Transactions on Quantitative Finance and Beyond

www.tqfb.reapress.com

Trans. Quant. Fin. Bey. Vol. 1, No. 2 (2024) 233–246.

Paper Type: Original Article

Analysis of the Impact of Macroeconomic Factors on the Development of Financial Products: Application of the PESTEL Model in Identifying Opportunities and Threats

Rosha Makvandi*

Department of Business Management, Karaj Branch, Islamic Azad University, Karaj, Iran; mcvandi.r@yahoo.com.

Citation:

Received: 03 May 2024 *Revised: 18 July 2024* *Accepted: 09 November 2024*	Makvandi, R. (2024). Analysis of the impact of macroeconomic factors on the development of financial products: Application of the PESTEL model in identifying opportunities and threats. *Transactions on quantitative finance and beyond*, *1*(2), 233–246.

Abstract

Macroeconomic factors significantly influence a country's economy and financial markets, thereby playing a pivotal role in the development of financial products. The PESTEL framework serves as a comprehensive analytical tool to examine the impact of political, economic, social, technological, environmental, and legal factors in identifying opportunities and threats for financial product development. This study utilizes the PESTEL model to analyze the impact of macroeconomic factors on the evolution of financial products and explores the associated opportunities and challenges. The research investigates macroeconomic factors such as interest rates, inflation, economic growth, political stability, societal changes, technological advancements, growing environmental consciousness, and regulatory frameworks. Data were collected from reliable secondary sources and analyzed using qualitative content analysis. Findings indicate that political stability and government support for financial innovation can foster the development of new products. Conversely, political instability and unexpected regulatory changes pose significant threats to financial firms. Economic conditions like interest rates and economic growth exert a substantial influence on market demand and access to capital. The results suggest that lower interest rates and economic growth create favorable opportunities for financial product development. Furthermore, evolving consumer needs and preferences, coupled with technological advancements, particularly in fintech, are transforming financial processes and customer experiences, enhancing efficiency, and improving customer satisfaction. Additionally, the increasing focus on environmental issues has driven demand for green and sustainable financial products. This research recommends that financial managers and policymakers analyze and understand these factors to capitalize on emerging opportunities and mitigate risks by adapting to environmental and technological changes. Future research can delve deeper into the intricate relationships between these factors through a more international perspective.

Keywords: Political factors, Economic factors, Social factors, Technological factors, Environmental factors, Legal factors.

1 | Introduction

In today's world, the financial industry plays a vital role as one of the key sectors of the economy, significantly contributing to the dynamism and economic growth of countries. The development of financial products is

Corresponding Author: mcvandi.r@yahoo.com

10.22105/tqfb.v1i2.40

shaped by the diverse and complex impacts of macroeconomic factors, which not only directly influence market behavior and financial companies but also affect the decisions of investors and customers. The macroeconomic environment of each country plays a crucial role in the success or failure of financial product development. Factors such as economic growth rate, inflation, interest rates, exchange rates, and unemployment can impact the ability of financial institutions to design and offer new products that influence the market [1]. Therefore, companies and financial institutions must conduct a thorough analysis of these factors and utilize analytical models such as PESTEL to understand the external environment better. This model specifically helps companies identify macro external impacts and develop strategies to capitalize on opportunities or counter threats [2]. The Political, Economic, Social, Technological, Environmental, Legal (PESTEL) model aids in analyzing macro factors in the external environment. Each of these six factors can influence the development of financial products. Political factors include tax policies and government regulations that may affect the costs of financial companies. Economic factors pertain to indicators such as economic growth rate, inflation, and interest rates, which directly impact market demand and consumer behavior. Social factors encompass demographic changes, consumption patterns, and customer behavior. Technological factors relate to innovations and new technologies, such as fintech, which create new opportunities for the development of financial products [3]. A precise understanding of these factors and an analysis of their effects can help financial institutions capitalize on opportunities and mitigate potential threats. In this context, one of the important analytical tools is the PESTEL model, which is used to assess the impact of environmental factors in various political, economic, social, technological, environmental, and legal domains.

The PESTEL model provides a comprehensive and structured analysis of the external environment of organizations, enabling managers to utilize this analysis to identify existing opportunities and threats in the macro environment. In the context of financial product development, this model serves as a highly effective framework for identifying factors that influence demand, innovation, investment, and the development of financial services. Political factors include tax policies, banking regulations, and government decisions in the monetary domain, which can directly impact the profitability and financial activities of institutions [4], [5]. On the other hand, economic factors such as interest rates, inflation, exchange rates, and economic growth are macroeconomic indicators that influence the behavior of customers and financial institutions [6]. These variables can lead to increased demand for financial products during economic booms and reduced demand and increased risk during economic downturns.

In the field of social factors, demographic changes, financial literacy levels, and consumer culture are among the factors that can alter demand for financial products. For instance, changes in population patterns, such as an aging population in some countries, can lead to shifts in the type and volume of demand for financial products related to retirement [7]. In this regard, technological factors and rapid advancements in fintech and the digitization of financial services create innovative opportunities and new products in financial markets. The development of financial technologies such as blockchain, artificial intelligence, and digital payments has not only reduced operational costs but also increased access to financial services on a global scale [8].

