JOURNAL OF RECYCLING ECONOMY & SUSTAINABILITY POLICY 2025 4(1) 17-29

RESP

e-ISSN: 2979-9414

Araştırma Makalesi ● Research Article

The Influence of Financial Innovation and Market Capitalization on Economic Growth: A Comparative Review of Global and Emerging Markets

Finansal İnovasyon ve Piyasa Kapitalizasyonunun Ekonomik Büyüme Üzerindeki Etkisi: Küresel ve Gelişmekte Olan Piyasaların Karşılaştırmalı Bir İncelemesi

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A N A H T A R K E L İ M E L E R

Piyasa Kapitalizasyonu
Finansal Yenilik
Ekonomik Büyüme

Ö Z

Finansal piyasa, ekonomik büyümede hayati bir rol oynar ve dalgalanmalar ile şoklar, ekonominin gelişiminde önemli bir etkiye sahiptir. Gelişmekte olan ekonomilerde borsa piyasalarının büyümesi, borsa büyümesinin nedenleri üzerine kapsamlı araştırmalara yol açmıştır. Finansal kapsayıcılıktaki olumlu şoklar ve özellikle borsalar gibi iyi gelişmiş finansal piyasalar, yabancı portföy yatırımlarını teşvik eder ve finansal sistemin yapısını iyileştirir. Finansal yenilik, finansal kurumların yeni biçimleri ve yapıları, teknolojik ilerlemelerle daha iyi finansal hizmetler ve gelişmiş finansal ürünler aracılığıyla ekonomide finansal aktiviteyi teşvik ederek ekonomik büyümeye katkı sağlar. Özellikle hisse senedi finansmanı, hem ABD'de hem de Avrupa'da ekonomik büyüme için faydalıdır, ancak bu etkinin Avrupa'da daha belirgin olduğu görülmektedir. Bu çalışma, piyasa kapitalizasyonu ile makroekonomik büyüme unsurları arasındaki teorik ve literatür tabanlı bağlantıyı araştırmayı amaçlamaktadır.

K E Y W O R D S

Market Capitalization
Financial Innovation
Economic Growth

A B S T R A C T

The financial market plays a crucial role in economic growth, with volatility and shocks playing a significant role in the development of the economy. The growth of stock markets in emerging economies has led to significant research on the causes of stock market growth. Positive shocks in financial inclusion and well-developed financial markets, particularly stock markets, encourage foreign portfolio investment and improve the structure of the financial system. Financial innovation promotes financial activity in the economy through new forms and structures of financial institutions, better financial services via technology advances, and enhanced financial goods, leading to economic growth. Equity financing is particularly beneficial for economic growth in both the US and Europe, with the effect being more significant in Europe. This study aims to explore the theoretical and literature-based connection between Market Capitalization and macroeconomic growth drivers.

1. Introduction

The link between financial development and economic growth has garnered significant attention from economists and policymakers (Awdeh & Hamadi, 2018). The growing role of stock markets in emerging economies has shifted researchers' focus towards understanding the factors driving their growth (Chiad & Hadj Sahraoui, 2021). Numerous studies have explored the relationship between stock market development and economic growth, highlighting the influence of financial inclusion and well-developed financial markets on foreign capital flows. Positive shocks in financial inclusion and efficient financial markets, particularly stock markets, attract foreign investment. Financial inclusion also encourages foreign investors to participate in infrastructure and manufacturing projects, improving the financial system's structure. Moreover, financial instruments adopted by local

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Atıf/Cite as: Sa'adah, S. (2025). The Influence of Financial Innovation and Market Capitalization on Economic Growth, A Comparative Review of Global and Emerging Markets. *Journal of Recycling Economy & Sustainability Policy,* 4(1), 17-29.

Received 24 August 2024; Received in revised form 20 October 2024; Accepted 27 October 2024

markets enhance connections between domestic and foreign financial systems (Qamruzzaman et al., 2019).

Financial innovation supports economic activity by introducing new financial institutions, services, and products, promoting effective resource allocation and economic growth. The government should focus on fostering financial innovation to benefit households and contribute to development. Capital market performance plays a key role in pooling surplus funds for medium- and long-term investments.

Orlowski (2020) found that equity financing positively impacts economic growth in the US and Europe, with a stronger effect in the euro area. Increasing equity financing is recommended to enhance GDP growth, particularly in Europe. Conversely, while debt accumulation may foster growth in Europe, it has a negative impact on the US economy, and expanding total credit is unlikely to benefit either region.

Economic fundamentals such as money supply, exchange rate, and inflation are linked to share return volatility. Both money supply and exchange rates impact stock market volatility, with evidence showing bidirectional causality and interdependence. The financial market is divided into two parts: the money market, dealing with highly liquid, short-term debt securities (Abbas et al., 2018), and the capital market, which trades longer-term financial instruments and is broader in scope (Moosavi et al., 2019).

Financial market volatility influences real production, particularly during financial crises. Increased uncertainty can lead to reduced consumption, investment, and output, as observed during the Great Recession, where financial volatility contributed to economic downturns. Financial instability negatively impacts production by reducing aggregate demand, and this effect is significant (Yıldırım-Karaman, 2018).

