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**THE IMPACT TRADE OPPENESS ON FINANCIAL DEVELOPMENT IN THE NEXT
11 COUNTRIES/ AN ECONOMETRIC APPLICATION**

MASTER'S THESIS

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Upon the submission of the dissertation to the **Graduate Education Institute** of Tokat Gaziosmanpaşa University, Soma Hamid Abdulrahman d has defended the study entitled **THE IMPACT TRADE OPPENESS ON FINANCIAL DEVELOPMENT IN THE NEXT 11 COUNTRIES/ AN ECONOMETRIC APPLICATION** in partial fulfillment of the requirements for the degree of Master of Arts in Teaching English as a Foreign Language, and the study has been found fully adequate, in scope and quality, as a thesis for the degree concerned by unanimous vote of the examining committee on 20.12.2024

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Director of Graduate Education Institute

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ABSTRACT

THE IMPACT TRADE OPPENESS ON FINANCIAL DEVELOPMENT IN THE NEXT 11 COUNTRIES/ AN ECONOMETRIC APPLICATION

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This article explores the relationship between trade openness and financial development in the Next 11 developing economies with substantial potential to contribute to the world economy. The econometric model is used to determine the value of different levels of trade openness on the financial sector development outcome in these nations, based on the panel data from 1992 to 2021. The independent variables include trade openness, globalization, GDP per capita and technological innovation. The Financial Development Index takes part and they are the main dependent variables. Evidence suggests that trade openness enhances the ability of domestic firms to receive foreign capital; expands investment channels; and raises financial sector competition, which are all conducive to financial development. The other variables, such as globalization, technical innovation and economic success are also positively associated with financial development, thereby suggesting a cumulative effect of one financial progress promoting further progress. The central tenets of policy recommendations include easing trade restrictions, promoting international integration, funding technical developments and promoting inclusive economic prosperity. This research provides useful information to policymakers in emerging economies for promoting a healthy financial sector by increasing trade openness and global connectivity.

Keywords: Trade Openness, Financial Development, Next 11 countries, Panel Data Analysis, Globalization.

Özet

Ticaret Açıklığının Finansal Gelişim Üzerindeki Etkisi Önümüzdeki 11

Ülke: Bir Ekonometrik Uygulama

Yüksek Lisans Tezi, Ekonomi Bölümü

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Bu makale, dünya ekonomisine önemli katkı sağlama potansiyeline sahip Gelecek 11 gelişmekte olan ekonomide ticaret açıklığı ile finansal gelişme arasındaki ilişkiyi araştırmaktadır. Ekonometrik model, 1992'den 2021'e kadar olan panel verilerine dayanarak, bu ülkelerdeki finansal sektör gelişme sonuçları üzerinde farklı ticaret açıklığı düzeylerinin değerini belirlemek için kullanılmıştır. Bağımsız değişkenler arasında ticaret açıklığı, küreselleşme, kişi başına düşen GSYİH ve teknolojik yenilik yer almaktadır. Finansal Gelişim Endeksi yer almaktadır ve bunlar ana bağımlı değişkenlerdir. Kanıtlar, ticaret açıklığının yerli firmaların yabancı sermaye alma yeteneğini artırdığını; yatırım kanallarını genişlettiğini; ve finansal sektör rekabetini artırdığını göstermektedir ki bunların hepsi finansal gelişmeye elverişlidir. Küreselleşme, teknik yenilik ve ekonomik başarı gibi diğer değişkenler de finansal gelişme ile olumlu ilişkilidir ve bu nedenle bir finansal ilerlemenin daha fazla ilerlemeyi teşvik eden kümülatif bir etkisi olduğunu göstermektedir. Politika önerilerinin temel ilkeleri arasında ticaret kısıtlamalarının hafifletilmesi, uluslararası entegrasyonun teşvik edilmesi, teknik gelişmelerin finanse edilmesi ve kapsayıcı ekonomik refahın teşvik edilmesi yer almaktadır. Bu araştırma, ticaret açıklığını ve küresel bağlantıyı artırarak sağlıklı bir finans sektörünü teşvik etmek için gelişmekte olan ekonomilerdeki politika yapıcılara yararlı bilgiler sunmaktadır.

Anahtar Kelimeler: Ticari Açıklık, Finansal Gelişim, Next 11 Ülkeleri, Panel Veri ,Küreselleşme.

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INTRODUCTION

In the period from 1995 to 2010, the arsenal of changes in the global financial development landscape had become severe. At this time, trade was increasingly globalized and new pilot authorities were formulated. In that era, financial development was one of the core pillars defining economic growth, and it played a big role in terms of what made nations advance. As such, we need to understand the general framework within which these changes occurred considering the role of trade openness that resulted in financial development.

From 1995 to 2010, the world saw monumental developments in financial systems around the world. The development of many countries, however, was contributed by changes in financial institutions, markets, and instruments (Guillén & Suárez, 2010, p.258). Increased inter connectedness of financial markets at this time indicated the use of advanced technology bringing about increasing speed and complexity of transactions. Its contribution to promoting economic stability; making investment opportunities possible; and directing the efficient utilization of resources shed new light on financial development during this time.

Financial development constitutes an engine of the economic growth. A well-developed financial system is usually linked with savings mobilization, efficient capital allocation, and risk management. Additionally, it is a driver of entrepreneurship and innovation whose impetus for economic development drives entrepreneurship and innovation (Maciejewski & Głodowska, 2020., p.78). Financial development is critical and other nations are also dedicated to developing their financial systems.

During the same period, we also witness a strong globalization trend and an interlocking of trade worldwide. Ventures were made by different countries to make their economies open, a place to trade different goods and services from one country to another. One element affecting the globalization of trade was improvements in transportation and communications, along with the freeing of market policies. The interdependence between the countries offered a chance for economic integration and resulted in increased international trade and the transformation and alteration of global monetary structures.

Key institutions which led to the globalism of trade across the globe were the International Monetary Fund (IMF), the World Bank, General Agreement and Tariffs on trade (GATT), and World Trade Organization (WTO). These institutions developed the standards that controlled the foreign trade; it promoted good cooperation and conflict resolution among the nations. The central element that should have facilitated the fair-trade practices, including dispute resolution mechanisms which played a key role in fostering globalization was a framework (Head, 2021, p.7). Second, trade openness has definitely become more popular as countries wanted to grow more actively in the International Markets.

This was trade openness with free trading environment and lower barriers in the world trade. However, most of the countries came to realize that they need to be embraced towards free trade to take advantage of their comparative advantage, ensure economic efficiency and support continued globalization (Singh et al., 2023, p.17). Hence, we pay attention to the importance of trade openness in determining national economic fates.

At the intersection of trade openness and economic development, the phenomenon is complicated and should be handled carefully. Relations between these two factors are complex and it may negatively influence economic growth, stability and national development. This is of critical importance to those formulating sound economic policies and strategies since the knowledge of how trade openness affects financial development is fundamental. Subsequent sections will discuss this relationship in detail for the following 11 developing nations which are likely to make a great contribution to the economy of the world by 2050.

CHAPTER 1

OVERVIEW OF TRADE OPENNESS

1.1. Definitions of Trade Openness

Since trade openness is a part of economic openness, one needs to understand economic openness in order to understand the idea of trade openness correctly. For example, economic openness is the acceptance of foreign investment, freely importing goods, and international trade (Becker, 1993, p.99). Loosening constraints on how a country's economy can function such as limitations on imports, foreign currencies, foreign investments, wages and taxes Pavcnik, 2002, p.91).

The openness of foreign trade is an aggregate of specific procedures and actions that lead to neutralizing the foreign trade system and the state interference in exports and imports, it is a long procedure. An open commercial environment from the point of view of international organizations is when a country's economic policies and programmers create an environment conducive to the free flow of goods, services and capital across its borders. (Rodriguez, 1993 p.241).

The basic idea of commercial openness is one of liberal flow of goods, services, and capital across borders. (Sachs & Warner, 1995, p.1)

It includes several aspects that govern it, including trade regulations, tariff levels and restrictions on foreign investment and the degree of economic activity done for and by foreign people or company. In addition to that, it has to do with the legal frameworks allowing a foreign business to enter and operate, and the ease of doing business it offers non-native investors (Krugman & Obstfeld, 2009). High economic growth, resulting efficient resource allocation ensuring competition, ideas and technology exchange (has), is characteristic for commercial openness (Frankel and Romer, 1999, p.378). But it is fundamental to strike the right balance between openness and protection of domestic industries and interests (Stiglitz, 2002). Low levels of commercial openness in the countries may cause slow rates of growth to the economy, little access to world product markets and less foreign investment opportunities (Lecture Notes, 2002). Ultimately, every nation has to decide its degree of commercial openness depending on national priorities: for example, for economic objectives, development goals, etc.