Conversely, environmental factors and the growing emphasis on sustainability and corporate social responsibility have brought green and sustainable financial products to the forefront. Investors and customers are seeking products that consider not only financial returns but also environmental and social responsibilities [9]. Finally, legal factors and regulatory standards are of great importance. Compliance with legal regulations and standards can serve as an opportunity to enhance customer trust and create transparency in financial markets. However, sudden changes in banking laws and regulations can pose a threat to long-term financial planning [10]. Based on the theoretical foundations and research background, the research framework can be outlined as shown in *Fig. 1*.

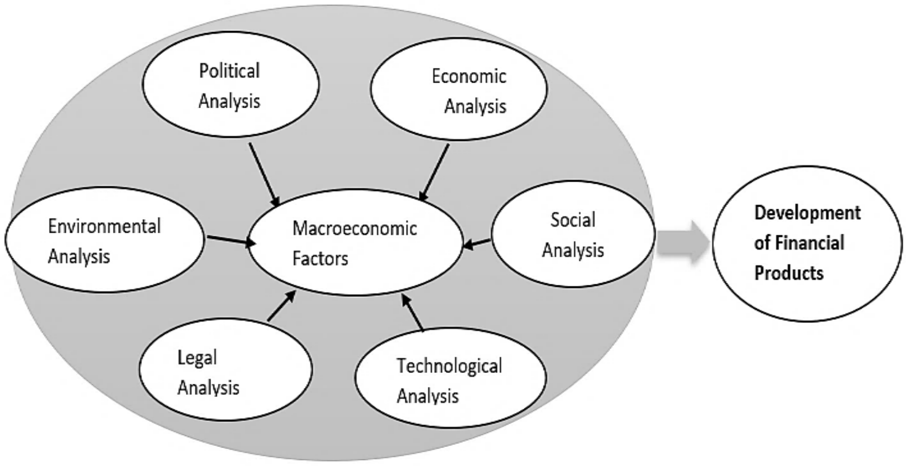

Fig. 1. Framework of the concept of research.

Overall, the analysis of macroeconomic factors using the PESTEL model enables organizations and financial institutions to become aware of the positive and negative impacts of environmental factors. Consequently, they can develop more effective strategies for the development of their financial products. This model provides a comprehensive framework that helps financial managers to accurately analyze the surrounding environment, identify risks associated with political, economic, social, technological, environmental, and legal factors, and adjust their plans based on available opportunities. Thus, the use of the PESTEL model in identifying opportunities and threats is considered an effective tool for the sustainable development of financial products.

2 | Literature and Background

2.1 | Macro Environment Analysis Model

The development of financial products, as one of the key components of economic growth and dynamism, has always been influenced by macroeconomic and environmental factors. This issue has gained particular attention from researchers and experts in recent decades due to rapid economic, social, and technological changes. A precise understanding of the factors affecting the development of financial products, including political, economic, social, technological, environmental, and legal factors (The PESTEL Model), helps financial institutions capitalize on opportunities and mitigate threats [11].

Political factors

Political factors play a vital role in the formation and development of financial products. Changes in monetary and fiscal policies, including interest rates and financial regulations, can directly impact the cost of financing and investment in financial markets. For example, studies have shown that expansionary fiscal policies during economic downturns can help increase demand for financial products [12]. Additionally, the political stability of countries can significantly affect foreign investment and the growth of financial markets.

Economic factors

Economic factors include interest rates, inflation, exchange rates, and economic growth, which have a significant impact on the development of financial products. Interest rates, as a key indicator in financial decision-making, directly affect borrowing and investment costs. Furthermore, economic fluctuations and recessions can lead to decreased demand for financial products and increased risks in financial markets [13]. In this context, research indicates that rising inflation can reduce consumers' purchasing power, thereby decreasing demand for financial products.

Social factors

Social factors are also considered key components in the development of financial products. Changes in demographics, consumer behavior, and financial literacy levels can significantly influence demand for financial products. For instance, with the increase in the young population and changes in their needs and desires, financial markets require new and diverse products that align with these changes [9]. Additionally, increased financial literacy and customer awareness can lead to changes in consumption patterns and the use of financial products.

Technological factors

Technological factors have recently become one of the main drivers of transformation in the financial industry. Advances in Information and Communication Technology (ICT), the emergence of fintech, and the development of digital services have increased access to financial products and reduced service delivery costs. Research shows that innovative technologies such as blockchain and artificial intelligence not only enhance the efficiency of financial products but also create new innovations in this field [8]. These developments enable financial institutions to offer new and diverse products to attract customers.

Environmental factors

Environmental factors and the increasing focus on sustainability issues have also influenced the development of financial products in recent years. With the growing public awareness of climate change and social responsibility, the demand for green and sustainable financial products is on the rise. Studies indicate that companies that pay attention to social and environmental responsibility are able to attract more investors, which can lead to improved financial performance [9].

Legal factors

Legal factors and regulatory standards are also considered influential in the development of financial products. Changes in financial laws and regulations, especially in areas such as anti-money laundering and consumer protection, can significantly impact financial activities. Compliance with these laws not only helps increase transparency in financial markets but also enhances customer trust [8]. However, sudden changes in regulations can pose challenges for financial institutions and lead to increased operational costs and financial risks. In general, analyzing the impact of macroeconomic factors on the development of financial products requires a deep and comprehensive understanding of the economic, social, and legal environment. Utilizing the PESTEL model as an analytical tool can help organizations identify existing opportunities and threats and develop more effective strategies for their financial product development. Given the rapid global changes and shifts in consumer behavior, future research should focus on these factors and how they interact with one another to achieve a better understanding of the financial product development process.

