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Determinants of dividend payouts in Ethiopian private banks: A firm-specific analysis

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ABSTRACT

Background: Dividend payout policies are critical in the banking sector to maintain financial stability while meeting shareholder expectations. Identifying the factors influencing these policies is essential, particularly in emerging markets.

Introduction: This study examines firm-specific factors affecting dividend payout ratios (DPR) among private banks in Ethiopia. It focuses on six key determinants: profitability, liquidity, leverage, growth of gross earnings, bank size, and the previous year's dividend payout.

Methods: A quantitative approach with an explanatory research design was used to analyze data from 11 private banks in Ethiopia, covering the period from 2015 to 2023. The study employed a panel regression model to determine the relationship between the selected determinants and DPR. Diagnostic tests ensured the robustness and validity of the results.

Results: The analysis showed that profitability (coefficient: 0.298), liquidity (0.234), and previous year's dividend payout (0.485) positively influence DPR. Conversely, leverage (-19.289) and growth of gross earnings (-20.925) negatively affect DPR, while bank size has a modest positive impact (0.151). The model accounts for 78% of the variation in DPR among these banks.

Conclusions: The findings underscore the importance of internal factors in determining dividend policies within Ethiopian private banks. Future research should investigate external influences, such as regulatory frameworks and macroeconomic variables, to provide a more comprehensive understanding.

Introduction

Dividend payout policies are vital in the banking sector, influencing investor confidence and reflecting a firm's financial health and governance quality. Despite extensive research, a universal understanding of dividend policy determinants remains elusive due to diverse market conditions, regulatory frameworks, and corporate governance structures [1]. Factors such as tax regulations, capital market dynamics, and legal environments vary significantly across countries, adding complexity. In emerging markets like Ethiopia, understanding the determinants of dividend payouts is particularly crucial given the rapidly evolving financial sector landscape. Despite global interest, there is limited research on dividend payout determinants in Ethiopian private banks [2].

The Ethiopian banking sector has experienced rapid growth and regulatory changes, creating a need for dynamic financial management strategies. Private banks in Ethiopia operate under unique conditions, including requirements to allocate portions of their loans to government bonds and adjust loan ratios. As dividend policies are crucial to a bank's financial strategy, understanding these determinants is essential. This study focuses on firm-specific factors affecting dividend payout ratios (DPR) in Ethiopian private banks, including profitability, liquidity, leverage, growth of gross earnings, bank size, and the previous year's dividend payout [3]. While existing research

KEYWORDS

Dividend payout ratio; Liquidity; Private banks; Profitability; Leverage; Financial policies

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primarily examines developed economies, few studies have explored these factors in the Ethiopian context.

The study uses a quantitative approach with an explanatory research design to analyze the determinants of DPR in 11 private banks in Ethiopia from 2015 to 2023. Using data from the bank's annual reports, a panel regression model identifies relationships between DPR and the selected determinants. Results show that profitability (coefficient: 0.298), liquidity (0.234), and the previous year's dividend payout (0.485) positively influence DPR, while leverage (-19.289) and growth of gross earnings (-20.925) negatively impact DPR [4]. Bank size shows a modest positive effect (0.151). The model explains 78% of the variation in DPR, highlighting the significance of these internal factors in dividend policy formation.

This study provides insights into the determinants of dividend policies among Ethiopian private banks but is limited to firm-specific factors, excluding external influences like macroeconomic conditions, regulatory changes, or market competition. The focus on a specific period (2015-2023) may not fully capture long-term trends or the effects of recent regulatory developments. Additionally, data availability and reliability are limited to selected banks, potentially restricting broader applicability [5]. While extensive studies have

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examined dividend policies globally, there is a notable gap in research on the Ethiopian banking sector, particularly private banks. This gap underscores the need for updated research that considers Ethiopia's unique banking environment [2].