Openness in trade is the central element in respect to international trade and economics, that is, how freely the goods and services can be moved or traded across the countries' borders (Winters, 2004, p. 115). Total trade to GDP (Dollar and Kraay, 2003, p.135) is typically used as a proxy for this. This index will have a higher value thus greater economic integration and greater competition from outside (Yanikkaya, 2003, p.58). In particular, this makes for considerable advantages of the kind that include increased productivity, spreading of technology, and enlarged markets (Squalli & Wilson, 2011, p. 1746). However, we must recall that trade openness is reconciled with protectionism to protect domestic industries.

Openness to trade is not simply how much a countries trade with other countries. They also include policies and rules governing international trade like the rates of tariffs, non-tariff barriers and the restrictions of foreign investment. In those countries with minimum barriers to trade and open commerce, cross border capital flows, products and services are more advantageous.

The degree of a country's trade openness has important economic implications for the economy of that country. Sachs and Warner (1995) demonstrate that open trade policies are correlated with greater competition and further innovations in production processes, productivity increase and efficient resource allocation. For another, an open market ensures more customers to local manufacturers and more choices for consumers. However, an open trading activity does not always relate with economic growth. These benefits can themselves be affected by institutional quality or macroeconomic stability, or else by variables such as human capital or macroeconomic conditions, as (Wacziarg & Welch, 2008, p.188) explain. But, however, too much exposure to globalization may also take the form of external shock, like job loss in particular industry, particularly the ones that are weak globally (Rodrik, 1998, p. 999).

These threats would be dealt with by countries introducing specific approaches and agreements for protecting domestic industries and employees being affected by increasingly international competition. It has adjustment assistance programs, retraining courses and strategic investment into areas where a comparative advantage can be become.

Therefore, the issue of the degree of openness must be also considered as a choice of policy; in this respect, developing countries' economic objectives and development priorities, as well as cost-benefits of different degrees of integration into the world trading system, need to be carefully drawn into account.

The openness to trade can have enormous impact on the growth and development paths of countries. The benefits of open trading policies are such that we have access to bigger markets, we compete on resources and comparative advantages (Frankel & Romer 2017, p.256). In order for international trade and investment to be prompt, countries must remove tariffs and other non-tariff barriers to goods, services and capital movement between them.

1.2. Globalization and Trade Openness

Globalization is the unrestricted cross border movement of goods, services, capital, technology and people, facilitated by transport, communication and information technologies (Steger 2017). This is where globalization becomes evident, in ancient civilizations whose Silk Roads were the origins of trade routes that allowed far away things to come in and out, exchanging goods, ideas, and cultural traditions. In the case under discussion, however, the modern period of globalization extends post war era accompanied by technological progress, economy liberalization and pulling down of trade barriers (Friedman, 2005). Globalization originated, for example, when McDonald's first overseas restaurant opened in Richmond, British Columbia, Canada in 1967 (Love, 1995). This was the launch of the company's expansion to the global market; therefore, it is the American culture that is now out countrywide.

Globalization implies increased connectivity and integration of the world's nations, affecting various scenes of human society. We can nearly always point to significant economic growth, cultural exchange and technological advancements. Wherever it has been adopted, however, it has also led to growing gaps between rich and poor, environmental destruction, and cultural erosion. In this essay, both the merits and demerits of globalization will be looked into. However, globalization has caused economic growth in a lot of countries. The crossing of border for goods, services, and capital without any restriction has created new trade and investment opportunities and hence spurred innovation, competition and efficiency (Bhagwati, 2004). At this stage, businesses have expanded globally and entrepreneurs are ambitiously operating around the globe as well as broadening their customer base and enhancing profitability.

Globalization is directly tied and related to trade, the one giving impetus to and reinforcing the other. Improvements in the levels of transportation, communications and technologies across the world have brought about increasing interdependence of economies, societies and cultures, in this case, globalization (Steger, 2013, p. 181). The events of trade are the movement of goods and

services across national borders. The most enthusiastic proponent of globalization has been the reduction of trade barriers and liberalization of international trading policies (Bhagwati, 2004). Tariffs have come down, quotas have been eliminated, and free trade agreements have been signed so that goods and services seem to flow across boundaries more freely. As a result, global trade and economic integration of nations have been on the rise (Frankel and Romer, 2017, p.379).

Also, globalization has been accelerated by the growth of multinational companies, especially from trade ones that have the capacity to produce or obtain their products around the globe (Dunning & Lundan, 2008). For example, multinational companies have built plants to make their product out of raw materials (which are available from different places) thus boosting demand for transport and international trade. Transportation and communication technologies had also eased the globalization of trade (Rodrigue, 2020). Containerization logistics have reduced the costs for carrying goods over long distances. Same as this, the internet and digital technologies have made possible information sharing on a global scale on global e commerce platforms and provide services (Freund & Weinhold, 2004, p.171).

However, there are some difficulties in the globalization–international business relationship. However, some critics view (Autor et al., 2013, p.68) it as how the manufacturing industry started moving their productions to countries where labor is cheap and this in turns results in job loss. However, shipping issues pollute the environment and erode national sovereignty and cultural identities (Copeland & Taylor, 2004, p.8), (Held & McGrew, 2007).

The flow of goods, services and capital across borders, has been moved by globalization, and the impact has been extraordinary one. Hummels (2007, p.133) shows that one effect of greater distance is that it increases trade volumes and deepens global supply chains. This means that trade barriers have been reduced while transportation costs have dropped, thereby allowing companies to take advantage of comparative advantages and economies of scale; sourcing materials, labor and production from different locations around the world (Feenstra 1998 p.33). More and more, trade has come to be about the exchange of intermediate goods and services, not final products (Johnson & Noguera, 2012, p.226). Advances in information and communication technologies, as well, have driven an expansion in the trade of services, as globalization has promoted growth in the scope of services traded (Freund & Weinhold, 2002, p.238).

Now they (financial, legal and IT services) can more easily cross borders and in trade so specialization and efficiency can improve (Bhagwati et al, 2002, p.93). But globalization's effects upon trade have also spurred worries of job displacement and wage inequality within individual sectors and regions. It may be difficult for production is moving overseas to develop country workers to get used to the changing demand patterns (Ebenstein et al., 2014, p.583). Increased greenhouse gas emissions from transportation and production from globalization, have also begun to lead discussions on the issue of sustainable trade practices (Copeland & Taylor, 2004, p.7). Although it is challenging, global markets alongside the interdependence of economies via trade are traits of modernization (Stiglitz, 2017).

1.3. Measures of Trade Openness

Trade openness, an important variable indicating how integrated are the countries into the international market, can be measured with different measures. The magnitude and the specifics of a country as a trading partner and its economic liberalization degree appear in these indices from different angles. As these are basic measures that must be familiar with to better monitor the effect of trade openness on economic factors like financial development, growth and welfare of the society. There are two ways determining measures of trade openness can be: just quantitative, using simple calculations of trade shares, and qualitative, applying more composite and pluralized indices. The Paper looks at the various dimensions of trade openness by taking different measurements and each indicates a country's trade policies or practices (Huchet-Bourdon et al., 2018, p. 65).

Assessing trade openness is as simple as the quantitative measure of the trade-to-GDP ratio. This ratio compares the amount of exports and imports as a percentage of GDP, indicating the share of international trade in the national economy. For instance, higher ratios would indicate greater integration into global trade networks. The volume of exports and imports or balance of trade measure (though other quantitative measures) is used to analyze other specific aspects of economic liberalization and trade performance further.

On the other hand, the qualitative measures of trade openness refer to the policies and regulations and the institutional factors on which international trade depends. These measures measure the degree of tariff and non-tariff barriers, the degree of trade agreements, and general regulatory

environments. When squalls and Wilson (2011), Economic freedom and the video game trade: A study of the global video retail, captured these factors that can be seen as indices such as the Economic Freedom Index or the Trade Openness Index help us to have more a more nuanced view of a country's trade environment and its link with the participation of the foreign in that environment.

Composite indices combine quantitative and qualitative data and provide an integrated view. For example, indices that combine trade shares across countries with tariffs and policy frameworks help policymakers and researchers understand how policy and economic liberalization mix with trade outcomes. The broader measures help us understand how trade openness is related to economic growth and financial development.

Trade openness is a multidimensional concept and can be measured qualitatively as a measure of the economy's 'degree of openness to trade' using quantitative methods, for example, via trade flows, international trade ratios, and tariff series. The quantitative measures use trade volumes as a share of GDP, whereas the qualitative measures are examined through policy and regulatory environments. The composite indices facilitate obtaining the combined effects of trade openness in financial development and economic growth. There is a need for these measures if a country is to be understood in its integration into the global market and for guiding trade-related policy decisions.

1.3.1 Trade Shares

The most direct measure of trade openness, trade shares are widely used. Trade is a simple percentage of total contribution of trade to the economy. Typically, they are evaluated in terms of their relative activity in international trade — total trade (which is the sum of exports and imports) to a country's Gross Domestic Product. It means that if you divide a country's total exports by its total imports you will get a large figure that shows just how much economic growth now depends on the balance of exports and imports.