Recessions are often accompanied by increased microeconomic uncertainty. Uncertainty shocks can cause GDP declines of around 2.5%. Matching consumption throughout the economic cycle requires combining first-moment shocks with uncertainty shocks. Bloom et al. (2018) found that the best model for recessions involves negative first-moment shocks and positive second-moment shocks.

The relationship between financial market growth and economic development has been a subject of extensive research. Several studies have examined the link between stock market development and economic growth. This study aims to explore the theoretical and literature-based relationship between market capitalization and the macroeconomic drivers of growth.

2. Theoretical Framework

The following paragraphs present several significant theories that form a solid foundation for this research study.

2.1. Harrod-Domar (Hd) Model Of Neo-Keynesian Theory

The Harrod-Domar (HD) model, which explains how capital and saving levels effect an economy's development, is described in Neo-Keynesian theory. This model illustrates how capital accumulation influences economic growth in addition to explaining technical advancement. This approach necessitates an additional capital stock for economic growth and development. This model presents a solution that is effective in understanding the underdevelopment of capital stock. As a consequence, it is just essential to increase the number of resources available to encourage investment. This strategy, according to the Harrod-Domar (HD) model, is insufficient to ensure full employment since it fixes the labour and capital stock, as well as the characteristics that are utilised.

2.2. Neoclassical Theory of Growth

The neoclassical (or marginalist) theory determines output and income distribution taking technology, consumer preferences, and endowments of productive factors as exogenous variables. This structure produces a few foundational elements common to both exogenous and endogenous growth. First, all models presuppose Say's law thus omitting any considerations about the role of aggregate demand in the growth process: Hence, growth is determined by supply factors alone. Moreover, the existence of a continuum of techniques of production ensures that it is possible to substitute one factor with another until their endowments are fully employed: In addition, excess supply of one input would produce a reduction in its price, thus favouring the adoption of a technique of production which employs the factor more intensively. Second, income distribution is determined by the relative scarcity of the productive factors. Moreover, the interaction between technology and factor endowments determines the equilibrium marginal product of each factor, this assumption is regarded as a source of neoclassical growth model's essential assumptions. As a result, they are referred to as exogenous to the model.

2.3. Endogenous Growth Theories

In this model, long economic growth is related to and viewed as an endogenous variable, allowing for infinite production per capita growth. It is able to do so because it has an infinite capacity for implementing new ideas. Furthermore, government policy can influence all government policy actions and growth rates, such as infrastructure provision, intellectual property protection, regulations, taxation, law and order enforcement, according to the endogenous growth framework, because it has the potential to influence the speed of creativity and activity (Johansson, Karlsson, & Stough, 2011). Furthermore, there are various benefits to employing these models in government. As a result, the nation's financial structure and policy, such as its taxes and regulatory systems, as well as

its macroeconomic distribution and financial structures, have a significant influence on saving decisions and investment distribution, such as whether or not to change long-term growth. Endogenous growth models, including neo-Keynesian and neo-classical growth models, give different definitions of growth, but they all agree that growth in total factor productivity is an important component of economic growth (Johansson et al., 2012). Furthermore, the development and preservation of an entrepreneurial spirit and a leadership culture are endogenous processes. Attracting university-educated labour and expanding the region's market potential are both endogenous processes that regional policy may help to promote and drive. Furthermore, regional expansion provides fresh resources for the development of educational programs and infrastructure.

2.4. Economic Growth and Economic Development

Three main trends are observed: firstly, GDP per capita and household incomes are rising steadily. Secondly, a higher share of household incomes is expected to be spent on consumption due to consumption-stimulating policies. Thirdly, most of the countries in the region demonstrate a tendency toward rising populations, which contributes to the higher consumer potential of the region. Similarly, Mishra (2011) reported that consumption may drive economic growth in developing nations rather than production or investment. The reason for that could be that private consumption accounts for 70 to 75 percent of GDP in these economies. As a result, with its major proportion of GDP, consumption expenditure is intended to contribute the most to real GDP growth. Furthermore, consumption itself would stimulate the private sector to generate more goods and services. Therefore, consumption-led growth would give way to production- and investment-led development, and the economy would subsequently reach a high growth rate. Moreover, it has been noticed that the rise in real private consumer expenditure over the period was supported by an increase in per capita income and an increase in inflows of workers' remittances as well. Hence, it could be said that the continued growth momentum was bolstered by greater consumer spending reflecting back into economic activity. So, it is concluded that the creation of a strong middle class with greater purchasing power is a positive indicator of and will lead to business growth and social development. However, in order to maintain the longer-term growth momentum, investment must be increased at a higher rate than consumption spending. Investors, on the other hand, took advantage of rising demand by expanding their operation of the company to fulfill it. There is no doubt that growth in the economy of the nation helps the country reduce its budget deficit, which improves its wealth simultaneously. The study of Agarwal (2020) stated that there are six factors of the economy of the nation that are presented in the below figure:

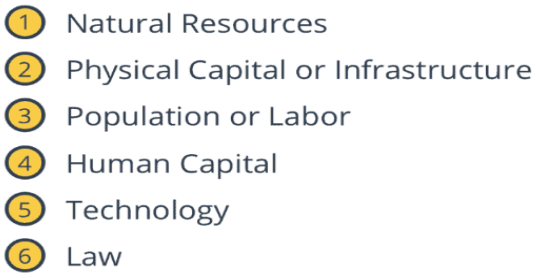

Figure 1. Six Factors of Economic Growth (Agarwal, 2020)