2.2 | Development of Financial Products

The development of financial products refers to the process of creating, improving, and introducing new financial products and services in financial markets. These financial products may include investment instruments, insurance, loans, credits, banking products, and other related financial services. The primary goal of developing these products is to respond to the changing needs of customers, enhance competitiveness in financial markets, and capitalize on opportunities arising from economic and technological developments. By developing new financial products, financial institutions can enhance their competitiveness in both domestic and international markets and increase their market share (Increased competitiveness) [14].

Introducing new financial products helps institutions diversify their revenue sources and reduce dependence on a specific type of product (Diversification of revenues) [11]. Developing financial products that meet customer needs increases their satisfaction and strengthens long-term relationships with customers (Responding to customer needs) [15]. Innovative financial product development can reduce financial risks and facilitate better financial management (Risk reduction) [9]. On the other hand, sudden changes in financial regulations may disrupt product development plans and create additional costs for financial institutions

(Complex regulations) [8]. The use of new technologies such as blockchain and fintech comes with security risks that must be carefully managed (Technological risks) [16]. Economic and social changes, such as economic recessions and rising unemployment, can challenge the development of financial products and reduce demand for certain financial products (Economic fluctuations) [17]. In today's world, the development of financial products has gained unprecedented importance due to the rapid and diverse impacts of economic, social, and technological factors [18].

Economic factors

Economic factors, such as interest rates, inflation, economic growth, and exchange rates, are among the most important factors influencing the development of financial products. Low interest rates directly affect borrowing costs and increase demand for loans and credits. Conversely, high inflation can lead to decreased customer demand for certain financial products, while in other cases, specific investment products such as gold or commodity-backed securities may see increased demand [11].

Social factors

Demographic changes, consumer behavior, and financial literacy levels are among the factors that influence the development of financial products. For example, the increase in the young population and the enhancement of financial literacy have created a greater inclination to use digital and innovative products [9]. Additionally, the growing public awareness of the importance of financial planning and investment for the future has led to increased demand for new financial products, including retirement plans and life insurance [19].

Technological factors

The development of innovative technologies, including fintech, blockchain, and artificial intelligence, has significantly impacted the development of financial products. These technologies not only reduce the costs of providing financial services but also enable the introduction of new and innovative products. For instance, blockchain technology has contributed to the creation of more transparent and secure financial products [20]. Moreover, the digitization of banking and electronic payments has improved customer experiences and facilitated their access to financial services [10].

Environmental factors

Climate change and increased awareness of environmental issues have led to the growth of sustainable and green financial products. These products include Socially Responsible Investments (SRI) and green bonds, which not only provide financial returns to investors but also have a positive impact on the environment [9]. The rising demand for these types of financial products presents an opportunity for organizations to increase their market share by offering green and sustainable products while fulfilling their social responsibility.

Political and legal factors

Government policies and financial regulations can play a significant role in the development of financial products. New laws and regulations in areas such as banking, anti-money laundering, and privacy protection can create new challenges and opportunities for financial product development. Adhering to legal standards and maintaining transparency in financial activities help build trust among customers and investors, while sudden changes in laws may disrupt financial product development plans. This issue is particularly significant in developing countries where financial regulations are unstable [10].

2.3 | Impact of Macroeconomic Factors on the Development of Financial Products

Economic growth

Economic growth in a country has a significant impact on the development of financial products. As Gross Domestic Product (GDP) increases and economic growth occurs, purchasing power and the willingness to invest in financial products rise. Economic growth can lead to increased demand for financial services such as loans, insurance, and new investments. For instance, during periods of economic growth, banks and financial institutions often introduce new products to attract fresh capital into the market [21]. High economic growth allows financial institutions to design new products and target new markets. Conversely, economic recessions may lead to decreased demand for financial products, pushing companies to cut costs and limit the introduction of new products.

Inflation rate

Inflation, as one of the macroeconomic factors, significantly affects the demand for financial products. Rising inflation can reduce consumers' purchasing power, thereby decreasing demand for loans and other financial services. Additionally, high inflation may cause instability in financial markets and increase investment risks [22]. In inflationary conditions, financial products that help protect asset values against inflation, such as physical assets or inflation-linked securities, tend to gain popularity. Increasing inflation rates can raise the operational costs of financial institutions and reduce demand for some of their products.

Interest rate

The interest rate is one of the important variables in macroeconomics that directly impacts financing costs and demand for financial products. Low interest rates typically lead to increased demand for loans and debt-related financial products, while high interest rates encourage saving and reduce borrowing [23]. Low interest rates create new opportunities for the development of financial products and increase credit availability. Conversely, rising interest rates can elevate the cost of financing for companies and put pressure on the loan and credit markets.

Exchange rate

Changes in exchange rates can have a significant impact on international financial markets and the valuation of financial products. Severe fluctuations in exchange rates can create currency risks for investors, especially in emerging markets where exchange rate changes are typically high [24]. Stable exchange rates can help financial companies develop new markets internationally. Exchange rate volatility may increase investment risks and reduce the willingness to invest in foreign markets.

