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Aspects of assessing the financial performance of commercial banks in Armenia within the scope of ESG

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Abstract

This study examines the relationship between financial performance and ESG (Environmental, Social, and Governance) practices within Armenia's banking sector. Focusing on Ardshinbank, Ameriabank, and ACBA Bank over the 2017–2024 period, the research employs a mixed-method approach combining traditional financial metrics (ROA, ROE, NIM, C/I) with advanced tools such as Multi-Criteria Decision Analysis and regression modeling. The findings reveal that banks with stronger ESG integration exhibit enhanced financial resilience, improved cost efficiency, and more stable long-term profitability. Notably, high governance scores are associated with stronger dividend policies and increased free cash flow. The results demonstrate that ESG is not merely a compliance framework but a driver of competitive advantage, particularly in emerging markets. The study underscores the necessity of embedding ESG indicators into standard performance assessments and highlights their growing role in attracting international funding. As Armenia's financial institutions adapt to sustainability trends, ESG-aligned strategies may significantly enhance market positioning, stakeholder trust, and risk mitigation. These insights offer practical implications for bank executives and policymakers seeking to align financial goals with sustainable development priorities.

Keywords: Banking system, ESG, Financial results, Innovative approaches, Republic of Armenia.

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1. Introduction

In recent years, interest in Environmental, Social, and Governance (ESG) principles has significantly increased across the financial sector. These principles expand the scope of evaluation beyond traditional financial indicators by emphasizing sustainable and responsible development. In the context of global sustainability trends and Armenia's evolving financial system, there is a critical need to examine the factors influencing the financial performance of local commercial banks. This study analyzes the operations of Armenia's leading banks Ardshinbank, Ameriabank, and ACBA Bank with the objective of rethinking conventional performance assessment frameworks by incorporating ESG dimensions through modern analytical techniques. The issue under investigation stems from the growing complexity and ambiguity in how ESG initiatives affect financial results. International evidence reflects both positive and delayed effects [1-3] while local studies emphasize the gradual nature of ESG adoption and its potential to enhance profitability through stakeholder trust [4].

However, the Armenian academic and professional community still lacks in-depth, systematic research addressing the multidimensional and time-sensitive impacts of ESG integration. This study aims to bridge this gap by evaluating how ESG components individually and collectively influence financial leverage, profitability, investor sentiment, and liquidity. The central research questions are structured around five hypothesized impact points, both positive and negative, across quantitative and qualitative dimensions. These include effects on leverage, ROA, P/E ratio, dividend policy, and free cash flow. The study proceeds in several key steps: selection of ESG and financial indicators; diagnostic testing for multicollinearity; application of MCDA and clustering techniques; regression modeling using the Ordinary Least Squares (OLS) method; and interpretation of the ESG-financial performance nexus in the Armenian context [1].

2. Literature Review

The relationship between ESG integration and financial performance has been extensively studied in recent years, with mixed results. Irina, et al. [1] highlight the inconsistent effects of ESG components, noting that while environmental initiatives often improve performance, social measures may constrain key financial metrics due to their cost and complexity. This complexity underscores the need for more targeted research, particularly in emerging markets. International empirical evidence supports a generally positive association. Irina, et al. [1] in a study of over 1,500 UK financial institutions, a strong correlation was reported between ESG scores and both market capitalization and core performance indicators. Similarly, Friede, et al. [3] demonstrate that firms with high ESG ratings dominate the large-cap sector, reflecting investor preferences for transparency and long-term sustainability. Joscha et al. [2], however, it is argued that the impact of ESG adoption may follow a U-shaped trajectory, where benefits emerge only after a certain threshold is met. This lag effect is particularly relevant for institutions in transition economies, such as Armenia.

Within Armenia's academic context, a growing consensus suggests that the gradual implementation of ESG strategies can promote long-term profitability without compromising operational goals [4]. However, data-driven research exploring the simultaneous and differentiated effects of ESG dimensions remains limited, especially in the Armenian context. This study seeks to fill that gap. Further contributing to this discussion are recent findings indicating strong performance growth in Armenian banks. For instance, one bank's capital share nearly quadrupled, while its net profit rose more than twentyfold, largely driven by broader sectoral activation amid geopolitical shifts, particularly the Russia–Ukraine conflict [5]. These outcomes coincide with a shift in management philosophy, one that increasingly aligns with sustainability and long-term strategic goals. Regression models were developed to interpret the link between ESG adoption and financial outcomes [6], Taking into account demographic and institutional factors. However, the most decisive variables remain the perceived utility of ESG, organizational attitudes toward sustainability, and internal motivation to embed ESG principles [7].