2.4.1. Technology, E-government & Manufacturing

In terms of technology as one of the factors affecting economic growth, Dhaoui (2021) conducted a study in 15 of the The Middle East and North Africa (MENA) Countries to examine the significance of e-government in MENA's economic and social development. The study found that putting digital technology and governance practices at the forefront of sustainable development initiatives and providing new and creative technical solutions may help achieve sustainable development in all aspects. Similarly, the study by Myovella, Karacuka, and Haucap (2020) examined the contribution of digitalization to the economic growth of sub-Saharan Africa in comparison with the economies of the Organization for Economic Cooperation and Development (OECD). The study stated that the advancement of technology and digitalization has changed the way individuals, consumers, and organizations behave, ways of work, and communication around the world. Moreover, this modern pattern can be linked to the introduction of information and communication technologies (ICT), for example, mobile phones and internet technologies, which result in new products and manufacturing processes, new marketing and supply chains, business complexities, as well as tremendous advancements in technology. The study concluded that digitization has a positive contribution to economic growth, regardless of a country's degree of development. However, although it is insignificant in OECD economies, the influence of mobile technology is positive and significant in Sub-Saharan African countries. In addition, the internet's effect on economic growth is strong.

In this context, Su and Yao (2017) utilized a broad range of globally comparable sectoral data to revisit the role of the manufacturing sector during the middle-income stage. The study revealed that industrialization is regarded as the most essential economic growth driver. Likewise, the study proves that manufacturing in middle-income economies is still the major growth driver. Furthermore, the research concluded that manufacturing has three primary characteristics: first, manufacturing expansion affects the growth of the services sector. Second, industrial development increases savings and accelerates technology accumulation. Third, a larger manufacturing sector in

middle-income nations may develop human capital and economic institutions.

In a similar way and from a different perspective, Aghion, Jones, & Jones (2019) analyzed the impact of artificial intelligence (AI) on innovative idea production and examined to what extent AI can boost growth temporarily or permanently. As AI is able to replace people in generating ideas, automation may supplant population growth as a driver of exponential growth. Hence, theoretically, AI could generate some form of singularity, possibly leading to the economy achieving infinite income in finite time. Indeed, singularity could occur even with less than full automation because nonrivalry of knowledge leads to increasing returns. However, even though many tasks have become computerized, growth may be constrained by areas that are hard to improve, for example, when some steps in the innovation process involve human R&D. The AI may impede or hinder growth by aggravating business theft, which inhibits human technology investments. The study found that capital share increases in several sectors (particularly outside services), which is consistent with automation. However, evidence connecting these patterns to sectoral automation measures is limited, and other various economic variables are at work in capital share movements.

Brooks, Wang, & Amback (2018) discussed another factor of the economy that is "law." The law that regulates economic activities, such as the rules of business, For example, solid waste management systems have found it difficult to keep up with the rapidly expanding usage and disposal of plastic products, which has negative effects on the environment and oceans. In addition, despite recycling and the circular economy being considered as possible answers, more than half of the plastic waste that was meant for recycling was shipped to hundreds of other nations. However, China has established a new policy that forbids the import of the majority of plastic garbage, which begs the issue of what will happen to the plastic waste that has been imported by China, which has brought in a total of 45% of plastic waste since 1992.

From a different perspective, Agarwal (2020) reflects those factors that may affect the growth of the economy of a nation if not worked in a proper manner. These factors are presented in the figure below:

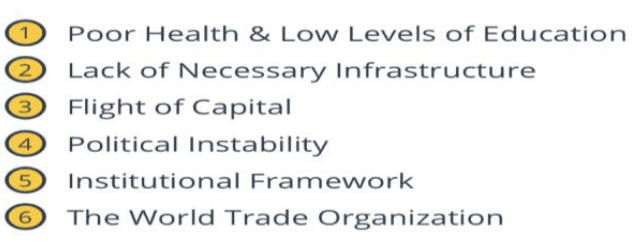

Figure 2. Factors Affecting the Growth of Economy (Agarwal & Zhang, 2020)

Agarwal (2020) discussed the institutional framework, such as rules and laws, that controls economic activity. Similarly, a study that was conducted by Welela (2018) states that economic growth could be increased by the profitability of firms, which could be achieved by reducing production costs or increasing the output of the companies. The study suggested that the government would be able to contribute to this process by investing more in infrastructural facilities, for example, electricity, gas, construction of roads, the health sector, education, research and development. The study of Shapirov (2015) showed that when the economy is in terrible condition and unemployment is going up, people spend less, save less, and invest less. So, John Keynes suggested that when there isn't enough market leverage to boost aggregate demand and get business going again, the government should intervene in macroeconomic policy, also called "fiscal policy," like cutting taxes or increasing government spending (UN, 2011). Furthermore, Keynes suggested that the best way to get the economy going again after the Great Depression was a mix of two things: lowering interest rates (monetary policy) and government investment in infrastructure (fiscal policy).