Country is relatively strongly opened up and has relatively higher trade shares, therefore depending on what proportion a country larger proportion of the activities is depending on international trade. By contrast, a trade to GDP ratio of 50% represents the fact that 50% of all economic activity in that country is related to that country's trade. However, this measure is

relatively easy to calculate and understand, and many economists and policymakers use it to analyze a country's trade openness at a given period or a particular country (Huchet-Bourdon et al., 2018, p. 71).

A commonly used measure of trade shares, a widely used measure of trade openness, are used to signal trade intensity between countries. As such, they are usually related to free trade policy, low tariff barriers and sound trade relations. The low trade shares can alternatively be explained by protectionism and trade barriers. Trade share can also help to determine change or formation of change in trade practices in a country. For instance, change in the trade shares after formation of trade blocs or free trade agreements.

Understanding the trade relationship between countries depends, in large part, on trade shares. For example, the trade shares may be very high in a small and non-restrictively economy like Singapore since trade is the life blood of its economy. In this respect, this insight helps economists, policymakers, and researchers to understand how trade matters strategically in different economies. Understanding that, for smaller economies, which are more dependent on their domestic markets, their trade share may be higher; and for a larger economy, their trade share may be smaller is also beneficial.

Trade share ratio is significant to determine the degree of trade openness. Its evaluation is very crucial in assessing a country's position in the world economy, and for legislative trade and economic policies (Squalli & Wilson, 2011, p. 68).

1.3.2 Adjusted Trade Flows

Trade openness based on adjusted trade flows also incorporates the size of economy and trade imbalances. In terms of structure the total trade shares are simpler, but the adjusted trade flows, taking into account the net exports and the overall GDP relation, are more informative. As this is a reasonable adjustment, it is a simplifying technique that allows us to more realistically compare trade openness across different sized and developed countries. This directly offsets one of the problems of using trade at an absolute level to measure how open an economy is because larger economies will consistently get a high level of trade just due to their size, but this does not imply a high degree of openness. Well, when the US and Singapore are looked at as they are, and

without adjusting for size differences, some conclusions might not stand up. This problem is solved by adjusted trade flows which standardize the trade flow data to the economic size of countries (Raghutla, 2020, p. 71). In addition, the balance of trade concept understands trade gaps that could make any country's trade viable and healthy. The observations of the trade surplus/deficit rates of other foreign countries may have different effects on the stability and the liberalization of the economy. Clearly, this adjustment can concentrate on preeminent economic factors which conventional trade shares might be presenting (Raghutla, 2020, p.67). The utility of this measure is particularly important in cross country work, where economic sizes and structures can differ. Adjusting trade flows makes sense, for example comparing trade liberalization in developed countries with that in developing countries. The usefulness of such information is in furnishing the ability of the policymakers to ascertain the true level of trade integration and its significance to the development process of the country without these fictitious trade flows embodied in the total trade figures. In contrast, adjusted trade lays out a more realistic measure of trade liberalization, which takes into account economies' sizes and balance in trade, thus facilitating comparisons and making policy recommendations (Sachs and Warner, 1995).

Furthermore, adjusted trade flows permit the identification of structural trade patterns that may shape long-term economic stability. For example, persistent trade deficits could mean trading off to foreign debt, while surging trade surpluses could signal export-driven growth. These patterns can help direct corrective policies to balance trade again and promote long-term development (Krugman, 1995).

Adjusting trade flows can also be used by policymakers to learn how efficiently regional trade agreements or economic partnerships are running. They can then analyze trade adjustments post-agreement to see if the policies work to integrate economies, spur growth, or exacerbate inequality between member states (Rodrik, 1998).

Adjusted trade flows provide a measure of trade openness adjusted for different economic sizes and trade balances. They are less affected by absolute trade shares and give a realistic picture of trade integration, making comparisons between diverse economies amenable. This makes the measure crucial in cross-country studies and policy-making.

1.3.3. Tariffs

One clear indication of a country's trade openness are tariffs, or taxes on imported goods. These tariffs reflect the degree to which a nation/country is willing to engage in international trade and, in general, the higher it is, the more protectionist a country is; the lower the level of tariff, the more open policy. As a result, tariffs are a useful indicator of the degree of openness of a country's macroeconomic trade environment. (Wang et al., 2022, p. 486).

This study found that bilateral and multilateral tariff liberalization have been central in increasing trade openness through the reciprocal reduction of tariffs. Due to this, several trade liberalization and negotiation processes have tried to lower the trade tariffs with a view of encouraging free trade and international integration. Organizations such as the WTO have taken leadership position in implementing such measures through the GATT, NAFTA (bilateral) or regional cooperation frameworks. As a result, the decline of tariffs has brought along a lot in the economic gains, an increase in volume and an enhancement of the standard of living for the consumer. Lower tariffs will reduce import cost, enlarge customer base and variety of commodities for consumption while providing cheap input for business and a wider market to penetrate. However, the type of this negotiation has shown a permanent tendency of cutting tariffs, which turns out to covering promotion of the competitive and integrated world markets (Yanikkaya, 2003).

It has further increased innovation and economic diversification. It tends to enhance access to goods from abroad and competition, and as a result, domestic industries are more productive and efficient. However, tariff reduction benefits do not accrue to all sectors or regions in an even fashion and can prove transitional for sectors or regions dependent upon protectionist policies (Rodrik, 1998).

Regional trade agreements have also shown the importance of targeted tariff reductions. They have also demonstrated that strategic tariff cutting within regions can substantially increase intraregional trade flows and provide incentives for joint economic growth. These arrangements likewise temper global uncertainties by developing stable regional economic relationships (Krugman, 1995).

Tariffs are fundamental indicators of trade openness, and a lower value of tariffs represents a more considerable level of openness when engaging in international trade. This shows that tariff reduction motivates economic integration, fosters efficiency, and augments trade volumes but, at the same time, requires deliberate policy action to mitigate challenges experienced in the transitional stage. Tariffs have, and continue to play, a vital part in promoting global trade and economic growth, with their decline through ongoing bilateral, multilateral, and regional agreements.

1.3.4. Non-tariff Barriers (NTB)

Non-tariff barriers (NTBs) are many regulations or policies that go beyond tariffs that limit international trade. Quotas, import licensing requirements, product standards and subsidies to give domestic producers a preference for their products over those of foreign competitors are the form these barriers take. Tariffs, by contrast—are direct taxes on imports at the time of importation—whereas NTBs operate through regulatory means, which are potentially more complex and difficult to quantify. However, examining the effects of NTBs on trade requires consideration of a country's regulatory environment and the trade volumes that result from it, because NTBs can have a decisive impact on foreign firms' access to the market and their competitiveness (Krugman and Obstfeld, 2009, p. 178). Examples are import quotas that do not restrict the quantity of goods that can be imported into the country, thereby denying foreign producers access to market. Similarly, strict product quality demands can be some specific factors that allow domestic producers, hindering the entry of foreign goods that do not comply with those standards, or with relevant certificates. There is also the opportunity for further trade barriers and paperwork that can add further disruption to the movement of goods between borders as a result of policies regarding import licensing. The second disadvantage of subsidies is that they distort the competition in the global market since the domestic firms produce on account of low cost, compared to the firms of the competing country. Therefore, although Tariffs are perhaps the most intuitive example of Trade Barrier, Nondiscriminatory Trade Barriers should not be overlooked as a trade barrier in changing the shape of trade openness in a state of trade policy analysis (Alazzam, 2021, p. 95).

In addition, such NTBs imitate developing countries disproportionately since their exporters frequently lack the resources to conform to stringent regulatory standards or licensing

requirements. By obstructing them from entering profitable markets, trade liberalization becomes impractical (Rodrik, 2001).

Against this backdrop, regional trade agreements (RTAs) such as the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) are increasingly focusing on reducing so-called non-tariff barriers (NTBs) to enable more fluid trade flows. Exemplary agreements stress the harmonization of product standards, reduce administrative complexity, and anticipate and treat international trade fairly for all concerned parties (Baldwin, 2016).

The second trade barrier category is the non-tariff barriers (NTBs), which are regulatory measures that restrict trade, potentially as much as or more than tariffs. Quotas, licensing requirements, product standards, and subsidies sometimes distort market dynamics and present challenges to foreign producers. However, NTBs shield domestic industries while restricting market access and reducing global trade efficiency. NTBs must be addressed through policy reforms and trade agreements to enhance trade openness and equal participation in the market.

1.3.5. Indexes

Then, it should be possible to monitor trade openness by means of several indexes embodying the various factors, such as tariffs, trade values, and non-tariff barriers (NTBs). Trade Openness Index and Economic Freedom Index are more relevant because these are not just ways of measuring the 'degree of openness' like on the others. Such indexes provide a basis with which to make comparisons across countries and, hence, help scholars and policymakers alike understand different patterns of countries' international trade flow. Thus, by aggregating different elements (i.e., tariff level, degree of restrictions and controls, etc.) to create an index indicating the openness of imports and exports, these indices are less biased and more complete when carried out to decide and formulate trade policies (Dollar & Kraay, 2003, p. 67).

