	0,0523	97,0896	0,9948	1,4060
	2015	38,8200	50,0000	51,85	4	0,0607	100,3000	0,9945	0,7909
	2016	38,8200	50,0000	46,03	4	0,0877	94,6212	0,9819	1,2583
	2017	38,8200	50,0000	39,28	4	0,0721	98,3303	0,9923	1,1691
	2018	38,8200	33,3333	46,27	3	-0,0297	111,1270	0,8482	1,4796
	2019	38,8200	33,3333	38,46	3	0,0197	115,2740	0,8336	1,5851
	2020	38,8200	50,0000	45,16	3	0,0321	90,5614	0,7808	1,4455
PNBS	2014	52,1100	33,3333	39,76	3	0,5314	94,1136	0,9971	1,3829
	2015	51,8600	33,3333	42,69	3	0,1495	139,6100	0,9806	0,8032
	2016	51,6100	33,3333	51,25	3	0,2276	149,5600	0,9814	0,2459
	2017	44,6900	33,3333	34,34	3	-0,0147	171,2510	0,9517	-11,1444
	2018	53,7000	33,3333	35,44	3	0,0164	114,5010	0,8231	0,2389
	2019	53,7000	33,3333	15,93	3	0,2696	76,5744	0,8126	0,1330

	2020	69,9300	33,3333	38,16	3	0,0149	94,5000	0,7667	0,0011
BEKS	2014	91,8900	33,3333	34,06	3	0,0045	86,1130	0,3330	-1,3207
	2015	91,8900	33,3333	42,19	3	-0,3402	80,7679	0,3842	-4,4121
	2016	64,7600	33,3333	24,19	3	-0,1200	83,8472	0,6505	-7,2224
	2017	60,0700	33,3333	33,33	4	0,4585	91,9546	0,9533	-1,1818
	2018	60,2600	33,3333	42,35	4	0,2380	82,8599	0,9508	-1,1683
	2019	73,2600	33,3333	40,31	4	-0,1460	95,5866	0,8111	-1,5650
	2020	81,7500	33,3333	50,00	4	-0,3409	146,7720	0,7572	-4,5875
BNLI	2014	44,5600	66,6667	37,62	6	0,1177	90,1277	0,9937	0,9042
	2015	44,5600	66,6667	43,93	3	-0,0144	89,0189	0,9860	0,1343
	2016	44,5600	66,6667	49,00	4	-0,0939	81,6349	0,9555	-3,7236
	2017	44,5600	66,6667	30,51	3	-0,1039	88,6124	0,9103	0,4769
	2018	44,5600	66,6667	24,28	4	0,0308	90,9224	0,9830	0,5984
	2019	44,5600	66,6667	23,40	4	0,0560	88,5168	0,9870	0,9546
	2020	98,7100	66,6667	41,00	4	0,2247	81,5085	0,8326	0,4018
BKSW	2014	7,6000	50,0000	23,19	3	0,8863	93,4686	0,9977	0,7622
	2015	8,1500	50,0000	16,77	3	0,2360	112,5400	0,9760	0,6698
	2016	8,1500	50,0000	16,23	3	-0,0538	94,5358	0,9706	-2,5946
	2017	7,7600	50,0000	18,99	3	0,0108	70,3689	0,9886	-3,2232
	2018	6,1600	50,0000	29,71	3	-0,1684	72,5894	0,9853	0,0646
	2019	6,5800	50,0000	21,28	3	0,1237	88,3136	0,9555	0,0243
	2020	5,3500	50,0000	29,85	3	-0,2052	99,6583	0,6115	-2,0434
BBRI	2014	47,2900	83,3333	61,21	6	0,2808	81,2482	0,9831	3,3910

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	2015	49,7700	83,3333	62,11	6	0,0953	85,4657	0,9798	3,0228
	2016	41,2200	83,3333	61,58	6	0,1425	86,8116	0,9891	2,7837
	2017	41,3900	83,3333	53,57	6	0,1222	86,3886	0,9912	2,7229
	2018	41,1100	83,3333	45,92	6	0,1515	90,0988	0,9908	2,6702
	2019	39,3200	83,3333	42,67	7	0,0924	89,6367	0,9896	2,5333
	2020	40,3100	100,0000	41,01	9	0,0671	82,8938	0,9920	1,2740
AGRO	2014	94,4500	50,0000	45,00	3	0,2467	90,1720	0,7349	1,0321
	2015	96,3300	33,3333	60,82	3	0,3093	88,0862	0,7662	1,0912
	2016	94,3100	33,3333	53,54	3	0,3603	88,6812	0,8118	1,0435
	2017	92,8000	50,0000	13,11	3	0,4348	88,4051	0,9622	1,0143
	2018	93,4200	50,0000	20,97	3	0,4281	86,7492	0,9822	1,0304
	2019	93,4200	83,3333	17,11	3	0,1610	91,5896	0,9514	0,2027
	2020	92,0900	83,3333	36,44	3	0,0350	84,7649	0,9727	0,1135
BSIM	2014	56,0000	33,3333	55,79	4	0,2185	84,3753	0,7532	0,8005
	2015	55,5500	33,3333	53,13	3	0,3109	78,3042	0,8673	0,7538
	2016	58,6200	33,3333	47,31	3	0,1193	77,1930	0,8927	1,2551
	2017	58,8300	33,3333	59,74	3	-0,0253	79,4694	0,6582	1,0355
	2018	63,9500	33,3333	72,97	3	0,0113	81,6705	0,5972	0,1651
	2019	62,7100	33,3333	76,54	3	0,1890	79,7214	0,5989	0,0201
	2020	61,6300	33,3333	64,77	3	0,2203	55,7106	0,5926	0,2920
BRIS	2014	100,0000	66,6667	60,98	4	0,1691	92,0578	0,7361	0,0349
	2015	100,0000	50,0000	59,62	7	0,1911	82,5596	0,6459	0,5503
	2016	100,0000	50,0000	60,38	5	0,1427	91,8541	0,3156	0,6557