According to Nguyen and Bui (2019), numerous pieces of evidence point to a genuine and theoretically positive relationship between real per capita growth, GDP, and financial market development, which boosts a country's GDP investment and is strongly related to the performance of the stock market. Economic growth and economic development are terms that are commonly used interchangeably. Economic growth is the expansion of the economy as shown by physical change. On the other hand, economic development describes a process of significant progress in the degree of operations of an economy based on the acquiring of high-calibre skills (Rana, 2021). Similarly, Agrawal (2020) stated that economic development is different from economic growth. It can be said that economic development lifts people out of substandard living conditions and into appropriate jobs and housing, while economic growth disregards the loss of natural resources, which may result in pollution, congestion, and sickness. However, development is concerned with sustainability, which involves addressing present demands without sacrificing future needs.

Figure 3. Economic Growth and Economic Development

2.4.2. Sources of Economic Growth

A study by Błażejowski, Kwiatkowski, and Gazda (2019) identified the variables influencing global economic growth. Indeed, an essential component of a sustainable economic development strategy may be the determination of the sources of economic growth. It could be stated that gross national saving (as a percentage of GDP) and gross fixed capital formation (as a percentage of GDP) were the most likely drivers of economic growth.

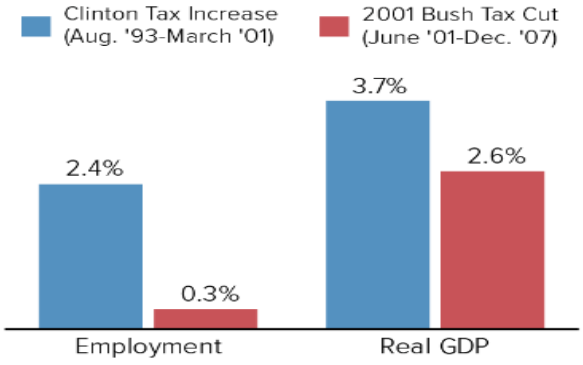

Figure 4. Employment and Real GDP Trend (Stone, 2017)

The above-presented figure 4, presented by Stone (2017), develops a relationship between different decisions taken by the federal government in the USA and their impacts on the performance of the GDP. From August 1993 to March 2001, the Clinton administration increased tax collections by raising taxes on the rich. Due to this reason, they began to offer more employment to the countrymen. As per the figure, the rate of employment during his tenure was 2.4%, while the country's real GDP was 3.7%. On the other hand, the Bush administration cut taxes between June 2001 and December 2007. During this period of time, the employment rate was only 0.3%, while real GDP was reduced and reached 2.4% (Stone, 2017).

From the analysis of the above-presented figure, it can be stated that the growth in a nation's economy depends on the direct relationship between job creation and the economy. On the other hand, the poor rate of employment has direct negative impacts on the real GDP. In addition, cutting taxes on the rich isn't a guarantee to spur growth, and strong economic and employment growth may occur even with higher taxes. Furthermore, small business job growth was also stronger under Clinton. The economy continued to grow and add employment after the Bush tax cuts for the very highest-income households expired at the end of 2012. On the other hand, according to economists Bill Gale and Andrew Samwick, who conducted a thorough analysis of the literature, "growth rates in the United States over extended periods of time have not changed in parallel with the huge changes in the structure and revenue yield of the tax system that have occurred."

Feng, Wang, Liu, & Huang (2017) describe the sources of economic growth as five variables that contribute to economic growth: the technology impact, the industrial structure effect, the regional development balance effect, the management effect, and the influence of the production factors. According to this study, these are the few important natural factors that indirectly give pace to the performance of business sectors and influence the growth of the economy. A study conducted by Moti (2019) stated that despite the availability of more resources in many resource-rich African nations, they have only seen minimal development from natural resource booms. Failure to execute the proper growth promotion policies and maintain strong institutions makes it difficult to diversify and expand manufacturing in resource-rich portions of Africa. Many African countries are not industrialized and are reliant on mineral exports.

The theory that having access to natural resources—especially those in the form of minerals or oil—does not guarantee economic success and that resource richness may even have structurally detrimental effects on long-term economic growth is known as the "resource curse." Although it may seem strange to suggest that a nation's access to a valuable and frequently necessary economic input could be detrimental to its ability to advance economically, scholars who believe in the "resource curse" contend that, more often than not, resource-rich or resource-dependent nations function worse than nations with few natural resources.

2.5. Factors Affecting the Performance of Stock Market

2.5.1. Capital Formation

Emeka, Idenyi, and Nweze (2017) determined whether there is a substantial long-term and causal relationship between domestic investment, capital formation, and economic growth in Nigeria. The study suggested that to finance investment for the purpose of achieving economic growth and development, every economy needs to mobilize capital. The study findings reveal that there is a significant long-term relationship between domestic investment and capital formation and that both of these factors contribute to economic growth. However, gross fixed capital formation in Nigeria has not kept pace with the rate of domestic investment growth. As explained in this study, gross capital formation contributes to technological advancement, which helps in realizing economies of scale or operation and promotes specialization in terms of providing machinery, tools, and equipment. As a result, the accumulated capital allows for the acquisition of additional productive capital equipment.