Although the early stages of ESG implementation may reduce free cash flow due to upfront costs, multiple studies suggest that in the long run, these practices result in cost optimization, productivity gains, and efficient resource use [8]. In investment terms, ESG factors tend to positively influence dividend yield and free cash flow, while slightly lowering the P/E ratio, reflecting reduced risk and volatility [9]. A deeper decomposition of ESG elements also points to the rise of responsible investing, where decisions are increasingly driven by non-financial values such as social equity and environmental stewardship [10]. Moreover, by using panel data methods, recent studies have confirmed the long-term, statistically significant influence of ESG on value creation metrics. The identified regression patterns offer a practical framework for application across companies, business groups, or even regional strategic planning [11]. Ultimately, while ESG integration requires transformational effort and resources, it empowers organizations to pursue flexible, resilient, and socially responsible governance, enhancing both financial robustness and trust among stakeholders [12].

3. Impact Assessment of Proposed Points

Point 1 (Quantitative / Positive): There is a generally positive but nuanced relationship between ESG adoption and financial leverage. Companies with stronger environmental sustainability practices (E) tend to receive more favorable borrowing conditions due to lower perceived risk, resulting in reduced leverage and improved capital structure. This indicates that ESG integration can enhance creditor confidence. However, the impact is not entirely unambiguous, particularly when it comes to the social (S) dimension, where poor implementation or lack of transparency may elevate credit risk and complicate portfolio management.

Point 2 (Quantitative / Negative): In some cases, implementing ESG initiatives correlates with a decrease in Return on Assets (ROA). This might indicate temporary drops in operational efficiency due to initial costs of adaptation, staff training, or restructuring needed to meet ESG standards.

Point 3 (Quantitative / Positive): A boost in a company's ESG rating usually relates positively to the Price-to-Earnings (P/E) ratio. This likely reflects investors' favorable view of the firm's long-term sustainability, reduced exposure to non-financial risks, and improved market valuation over time.

Point 4 (Qualitative / Negative): ESG-driven strategies can exert downward pressure on dividend payouts, especially in companies that allocate more profits toward environmental cleanup, community involvement, or the development of green technologies. While these investments build long-term value, they may limit free cash flow available for shareholder returns in the short term.

Point 5 (Qualitative / Negative): Carrying out ESG programs may reduce free cash flow due to rising costs related to compliance, sustainability reporting, and environmental or social projects. Although these expenses are strategic, they can restrict liquidity, especially during the initial stages of ESG integration.

4. Materials and Methods

This study adopts a mixed-method approach to assess the impact of ESG practices on the financial performance of Armenian commercial banks. The analysis focuses on three leading institutions, Ardshinbank, Ameriabank, and ACBA Bank during the period 2017–2024. Data collection involved primary data obtained from publicly available financial statements, ESG disclosures, and corporate sustainability reports published by the banks. Supplementary data were collected from regulatory sources, including the Central Bank of Armenia, and cross-referenced with third-party ESG rating databases and sectoral benchmarks. Analytical methods utilized both quantitative and qualitative tools. Classical performance metrics such as Return on Assets (ROA), Return on Equity (ROE), Net Interest Margin (NIM), and Cost-to-Income ratio (C/I) served as dependent variables. Independent variables included ESG indicators and control factors (e.g., bank size, ownership structure). To evaluate relationships and patterns, the following methods were applied: Multi-Criteria Decision Analysis (MCDA), used to assign weights and ranks across ESG and financial dimensions, allowing for a composite performance assessment; Classification and Cluster Analysis, applied to group banks with similar ESG-financial profiles and detect structural similarities or anomalies; Regression Analysis (OLS), conducted to test the magnitude and direction of ESG variables on financial performance. Multicollinearity was addressed using the Variance Inflation Factor (VIF) testing. Panel data testing involved fixed and random effects models; however, the OLS method was retained due to its better statistical robustness in this case.