Unemployment rate

The unemployment rate is also a macroeconomic factor that influences the development of financial products. Rising unemployment usually leads to decreased household income and reduced demand for financial products such as loans, insurance, and banking services [25]. A decrease in the unemployment rate and an increase in employment can boost demand for financial services and expand the financial products market. High unemployment rates reduce customers' financial capacity and decrease demand for new financial products.

3 | Research Methodology

The present research is classified as applied research in terms of its objectives. This study is qualitative and descriptive-analytical, examining the impact of macroeconomic factors on the development of financial products using the PESTLE analysis method. Thematic analysis is a qualitative method used to identify, analyze, and report patterns (themes) within data. This method is employed to gain a deeper understanding of complex topics and to identify meaningful relationships and patterns. The PESTLE analysis includes six dimensions: PESTLE. The data required for this research were gathered through a review of relevant articles and previous studies on the topic from scientific databases such as Civilika, Google Scholar, JSTOR, and Science Direct, as well as published reports using qualitative content analysis.

To enhance the validity and reliability of the research findings, methods such as comparing the results with similar studies, examining their consistency, and utilizing credible and scientific sources for data collection and analysis were employed. Thematic analysis was used to analyze the data. Initially, a thorough and repeated review of the collected data was conducted to familiarize with the content and identify preliminary ideas. Subsequently, initial codes were extracted from the data, and significant sections of the text related to the research questions were identified. Next, similar codes were grouped, and foundational themes related to the research topic were identified. The identified themes were reviewed and evaluated to ensure consistency with the data, and organizing themes were identified. Each organizing theme was named and described in detail, followed by the identification of overarching themes. Finally, the identified themes were synthesized, and a comprehensive analysis was presented in the form of a report covering the six dimensions of the macro environment.

4 | Research Findings

The thematic analysis aids in identifying meaningful patterns within the data. *Table 1* presents the foundational, organizing, and overarching themes related to the role of macroeconomic factors in the development of financial products based on the PESTLE model.

Table 1. Analysis of macro factors (overarching, organizing, and foundational themes) theme.

Overarching	Organizing	Foundational
Political factors	Financial and monetary policies Tax policies International relations and sanctions Investor protection laws	Expansionary and contractionary monetary policies, changes in central bank interest rates Tax reforms, changes in corporate and individual tax rates Economic sanctions, international trade agreements Protective regulations for investor rights
Economic factors	Economic growth rate Inflation rate and cost of living Labor market changes Exchange rate fluctuations	GDP growth rate, industrial growth rate Price increases and decreased purchasing power, chronic inflation Changes in unemployment rates, job creation Decrease or increase in national currency value, changes in foreign exchange rates
Social factors	Changes in consumption patterns Changes in savings patterns Demographic changes Financial education and awareness	Changes in consumer buying behavior, increase or decrease in luxury goods consumption Decreased willingness to save, increased consumerism Increase in the young population, aging population, migration Increased financial literacy, greater access to financial educational resources
Technological factors	Growth of financial technologies and digital innovations Digitization of banking processes Automation and robotics in financial services Cyber threats and data security	Expansion of fintech, blockchain, artificial intelligence in financial management online banking, electronic payments, mobile financial systems Use of robots and automation in financial consulting and banking services Cyberattacks, privacy breaches, data theft
Legal factors	Tax regulations and protective laws Anti-money laundering and anti-terrorism financing laws Changes in regulatory laws Customer rights protection	Changes in tax laws, protective regulations for customers, stringent financial policies Compliance with anti-money laundering standards, stricter enforcement of financial transaction monitoring financial and banking laws, new regulations related to fintech Consumer protection laws, increased transparency in financial service provision

Table 1. Continued.

Overarching	Organizing	Foundational
Environmental factors	Sustainability and corporate social responsibility Climate change and environmental regulations Attention to clean energy and green technologies	Development of green financial products, issuance of green bonds, investment in renewable energy Intensification of environmental regulations, impacts of climate change on assets and financial markets Investment in clean energy, use of green technologies in financial companies

This table provides a comprehensive view of the influencing factors on the development of financial products using the PESTLE model and thematic analysis, illustrating how each of these factors can create opportunities and threats for financial institutions. In *Table 2*, the role of macroeconomic factors in the development of financial products is analyzed based on this model.

Table 2. The role of macroeconomic factors in the development of financial products based on the PESTEL model.

PESTEL	Opportunities	Threats	Impact on Financial Product Development
Political factors	Political stability and supportive policies can facilitate financial market growth.	Political instability and sudden changes in laws can increase risk.	Expansionary monetary policies (low interest rates) can create a higher demand for loans and credit, while contractionary policies reduce this demand. Tax reforms can either reduce or increase costs for financial companies, affecting the profitability of financial products. Sanctions can limit access to foreign markets, while international trade agreements help expand markets. Protective laws increase trust in financial markets and boost investment.
Economic factors	High economic growth and low interest rates can increase demand.	High inflation and economic recession can decrease demand and increase costs.	High economic growth leads to increased demand for financial products and credit, while economic recession decreases demand. High inflation reduces purchasing power and demand for financial products, but inflation-protected financial products may see increased demand. Decreasing unemployment and job creation can increase demand for credit and insurance products. Exchange rate fluctuations increase risks associated with international financial products and heighten the need for financial hedging products.
Social factors	Demographic changes and increased financial awareness can create new demand for products.	Cultural changes and decreased public trust can lead to reduced demand.	Changes in consumption patterns can affect financial products such as credit cards and consumer loans. Decreased household savings may lead to reduced demand for investment and credit financial products. Changes in demographic structure impact the need for specific financial products like student loans or retirement insurance. Increased financial awareness aids in the development of new and complex financial products and better utilization of financial tools.
Technological factors	Technological advancements can accelerate the development of financial products.	High research and development costs and the need to adapt to new technologies.	New technologies contribute to the creation of innovative financial products and reduce service delivery costs. Digitization of processes increases the speed and accessibility of financial services while lowering costs. Automation can reduce financial service costs and improve the quality of advice. Cyber threats can damage the reputation of financial companies and increase the need for greater investment in cybersecurity.