2.5.2. Capital Formation

Economic growth and economic development are used interchangeably; however, there is actually a distinction between both concepts: economic growth refers to improvement in output, while economic development refers to the quality of improving the production process, the efficient use of resources, and enhancements in the quality of life. Hence, the difference in measurement

methods could cause some kind of inequality and reward due to some economic sectors having enough resources while others don't. The negative effects of economic growth, such as pollution, environmental issues, etc., should be controlled and rectified to achieve economic development. Ruchika, Sikarwar, Middi, and Appalaraju (2018) investigated the relationship between the performance of the stock market and economic growth in India. The results revealed a uni-directional causal relationship between GDP and the return of the stock market. The study by Agarwal and Zhang (2020) measured economic growth as the increase in a nation's real gross domestic product (GDP) or gross national product (GNP). The gross domestic product (GDP) of a nation is the total value of all final goods and services produced in that nation over a given time period. Therefore, an increase in GDP indicates an increase in production. GDP is used to measure the performance of the economy of a country (Simionescu et al., 2017). Ho & Odhiambo (2018) conducted a study to analyze stock market macroeconomic factors. The study examined the impact of banking sector development, inflation, exchange rate, economic growth, trade openness, and stock market liquidity. The study concluded that such a policy will benefit the stock market's long-term development by raising exporters' desire for equity financing. Furthermore, policymakers should also stimulate banking sector expansion to boost short-term stock market growth. Policymakers should support local currency stability to foster short-term stock market growth.

The economy of a country includes many factors that combine to work for the growth of the nation. In this regard, a study conducted by Rodrigue (2021) depicts that there are only three important elements of the economy. These are regulations, manufacturing, and distribution. Moreover, economies are primarily concerned with the interrelationships between supply and demand. For a country, manufacturing and distribution are becoming increasingly intertwined as a result of the rise of logistics. To make things even more complicated, all of these aspects, particularly manufacturing, rely on inputs, which are more properly referred to as components of production. Land with the inclusion of natural resources, labour, and capital all falls under this category. Rodrigue (2021) added the fourth component, since its primary function is to organize the other factors of production. All these aspects, notably manufacturing, need inputs, sometimes called production factors. Land, money, and labour are the basics. In addition, the corporation is seen as another factor, as its role is crucial in organizing other factors of production into a manufacturing process.

In a similar context, Beattie (2021) explored four key elements that contribute to effective performance in the world market: supply and demand, scarcity, incentives, costs, and benefits. The study highlights the limited nature of global resources, requiring careful allocation to meet needs efficiently. Similarly, Kim (2018) analyzed supply and demand in relation to oil production, explaining dramatic oil price drops as driven by these factors. During the initial oil price decrease, genuine demand reduction had a larger impact, while the second decrease was influenced by both supply issues and speculative demand.

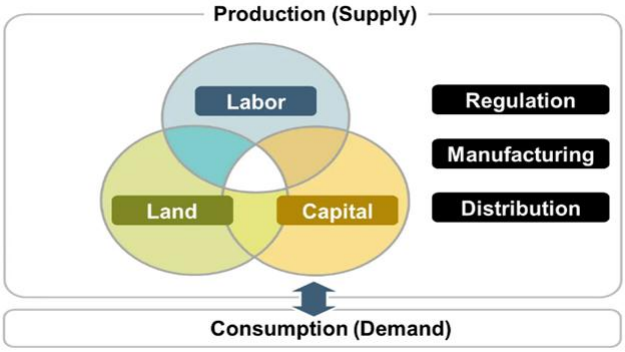

Figure 5. Elements of Economy (Rodrigue, 2021)

Bachner, Mayer, and Steininger (2019) examined the effect of costs and benefits on economic decisions, focusing on the transition from fossil fuels to renewable energy. They found that investors perceive renewable energy as more capital-intensive, suggesting that reducing financial risks for renewables could support long-term climate goals. Focusing on consumption, Arapova (2018) analyzed factors influencing household consumption expenditures in East Asian countries.

2.6. Linkages between Stock Market Development and Economic Growth

Economists have long been captivated by the relationship between financial development and economic growth, given that stock market expansion can drive economic progress. Banerjee et al. (2017) found a correlation between financial sector improvements and economic development, consistent with Schumpeter (1912). Tigari and Aishwarya (2019) emphasized that capital market development is a measure of economic growth, guiding savers' funds towards productive investments. Regulatory bodies such as the Bank of England and the US SEC ensure that capital markets operate ethically, which is crucial for industrial and economic growth.

2.6.1. Government Expenditure

Ayad (2020) proposed five theories explaining the link between economic development and government spending, including Wagner's law and Keynesian theory. These theories suggest that economic progress leads to increased government spending or vice versa. The findings have implications for MENA policymakers, where countries like Algeria, Egypt, and Iran should use government expenditure to foster long-term growth, while others like Tunisia and Turkey should leverage economic growth to enhance government spending.

Simionescu et al. (2017) linked economic prosperity in the Eurabian nations to integration and expansion, highlighting factors like government spending on education and FDI. Arayssi et al. (2019) examined the impact of the Arab

Spring, noting its adverse effects on economic stability and growth, particularly in non-oil-producing countries. Political instability has hindered financial progress, with regional economic development slowing post-2011.