This study aims to investigate the internal determinants of dividend payouts in Ethiopian private banks, focusing on factors such as profitability, liquidity, leverage, growth, bank size, and the previous year's dividends. The goal is to provide insights that assist bank managers, policymakers, investors, and stakeholders in making informed decisions about dividend policies while contributing to the existing literature by addressing the research gap in the context of Ethiopian banks [6].

- **1. H1:** Higher profitability is positively associated with higher dividend payouts in Ethiopian private banks.
- **2. H2:** Greater liquidity leads to increased dividend payouts in Ethiopian private banks.
- **3.** H3: Higher leverage is negatively associated with dividend payouts in Ethiopian private banks.
- 4. H4: Banks with higher growth of gross earnings tend to have lower dividend payouts.
- 5. H5: Larger banks are more likely to distribute higher dividends.
- **6. H6:** The previous year's dividend payout positively influences the current year's dividend payout [7].

Ethiopian private banks provide a unique context for examining dividend payout policies due to rapid growth, regulatory changes, and specific financial practices. The Ethiopian banking sector faces unique challenges, including limited financial market depth, evolving governance standards, and restricted foreign ownership. These characteristics make it an essential focus for research to understand how distinctive local factors influence dividend decisions. By studying Ethiopian private banks, this research fills a significant gap in understanding the determinants of dividend policies in an emerging market context. The findings will provide valuable information for local and international investors, regulators, and bank managers, supporting better financial decisionmaking and policy development [8].

- 1. Condensed background and history: Focused on essential points about the complexity of dividend policies and the importance of studying them in the Ethiopian context.
- **2. Streamlined subject introduction:** Made the introduction more concise, clearly stating the context and relevance of the study to Ethiopian banks.
- **3. Shortened study details:** Reduced the length of the study description while retaining critical statistical data and findings.
- 4. Clarified study limitations and research gap: Provided concise descriptions of the limitations and the research gap.
- **5.** Condensed hypotheses and justification: Made hypotheses and justification more direct, maintaining clarity and relevance [9].

Literature Review

Dividend payout policies are crucial for corporate financial strategy, especially in the banking sector, where they reflect a

firm's profitability, liquidity, and overall financial stability. Understanding these policies is challenging due to the complex interplay of internal and external factors. This review discusses the main theoretical frameworks and recent empirical findings regarding dividend payout ratios (DPR) in Ethiopian private banks [10].

Theoretical frameworks of dividend payout ratio

Several theories help explain the rationale behind dividend payout decisions. The Miller and Modigliani Dividend Irrelevance Theory (1961) suggests that in an ideal market, without taxes, bankruptcy costs, or asymmetric information, a firm's dividend policy does not impact its market value. In such a market, a firm's value is determined solely by its earnings potential and business risk [11]. Contrary to this, the Bird-in-the-Hand Theory argues that investors prefer dividends over future capital gains due to the uncertainty of potential returns. Hence, firms offering higher dividends may achieve higher market valuations [12]. The Signaling Theory proposes that dividend announcements provide critical information about a firm's profitability and prospects. An increase in dividends is often seen as a positive signal of management's confidence in the firm's future earnings [13].

Meanwhile, the Agency Theory suggests that dividends can reduce conflicts between managers and shareholders by limiting the free cash flow available to managers, thereby curbing potential wasteful expenditures. The Pecking Order Theory further posits that firms prefer internal financing over external options. When firms have excess cash, they might distribute it as dividends rather than invest in new projects, influencing the dividend payout ratio [14]. Several studies have examined the determinants of dividend payout ratios in Ethiopian banks. It was found that profitability, liquidity, and earnings volatility are key factors influencing dividend payouts in Ethiopian commercial banks. Specifically, banks with higher profitability and liquidity tend to have higher dividend payouts, while those with more volatile earnings are likely to distribute lower dividends. This finding aligns with the Bird-in-the-Hand Theory, indicating that stable banks are more inclined to pay dividends to attract risk-averse investors [15].