Methodological Contribution: Unlike prior studies that often focus on a single ESG dimension (e.g., environmental or governance alone) or use static cross-sectional models, this research adopts an integrated multi-dimensional ESG framework and longitudinal data spanning eight years. Moreover, the use of MCDA and clustering adds depth by capturing both relative performance and inter-bank differentiation, an approach rarely applied in the Armenian context. The methodological framework of the study is built upon the use of the following analytical tools:

Multi-Criteria Decision Analysis (MCDA) is applied for a comprehensive evaluation and comparative ranking of banks based on a combination of financial and non-financial indicators, enabling a more balanced interpretation of performance.

Classification and cluster analysis are used to identify groups of banks with similar operational characteristics and to uncover hidden patterns in data structures.

The methodological stages of the study include:

- Variable selection — based on the relevance of financial, ESG, and control indicators to the stated research objectives.
- Multicollinearity testing — VIF (Variance Inflation Factor) was calculated to eliminate redundant factors among independent variables.
- Regression model construction (OLS) — financial or investment performance indicators served as dependent variables, while ESG and control variables were used as independent ones; the model was estimated using the Ordinary Least Squares method.

Panel model testing — At the preliminary stage, both fixed effects and random effects models were tested. However, due to the low statistical significance of coefficients and high values of information criteria, the OLS method was selected as the primary tool, given its robustness and widespread use in empirical research.

Table 1.
Regression analysis indicator system.

Index	Calculation method	Source	Conventional notation
Explanatory variables – Financial condition	Undetermined	Undetermined	Undetermined
Debt-to-Equity Ratio	DE = (Long-term Liabilities + Short-term Liabilities) / Equity	D_E	Undetermined
Return on Assets (ROA)	ROA = Net Profit / Total Assets	ROA	Undetermined
Dependent Variables – Investment Indicators	Undetermined	Undetermined	Undetermined
Price-to-Earnings Ratio (P/E)	P/E = Price per Share / (Net Profit / Number of Shares)	SmartLab, Investing, TradingView	P_E
Dividend Yield	DY = Dividends / Market Price	SmartLab, Investing, TradingView	D_Y
Free Cash Flow to the Firm (FCFF)	FCFF = Operating Cash Flow – Capital Expenditures + Interest	SmartLab, IFRS financial statements of companies	FCFF
Independent Variables – ESG Factors	RAEX-based Assessment	Undetermined	Undetermined
Integrated ESG Score (RAEX Methodology)	Composite ESG Score based on RAEX Methodology	Rank_ESG	Undetermined
Environmental Component Score (E) – RAEX Methodology	Environmental Component, RAEX	Undetermined	Undetermined
Social Component Score (S) – RAEX Methodology	Social Responsibility Component, RAEX	Undetermined	Undetermined
Governance Component Score (G) – RAEX Methodology	Corporate Governance Component, RAEX	Undetermined	Undetermined
Independent Variables – Control Indicators	Undetermined	Undetermined	Undetermined
Revenue	Total revenue from all activities	SmartLab, IFRS financial statements of companies	Rev
Net Profit	Net profit according to financial statements	NP	Undetermined
Total Assets	Total assets on the balance sheet	As	Undetermined
Return on Equity (ROE)	ROE = Net Profit / Equity	ROE	Undetermined
Operating Expenses	Total operational costs of the company	OPEX	Undetermined

The integration of ESG ratings, as presented in the table, is interpreted as a key component of a sustainable development strategy, fostering a culture of responsible lending and managing medium-term risks. Within the framework of this analysis, an innovative model for the quantitative interpretation of ESG is proposed, developed based on the RAEX methodology. This model can be universally applied not only within the banking sector but also across other financial institutions for purposes such as credit scoring, investment analysis, and internal compliance procedures.

Table 2.
Assessment methodology for Table 1 based on the RAEX ESG model.

Component	Indicator	Average Score (example)	Weight	Weighted Value
E – Environment	Rank_E	4.2 / 5.0	30%	1.26
S – Social	Rank_S	3.8 / 5.0	30%	1.14
G – Governance	Rank_G	3.5 / 5.0	40%	1.40
Overall ESG Rating	—	—	—	3.80 / 5.0

Within the proposed model, the overall ESG rating of 3.80 is interpreted as an indicator of an acceptable level of integration of responsible banking governance principles. This result reflects the presence of fundamental sustainability mechanisms and adherence to key standards in the areas of environmental responsibility, social impact, and corporate governance. The following qualitative threshold values may serve as indicative benchmarks:

Table 3.
Example model of qualitative thresholds.

->4.5	Green: Leading good borrower
3.5–4.5	Stable borrower
<3.5	Risk borrower

Table 4.
Integration of qualitative thresholds using the example of credit superiority.