Emara (2020) noted that while MENA economies experienced some growth, it was uneven across the region. Oil-exporting countries recovered faster from economic downturns, while non-oil nations faced challenges such as security concerns and refugee crises. Foreign investment in the region helped recovery but was hindered by conflicts and instability.

Kutan, Samargandi, and Sohag (2017) highlighted differing perspectives on the relationship between financial development and economic growth in MENA countries. Gwaison et al. (2021) also pointed out the benefits of capital markets but cautioned against over-reliance on them for boosting economic growth. Awdeh and Hamadi (2018) emphasized the role of natural resources and labor in driving growth in MENA, but noted that despite favorable conditions, sustained economic performance has been elusive.

2.6.2. Corruption & FDI

Corruption, defined as preferential treatment by public decision-makers, has negative implications for investment and economic growth (Krueger, 1974; Tullock, 1980, as referenced in Awdeh & Hamadi, 2018). It hampers business formation, distorts markets, and raises costs. Rogmans and Ebbers (2018) found that resource-rich nations often implement anti-FDI laws, contributing to the "Dutch Disease." Kutan et al. (2017) emphasized that FDI can support financial market development in MENA, but its impact is not uniform across all countries.

2.6.3. Labour Market Conditions

Awdeh and Hamadi (2018) identified key barriers to economic advancement in MENA, including state debt, military expenditure, and political instability. They argued that MENA countries need to focus on private-sector-led growth and improve educational programs to address labor market challenges. High population growth rates and brain drain are additional barriers to economic progress in the region.

2.6.4. Foreign Direct Investment

Qamruzzaman and Wei (2019) highlighted the role of FDI in enhancing capital flow, productive investment, and financial market efficiency. Abdelhadi et al. (2021) found that foreign investment positively impacts economic growth by transferring technology and know-how. Saidi and Mbarek (2015) noted that energy consumption and technological advancement are crucial for economic growth in MENA, while Sothan (2017) emphasized that FDI's impact varies based on country-specific factors.

2.6.5. Human Capital and Employment

Pasara and Garidzirai (2020) emphasized employment expansion as a means of promoting economic growth. They recommended increased government spending on capital goods to boost employment. Mckee et al. (2017) highlighted the challenges of regional integration and labor market issues in MENA, recommending education reforms to improve workforce skills.

2.6.6. Unemployment, Economic Growth, and Gross Capital Formation

Pasara and Garidzirai (2020) found that physical capital formation helps reduce unemployment and boost economic growth. Ogundari and Awokuse (2018) noted that both education and health positively impact economic growth in Sub-Saharan Africa, though health has a greater influence.

2.7. Relationship between Macroeconomic Factors and Economic Growth

The business cycle is crucial for understanding the relationship between macroeconomic conditions and economic growth.

2.7.1. The business cycles In the Holy Qur'an

The Holy Qur'an provides valuable insights into economic cycles and strategic planning. In Surah Yusuf (Ayat 43 to 56), Prophet Yusuf interpreted the Egyptian king's dream involving seven fat cows being eaten by seven thin cows, and seven green wheat bunches alongside seven dried ones. He advised storing the harvest from seven years of abundance to prepare for seven years of scarcity, followed by years of prosperity. This guidance enabled Egypt to navigate economic challenges effectively, emphasizing the importance of foresight, planning, and resource management during periods of both growth and hardship. The story demonstrates how strategic planning and preparedness can help stabilize economies and ensure sustainable development. Such wisdom is applicable in modern contexts, highlighting the importance of proactive economic policies to mitigate future crises and promote resilience.

2.7.2. The business cycles In the Holy Qur'an

Hall, West, and Gunn (2015) found that negative signals about future financial returns can lead to economic cycles, even without changes in domestic fundamentals like technical shocks or fiscal policies. Their research highlighted the role of uncertainty in causing business cycles and showed that recessions are often accompanied by increased microeconomic uncertainty. Uncertainty shocks can cause a 2.5% drop in GDP, and adding first-moment shocks helps explain consumption patterns across the cycle. Hall argued that negative first-moment shocks combined with positive second-moment shocks provide the best model for recessions, and increased uncertainty can also reduce the effectiveness of first-moment programs like wage subsidies.

Yıldırım-Karaman (2018) provided evidence of the negative impact of financial market volatility on real output, particularly during financial crises such as the 2008 Great Recession. The collapse of Lehman Brothers triggered widespread panic, increasing market volatility and reducing consumption, investment, employment, and production. This highlights how financial volatility can have a significant negative effect on aggregate demand and economic output.

Begenau (2018) examined how financial frictions influence firms' borrowing decisions over the business cycle, focusing on when firms seek loans versus equity capital. The study found that company dynamics and financial frictions interact to shape financing decisions, with small firms adopting a pro-cyclical debt and equity financing approach, while large firms shift between debt and equity based on economic conditions. Changes in funding capacity and needs determine firms' external financing behavior. During favorable periods, reduced debt costs may encourage firms to adjust their capital structure to include more debt. However, small firms unable to finance investments through debt alone may turn to equity issuance.