However, the Trade Openness Index and Economic Freedom Index provide more nuanced measures of open trade since they are composed of a variety of dimensions of trade policy and implementation. Basically, these indexes can be just other measures other than amount of trade and its value, such as trade regulations, and the quality of institutions. This will provide policymakers and scholars a framework with which to judge policies concerning trade and

distinguish policies that need to be changed from policies that are desirable globally. Moreover, these indexes serve as useful tools with which one can evaluate the impact of trade liberalization on economic factors such as growth, development and financial vulnerability in the anticipation of assisting the policymakers craft policies that should propel economic progress (Dollar & Kraay, 2003).

1.3.6 Price-Based Measures

Price based measures of trade openness provide interest entries to understand how internationally the domestic markets link with the international economy. These reflect the extent to which fluctuations in international prices change domestic prices and therefore the degree of market integration. A high degree of openness is characterized by domestic prices closely mirroring international price movements, symbolically determined by global price dynamics. The effects of globalization are felt most keenly in sectors which deal either with agriculture and commodities or with the firms selling their products worldwide.

Economic interdependence as a function of economic integration is further captured by measuring and gauging the degree of price transmission between domestic and international markets which provides a clearer picture of the extent to which domestic economies are inextricably bound to and embedded in the international economy, and provides the basis for policymakers to formulate appropriate policy responses. For instance, if domestic prices are closely linked and react strongly to changes in international prices, policymakers may need to undertake stabilization measures to mitigate impacts on domestic markets and vulnerable sectors from foreign shocks. Furthermore, price-based measures may contribute to trade policy decisions by showing, for instance, the degree to which trade agreements have promoted market integration and the speeding of price convergence between trading partners. All in all, price-based measures of the degree of trade openness provide a valuable tool for studying dynamics of global trade and

how it relates to domestic economies along with implications for domestic economies in this regard, this providing a leeway to policymakers to develop policies which can help them harness the benefits of trade while minimizing the attendant risks.

Besides mitigating risk, price-based measures can be used to determine the effectiveness of trade agreements. They assess whether the agreements they consider promote market integration and price convergence between the trading partners. For example, when price differentials between two countries decrease after a trade agreement, it implies that trade is more efficient and that the markets of two countries are being tied more closely together.

Furthermore, this approach also informs us of competitiveness in the domestic market. In an efficient market, where local prices match international benchmarks, the local market's ability to meet international demand and supply conditions is implied. In the opposite, price disparities of great magnitude could indicate inefficiencies or trade barriers (tariffs or non-tariff measures), limiting full market integration.

In addition, price-based measures are needed to gauge the long-run sustainability of trade policies. They can also help assess to what degree local industries adapt to global competition or where they may need further help to be viable. These insights may also be helpful for policymakers in negotiating better trade terms so that domestic markets can take advantage of international price developments that do not harm them.

Domestic price-based measures are essential to understanding how domestic economies integrate with global economies. These metrics reflect the transmission of foreign exchange shocks into domestic markets and reflect trade openness and competitiveness. They comprise crucial information for policymakers to design strategies to stabilize markets, improve trade efficiency, and protect vulnerable sectors from global shocks. Additionally, these measures inform trade policy decisions that require analysis to assess the effectiveness of trade agreements and guarantee sustainable economic benefits to domestic markets.

1.3.7. Qualitative Measures

But she argues that quantitative measures are so aggregate as to provide little means for assessing the institutional context within which trade openness is defined for any country. The quality measures unlike quantitative methods essentially focus on the quality aspect of trade policies, regulations and the general business environment. The receptiveness of a country's environment to trade is determined by these factors: upward business reviews, trade partners that are friendly and an economic friendly climate. As such, the measures that are obtained, by replacing a quantitative indicator with a qualitative characteristic, enable us to draw valuable conclusions relating to institutional and policy factors behind the level of openness of a country.

The backbone of today's qualitative measures is actually the expressions and perceptions drawn out of questionnaires and surveys helping to gauge the views of industry experts, policymakers, business leaders and the like. It considers differing focal aspects of the trade environment/reform, including regulatory openness, bureaucratic red tape, and property rights. The reason why the qualitative measurements provide an exhaustive evaluation of the extent of a nation's trade openness, because, in measuring the quality aspect, it incorporates the perceptions data, thus goes beyond the official policies regulating business conduct despite the country, and reveals how business is actually conducted in the country. So, besides qualitative measures add to quantitative indicators and provide a wider view of how policy practices and institutions on which trade flow and as a result take back to the policymakers and the stakeholders' areas of improvements and policy nudges to enhance trade openness.

Further, qualitative measures describe the dynamics of informal practices, regional cooperation, and soft power influence of a country on global trade. For example, the degree to which a country signs up for a regional trade agreement, the perception of trust by trading partners, and the country's understanding of a diplomatic and cultural trading environment would also form part of these (Baldwin, 2016). For instance, a country can boast robust numerical indicators showing that it is open to trade but has burning issues around trust with its partners resulting from the perceived unstable environment or breach of global trade standards.

More importantly, qualitative measures are good indicators of the success of trade negotiations and trade dispute resolution mechanisms. Evaluations of how trade agreements are implemented or contested typically require subjective assessments of government efficiency and institutional integrity (Rodrik, 2004). They affect investor confidence, participation in the market, and the growth of long-term trade.

Such measures also emphasize inclusion in trade. We show how policymakers can assess the extent to which trade policies are attending to various stakeholders (such as small-scale traders and marginalized communities). For instance, an open trade policy framework may not be working against women-led enterprises or rural industries despite their abilities to thrive.

Since qualitative measures cannot uncover these nuanced trade dynamics, they can be important for targeted policymaking. Quantitative metrics quantify openness, and qualitative approaches describe how openness is rendered equitable and practicable. Together, the ideas support integrating the globe and engender sustainable economic growth.

But numbers do not do justice to the topic, and that's where qualitative measures come in. They speak about the institutional and contextual factors that determine trade openness. They study the regulatory environment, cultural attitudes, and inclusivity of trade policies to aid the identification of non-numerical barriers. We need these measures to enable designed and successful trade policies that correct systemic inefficiencies and foster inclusive growth.

1.4. Theoretical Approaches Explaining Trade Openness

Four theoretical approaches to international economics that can explain trade openness are stated as below. Moreover, the theoretical literature emphasizing on trade and trade gains must be elucidated. The basis and consequences of trade openness with regard to economic integration can be explained with different theories.

1.4.1. Pre-Classical Theoretical Views

Not classical forms of globalization theories like mercantilism whose assumptions were state that the wealth of a country depends on the trade balance. They viewed all trade as a negative

sum game, which sought to export more than import in order to build gold and silver coins. Thus, this perspective led to the imposition of protectionist measures so exports can be fostered and imports reduced in order to have a trade balance positive. Interestingly, mercantilist policies promoted protectionism, which resident tariffs, subsidies and other favorable trade inflections (Lindao Montesdeoca et al., 2023, p.37).

However, classical trade theorists such as Adam Smith and David Ricardo soon negated these pre classical trade theories on the assumption that trade was beneficial for all concerned. Classical theories say that free trade allows countries to produce the goods where they are most efficient doing so and in turn the world would be a better place. The classically inspired theories of trade, on the other hand, were more concerned with arguments based on the rationality of productive efficiency and freer trade as a means to an end of higher more rapid and more widespread economic growth and well-being. This great change of perspective accounted for the beginning of the theories of international trade which are so influential in international policy today (Lindao Montesdeoca et al., 2023, p. 35).

Whereas mercantilists pursued stockpiling wealth through exclusivist trade practices, pre-classical theorists neglected to consider the mutual advantages of trade. Such protectionist measures were prioritized, and by isolating markets and allowing monopolies to take hold, the innovating and the most economically efficient processes and ideas were inhibited. For example, subsidies are used to promote particular industries, but specific sectors come with a price of neglect.

These pre-classical approaches fail to predict this dynamic and evolving feature of global markets. The modern interpretation of mercantilism is critical of the short-term emphasis on accumulation rather than growth. Furthermore, excessive attention given to controlling imports created an inefficient use of resources, tended to induce overpricing inside the domestic market, and limited variety of goods (Irwin, 2020).

Contemporary economists credit the transition to classical theories, principles of comparative advantage, and market-driven resource allocation as the turning point in trade history. Preclassical ideas challenged the rigid frameworks of preclassical thought; in essence, they were

open and encouraged interdependence of the economy and people of their time as opposed to isolation and the idea that ended up being naïve. Hence, mercantilist policies set the stage for advanced ideas that fit the existing globalized economy by providing a base trade structure.

Attention was given to restricting measures aimed at achieving trade surpluses without regard to the mutual advantages and long-term growth of the nation. Though these policies brought wealth, they restricted innovation and consumer preference. Since then, modern critiques focus on how classical trade theories had turned these notions on their heads and encouraged efficiency and interdependence as keys to global economic prosperity.