Indicator	Numeric Value	Standard Threshold	Assessment
ROA = Profit / Assets	5.5%	>3%	✔ Satisfactory
DE = Liabilities / Equity	1.2	<2.0	✔ Acceptable
FCFF = Operating Cash Flow – CapEx + Interest	125 million AMD	>100 million AMD	✔ Stable
ESG Score	3.80 / 5.0	>3.5	✔ Stable

In the case under consideration, the borrower may be classified as a client with a stable level of creditworthiness, which provides grounds for offering preferential lending terms such as a reduced interest rate or an extended credit line. This confirms the applicability of ESG assessment not only to clients but also in a broader context: in evaluating business partners, investment initiatives, and internal corporate governance mechanisms.

Within the scope of investment analysis, project financing, and equity transactions, there is an objective need to implement the following measures:

- Establishing differentiated debt burden conditions based on the ESG rating of the counterparty;
- Introducing a management team performance assessment system linked to the G (Governance) component;
- Developing and approving an internal policy for integrating ESG ratings into the bank's business processes;
- Regularly calculating the ESG profile of each corporate client;
- Publishing an aggregated ESG index through the bank's external communication channels (including the official website and annual report).

5. Results and Discussion

Traditional methods of assessing the financial performance of Armenia's leading banks have been reinterpreted in this study, with a focus extending beyond numerical indicators to the underlying structural and operational dimensions of their activities.

The integration of ESG (Environmental, Social, and Governance) principles aligns closely with the United Nations' Sustainable Development Goals (SDGs), serving as a practical mechanism to advance global sustainability targets. ESG-focused investment strategies support long-term development by promoting responsible corporate behavior, environmental protection, and social inclusion, all of which are embedded in the 2030 Agenda for Sustainable Development. The United Nations' 2024 Global SDG Progress Report reveals alarming trends: only 17% of measurable targets are currently on track, while nearly half (48%) are significantly off course. This underscores the urgent need for stronger ESG adoption to help close these gaps. In this context, Figure 1 illustrates the Seventeen (17) Sustainable Development Goals, while Figure 2 provides a goal-by-goal progress assessment based on available trend data. By integrating ESG standards into financial and corporate systems, stakeholders can directly contribute to reversing stagnation and accelerating progress toward the 2030 targets, especially in developing countries where the risks of inaction are most pronounced.