Schumpeter (1939) argued that analyzing business cycles is akin to analyzing the economic process of capitalism. His Theory of Economic Evolution laid the foundation for integrated growth and cycle analysis. Schumpeter emphasized the concept of Creative Destruction, where the liquidation and reallocation of productive resources during recessions are essential for long-term development. He believed that crises serve as a necessary "spring cleaning" to enable new economic growth, reflecting capitalism's inherent resilience.

2.7.3. Macroeconomic Factors

Chun, ho, and Ryu (2020) suggested that investors should rely on stock market indicators to evaluate daily market risk in order to anticipate the economy's performance. As a result, the researcher conducted an examination to validate the volatility index VKOSPI's usefulness as a daily trading indicator. VKOSPI is South Korea's largest stock market index. As a result, the study advises introducing volatility index (VKOSPI) futures contracts to raise the index's credibility, because greater openness and more information will improve the underlying market's efficiency and completeness. The study's findings suggest that implied volatility indices and stock market indicators can anticipate market volatility. Furthermore, a country's economy comprises several components that work together to promote national growth. Similarly, a study done by Rodrigue (2021) shows that there are just three key aspects of the economy. Regulations, production, and distribution are examples of these. Furthermore, economies are preoccupied with the interdependence between supply and demand. Furthermore, with the expansion of logistics, production and distribution are becoming increasingly interwoven for a country. Furthermore, all of these components, particularly manufacturing, rely on inputs, also known as production factors, to carry out their activities. In their most basic forms, they consist of land (including natural resources), capital, and labour. Because the organization's basic duty is to organize the other parts of production into a functioning unit, the corporation is sometimes seen as the fourth component.

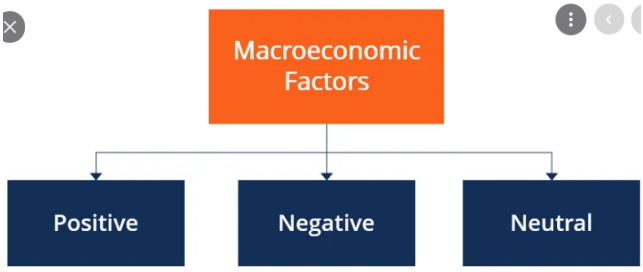

Figure 6. Macroeconomic Factors (Corporate Finance Institute, 2015)

Negative economic growth causes such as political upheavals in a country, unstable governments, financial crises, and high inflation rates are those that have a direct impact on a country's economy. With the aid of an example, if there is a worry of political instability in the worldwide market regarding a given country, there is a probability that an international conflict will occur or that their people would experience civil war. Furthermore, as Seyoum and Camargo (2020) discovered, political instability has a direct impact on a country's economy. This may be witnessed in Afghanistan, Yaman, Iraq, and Lebanon, which are some clear examples of nations whose economies have suffered as a result of political instability. A condition like this in a country not only increases economic volatility as a result of inadequate resource reallocation, but also promotes economic degradation, people flight (brain drain), low levels of inbound FDI, and economic decline.

In the same direction, but another research study undertaken by Maris, Sklias, and Maravegias (2021) focused on the other macroeconomic elements that influenced the economy's growth. This element is known as the economic crisis, and it primarily impacts the flow of commodities owing to a drop in demand caused by a shortage of liquid money in the market and a credit crunch, which reduces people's spending power. For example, the 2008 financial crisis primarily impacted US banking institutions, but it ultimately impacted the global economy. This is due to the interdependence of the economy of the countries. Furthermore, the study focused on the political causes of the crisis in order to determine whether they were the primary causes of the economic crisis (particularly over the last decade) as well as the primary causes of Greek and European officials' inability to overcome the crisis. Furthermore, Greece's macroeconomic data, such as GDP and budget deficits/surpluses, may have improved. It has not, however, enhanced the operation of its institutional mechanisms, which are critical to its efficient structure and

healthy operation.

Some economic elements are neutral in nature. Instead, the purpose of the action, such as trade regulation between states or nations, determines the exact repercussions. When a trade embargo is imposed or withdrawn, for example, it has a number of implications depending on the economy affected. Huy et al. (2020) carried out a study that revealed the favourable macroeconomic elements that promote economic growth. Macroeconomic and financial policy must take into consideration both internal and global effects, such as US inflation. Furthermore, the stock market, and hence the stock price, is positively associated with lending interest rates and exchange rates. As a result, banks and government agencies must monitor and balance capital sources in order to avoid using short-term funds to pay long-term projects. Similarly, due to the interconnectedness of the nations' economy, it has been seen that US inflation correlates favourably with stock prices and the Viet Nam stock market. As a result, if US inflation rises or declines, the government must adopt appropriate macroeconomic actions.

Islam, Alharthi, and Murad (2021) explored the effects of inflation on economic growth by adding the influence of population. They found that inflation and population have distinct effects on economic growth in the short term, but both are positive for economic growth in the long run. The study, on the other hand, indicated that inflation causes GDP to rise faster, but only marginally. Furthermore, as the economy is at full capacity, higher inflation is likely. A negative link between inflation and economic growth, on the other hand, may indicate that the economy is moving along the horizontal section of the long-run aggregate supply curve.