Theory investigated how ownership structure impacts dividend payouts and found that concentrated ownership negatively affects DPR. This supports the Agency Theory, as it suggests that major shareholders might prefer retaining earnings for reinvestment rather than distributing them as dividends, thereby maintaining greater control over the firm's resources [13]. A study explored the influence of growth opportunities on dividend payouts, revealing that firms with higher growth potential generally maintain lower dividend payout ratios (DPRs). This trend underscores the preference for reinvesting earnings to fuel growth, aligning with the Pecking Order Theory, which suggests that firms prioritize internal financing over distributing dividends when pursuing growth [16].

Study examined the influence of macroeconomic factors like inflation and GDP growth on dividend policies in Ethiopian private banks. The study found that these external factors significantly shape dividend decisions, indicating that banks adjust their payout strategies based on economic conditions to maintain financial stability [17]. A study on Ethiopian banks examined how regulatory frameworks impact dividend policies, revealing that regulations like capital adequacy and reserve requirements significantly affect these decisions. Stricter regulations typically result in more conservative dividend payout policies. Recent research has explored additional factors that influence dividend payout ratios in Ethiopian banks.

One study analyzed the effects of digital banking and technological advancements, finding that banks heavily investing in digital platforms tend to distribute lower dividends due to increased reinvestment needs. Another study focused on board characteristics, such as size and independence, and their impact on dividend decisions. It was found that banks with larger and more independent boards are more inclined to distribute higher dividends, suggesting that robust governance aligns management actions with shareholder interests [18]. These findings indicate that both regulatory frameworks and internal bank characteristics significantly shape dividend policies, reflecting diverse strategic priorities within the sector (Figure 1).

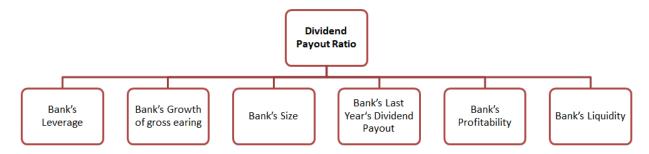


Figure 1. Conceptual model designed by authors.

Methodology

This study aims to identify the internal determinants affecting the dividend payout ratios (DPR) of selected private commercial banks in Ethiopia by examining specific bank-related factors. A quantitative research approach was employed to provide empirical evidence through statistical analysis of these determinants, ensuring an objective understanding of their impact on dividend payout decisions [19]. An explanatory research design was adopted to investigate the relationships between several independent variables and the DPR of the banks. The study focuses on six key variables:

- 1. **Profitability (PROF):** Measured by return on assets (ROA), calculated as net income divided by total assets, expressed as a percentage.
- **2. Liquidity (LIQ):** Assessed by the ratio of loans and advances to total assets, represented as a percentage.
- **3. Leverage (LEV):** Defined as the ratio of total liabilities to total assets, measured in percentage terms.
- **4. Growth (GRO):** Estimated by the percentage change in revenues (both interest and non-interest) year-over-year.
- **5. Bank size (SIZE):** Measured by the natural logarithm of total assets to control for scale effects.
- **6. Previous year's dividends (PYD):** Expressed as a percentage of the dividend payout from the prior year [20].

The study population includes all private banks operating in Ethiopia. A sample of 11 private banks was selected using a purposive sampling technique, based on the availability of consistent data over eight years (2015–2023). The sample represents the more established banks in Ethiopia, ensuring their market share reflects broader industry practices. Selection criteria included the banks' operational duration and their ability to provide continuous data for the period under study [8]. The sample captures significant market trends, offering insights into dividend payout practices across the Ethiopian banking sector.

The study relies on secondary data sourced from the annual financial reports of the selected banks and publications from the National Bank of Ethiopia. The data covers the years 2015 to 2023, providing a robust dataset that includes both cross-sectional and time-series elements [10]. This comprehensive data collection approach enables a thorough analysis of how various internal factors influence dividend payout decisions over time. Panel data regression was employed to analyze the relationships between the dependent variable (DPR) and the independent variables (PROF, LIQ, LEV, GRO, SIZE, and PYD). The panel data approach combines both cross-sectional and time-series data, allowing for a more nuanced understanding of dynamic relationships [21]. A Hausman test was conducted to determine whether a fixed or random effects model was more appropriate. The results favoured a fixed effects model, which accounts for individual bank characteristics that may correlate with the independent variables. This approach controls for unobserved heterogeneity, ensuring that any differences in DPR are attributable to the variables under study rather than unobserved factors. To validate the model, key assumptions of the Classical Linear Regression Model (CLRM)-including normality, homoscedasticity, autocorrelation, and multicollinearity-were tested to ensure reliable results [22].