	Year							
	2017	100,0000	50,0000	24,00	8	0,1393	67,7750	0,3477	0,3413
	2018	73,0000	50,0000	39,09	6	0,2005	69,8829	0,3629	0,3071
	2019	73,0000	33,3333	34,67	5	0,1387	75,5362	0,4715	0,1828
	2020	71,6400	33,3333	31,21	5	0,3384	78,8916	0,2868	0,4920
BBTN	2014	34,8800	50,0000	54,10	5	0,1023	108,8710	0,9724	0,8309
	2015	36,4900	50,0000	59,77	5	0,1883	108,8070	0,9789	1,1700
	2016	36,7000	50,0000	55,21	5	0,2466	102,7870	0,9815	1,3570
	2017	22,7600	83,3333	57,92	6	0,2204	103,3860	0,9834	1,2733
	2018	23,0000	83,3333	49,10	6	0,1724	103,4500	0,9817	0,9891
	2019	14,8600	50,0000	71,32	4	0,0174	113,5070	0,9704	0,0677
	2020	29,1400	50,0000	64,42	4	0,1585	93,2340	0,9794	0,4762
BVIC	2014	53,1800	33,3333	48,41	3	0,1144	71,8735	0,9739	0,5215
	2015	70,8400	33,3333	41,42	4	0,0883	71,7234	0,9661	0,4217
	2016	62,0100	33,3333	39,34	4	0,1182	70,2594	0,9763	0,4076
	2017	57,3700	33,3333	40,85	4	0,1087	71,1560	0,9768	0,4964
	2018	54,3800	33,3333	36,82	3	0,0467	74,2248	0,9810	0,2681
	2019	59,4300	33,3333	32,46	3	0,0094	74,8573	0,9504	-0,0454
	2020	58,8800	33,3333	34,10	3	-0,1391	75,5152	0,9509	-0,8899
SDRA	2014	80,0800	50,0000	51,35	3	0,9965	101,4540	0,9819	1,1196
	2015	80,0800	50,0000	60,44	4	0,2183	97,3000	0,8916	1,4552
	2016	81,7300	50,0000	63,54	5	0,1304	110,4920	0,8496	1,4528
	2017	79,8800	50,0000	59,55	4	0,1969	111,0800	0,9910	1,7649
	2018	85,9100	50,0000	43,94	4	0,0940	146,3760	0,9892	1,8970

	Año								
	2019	85,8900	50,0000	40,74	5	0,2467	139,9100	0,9882	1,5015
	2020	79,8800	33,3333	45,76	5	0,0301	162,2960	0,9945	1,4294
BJBR	2014	17,7000	66,6667	58,24	6	0,0687	93,5845	0,6680	1,5206
	2015	18,7300	50,0000	60,81	5	0,1696	88,7212	0,7217	1,6740
	2016	8,3300	66,6667	63,46	5	0,1536	92,7189	0,6074	1,2087
	2017	31,7600	66,6667	65,63	4	0,1237	93,2476	0,6052	1,1155
	2018	12,1400	66,6667	67,83	4	0,0453	98,2093	0,5778	1,3167
	2019	12,6400	50,0000	59,23	5	0,0278	104,7500	0,6021	1,2790
	2020	12,8900	33,3333	77,65	4	0,1408	95,6197	0,5647	1,2759
BJTM	2014	13,9100	33,3333	30,43	3	0,1498	86,6045	0,6430	2,6436
	2015	14,8700	50,0000	29,03	3	0,1265	83,0297	0,6910	2,1893
	2016	10,4800	50,0000	30,00	3	0,0054	90,4776	0,5209	2,3958
	2017	12,5300	33,3333	30,32	4	0,1972	79,6946	0,6564	2,4524
	2018	12,5300	33,3333	21,49	4	0,2168	66,5671	0,9356	2,2070
	2019	12,7800	50,0000	21,13	4	0,2244	63,3442	0,9723	1,9743
	2020	12,3600	50,0000	65,38	4	0,0894	60,5839	0,8189	1,8568