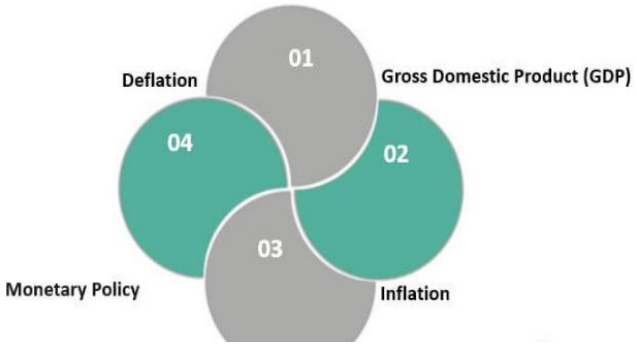

Figure 7. Economy and Macroeconomic Factors

Macroeconomic policies have played a key role in shaping the nation's economic development, combining liberalization, structural reforms, and interventionist measures to promote growth and stability. These policies address challenges such as inflation, fiscal deficits, unemployment, and infrastructure gaps, while fostering market-oriented reforms and encouraging foreign investment. Additionally, countercyclical measures have been adopted to mitigate economic downturns, and the Reserve Bank has ensured price stability through effective monetary policy. Overall, these efforts focus on achieving sustainable and inclusive growth, balancing industrial development, poverty reduction, and environmental sustainability (Srisiim, n.d.).

Similarly, in recent years, economic growth and financial development have been more prominent research topics, with various studies seeking to uncover the causal relationship between them. These research, for example, focused on two fundamental questions: Is there a causal relationship between economic growth and financial development, and what is its nature and direction? According to Qamruzzaman and Wei (2019), all financial processes may be accelerated to increase the economy, and financial innovation, in particular, supports economic growth. Financial innovation strengthens the financial system by diversifying banking services and mitigating investment risk through capital market financial instruments. The author discovered that capital flows impact productive investment, lowering capital constraints, and investment diversification by researching the relationship between capital flow and economic growth.

Several development economists, on the other hand, have acknowledged the relevance of finance in economic growth. Others argue that economic growth and development are a complex process influenced by the development of financial markets. Furthermore, capital movement improves market efficiency by exposing it to international competition and developing new financial goods and services that attract both domestic and foreign investors. Furthermore, all of these market imperfections can boost the efficiency with which resources are distributed. These studies also suggest that endogenous growth models have an effect on the link between financial growth and development. Endogenous growth suggests that a well-developed stock market may improve liquidity, information processing, diversification, and capital mobilization.

Furthermore, it has the ability to improve long-term economic growth and development. Proponents of this idea argue that the stock market may stimulate effective capital allocation due to its economic character. According to Nathaniel et al. (2020) the stock market capitalization ratio, the value of traded shares, and the market turnover ratio all had a significant influence on economic growth, however the value of traded shares had a negative impact. As a result, the determinants of stock market development are connected with economic growth in the long run.

3. Conclusion

The findings of this study underscore the significant influence of financial innovation and market capitalization on economic growth. Financial innovation, through advancements in fintech solutions such as mobile banking and electronic payments, has played a crucial role in enhancing financial inclusion and improving economic development, particularly in emerging markets. Market

capitalization is also a key contributor, especially in developed economies where a well-capitalized stock market promotes liquidity, attracts foreign investments, and provides businesses with access to much-needed equity financing.

Furthermore, ICTs and digital technologies are regarded as transformational, particularly in terms of good governance and sustainability. Similarly, financial and technical improvements have propelled modern economic expansion, as noted by Todaro and Smith (2012). In oil-dependent countries, economic growth is closely linked to fluctuations in oil prices, and these economies often face challenges such as low GDP per capita due to high population growth rates. Regional growth is mainly driven by capital accumulation rather than productivity improvements.

The study also highlights the importance of a stable macroeconomic environment in fostering investor confidence and promoting financial stability. The impact of financial innovation and market capitalization differs between global and emerging markets, with developed economies benefiting more due to their established financial infrastructure, while emerging markets gain through improved access to financial services.

Overall, the study concludes that both financial innovation and market capitalization are vital to economic growth, but the extent of their impact is contingent on the maturity and structure of the financial market in each region. Financial and technical breakthroughs are essential for emerging countries to maintain their economic success. Future research should focus on empirical studies that explore the specific factors driving these differences, particularly in individual countries.

4. Policy Recommendations

The study suggests policy measures to enhance market capitalization, improve access to banking for underserved populations, foster fintech startups, invest in financial market infrastructure, and improve market transparency to build investor confidence. Financial development has a positive influence on economic growth, especially in the pre-crisis period, and initiatives should be directed at reinforcing the banking sector, fostering financial inclusion, and ensuring the stability of financial markets.

5. Policy Recommendations

This study provides a comprehensive comparative literature review of financial innovation, market capitalization, and their effects on economic growth. However, there are limitations to consider. The literature review is inherently limited by the availability of peer-reviewed studies and economic reports, which may not cover all regions equally. Additionally, the study's reliance on secondary data restricts the ability to draw causal relationships, as the findings are based on correlations observed in existing literature.

Another limitation is the focus on both developed and emerging markets without delving deeply into individual country-specific contexts. Future research could expand on the findings by conducting empirical studies specific to particular countries or regions to validate and refine the conclusions drawn from this comparative review.

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