Results

The descriptive statistics and correlation analysis offer key insights into the financial characteristics of the 11 private banks in Ethiopia selected for this study. The results indicate that these banks generally show high dividend payouts, strong profitability, low leverage, and robust liquidity [23]. Additionally, the banks exhibit positive growth in gross earnings and relatively large asset sizes, which are crucial factors influencing their dividend payout policies (Tables 1 and 2).

	DPR	ROA	LIQ	LEV	GRO	FS	PYD
Mean	4.68683	4.6711663	4.04692	0.006575	0.037713	5.152984	5.156347
Maximum	8.2933	7.3849	7.3854	0.0572	0.0953	9.7428	0.2977
Minimum	1.1805	1.0556	0.2455	0.0012	0.0053	1.0556	1.1805
Std. Dev.	2.07988	2.36526	2.0736422	0.010025	0.02777	2.36265	2.10892
Observations	110	110	110	110	110	110	110
Table 2. Descripti	ve statistics resu	lt. ROA	LIQ	LEV	GRO	FS	PYD
DPR	1						
ROA	0.684360	1					
LIQ	0.507014	0.531599	1				
LEV	- 0.051212	0.202425	0.094204	1			
GRO	- 0.224712	0.628997	0.476266	-0.041853	1.		
FS	0.623026	0.816570	0.438338	0.165390	0.525631	1.	
PYD	0.787987	0.559792	0.324806	0.027196	0.173408	0.475956	1

Table 1. Descriptive statistics result.

The correlation matrix revealed significant correlations among several independent variables, suggesting the presence of multicollinearity. To address this issue, the Variance Inflation Factor (VIF) was calculated for each variable. Variables with a VIF exceeding the threshold of 10 were examined closely to determine if they significantly impacted the model's accuracy. The variables contributing to high multicollinearity were either adjusted or combined to mitigate their effects, thereby enhancing the reliability of the coefficient estimates [24]. The regression analysis used an Ordinary Least Squares (OLS) model to assess the relationship between the Dividend Payout Ratio (DPR) and six explanatory variables: Profitability (PROF), Liquidity (LIQ), Leverage (LEV), Growth of Gross Earnings (GRO), Bank Size (SIZE), and Previous Year's Dividend Payout (PYD) (Figure 2) [25]. The model demonstrated a strong fit, explaining 78% of the variation in DPR among the banks (Table 3).

Table 3. Regression Result.

Dependent Variable: Dividend Payout	Ratio (DPR)			
Method: Least Squares				
Date: 06/20/24 Time: 00:27				
Sample: 1 110				
Included observations: 110				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
Profitability (PROF)	0.298399	0.08934	3.340048	0.0012***
Liquidity (LIQ)	0.234192	0.056775	4.124917	0.0001***
Leverage (LEV)	-19.28864	10.28332	-1.875721	0.0635**
Growth of gross earning (GRO)	-20.92513	4.983047	-4.199264	0.0001***
Size (SIZE)	0.151411	0.07102	2.131934	0.0354**
Previous Year's Dividend Payout	0.484547	0.058994	8.213434	0.0000***
(PYD)				
C	0.164335	0.302582	0.543109	0.5882
R-squared	0.777364	Mean dependent var		4.868684
Adjusted R-squared	0.764395	S.D. dependent var		2.079886
S.E. of regression	1.009559	Akaike info criterion		2.918425
Sum squared resid	104.9785	Schwarz criterion		3.090274
Log likelihood	-153.5134	Hannan-Quinn criter.		2.988128
F-statistic	59.93982	Durbin-Watson stat		1.421435
Prob(F-statistic)	0			

Dependent Variable: Dividend Payout Ratio (DPR), statistical significance conventionally with asterisks representing confidence at** 1%, *5%, and 10% levels

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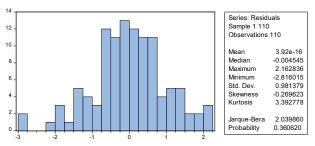


Figure 2. OLS assumptions Result.