Figure 1.
Seventeen (17) Sustainable Development Goals (SDGs**).**

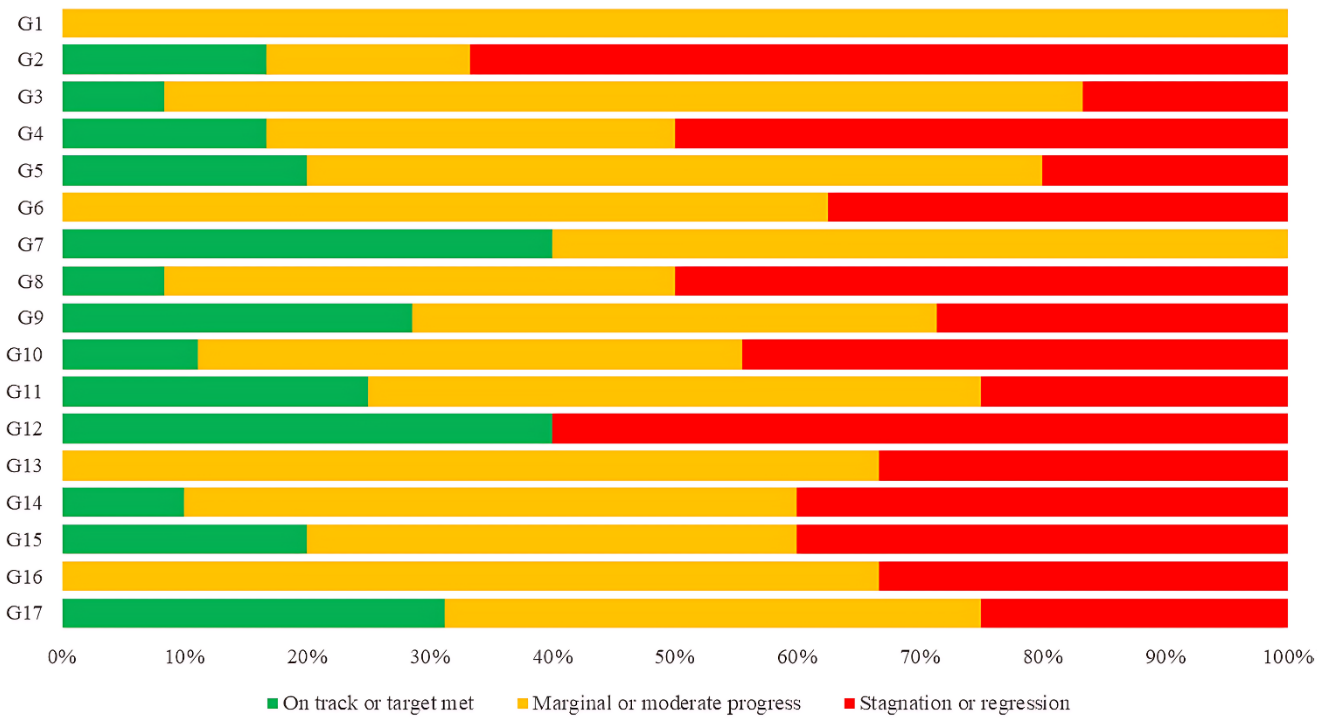

Figure 2.
Progress assessment for the 17 Goals based on assessed targets with trend data, by Goal, 2024 or the latest data (Source: United Nations [13]).

The conclusions drawn and data obtained provide real opportunities for more informed strategic decision-making, the enhancement of risk management systems, and the overall improvement of banking profitability.

Table 5.
Key Financial and Economic Index of the Three Leading Commercial Banks in the Banking System of the Republic of Armenia ***(mln AMD).***

Bank / Indicator	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
"Ardshinbank" CJSC								
Assets	568118	672988	721137	917050	1010410	1557785	1634863	2307218
Equity	66454	65419	77543	86889	100069	145563	189581	322924
Liability	501664	607569	643594	830160	910342	1412222	1445281	1984295
Net profit	5528	6471	9601	10178	13653	62213	61092	132710
"Ameriabank" CJSC								
Assets	677722	779747	968081	1090762	1096387	1251829	1409581	1882508
Equity	69901	89757	101227	109705	128931	172051	195787	256288
Liability	607820	689989	866854	981057	967455	1079778	1213793	1626220
Net profit	7649	10502	12115	9000	19416	44269	46051	60029
"ACBA Bank" OJSC								
Assets	310920	349491	432612	495631	546930	664938	783793	937863
Equity	60303	63689	68642	70509	88193	109402	133110	163118
Liability	250617	285803	363970	425122	458737	555536	650683	774745
Net profit	5564	6247	6955	2724	9813	22570	28392	28366
General banking system								
Assets	4364374	4986448	5828362	6691935	7085515	8390142	9181228	11035279
Equity	686273	748847	824077	878445	917995	1246730	1362720	1779301
Liability	3678101	4237601	5004285	5813490	6167520	7143412	7818508	9255902
Net profit	40368	38355	61292	61582	61781	238234	176712	287303

Source: RA Banking System Main Balance Indicators [14].