1.4.2 Classical Economics

Both Adam Smith and David Ricardo turned trade upside down in their classical theories which sowed the seeds of today's trade theories. Absolute advantage is what Smith explained in his 1776 work *The Wealth of Nations* to be a trade theory in which nations should concentrate their efforts on making those goods with which they happen to have a natural advantage. Therefore, according to Smith, nations should concentrate on specific industries while leaving out others, and then exchange their products with other nations to get the maximum (Inoua & Smith, 2020, p. 84).

In the theory of comparative advantage, David Ricardo further expanded on Smith's ideas. According to this theory, a country should specialize in producing those goods that lie within that country's greatest inefficiency (or lowest efficiency) or indifference spectrum in relation to another country, even though another country produces all goods more efficiently. If nations specialize in the most efficient sectors however, trade is able to benefit all participating countries, regardless of the overall productive efficiency, a fact which Ricardo demonstrated. The principal answer to these classical theories was that they explicated the division of labor at home and abroad, trade, and specialization as the means to the ends that positively foster economic growth and form the basis of the theories of trade and legislation in the future.

Admitting productivity to be a cornerstone of trade relationships, Adam Smith's theory of absolute advantage marked itself as a complete revolution of the traditional economy. It brought home the benefits of concentrating on industries where countries innately excel because of climate,

geography, or endowment of resources. Smith's framework forms the basis of multiple trade procedures, focusing on efficiency and specialization.

Ricardo built on Smith's idea to introduce an idea of comparative advantage, which goes beyond efficiency. He showed how the opportunity cost and resource allocation debates manifested in the work of his economy illuminated the benefits of trade beyond the best nations. To illustrate, a country possessing lesser productive efficiency for producing all goods can benefit from specializing in those products for which its inefficiency is least (Rodrik, 2022, p. 122).

Both theories shifted from protectionism to a general internationalized economic view. They are clearly behind persistent advocacy of liberalization and the dismantling trade barriers in trade policies. However, the classical framework is criticized for assuming perfect competition and omitting current realities, including technological asymmetries and imperfections of market power. Thus, though their principles remain strikingly relevant, their application needs to become suitable for the challenges of the contemporary global economy (Krugman, 2021, p. 88).

Andy Smith and David Ricardo revolutionized trade through the teachings of absolute advantage and comparative advantage, respectively, by preaching for specialization and efficient use of resources. Finally, these ideas showed that even less efficient countries have gains from trade as long as they focus on the sectors where they have a relative advantage. While their frameworks convey through contemporary trade policies, they must be diversified to cope with the current economic complexities.

1.4.3 Neo-Classical Economics

However, in the classical theories the neo-classical economics learning had given their models in understanding the factors that are affecting the international trade. Among these, the theory of trading that contributed most to present day trade theory formulated by Eli Heckscher and Beril Ohlin is called Heckscher? Ohlin's theory. According to this theory, countries which use more intensively a certain factor of production will export commodities which also require the intensive use of the same factor in that country, but which can be imported if those commodities require the intensive use of a different factor of production, but one which is also scarce in the importing country. That is, the Heckscher–Ohlin model supports the view that the trade flows

depend on factor endowments such as labor, capital and natural resources (Inoua & Smith, 2020, p. 74).

Since the Heckscher-Ohlin theory deals with the ideas about the dynamics of the flow of the trade through factor proportions analysis. It effectively argues that there are ‘trade gains’ to be had to countries which enjoy ‘comparative advantage’ in the production of a good or service, that is, it’s a function of differences in resources. Besides, the theory assumes that with trade, countries will concentrate in producing goods which they have comparative advantage in, thus ensuring that the use of resources is efficient globally. This task has relied heavily on the Heckscher-Ohlin model in developing trade policies and educating policymakers on the consequences of trade liberalization and globalization (Aksakal, 2024 p. 200)

The Heckscher-Ohlin model was constructed on Ricardo’s comparative advantage but further added the significance of factor endowments for trade flows. This model claimed capital and resources, as well as labor and productivity, that opposed previous theories. Countries with plentiful capital export capital-intensive goods, and countries with plentiful labor export labor-intensive goods.

In addition, the theory shows how trade enhances global resource allocation efficiency, curbs wastage, and maximizes production. Modern trade negotiations have built on this foundation, especially in outlining how resource-rich and poor nations should cooperate to benefit both countries (Krugman, 2021, p. 134). Critics, however, claim that the model simplifies the picture too much, assuming perfect competition and identical production technologies, which might more strictly be situations in real life. However, the Heckscher-Ohlin theory still plays a vital role in setting up the policy that uses a country’s resource endowments to foster economic development (Rodrik, 2022, p. 98).

Heckscher-Ohlin's theory then expanded classical economics by adding other factors, such as endowment, labor, and capital, to trade analysis. As a case in point, it shows how differences in the availability of resources affect global trade flow by promoting efficiency in specialization. Its assumptions are robust in policy-making, yet they need to be recursive to the complexity of the modern economy.

1.4.4 Post-Keynesian Theory

The trade theories proposed by the post Keynesian authors are different than in the classical and neoclassical theory since they take account into factors of dynamic type and demands for growth. In this sense, very different from most theoretical frameworks, which assume totally perfect competition, maximum employment level, take into consideration market failures, and where we have increasing returns to scale as part of our thesis's context. Following these theories, the strategic trade policies aimed at the industrialization process are important in realizing long term economic growth (Jespersen et al., 2024, p .6).

This theoretical framework is built on the idea of the realities of imperfect competition and it is able to promote competitiveness. The changes in technology, innovations, and demand on the side of importing country are also stressed by Nicholas Kaldor as important driving forces of trade and theories that advocate government policies to promote such a critical industry so as to widen its manufacture in line with its capability. Post Keynesian theorists are correct in not finding anything wrong with the intervention by the governments at the apex of the demand-pull strategy for instance research and development investment or industry –specific initiatives targeted on export competitiveness. Jespersen & Renard (2024, p.6) state that the Post Keyrainian trade procedures offer distinctive viewpoints of trade arrangements and considerations for development designs in light of their ventures on the obstructive thinking and the fluid qualities of monetary exchanges.

Traditional economic models fail according to Post Keynesian theory, which introduces elements of imperfect competition and increasing returns to scale. Its main feature is that, unlike classical ideas, it accepts market failures while government intervention is good for growth. Kaldor's focus on innovation largely reflects the urgent need for modern industries to keep up with ever-changing economic conditions.

Furthermore, Post Keynesians support demand-driven strategies based on public investment's competitive and industrial growth role. In this respect, post-Keynesian views differ from classical ones that mainly concentrate on comparative advantage by arguing that seeking policies toward industries in general, and even more so toward particular industries that correspond

to new technologies, can sustainably advance economic growth. The movement from a laissez-faire attitude toward planning becomes the theory's platform to tackle the intricacies of contemporary global trade (Lavoie, 2023, p. 117; Arestis & Sawyer, 2022, p. 35).

Compared to classic trade theories, Post Keynesian trade theories challenge the idealized assumptions of perfect competition and employment, focusing on market failures and intense returns to scale. It is a stance to strategic government interventions, innovation-driven policy, and demand-focusing strategies for industrial growth, providing pragmatic solutions to modern trade problems.

1.4.5 New Theories of International Trade

In the latter quarter of the twentieth century other theories have emerged which differ in some degree from classical and neoclassical approaches, such as economies of scale, product differentiation and multinational companies. These new theories differ with the most prevailing conventional theories, which put forward the notion of comparative advantage as the source of the profits for trading; these theories assert that even if a country lacks comparative advantage over the other country, trading still benefits it. But trades people see it as a platform that enlarges market, competes and innovates.

Paul Krugman among others have created frameworks spotlighting market composition and behavioral patterns in trade liberalization. Second, in developing the theory of Monopolistic competition and intra industry trade, providing insights into how differences in product differentiation and economies of scale help determine trade. Rather than the traditional view, these new theories emphasize flexibility of global trade, and the role of non-superior causes of growth and development (technology and market access). These theories have explained the factors that shape contemporary trade policies and expanded our knowledge of what factors shape international trade and has informed policy debates revolving around trade liberalization and trade integration processes (Xia, 2022, p. 42).

New theories of international trade continue to develop regarding how strategic trade policy can be used to support industries with scale and innovation prospects. These methods suggest that industries may be able to be global competitors even when the country does not have

an initial advantage by using government subsidies or tariff adjustments. In addition, these theories also view intra-industry trade, imports, and exports of products like cars or electronics and thus emphasize the role of product differentiation and consumer taste.

Including multinational corporations in trade theories brings a new insight into understanding global trade flows, focusing on a corporation's strategies to capture access to new markets and share knowledge. A host of technology transfer and investment passes through these corporations as the bridge to the development of host countries and the strengthening of global supply chains through these corporations. Moreover, the theories explain how technology and logistics developments have transformed global trade, so even smaller firms take part in international markets utilizing e-commerce and digital platforms. Second, the insights derived from this research have heavily influenced the making of policies concerning trade that are friendly to modern economics and globalization features (Brander & Spencer, 2023, p. 51; Helpman, 2023, p. 78). New approaches to international trade complement the comparative advantage approach and assume the importance of economies of scale, product differentiation, and market dynamics. The former theory concentrates on determining strategic policies, technological speak, and multinational corporations to enhance trade, which continues to apply to today's global economic trends.