The regression results indicated the following:

- **Profitability (PROF):** A 1-unit increase in profitability is associated with a 0.298399-unit rise in DPR.
- Liquidity (LIQ): A 1-unit increase in liquidity corresponds to a 0.234192-unit increase in DPR.
- Leverage (LEV): A 1-unit rise in leverage leads to a decrease of 19.28864 units in DPR, indicating a negative relationship between leverage and dividend payouts.
- Growth of Gross Earnings (GRO): A 1-unit increase in growth results in a 20.92513-unit decrease in DPR, suggesting that banks focusing on growth may reinvest earnings instead of distributing them as dividends.
- **Bank Size (SIZE):** A 1-unit increase in size contributes to a 0.151411-unit increase in DPR.
- **Previous Year's Dividend Payout (PYD):** A 1-unit increase in the previous year's DPR leads to a 0.484547-unit increase in the current year's DPR, highlighting the trend of maintaining consistent dividend policies [26].

The Durbin-Watson (DW) statistic revealed evidence of autocorrelation in the residuals, which could affect the OLS estimates' validity. To correct this, the Cochrane-Orcutt procedure was applied, successfully addressing the autocorrelation and improving the model's reliability [12]. By effectively managing multicollinearity and autocorrelation issues, the study ensures the robustness and validity of the findings on the determinants of dividend payout ratios in Ethiopian private banks [22].

Discussion

The study's findings on the determinants of dividend payout ratios (DPR) among Ethiopian private banks show similarities and some differences when compared to findings from other countries. Profitability (PROF), with a coefficient of 0.298399, indicates that higher profitability is associated with increased dividend payouts. This result aligns with Sharma and Garg (2022), who observed a similar positive effect in Indian banks [27]. Liquidity (LIQ) also shows a positive relationship with DPR (coefficient of 0.234192), supporting the findings of Haron et al. (2008) in Malaysia, which suggest that banks with greater liquidity are more inclined to distribute dividends [28].

The negative relationship between leverage (LEV) and DPR, as indicated by a coefficient of -19.28864, confirms earlier studies by Chen and Steiner (2005) in the U.S and Haron et al. (2017) in Malaysia, which found that higher debt levels discourage dividend payments [29,28]. Similarly, the negative impact of growth in gross earnings (GRO) on DPR (coefficient of -20.92513) suggests that banks emphasizing growth may

prioritize reinvestment over dividend distribution, consistent with Hasan et al. (2019) in China [30]. The positive coefficient for bank size (SIZE) of 0.151411 aligns with Pamukcu (2014) in Turkey, indicating that larger banks tend to have more stable dividend policies [31]. Additionally, the positive impact of the previous year's dividend payout (PYD) on the current year's DPR (coefficient of 0.484547) is consistent with Yimam (2016) in Ethiopia, suggesting a trend towards maintaining or increasing dividends year over year [32].

An unexpected finding is the strong negative impact of growth on dividends, which may indicate a conservative dividend policy among growth-oriented Ethiopian banks, possibly due to market uncertainties. The study is limited by its small sample size of 11 banks and the exclusion of external factors like macroeconomic conditions, which could influence dividend policies. Future research should expand the sample size and include a wider range of variables for more comprehensive insights. These findings have practical implications for bank managers and policymakers, emphasizing the need to balance profitability, liquidity, and growth strategies to maintain stable dividend payouts and build investor confidence [33].