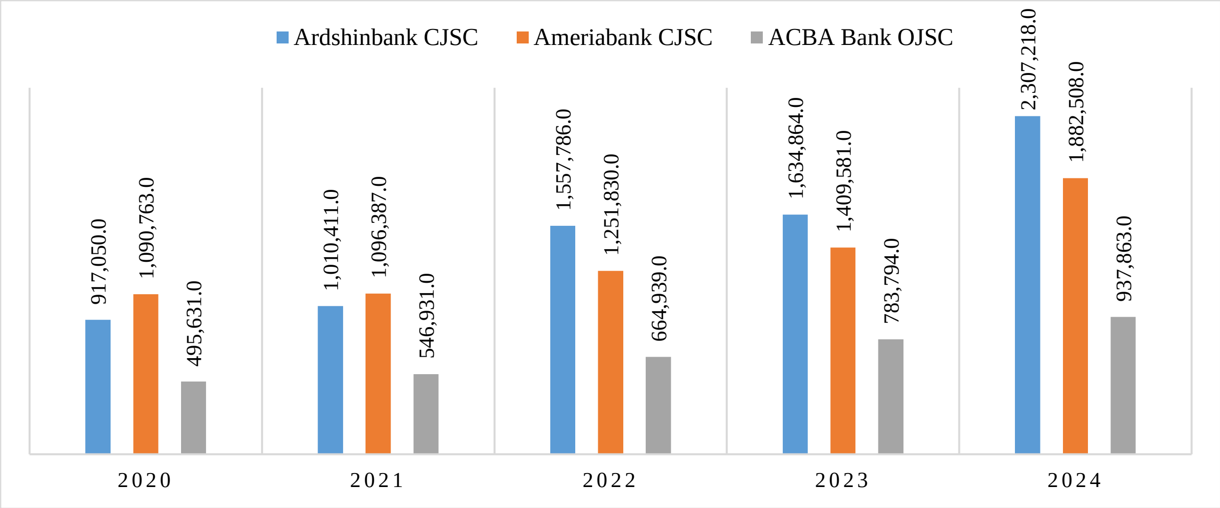

Figure 3.
Indexes Using the Example of Asset Proportions.

The results analysis indicates that during the period, the three largest banks in Armenia, Ardshinbank CJSC, Ameriabank CJSC, and ACBA Bank OJSC, demonstrated stable and confident growth across key financial indicators.

Ardshinbank's total assets increased more than threefold from AMD 568.1 billion to AMD 1,739.1 billion, representing a 201% increase. A particularly notable surge occurred in 2022, with growth exceeding 54%, indicating significant expansion of operations and a strengthening of market position. The bank's capital share nearly quadrupled, while net profit increased more than 23 times, largely driven by the broader activation of Armenia's banking sector amid geopolitical and economic developments, notably the Russia–Ukraine conflict [5].

Ameriabank also achieved substantial asset growth, with an increase of 177.7% and consistent, stable dynamics. Its capital share grew by 266.6%, and net profit increased by 684.5%, reaching AMD 60 billion. As with Ardshinbank, the peak growth occurred in 2022, underscoring the widespread influence of external factors.

ACBA Bank demonstrated more moderate yet consistent results: assets increased by 152%, capital by 170.7%, and net profit by 409.5%. Most of this growth occurred between 2021 and 2023. Despite its smaller scale, the bank maintained a confident position in the market.

A comparative analysis shows that Ardshinbank emerged as the clear leader over the last two years in terms of asset volume, capital, and profit, surpassing its closest competitors. Nevertheless, both Ameriabank and ACBA Bank remain key players, contributing to the overall stability of the banking system.

In terms of market share, Ardshinbank significantly strengthened its position from 2017 to 2024: its share of total assets increased from 13.02% to 20.91%, its capital share from 9.68% to 18.14%, and its profit share more than tripled to 46.19%. The strongest growth was recorded in 2022, driven by aggressive lending and expansion of the client base.

Ameriabank maintained stable positions: its asset share ranged between 15.5% and 17%, and its capital share stood at 14.4% in 2024. Despite moderate fluctuations due to market competition, the bank showed sustained profitability. Its peak profit share was in 2021 (31.43%), but by 2024, it declined to 9.9%.

ACBA Bank also recorded a gradual improvement in its market position: asset share increased from 7.12% to 8.49%, capital share reached 9.16%, and liability share rose to 8.37%. The highest profit share was observed in 2023 (16.07%), before declining to 9.9% in 2024. Nevertheless, despite a smaller operational scale, the bank demonstrated resilience and the ability to recover from external shocks.

Thus, Ardshinbank has become the undisputed market leader in the banking sector, largely due to an aggressive strategy of deposit growth and improved profitability. Ameriabank and ACBA Bank continue their confident development, maintaining a high degree of resilience even under conditions of external economic instability.

The presented data confirm that the growth in profits and assets among Armenia's leading banks is driven not only by traditional financial factors but also by strategic managerial decisions and the adoption of innovative approaches. However, for a deeper and more accurate assessment of banking performance within the ESG paradigm, it is necessary to move beyond classical financial models and apply operational-structural and value-oriented mechanisms.

Modern banking efficiency is increasingly defined by the degree of ESG integration, the use of digital technologies, and the commitment to corporate social responsibility. ESG approaches not only help minimize environmental and social risks but also reduce operational costs, enhance internal efficiency, and shape a positive public image of the bank.

Based on the findings of this research, an important conclusion can be drawn: positive dynamics in financial indicators are not merely a reflection of past success; they also signify a fundamental shift in management philosophy, now rooted in sustainability and long-term strategic vision.