Table 2. Continued.

PESTEL	Opportunities	Threats	Impact on Financial Product Development
Legal factors	Compliance with laws can enhance customer trust and attract investments.	Sudden changes in laws can create instability in financial markets.	Changes in tax laws can impact costs and profitability for companies, while protective laws increase customer trust. Anti-money laundering laws can enhance financial transparency, but compliance may create additional costs for institutions. Sudden changes in regulations can disrupt companies' financial planning and pressure new products. Increased transparency in financial services can help attract new customers and strengthen public trust.
Environmental factors	Demand for green and sustainable financial products may increase.	High environmental costs and the risk of non-compliance with standards can create challenges.	Demand for green and sustainable financial products is rising, and social responsibility can enhance companies' reputations. Climate change may lead to decreased asset values and financial products based on natural resources. Demand for investment in clean energy can create new opportunities for the development of financial products.

Overall, the model depicting the role of macroeconomic factors on the development of financial products can be represented as shown in *Fig. 2*.

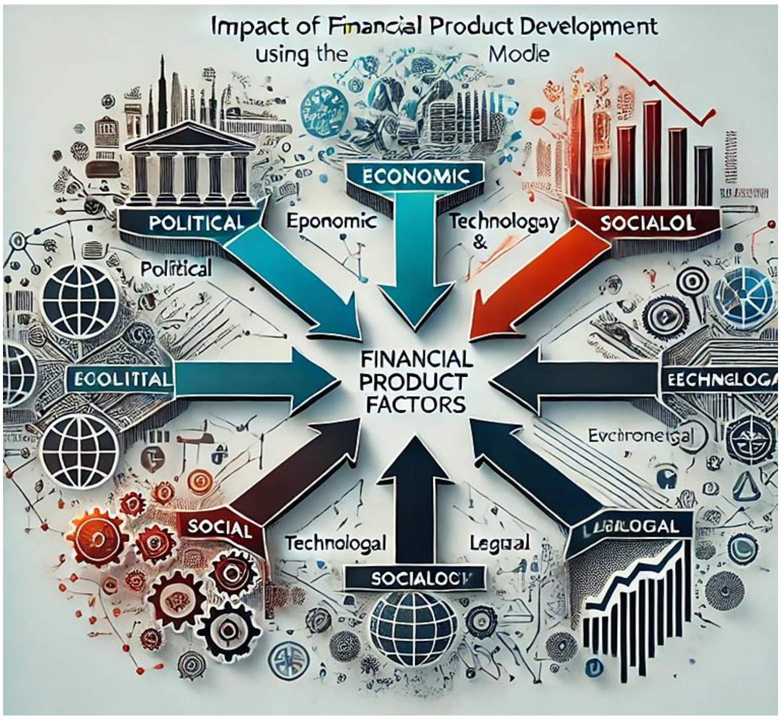

Fig. 2. The role of macroeconomic factors on the development of financial products.

5 | Conclusion

Macroeconomic factors such as economic growth, inflation rates, interest rates, exchange rates, and unemployment have significant impacts on the development of financial products. By conducting a thorough analysis of these factors and utilizing the PESTEL model, companies can identify existing opportunities and threats in the market and adopt appropriate strategies to adapt to changes in the economic environment. A deep understanding of these factors helps companies develop their financial products more effectively in a dynamic and complex environment. This article analyzed the impact of macroeconomic factors on the development of financial products using the PESTEL model. This model, by identifying six key factors—political, economic, social, technological, environmental, and legal—assists in analyzing the opportunities and threats present in the market. In particular, focusing on economic factors highlights the importance of financial and economic conditions in shaping successful strategies in the financial industry. The findings indicate that political stability and government support for financial innovations can aid in the development of new products. Conversely, political instability and unexpected changes in laws may pose serious threats to financial companies. The results align with the research of Allard et al. [26], which show that political instability can lead to market uncertainty and reduced investments. Niehans [27] emphasize that changes in monetary and fiscal policies, especially during economic crises, can affect financial innovations and market demand.

Economic conditions such as interest rates, inflation, and economic growth significantly influence market demand and access to capital. The results show that lower interest rates and economic growth can create favorable opportunities for the development of new financial products. These findings are consistent with the research of Hall et al. [28] and Lian et al. [29], which indicate that lower interest rates can lead to increased consumer demand and investments. Additionally, Prechter et al. [30] examined the impact of economic fluctuations on investor behavior and the need for new financial products, demonstrating that economic volatility can lead to changes in consumption patterns and demand. Kose et al. [31] showed that macroeconomic impacts on financial product development and market volatility can lead to changes in investment strategies. Furthermore, economic changes can play a crucial role in customers' financial decision-making.