Conclusions

In conclusion, this study reveals that various internal factors such as profitability, liquidity, leverage, growth of gross earnings, bank size, and the previous year's dividend payout significantly influence the dividend payout ratio among private banks in Ethiopia. These findings not only corroborate existing literature from diverse countries, highlighting the global relevance of these factors but also provide a framework for bank managers to formulate dividend policies that align with their financial strategies and stakeholder expectations. Future research could explore the impact of external factors, such as economic conditions, regulatory changes by the National Bank of Ethiopia, or market competitiveness, on dividend policies in the banking sector. Additionally, comparative studies involving private and public banks or extending the analysis to different emerging markets could yield deeper insights into the dynamics of dividend payouts. This holistic approach would further enrich the understanding of dividend policy determinants and their implications for financial stability and shareholder value creation.

Disclosure statement

The authors affirm that there are no competing interests that could influence the findings or conclusions presented in this research.

References

- Jiraporn P, Kim JC, Kim YS. Dividend payouts and corporate governance quality: An empirical investigation. Financial Review. 2011; 46(2):251-279. https://doi.org/10.1111/j.1540-6288.2011.00299.x
- 2. Kassie WD. The Determinants of Dividend Payout: Evidence from Private Banks in Ethiopia. Research Journal of Finance and Accounting. 2021;12(3):23-35. https://doi.org/10.7176/RJFA/12-3-03
- 3. Mitiku E. Determinants of Dividend payout: An Empirical Study in Ethiopian Private Banks.
- Kumar DB. Determinants of dividend payout ratio: empirical evidence from Ethiopian private banks. Available at https://papers.srn.com/sol3/papers.cfm?abstract_id=3826752
- 5. Zelalem BA, Abebe AA. Balance sheet and income statement effect on dividend policy of private commercial banks in Ethiopia. Cogent

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Econ Financ. 2022;10(1):2035917. https://doi.org/10.1080/23322039.2022.2035917

- Zelalem D. Determinants of dividend payout policy of commercial banks: Evidence from selected commercial banks in Ethiopia. Int J Financ Bank Res 2021;7:29.
- https://doi.org/10.11648/j.ijfbr.20210702.11
- 7. Merin MA. Determinants of bank profitability in Ethiopia: A case study of private commercial banks. Research Journal of Finance Accounting. 2016;7(7):28-43.
- Kinfe T. Determinants of dividend payout: An empirical study on bank industry in Ethiopia. LAP LAMBERT Academic Publishing; 2013.
- Bayisa Y. Determinants of Dividend Payout in Private Insurance Companies of Ethiopia. Int J Adv Res Sci Technol 2023;12(8): 1064-1070. https://ssrn.com/abstract=4589807
- 10. Adimasu NA. Dividend policy and firm's profitability: Evidence from Ethiopian private insurance companies. Journal of Finance and Accounting. 2019;7(4):116-121.

https://doi.org/10.11648/j.jfa.20190704.12

- 11. Ben-David I. Dividend policy decisions. Behavioral Finance. 2010;435. https://doi.org/10.1002/9781118258415.ch23
- 12. Jain P, Chu QC. A Global Investigation of Dividend Yields: Shareholder Demand, Agency Problems, and Market Quality. InMidwest Finance Association 2012 Annual Meetings Paper 2011. https://dx.doi.org/10.2139/ssrn.1929183
- Ali A, Urcan O. Dividend increases and future earnings. Asia-Pac J Account E. 2012;19(1):12-25.
 - https://doi.org/10.1080/16081625.2012.668052
- 14. Goossens W. Investigating the Relevance of the Pecking Order Theory and the Agency Costs of Free Cash Flow Theory in the Eyes of Investors.
- Mamo AA. Determinants of Commercial Banks Profitability: Empirical Evidence from Ethiopian Commercial Banks. https://doi.org/10.7176/RJFA/11-15-04
- 16. Agarwal N, Chakraverty A. Growth opportunities, information asymmetry, and dividend payout: Evidence from mandatory IFRS adoption. European Accounting Review. 2023 Jan 1;32(1):113-139. https://doi.org/10.1080/09638180.2021.1938622
- 17. Yigermal ME. The determinants of private commercial banks profitability: In the case of selected Ethiopian private banks. J Econ Behav Organ. 2017;5(1):25-35.