CHAPTER 2

DEVELOPMENT AND DIMENSIONS OF FINANCIAL DEVELOPMENT: -

2.1. Definitions of Financial Development

Financial development is the progressive development of financial structures in terms of institutions, markets, and instruments to promote the effective mobilization and allocation of resources (Beck et al., 2009). It expands and improves both volume and efficiency, as well as inclusiveness and accessibility of financial services. At the heart of this notion is financial

intermediation, by which households' and firms' savings are redirected to productive investment channels facilitated through credit markets, equity markets, or insurance systems (Levine, 2005).

According to Svirydzenka (2016), a developed financial system would be one that can lower transaction costs, produce risk-sharing mechanisms, and enhance effective capital allocation. It builds on the financial infrastructure: robust payment systems, well-regulated markets, and transparent governance frameworks. In particular, the recent proliferation of new financial products and services, like microfinance and mobile banking, has greatly increased the scope of coverage of financial systems, especially in developing economies (Demirgüç-Kunt et al., 2013).

Financial development plays an integral part in promoting economic growth. King and Levine (1993) reported that well-functioning financial systems promote economic development by enabling access to credit, fostering entrepreneurship, and empowering innovation in technology. Second, economic stability is closely related to financial development. Through derivatives and insurance, as tools for risk management, it helps offset the impacts of economic shocks on businesses and households (Beck et al., 2009).

Furthermore, financial development is necessary to enhance financial inclusiveness. It provides access to savings, loans, and insurance products to underserved populations and diminishes barriers to entry into economic activities so that they can participate in economic activities. Digital financial services, for example, have provided rural and low-income groups with increased access to financial systems to mitigate income inequality and promote inclusive growth (Cull et al., 2014). Because of this, economic development benefits are shared widely across society.

Technology has an inalienable part in financial development. With developments around blockchain, artificial intelligence, and big data analytics, we've seen how financial systems can become increasingly efficient and accessible. They help speed up transactions, simplify the processes of credit assessment, and reduce operation costs. In general, this improves the efficiency of financial systems' work (World Bank, 2020).

Financial development is an evolutionary process determined by the interaction of the quality of institutions, market efficiency, and technological developments. The multifaceted nature of its

influence confirms its contribution to the set path of economic development and financial resilience.

2.2. Importance of Financial Development

Economic development is reliant on financial development since it can impact economic growth and determine the cyclical stability. Firstly, financial development mainly acts through the channel of unblocking savings resources and providing the avenues to channel such resources to productive uses. This paper will also analyze how gains are mobilized by financial systems by empowering individuals to invest in numerous assets, therefore allowing for accumulation of capital that can enhance economic activities. On the other hand, financial intermediation contributes substantially towards returning customers rate by lending businesses which will involve in lowering capital costs for investment and expansion (Canh & Thanh, 2020 p.45).

Second, financial development avails and increases access to financial services that are crucial and readily available to needy customers in a society perhaps the less fortunate and the small and medium enterprises. This affordance of banking facilities, credit facilities as well as insurance policies makes the citizens engage in economic activities, which translate to generation of incomes and stamping out of poverty. It not only provides credit to the SBs for their development and expansion as debt which contributes towards employment and advancement of the economy at the base level, but also through the increase in financing by the competition leading to liberalizing the lending procedures (Luintel et al., 2016, p.111).

Furthermore, institutions that have sound and efficient financial markets to serve them can equally handle risks if there is a variety of hedging and risk diversification instruments available. Individuals, businesses and financial institutions use such for managing various risks like credit risk, interest rate risk, and market risk, and so on effectively, which in turn smoothest financial stability in the end, through demands of effective funding and easy mobilization of funds for research and development of innovations and to facilitate the process of commercialization of such technologies, financial development encourages innovation. However, by providing the funding and support of high-risk innovations, financial systems play an important role in launching, and fostering, such critical technologies on which lasting capacity for economic competitiveness rests.

This was therefore why financial development is necessary in various ways in order to accelerate the increase of funds, improve access to credit, absorb risks and create opportunities to promote economic progress and overall welfare (Canh & Thanh, 2020, p.55).

2.3. Sources of Financial Development

The sources of financial development embrace all parts of the financial structure, all elements of financial instrument for the upward financial development.

2.3.1. Banking Sector

The banking system is very important in the banking sector that serves as a central source of fund in the economy as well as a nexus between savers and borrowers. The function of accepting deposits by individuals and other institutions using common products such as savings accounts, fixed deposits and certificates of deposit is a core function. Demand deposits are essential among these deposits, since these deposits are the main part of the banking sector's funding base of its funding activities. Banks support investment in the different areas of the economy due to the extension of loans and credit facilities. It helps create investment in projects that contribute to economic growth and development, improve productivity, create new employment opportunities and generally propel the economy.

In addition, the role of the banking sector in the economy is central that of advancing money through lending for stabilization of financial integrity during spikes in the economy. As a result, they are the suppliers of last resort of liquidity in the financial markets and institutions to prevent systems failures. In addition, credit offered by banks acts as a stabilizing force between business enterprises and public for consumption and capital investments purposes, firstly through keeping economic fluctuations to a low level. Also, banks fulfill the role of an intermediary in international trade by offering trade finance, letters of credit, and foreign exchange. These services' standardized operational procedures bring transactional safety and lessen the barriers to cross-border transactions, allowing businesses to participate in the global markets (Beck et al., 2010).

Adopting and integrating innovations in financial technology by banks is another crucial role in developing solutions such as mobile banking, internet banking, and digital wallets. The advancement of these solutions leads to increased customer accessibility, reduced transaction costs, and efficiency improvements. Artificial Intelligence and machine learning facilities even better fraud detection, hazard

management, and individualized client systems (World Central Bank, 2020). In addition, banks are an intermediary channel for channeling domestic savings towards productive investments and moving resources to the most efficient use through sectors. The allocation of this encourages entrepreneurship and aids start-ups and small businesses, which is essential for economic diversity and growth (Levine, 2005). The role of the banking sector extends to improving financial inclusion by reaching underserved populations through innovative delivery mechanisms such as agent banking and mobile platforms. By offering microloans, savings accounts, and insurance products to low-income individuals and rural communities, banks help bridge the gap between formal financial institutions and the unbanked population. This inclusivity contributes to poverty alleviation and enhances economic participation across demographics (Cull et al., 2014).

By definition, the functions of this sector are aimed at collecting savings, effective intermediaries of money allocation, and financial services, which play a central role in promoting financial liberalization and economic growth. Additionally, a sound banking sector contributes to long-run economic stability by allowing the realization of the implementation of monetary policy. Central banks use the banking sector to influence inflation, unemployment, and investment rates by interest rates and credit supply management. The sector, therefore, is interplayed with the country's banking institutions and monetary authorities, fulfilling the primary function of maintaining the macroeconomic equilibrium within any economy (Levine, 2005).

In addition, banks are also great providers of infrastructure development through financing big infrastructures like transportation, energy plants, and urban development. They also demand long-term funding and significant capital outlay, which banks fund through syndicated loans and other financings. Economic growth: Infrastructure development and its impact on economic growth thinks that infrastructure development (roads, bridges, etc.) drives economic growth, and this growth drives further infrastructure development (Beck et al., 2010).

The time of economic crisis is when the banking sector is a stabilizing force. They lazily depend on commercial banks to spread excess monetary stimulus into the broader economy through increased lending and lower interest rates. The counter-cyclical role of banks becomes vital in mitigating the adverse impact on the economy during financial downturns and facilitating

economic revival. In addition, banks carry considerable weight during crisis times to sustain investors' trust through liquidity support and financial transactions (World Bank, 2020).

Due to several functions performed, it fosters financial inclusion, promotes technological innovation, facilitates monetary policy, and supports economic stability. The sector ensures economic development, which is why it is all-inclusive. Its capacity for adaptation and evolution to the needs of evolving economic landscapes guarantees its relevance in its role of growth driving and addressing future challenges.

2.3.2. Stock Market

Finally, the stock market is crucial part of financial development, functioning as a critical element of capital for the businesses and entrepreneurs. It is a way firms raise capital by offering company shares to investors through an IPO and another share offer to pay for projects. One of the feasible types of financing for equity, especially for expansion programs, research, development and other strategic activities, for growth and development is this kind of financing. Thus, stock markets contribute to access to external financing of the companies which invest for new business ideas and projects that form the fundamental support for economic growth and job creation.