Changes in consumer needs and preferences are recognized as significant factors in the development of financial products. Previous studies have shown that financial companies that can quickly respond to these changes have been more successful. These findings align with the research of Feola et al. [32] and Javaid et al. [20], which emphasize the importance of identifying and responding to social changes. Additionally, Hoque et al. [33] examined the impact of social factors on financial product development and concluded that changes in attitudes and social values significantly affect demand.

The rapid advancement of technology, particularly in the fintech sector, influences financial processes and customer services. Studies indicate that the use of new technologies can lead to significant improvements in efficiency and customer experience. The results are consistent with the research of Tai et al. [34], which show that technological innovations enhance services and increase customer satisfaction. Skaf et al. [35] also analyzed the impact of technology on customer experience in the financial industry, demonstrating that technological innovations significantly affect customer satisfaction.

With the increasing attention to environmental issues, the demand for green and sustainable financial products is on the rise. Previous research indicates that companies offering environmentally friendly products can gain a competitive advantage. The findings are consistent with the studies of McNally et al. [36], which emphasize the importance of considering environmental dimensions in financial product development. Additionally, Cantele et al. [37] analyzed the impact of environmental changes on the demand for green and sustainable financial products, stating that companies providing environmental products have a competitive edge.

Laws and regulations can act as either opportunities or threats. For example, investor protection laws can facilitate the development of new products, while stringent regulations may hinder innovation. The findings align with the research of Cantele et al. [37] and Janicka [38], which indicate that effective legal frameworks can contribute to the formation of sustainable financial markets. Strict regulatory laws, especially in areas such as anti-money laundering and banking transparency, can create opportunities for increasing public trust. Additionally, Berger et al. [39] examined the impact of legal and regulatory factors on the financial industry, demonstrating that laws and regulations can serve as opportunities for creating new products.

Previous research on the impact of macro factors on the financial industry has shown that these factors directly influence consumer behavior and investment decisions. For instance, a study by Bidabad [40] shows that economic fluctuations can lead to changes in consumption patterns and the need for new financial products. Furthermore, studies by Skaf et al. [35] have emphasized that technological factors and financial innovations significantly impact customer satisfaction. Compared to these studies, our findings also confirm that the PESTEL model can serve as a useful tool for identifying opportunities and threats in the financial industry. This model, especially in changing economic conditions, can assist financial managers in adopting better strategies for developing new products and competing in the market. Additionally, the research by Tufano [41] analyzed the relationship between economic factors and innovation in the financial industry, showing that economic conditions, particularly interest rates and inflation, are key drivers of innovation. Furthermore, McNally et al. [36] demonstrated that increasing consumer awareness of social and environmental issues can lead to higher demand for sustainable financial products. As an effective analytical tool, the PESTEL model can help financial companies accurately identify macroeconomic, social, and technological factors, as well as the existing opportunities and threats.

Recommendations for financial companies:

I. Enhance innovation in financial products: Based on the research findings, financial companies should strive to quickly adapt to economic and social changes and utilize new technologies to offer innovative financial products. It is recommended that companies form innovation and research and development teams to identify new opportunities and implement new technologies.

II. Focus on preventive laws and regulations: Financial managers and policymakers should work towards formulating and drafting supportive and transparent laws and regulations that promote the growth and development of the financial market. These laws should be updated in line with technological advancements and market changes to support innovation and prevent potential crises.

III. Increase investment in fintech: Given the importance of technology in developing financial services, companies should invest more in ICT and fintech. These investments can help create digital platforms to improve efficiency, reduce costs, and enhance customer experience.

IV. Emphasize green and sustainable financial products: with the growing global focus on environmental issues, it is recommended that financial companies engage more in developing and offering sustainable and green financial products. This action can help attract investors and consumers who prioritize these issues.

V. Periodic evaluation of macroeconomic factors: financial companies should periodically assess macroeconomic environmental factors (Political, economic, social, etc.) to identify threats and opportunities accurately. This can improve strategic planning and optimize decision-making.

In conclusion, the effective use of this model can contribute to the sustainable and optimal development of financial products, enabling managers to make better strategic decisions. Given the changing economic conditions, it is suggested that further research be conducted on the direct impact of these factors on customer behavior and financial outcomes to gain a better understanding of future trends in the financial industry. Therefore, the following suggestions are provided for future researchers:

I. Examine the precise impacts of macroeconomic factors on consumer behavior: Future researchers can conduct more detailed studies on the impact of economic factors such as inflation rates, interest rates, and economic growth on consumer behavior in using financial products. This research can help identify new trends and predict market changes.

II. Comparative studies between countries: Future studies can compare the impact of PESTEL factors on the development of financial products in different countries to examine geographical, economic, and cultural differences in the development of these products. These studies can provide a better understanding of successful strategies in various markets.

III. Analyze the impact of technological innovations on financial products: Researchers can further investigate the impact of technological innovations in areas such as blockchain, artificial intelligence, and machine learning on the development of financial products. This research can help identify key technologies that can contribute to the growth of the financial market.

IV. Examine the impact of laws and regulations in developing countries: The impact of laws and regulations on the development of financial products in developing countries may vary. Therefore, researchers can conduct deeper analyses and adapt the results of the PESTEL model in these countries to provide suitable solutions for financial development.

V. Develop new frameworks for environmental assessment of financial products: Given the importance of environmental issues and the increasing attention to green financial products, researchers can design new frameworks for assessing the environmental impacts and sustainability of financial products. These frameworks can help better evaluate products and increase customer trust.