https://doi.org/10.11648/j.ijebo.20170501.15

- 18. Lee SW. Bank characteristics and payout policy. Asian Social Science. 2014;10(1):12. http://dx.doi.org/10.5539/ass.v10n1p12
- Teshome E, Debela K, Sultan M. Determinant of financial performance of commercial banks in Ethiopia: Special emphasis on private commercial banks. Afr J Bus Manag. 2018;12(1):1-10. http://dx.doi.org/10.5897/AJBM2017.8470
- 20. Nuriatullah N. Does Financial Ratios and Company Size Affect Dividend Payout Ratio? EkBis: Jurnal Ekonomi dan Bisnis.

2020;4(1):393-412. https://doi.org/10.14421/EkBis.2020.4.1.1246

- Ehi-Oshio OU, Adeyemi A, Enofe AO. Determinants of corporate profitability in developing economies. Eur J Bus Manag. 2013;5(16):42-50.
- 22. Raza SH, Shahzadi H, Akram M. Exploring the determinants of financial development (using panel data on developed and developing countries). J Financ Econ. 2014;2(5):166-172. https://doi.org/10.12691/jfe-2-5-6
- 23. Assfaw AM. Determinants of the financial performance of private commercial banks in Ethiopia: Bank specific factors analysis. Global Journal of Management and Business Research. 2018;18(3):64-77.
- 24. Kyriazos T, Poga M. Dealing with multicollinearity in factor analysis: the problem, detections, and solutions. Open J Stat. 2023 ;13(3):404-424. https://doi.org/10.4236/ojs.2023.133020
- Malik F, Gul S, Khan MT, Rehman SU, Khan M. Factors influencing corporate dividend payout decisions of financial and non-financial firms. Research Journal of Finance and Accounting. 2013;4(1):35-46.
- 26. Pattiruhu JR, Paais M. Effect of liquidity, profitability, leverage, and firm size on dividend policy. J of Asian finance, economics, and bus. 2020;7(10):35-42.

https://doi.org/10.13106/jafeb.2020.vol7.no10.035

 Sharma AD, Garg PK. A Study on Pre- and Post-Merger Impact of Punjab National Bank. International journal of economic perspectives. 2022;16(8):30-39.

https://ijeponline.org/index.php/journal/article/view/464

- 28. Haron S, Nursofiza Wan Azmi W. Determinants of Islamic and conventional deposits in the Malaysian banking system. Managerial Finance. 2008;34(9):618-643. https://doi.org/10.1108/03074350810890976
- 29. Chen CR, Steiner TL. Managerial ownership and agency conflicts: A nonlinear simultaneous equation analysis of managerial ownership, risk-taking, debt policy, and dividend policy. Financial review. 2005;34(1):119-136.

https://doi.org/10.1111/j.1540-6288.1999.tb00448.x

- 30. Hasan S, Shi W, Zhu X, Abbas S. Monitoring of land use/land cover and socioeconomic changes in South China over the last three decades using Landsat and nighttime light data. Remote Sens. 2019;11(14):1658. https://doi.org/10.3390/rs11141658
- 31. Kalaycı E, Pamukçu T. Assessing the drivers of R&D activities of firms in developing countries: evidence from Turkey. Eur J Dev Res. 2014;26:853-869. https://doi.org/10.1057/ejdr.2014.12
- 32. Yimam CD. Internal Determinants of Dividend Payout in Private Commercial Banks in Ethiopia (Doctoral dissertation, Addis Ababa University Addis Ababa, Ethiopia). 2016.
- 33. Hordofa DF. Revisiting the relationship between board structure and bank performance in Ethiopian commercial banks. Cogent Bus Manag. 2023;10(2):2240554.

https://doi.org/10.1080/23311975.2023.2240554

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