Furthermore, stock markets are significant to the financial advancement as they boost good market effectiveness and resource utilization in the economy. The fact that investors can quickly buy and sell ownership shares of various organizations through flows of securities on exchange reflects the expectations and likely performance of the securities. This allows to shape the appropriate price of capital and push resources to firms with the greatest growth potential and growing productivity and economic growth. Secondly, the stock markets are liquid market, enabling the investor to sell off the stocks fast, thereby reducing the risk element in investments and flourishing the equity markets. Indeed, capital formation's nature, resource allocation, and market efficiency are essential to the promotion of financial development and guaranteeing long run economic growth of the stock market (Destek et al., 2023, p.98)

Although the study focuses on the external environment segment, the stock market's role in capital formation, resource allocation, and market efficiency is particularly important to financial development and ensuring long run economic growth (Destek et al., 2023, p.98).

Besides, stock markets measure the general economic health of the body and the feelings of those in the business. Stock indices, the increases or decreases in share prices, reflect underlying economic trends and show policymakers whether the market is confident. These indicators help to ‘seek out vulnerabilities and to push in places when financial stocks are coming down the pike, and to work out these vulnerabilities in ways which build financial stability’ (Levine & Zervos, 1998).

Securities exchanges also play a role in financial inclusion by facilitating individual and institutional investors' inclusion in the wealth creation. This creates an inclusive environment for savings and investment, drives capital mobilization for businesses, and lowers the dependence on the traditional banking system. Democratizing the opportunity to invest, stock markets provide a larger share of the population with the means to participate and profit from economic growth (DemirgüçKunt et al., 2013).

Besides, technological progress has made the stock market much more open, smooth, and freely available. Electronic and algorithmic trading platforms have decreased transaction costs and increased transaction speed. Advancements in stock markets encourage more people to invest in them, improving liquidity and depth in financial systems (World Bank, 2020).

2.3.3. Derivative Products

Derivative products are part of financial development and are necessary for hedging or minimizing risk caused by wild fluctuations in financial markets. Futures, options and swaps are useful instruments used by market players to fix price, interest or exchange rate levels to mitigate market risk related to changing market conditions. Some hedge against risk and stabilize cash flows is provided by these derivatives to businesses involved in overseas business or might be exposed to the volatility of commodity prices. Derivative products help to create markets with better efficiency and confidence among investors by risk shifting and risk distribution.

Additionally, the presence of a derivative market in the structure has the potential of the liquidity effect in favor of the financial system, expand the number of investors and contribute to

capital formation. Derivatives are used for risk management and therefore have positive impact on investments and innovation because the potential negative impact of the markets on profitability and returns is (legally) prohibited. Additionally, they allow for expressing market views or views on prices or value of assets, without owning these assets, making dissemination of prices possible and efficient. The superiority of derivative products for financial development is in effective management of risk, increased market liquidity and global capital mobilization.

Furthermore, derivatives create a mechanism through which market participants in financial markets can use derivatives to increase trading activities and liquidity in the market. Although criticized, speculation remains one of the most critical components of a market's price discovery function because the markets must efficiently reflect all information available. The following price discovery function permits businesses and investors to make informed decisions when allocating resources (Hull, 2018).

Derivatives also have an important function in the emergence of the global financial market by enabling transactions across domestic boundaries. For example, financial derivatives of currency allow firms to manage exchange rate risks in international trade to wear out the hitches in international commerce and investment. The ability to absorb some of the risks of foreign exchange markets strengthens the stability and integration of the global financial systems (Chui et al., 2010).

The use of derivatives, too, has been revolutionized by technological advancements at the level of electronic trading platforms, which galvanized easier, more transparent, and more efficient processes than their predecessors could ever offer. Such platforms permit real-time trade and settlement, thereby eliminating traditional trade's operational risk and cost. The evolution of technology has been disseminating derivative markets to more minor market participants to achieve risk management and investment (World Bank 2020).

However, derivatives are usually blamed for financial crises because of their intricacy and the opportunity for their misuse. Moreover, over-leveraging in derivative instruments magnifies systemic risks, a lesson of the 2008 financial crisis that made clear that it is not just the value of a bank's assets that matters but their very existence. As a result, regulatory bodies closely watch

derivative markets to prevent too much risk-taking and provide market transparency. Policies such as clearing through central counterparty and bringing stringent reporting requirements have been implemented to improve the stability of the derivative market (Hull, 2018).

2.3.4 Cryptocurrencies

The new trend of financial evolution is the appearance of cryptocurrencies, which shaped the flow of existing of convention of money and finance. Bitcoin, Ethereum and other digital currencies operate on distributed ledgers, enabling contracts between parties to be consummated without such intermediaries as banks or other financial organizations. However, with this structure, the use of democratic money will be better at enabling financial liberalization of areas that are under banked or not banked at all for the residents. Finally, digital currencies open up opportunities for financing decisions for investment and capital assets, which attract the attention of the buyers of financial products, such as retail and institutional participants in the cryptocurrency market (Dulhare et al., 2022, p. 654). But, offering crypto likewise introduces risks and risks to the economic system and its laws. Using blockchain to form a decentralized structure does come at the cost of various risks including hacking, fraud, and market manipulation. In addition, the issuance, trading and management of cryptocurrencies as well as their lack of regulatory measures or compliance with certain guidelines generate doubts about the susceptibility of investors and the markets and the generation and risk of systemic risk (Dulhare et al., 2022, p. 656). Kicking up a monumental stink over the status of cryptocurrencies and their applications within the global financial environment, various governments and regulatory authorities are trying to present what they hope will be the most functional and effective means of categorizing these items, while the very shape of the regulators' future role in the development of this sphere remains vague. Despite this, their hackish nature, alongside the huge innovation they bear on the process of the financial intermediary suggest requiring more research and development, revision of new policies, and constant innovation in order to achieve full potential of these technologies while carefully managing risk factors that arise (Chinn & Ito, 2024, p. 53).

Besides that, innovation in the financial use of cryptocurrencies has led to the emergence of DeFi, which uses cryptocurrency to perform various financial crypto transactions without banks and other intermediaries. redfin applications enable platforms for decentralized lending,

borrowing, and trading for users and go further to enhance financial inclusivity and accessibility. With this, however, also comes the danger of asset tokenization, which faces risks regarding fraud, liquidity challenges, and technology break-downs – which require regulatory frameworks to address them.

Also of great concern is the environmental impact of cryptocurrencies, which increasingly rely on energy-intensive proof of work protocols. Substantial energy consumption by mining processes presents a sustainability challenge to the widespread adoption of the technology. These challenges are solved by transitioning to energy-efficient alternatives, like proof of stake systems, that aim to use blockchain technology sustainably.

Also, cryptocurrencies have started discussions around their status as potential central bank digital currencies (CBDCs). To combine digital currency's speed with fiat systems' security, several nations are researching or piloting CBDCs. Nevertheless, payment systems using CBDCs hope to reap the benefits of innovation while not giving up state control over monetary policy and the principle that cryptocurrencies are not tied to a specified central bank, such as Bitcoin.

2.3.5. Institutional Quality

The first are the norms, laws and rules that exist in a country and can be classified as institutions which are very important for financial development. Building the confidence of investors requires well developed institutions that put in place a sound legal environment for enforcement of financial contracts as well as protection of property rights. The purpose of dispute resolution systems is the resolution of diverse matters and maintenance of the rule of law, which is essential in the preservation of the integrity of the market and investor confidence. Also, various financial institutions and markets are supervised by Protean regulatory bodies that check on cases of risk that could make the system to fail. The more robust the institutions, the more dynamic the financial structure, the more likely credit, lower transaction costs, and improvements in protecting investors are. The effective resource mobilization and facilitation of growth in terms of innovation and unit growth – through appropriate institutions – lead to long term economic development. In other cases, institutions may be weak (or ineffective), which would have the consequence of

destabilizing financial systems, capital structures, or the development process. Therefore, policymakers and other relevant stakeholders should focus more and drive more institutional reforms, enhance regulatory frameworks and enforcement of the rule of law as general financial development and sustainable economic progress strategies for the region (Dutta & Meierrieks, 2021, p. 124).

On the other hand, financial stability results from good regulatory oversight and policy enforcement in the institutions. Insofar as markets can be manipulated and cheated, and the risk taken to excess, strong institutions shall prevent these problems and thus avoid systemic crises. For example, in uncertain economic situations, regulatory bodies as stabilizers introduce capital adequacy requirements and stress testing measures to buffer financial shocks.

In addition, institutions encourage financial inclusivity. Well-designed policies and frameworks can support the availability of credit, savings, and insurance products to the underserved, reducing income inequality and promoting broad-based economic growth. Policies related to financial inclusion have been successful in developing economies, promoting microfinance and digital payment systems to increase access to financial services (World Bank, 2020).

Then, there is a close tie between the quality of institutions, political stability, and governance. Transparent and accountable governments place countries ahead of others to implement sound economic policies that enhance the confidence of investors and foreign direct investment (FDI). However, weak governance frequently results in corruption or inefficiency and a decline in public trust, which, in turn, discourages private sector investment (North, 1990).

Furthermore, technological change has started to alter the importance of institutions in financial development. Technology has been integrated into regulatory frameworks, including Regtech solutions, which improved compliance monitoring and risk management. These innovations improve institutions' ability to efficiently manage complex financial systems that are stable enough to foster innovation.