VI. Examine interrelationships between PESTEL factors: Researchers can study the interrelationships between PESTEL factors (such as the impact of political factors on economic factors and vice versa). This systematic approach can enhance the understanding of how these factors influence each other and ultimately affect the development of financial products.

This research comprehensively and systematically examined the impact of macroeconomic factors on the development of financial products. The results indicated that various factors, such as political stability, economic conditions, social changes, technological advancements, attention to environmental issues, and laws and regulations, can directly and indirectly influence the opportunities and threats present in the financial market. This analysis not only confirms the importance of considering these factors in developing financial strategies but also emphasizes the necessity of rapid and effective adaptation to environmental and technological changes. Financial companies and policymakers can make better decisions regarding innovation, sustainability, and long-term growth by accurately recognizing and understanding these factors. It is suggested that future research adopt comparative and international approaches to investigate the impacts of these factors further and analyze their interrelationships more precisely. Such studies can contribute to the development of new and innovative frameworks for risk management and market opportunities, ultimately leading to improved performance and sustainability in the financial industry. The conclusion of this research not only serves as a point for summarizing existing achievements but also marks the beginning of further research and innovations aimed at developing and improving high-quality and sustainable financial products.

Finding

The author declare thatno external funding or support was received for the research.

Data Availability

All data supporting the reported findings in this research paper are provided within the manuscript.

References

[1] Henry, A. E. (2021). *Understanding strategic management*. Understanding strategic management. https://doi.org/10.1093/hebz/9780198859833.001.0001

[2] Johnson, G., Scholes, K., Whittington, R., Angwin, D., & Regner, P. (2019). *Exploring strategy: text and cases (12th ed.)* . Pearson UK. https://B2n.ir/qh8920

[3] Mazikana, A. T. (2023). *Application of pestel factors: A case of financial institutions*. https://doi.org/10.2139/ssrn.4380768

[4] Lee, C. C., & Lin, C. W. (2018). Economic growth, financial market, and twin crises. *Journal of international trade and economic development*, *27*(8), 937–967. https://doi.org/10.1080/09638199.2018.1477824

[5] Grilli, V., Masciandaro, D., & Tabellini, G. (1991). Political and monetary institutions and public financial policies in the industrial countries. *Economic policy*, *6*(13), 341–392. https://doi.org/10.2307/1344630

[6] Kyereboah Coleman, A., & Agyire Tettey, K. F. (2008). Impact of macroeconomic indicators on stock market performance. *The journal of risk finance*, *9*(4), 365–378. https://doi.org/10.1108/15265940810895025

[7] Poterba, J. M. (2004). The impact of population aging on financial markets. *National bureau of economic research Cambridge, Mass., USA*. https://doi.org/10.3386/w10851

[8] Paramesha, M., Rane, N. L., & Rane, J. (2024). Artificial intelligence, machine learning, deep learning, and blockchain in financial and banking services: A comprehensive review. *Partners Universal Multidisciplinary Research Journal*, *1*(2), 51-67. https://doi.org/10.5281/zenodo.12826933

[9] Eccles, R. G., & Klimenko, S. (2019). The investor revolution. *Harvard business review*, *97*(3), 106–116. https://hbsp.harvard.edu/product/R1903G-PDF-ENG

[10] Barr, M. S. (2012). The financial crisis and the path of reform. *Yale journal on regulation*, *29*, 91. https://heinonline.org/HOL/LandingPage?handle=hein.journals/yjor29&div=6&id=&page=

[11] Carroll, D. A., & Stater, K. J. (2009). Revenue diversification in nonprofit organizations: Does it lead to financial stability? *Journal of public administration research and theory*, *19*(4), 947–966. https://doi.org/10.1093/jopart/mun025

[12] Caballero, R. J., & Krishnamurthy, A. (2004). Fiscal policy and financial depth. *National bureau of economic research*. https://doi.org/10.3386/w10532

[13] Christiano, L., Rostagno, M., & Motto, R. (2010). *Financial factors in economic fluctuations*. European central bank (ECB). https://hdl.handle.net/10419/153626

[14] Kovalenko, V. V, Bolgar, T. M., Yevtushenko, O. A., Pestovska, Z. S., & others. (2019). Competitiveness of banks in the modern conditions of financial market development. *Financial and credit activity problems of theory and practice*, *2*(29), 3–12. https://doi.org/10.18371/fcaptp.v2i29.171731

[15] Khadka, K., & Maharjan, S. (2017). Customer satisfaction and customer loyalty. *Centria university of applied sciences pietarsaari*, *1*(10), 58–64. https://www.pourashraf.ir/wp-content/uploads/2024/06/1.pdf

[16] Covello, V. T. (1983). The perception of technological risks: A literature review. *Technological forecasting and social change*, *23*(4), 285–297. https://doi.org/10.1016/0040-1625(83)90032-X

[17] Smithies, A. (1957). Economic fluctuations and growth. *Econometrica*, *25*(1), 1–52. https://doi.org/10.2307/1907741

[18] Challoumis, C., & Eriotis, N. (2024). A historical analysis of the banking system and its impact on Greek economy. *Edelweiss applied science and technology*, *8*(6), 1598–1617. https://doi.org/10.55214/25768484.v8i6.2282