In recent years, the number of academic studies confirming the positive impact of ESG practices on financial stability and investment attractiveness has grown rapidly. Nonetheless, in practice, only a limited number of organizations have adopted sustainable business models, as the commercial returns from ESG adaptation are not always immediate or clearly measurable. Moreover, the causal impact between ESG initiatives and financial outcomes remains insufficiently explored, especially within Armenian academic and applied literature.

This highlights the importance of continued research aimed at identifying the influence of ESG factors on financial performance, investment activity, and management decisions in the banking and financial sectors.
Within the scope of this study, the following key objectives were addressed:

- A comprehensive review of theoretical literature on the impact of ESG factors on public and financial organizations was conducted.
- Hypotheses were formulated regarding potential correlations between ESG components and key financial and investment indicators;
- Regression models were developed to test and interpret the proposed approaches [6].

It is also worth noting that in recent years, Armenia's leading banks, Ameriabank, ACBA Bank, and Ardshinbank, have made tangible progress in ESG integration, receiving targeted funding from international financial institutions. The following section presents a comparative analysis of the funds raised and the ESG-related initiatives implemented by these banks.

Table 6.
Main Financing by Banks.

Bank	Account	Year	Funding Organization	Purpose / Note
Ameriabank	$200 million	2025	IFC	Climate projects, SMEs, and women's entrepreneurship
Ameriabank	$20 million	2023	ResponsAbility / GCPF	SMEs and green projects
Ameriabank	$60 million	2020–2022	Green bonds	Energy saving, renewable energy
ACBA Bank	€55 million	2024	EIB	SMEs and medium-sized enterprises
ACBA Bank	$50 million	2024	DFC (USA)	SME, women's entrepreneurship
ACBA Bank	$5 million	2021	EBRD	Green projects
ACBA Bank	€22.5 million	2024	Proparco	Agriculture, SME
Ardshinbank	$25 million	2023	EFSE (European Financial Stability Facility)	SME and sustainable financing
Ardshinbank	$20 million	2020	EBRD	Green Economy Financing Facility (GEFF)
Ardshinbank	€10 million	2022	Green for Growth Fund	Energy efficiency projects

Source: Electronic links to financing data for Ameriabank [15].

In recent years, ACBA Bank, Ameriabank, and Ardshinbank have confidently taken active positions in the field of international sustainable finance. The investments they have attracted have been directed toward implementing projects in the green economy, supporting small and medium-sized enterprises (SMEs), and promoting social inclusion initiatives. This trend highlights the growing role of Armenian banks in shaping a modern financial environment grounded in the principles of sustainability and social responsibility.

The quantitative analysis conducted reveals a significant difference in the scale of ESG-related funding. Ameriabank emerged as the leader in terms of total funds raised, securing over USD 280 million, which reflects its deep involvement in international programs focused on environmental and social priorities. ACBA Bank ranks second, having attracted around USD 115 million, while Ardshinbank, with approximately USD 56 million in ESG financing, has adopted a more moderate approach to ESG initiatives. In total, the combined volume of ESG-related resources exceeded USD 450 million, representing a substantial contribution not only to the development of the banking sector but also to the sustainable socio-economic growth of the country.

Modern academic approaches increasingly incorporate ESG principles into classical economic and management models, underscoring their growing importance in assessing the real sustainability of companies. Beyond traditional operational and financial metrics, factors such as environmental strategy, social responsibility, and the level of corporate accountability are beginning to play a pivotal role. Based on the previously formulated hypotheses, it can be argued that value orientation and environmental commitment are becoming key elements of strategic management, facilitating the alignment of technological progress with sustainability principles. Although demographic and institutional variables also play a role, the decisive factors remain the perceived utility of ESG practices, the attitude toward sustainable development, and the internal motivation to implement these principles [7].

Previously, environmental assets were not included in the structure of fixed assets, and banks could not apply depreciation mechanisms to them. However, as ESG integration deepens, such assets are increasingly becoming part of the production base, and their impact is being more clearly reflected in financial outcomes.

Point 1: ESG factors do influence financial risk, but the effect is multifaceted. Environmental initiatives (E) often reduce borrowing costs and thereby lower leverage ratios, contributing to decreased overall financial risk. These benefits stem from increased lender confidence in firms with credible sustainability commitments. However, the social dimension (S) may present risks when companies demonstrate weak accountability or low transparency, leading to greater uncertainty for lenders and higher potential for credit defaults. The net impact of ESG on financial performance, therefore, depends on the balance and quality of ESG integration across all components.