[19] Barro, R. J. (1976). The loan market, collateral, and rates of interest. *Journal of money, credit and banking*, *8*(4), 439–456. https://doi.org/10.2307/1991690

[20] Javaid, M., Haleem, A., Singh, R. P., Suman, R., & Khan, S. (2022). A review of blockchain technology applications for financial services. *Benchcouncil transactions on benchmarks, standards and evaluations*, *2*(3), 100073. https://doi.org/10.1016/j.tbench.2022.100073

[21] Arestis, P., & Demetriades, P. (1997). Financial development and economic growth: Assessing the evidence. *The economic journal*, *107*(442), 783–799. https://doi.org/10.1111/j.1468-0297.1997.tb00043.x

[22] Kim, D. H., & Lin, S. C. (2023). Income inequality, inflation and financial development. *Journal of empirical finance*, *72*, 468–487. https://doi.org/10.1016/j.jempfin.2023.04.008

[23] Mankiw, N. G. (2021). *Principles of economics (9th ed.)*. Cengage learning, Harvard university. https://thuvienso.hoasen.edu.vn/handle/123456789/11032

[24] Krugman, P., & Wells, R. (2018). *Economics*. Worth publishers. https://B2n.ir/xt1080

[25] Blanchard, O. (2023). *Fiscal policy under low interest rates*. MIT press. https://doi.org/10.7551/mitpress/14858.001.0001

[26] Allard, G., Martinez, C. A., & Williams, C. (2012). Political instability, pro-business market reforms and their impacts on national systems of innovation. *Research policy*, *41*(3), 638–651. https://doi.org/10.1016/j.respol.2011.12.005

[27] Niehans, J. (1983). Financial innovation, multinational banking, and monetary policy. *Journal of banking and finance*, *7*(4), 537–551. https://doi.org/10.1016/0378-4266(83)90011-0

[28] Hall, R. E., Sims, C. A., Modigliani, F., & Brainard, W. (1977). Investment, interest rates, and the effects of stabilization policies. *Brookings papers on economic activity*, *1977*(1), 61–121. https://doi.org/10.2307/2534257

[29] Lian, C., Ma, Y., & Wang, C. (2019). Low interest rates and risk-taking: Evidence from individual investment decisions. *The review of financial studies*, *32*(6), 2107–2148. https://doi.org/10.1093/rfs/hhy111

[30] Prechter Jr., R. R., & Parker, W. D. (2007). The financial/economic dichotomy in social behavioral dynamics: the socionomic perspective. *Journal of behavioral finance*, *8*(2), 84–108. https://doi.org/10.1080/15427560701381028

[31] Kose, M. A., Prasad, E. S., & Terrones, M. E. (2003). Financial integration and macroeconomic volatility. *IMF staff papers*, *50*(Suppl 1), 119–142. https://doi.org/10.2307/4149918

[32] Feola, G. (2015). Societal transformation in response to global environmental change: A review of emerging concepts. *Ambio*, *44*(5), 376–390. https://doi.org/10.1007/s13280-014-0582-z

[33] Hoque, M. N., Rahman, M. K., Said, J., Begum, F., & Hossain, M. M. (2022). What factors influence customer attitudes and mindsets towards the use of services and products of Islamic banks in Bangladesh? *Sustainability*, 14(8), 4703. https://doi.org/10.3390/su14084703

[34] Tai, Y. F., Wang, Y. C., & Luo, C. C. (2021). Technology-or human-related service innovation? Enhancing customer satisfaction, delight, and loyalty in the hospitality industry. *Service business*, *15*(4), 667–694. https://doi.org/10.1007/s11628-021-00461-w

[35] Skaf, Y., Eid, C., Thrassou, A., El Nemar, S., & Rebeiz, K. S. (2024). Technology and service quality: achieving insurance industry customer satisfaction and loyalty under crisis conditions. *EuroMed journal of business*. https://doi.org/10.1108/EMJB-01-2024-0027

[36] McNally, R. C., Cavusgil, E., & Calantone, R. J. (2010). Product innovativeness dimensions and their relationships with product advantage, product financial performance, and project protocol. *Journal of product innovation management*, *27*(7), 991–1006. https://doi.org/10.1111/j.1540-5885.2010.00766.x

[37] Cantele, S., & Zardini, A. (2018). Is sustainability a competitive advantage for small businesses? An empirical analysis of possible mediators in the sustainability–financial performance relationship. *Journal of cleaner production*, *182*, 166–176. https://doi.org/10.1016/j.jclepro.2018.02.016

[38] Janicka, M. (2016). Financial markets and the challenges of sustainable growth. *Comparative economic research. central and eastern europe*, *19*(2), 27–41. https://doi.org/10.1515/cer-2016-0011

[39] Berger, A. N., Demsetz, R. S., & Strahan, P. E. (1999). The consolidation of the financial services industry: Causes, consequences, and implications for the future. *Journal of banking & finance*, *23*(2), 135–194. https://doi.org/10.1016/S0378-4266(98)00125-3

[40] Bidabad, B. (2019). Fluctuations and business cycles prevention by new financial instruments and banking structure reform. *International journal of accounting & Amp; finance review*, *4*(1). https://doi.org/10.46281/ijafr.v4i1.282

[41] Tufano, P. (2003). Financial innovation. *Handbook of the economics of finance, 1*, 307-335. https://doi.org/10.1016/S1574-0102(03)01010-0