Point 2: Although ESG factors are sometimes viewed as detrimental to Return on Assets (ROA), this effect is not universal. In the banking sector, the opposite trend is observed: ESG adoption, particularly through improved environmental practices and more efficient resource management, contributes to an increase in ROA. This highlights that ESG strategies, when tailored to sector-specific dynamics, can strengthen financial performance.

Point 3: ESG investments create client trust and long-term competitive advantage. The implementation of such initiatives actively enhances customer loyalty, improves corporate reputation, and attracts responsible investors focused on transparency and sustainability. In this context, the verb "create" is appropriate, as these effects are the direct result of deliberate ESG-driven transformations.

Point 4: The assumption that ESG factors do not influence banks' dividend policies is not entirely accurate. Improvements in corporate governance (G) can stabilize dividend practices, reduce operational risks, and reinforce investor confidence. Thus, ESG indirectly contributes to a more predictable and resilient profit distribution framework.

Point 5: Contrary to the claim that ESG factors reduce free cash flow, empirical evidence suggests that ESG integration often leads to more efficient resource use, productivity gains, and cost optimization. While initial implementation may involve short-term expenses, the long-term outcome is typically characterized by stronger free cash flow, improved returns, and manageable financial risk [8].

Summary Conclusions:

- Analysis of practices among investment banks, government agencies, research organizations, and literature confirms that companies adhering to ESG principles gain numerous advantages: access to preferential loans, tax incentives, increased market value of shares, and reduced regulatory pressure.
- In the investment context, ESG factors positively influence dividend yield and free cash flow, while their effect on the P/E ratio and coefficient is negative, indicating reduced risk and market volatility [9].
- The analysis revealed the need to integrate financial and non-financial reporting, including the development of standardized ESG disclosure formats and the implementation of non-financial audits by specialized bodies.
- A deeper decomposition of ESG factors opens new avenues for the development of responsible investing, where decisions are based not only on profitability but also on environmental and social considerations [10].
- The use of panel data allowed the study to overcome sampling limitations and statistically confirm the persistent influence of ESG on value creation indicators.
- The regression models developed and patterns identified may be used for scenarios and support effective decision-making at the level of individual companies, business groups, or even within regional socio-economic strategies [11].

The implementation of ESG principles requires upfront investments and internal process transformation, but in the long run, it enables sustainable, flexible, and risk-aware governance. This strengthens not only financial resilience but also an organization's social capital, reinforcing trust from clients, investors, and regulators alike [12].

6. Conclusion

Implications: The conducted research confirms that ESG factors significantly influence the financial performance and investment appeal of banks. Their integration transcends formal adherence to environmental or social standards; it becomes a tool of economic rationality and strategic management [16]. In Armenia's developing banking market, ESG can serve as a genuine competitive advantage. Such approaches contribute not only to profit growth and capital strengthening but also to cost efficiency, improved resource allocation, and reduced systemic risk and market volatility. The Governance (G) component is especially influential: higher governance scores strongly correlate with stable dividend policies and increased free cash flow, reflecting the maturity of executive decision-making [17]. Furthermore, ESG-oriented practices, especially in environmental and operational dimensions, are associated with lower leverage and improved profitability. ESG investments help build trust and strategic positioning, while enhanced governance promotes stable shareholder returns and reputational resilience [18]. Rather than constraining financial flexibility, ESG integration fosters long-term free cash flow growth and sustainable operations [6].

Limitations: Despite the valuable insights, this research has certain limitations. The analysis relied on publicly available ESG disclosures and financial statements, which vary in quality and depth. The focus on three major Armenian banks limits the generalizability to the entire banking sector or to other industries. Data consistency across the 2017–2024 period posed challenges due to evolving ESG reporting standards and bank-specific disclosure practices. In addition, Armenia's unique geopolitical and regulatory environment may constrain the applicability of results to broader or global contexts.

Future research suggestions: Future research should expand the sample to include a wider range of financial institutions, including mid-sized or regionally operating banks, to examine ESG effects across diverse organizational structures. It would also be useful to compare Armenian findings with data from other developing or post-Soviet economies. Methodologically, applying advanced econometric tools such as dynamic panel models or instrumental variable approaches can improve the identification of causal relationships between ESG performance and financial outcomes. In particular, a focused exploration of the social (S) dimension could provide a deeper understanding of ESG's impact on stakeholder engagement and long-term financial resilience [15].

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