2.4. Measures of Financial Development

Measurements evaluate the extent of financial development, while structural indicators show the structure of the financial system in any economy.

They show us how deep, available, and efficient financial institutions and markets are. Financial system analysis is based on these and is used to assess the financial system's contribution to economic growth.

A standard measure is the private sector credit-to-GDP ratio, which measures the ease of credit availability to businesses and individuals. The higher the ratio, the more developed the financial system is and the better it is to mobilize and channel resources to the most productive uses. Likewise, measures such as stock market capitalization as a percent of GDP and bond market size provide insights into the level of capital markets' development and serve as examples of the capital markets function in long-term funding and investment opportunities (Demirgüç-Kunt & Klapper, 2012).

Another relevant dimension is access to financial services (instrumented by metrics like the number of bank branches or ATMs per 100,000 adults). This, however, shows the financial system's inclusiveness, especially to rural and underserved populations. The literature links financial inclusion with economic growth and poverty reduction since people can save, invest, and hedge more appropriately with access to a financial system (Sarma & Pais, 2011).

Financial institutions' operational performance is evaluated based on efficiency measures such as net interest margin and overhead costs per percent of total assets. Low costs and margins are typically related to competitive and efficient markets, where financial institutions can offer solutions to their customers at lower costs and still sustain profit.

The resilience of financial systems to economic shock is measured by stability metrics, such as non-performing loan (NPL) to total loan ratio and capital adequacy ratio. Barth et al. (2013) note that these indicators are essential to guarantee that financial institutions stay solvent when faced with stress and continue supporting economic initiatives without systematic disturbances since an asset side and liabilities side perspective to the information on banks' balance sheets should be taken.

Another important criterion of development is the financial sector's product diversity. A mature and innovative financial system has many financial instruments, including insurance products, derivatives, and mutual funds. This diversity enables businesses and consumers to

smooth risk, access customized financial solutions, and participate in far wider economic activities (Allen et al., 2014).

Moreover, digital financial services, including mobile banking and fintech platforms, have provided new metrics of financial development. Adoption rates and the volume of digital transactions using digital payment systems are becoming critical metrics of the modernization and accessibility of financial systems, especially in developing countries. Innovations are changing the way traditional measures of financial development are defined and measured, highlighting technology's role in promoting financial inclusion and efficiency.

2.4.1 Quantity Measures

This provides the basis upon which the scale and scope of markets in a given economy on a financing basis can be measured by the quantity. The private sector credit is evaluated with reference to a country's GDP because it gives an insight into the efficiency of financial intermediation and the flow to productive investment. Meanwhile, the stock market capitalization to GDP ratio presents an indicator for developed equity markets that depicts how open companies are to capital to finance their expansion (Dutta & Meierrieks, 2021, p. 117).

In addition, bond markets by size and spread add further layers to analysis of long-term funding sources and the interest of investors in debt securities. Quantity indices are these quantity measures which sum up a general state of development as well as maturity of financial markets of a given economy. For instance, they enable the evaluation of the depth of financial development and identify existing potential risks and new opportunities for future financial services development (Chinn & Ito, 2024, p. 23).

Moreover, the broad money supply (M2) to GDP ratio is a crucial quantity measure that gives us insight into an economy's level of financial deepening. A higher ratio means more financial resources mobilized and more economic transactions facilitated, implying a well-developed financial system (King and Levine: 1993).

Second, the financial system also has the potential to channel savings into productive investments, as reflected by the available savings instruments such as fixed deposits and treasury

securities. Robust trust in financial institutions and their ability to offer secure and profitable options for surplus funds is implied by high levels of savings mobilization (Pagano, 1993).

In addition, the total volume of financial transactions, covering loans disbursed, stock trades, and bond issuances, measures the volume in financial markets. Higher transaction volume shows the dynamic nature of financial markets and the role of financial sectors in supporting economic activities (Rajan & Zingales, 1998).

The second indicator is the economic growth rate of financial assets, such as loan book expansion or the development of equity investments. The sharp growth of financial assets demonstrates how financial services are penetrating broader and financial markets are broadening for the broader economic sectors. Such growth must be monitored vigorously to allow for future attention and avoid over-extension, which could create systemic risks (Beck et al., 2000).

2.4.2. Structural Measures

The structural measures however take the quantitative indicators further; therefore, they display more of the efficiency and soundness of these financial institutions/markets. How far and how people and organizations can reach for access to financial services using measures such as the availability of Bank branches per population. Similar to this, financial solidity measures such as the non performing loan ratios show the finance institutional ability to cope with unfavorable economic conditions and the quality of the finance institution's asset loans. In this sense, interest rate margins (and other measures of financial soundness) provide an indication of the cost of funds and how well the capital is mobilized within the financial sector. Based on these structural indicators, policymakers and regulators can analyze soundness, efficiency and inclusiveness of financial systems, propose and implement specific actions to improve the financial sector, and thereby advance finance in a universal way. Additionally, these ratios can be employed by investors and market participants to look at the risk and returns of banking institutions and securities markets, as a guide into making adequate decisions pertaining investments and funding.

Also, it comprises structural measures like penetration of digital financial services, i.e., mobile money accounts or digital payment transactions. The extent to which technology is

embedded in financial systems, and thus reflects the modernization and adaptability of financial services to current needs (Claessens et al., 2018), is shown in these metrics.

Another measure that works as a structural ratio is the insured deposits to total deposits, which indicates the level of trust depositors have and the security of the deposits. Low insurance coverage shows an unregulated system with unfavorable deposit protection from systemic failures; confidence in financial institutions is low (Demirgüç-Kunt et al., 2015).

In addition, metrics such as the loan-to-deposit ratio (LDR) give some indication of the level of liquid versus credit provision by the banking sector. An optimal LDR is significant as it minimizes the financial institutions' lending resources while maximizing liquidity needs (Berger & Bouwman, 2009).

Also, as a structural measure of financial development, the degree of market concentration measured by the Herfindahl Hirschman Index (HHI) is considered. Too high a concentration ratio may signal inadequate competition among financial institutions or, otherwise, inefficiency. On the other hand, a more competitive market promotes innovation, lowers costs, and leads to higher quality of service to consumers (Beck & Demirgüç-Kunt, 2006).

Finally, structural measures can allow a measure of how resilient a financial system is from external shocks by analyzing the results of stress testing. These tests assess financial institutions' stability and robustness under adverse economic conditions and tell us where we are vulnerable and need reform (Allen et al., 2012).

The structural measures make a deeper picture of financial development possible by looking at the soundness, accessibility to, and resilience of financial institutions and markets. Bank branches, nonperforming loan ratios, and interest rate margins are smooth indicators of operational efficiency and stability of financial systems. Digital payment penetration and insured deposit ratios are emerging as technology metrics advance and public confidence in modern finance emerges. Moreover, the loan-to-deposit ratio, concentration measures, and stress test results reveal the tradeoff between liquidity, competition, and resilience. Structural measures collectively provide policymakers, regulators, and investors with actionable information that enables them to

strengthen the effectiveness, accessibility, and stability of financial systems and facilitate sustainable economic growth.

2.4.3. Financial Prices

The functioning and health of financial markets can be closely reflected by financial prices. These prices are interest rates, exchange rates, asset prices like stocks and bonds. Interest rates can tell us the cost of borrowed money — the return on savings — as well as the stance of monetary policy. Seeing how exchange rates are important also to shed light on its external competitiveness, balance of trade payments as well as foreign exchange reserves.

Stock prices and bond yields are asset prices that reflect investors' expectations about future earnings, economic growth and inflation. Fluctuations in these prices may reflect a degree of instability or uncertainty in financial markets. Policymakers and market participants can monitor these financial prices as gauges for market conditions and spot potential risks as well as take action to achieve economic stability and growth (Nguyen, 2022, p.197).

Moreover, credit spreads, the spread between corporate bonds, and risk-free government securities yields are other vital risk signals in the financial system. Wider credit spreads are sometimes observed in connection with high levels of uncertainty and risk aversion among investors (i.e., financial market distress) (Fabozzi & Mann, 2011).

Another measure is the inflation rate; high or low inflation does not influence the real interest rate or purchasing power of money. Inflation maintains economic stability, but a too-high or too-low level of inflation can stimulate market distortions and subvert investors' confidence (Mishkin, 2007).

The study of foreign exchange reserves also forms an assessment of a country's financial health. Exchange rate stability, lower currency crises, and higher investor confidence in the financial system depend on reserve adequacy (Aizenman & Lee, 2007).

However, market liquidity is another essential characteristic, and many of them are measured by bid-ask spread or trading volumes. It means being high on liquidity levels, meaning

that market participants trading with assets do not cause significant price deviation. In contrast, illiquid markets may reflect not only the illiquidity of those markets but also the weakness or weaknesses of barriers to the entry of investors (Amihud, 2002).

Financial markets are essential to market health and general economic stability, and their financial prices (for example, interest rates, exchange rates, and asset prices) are vital barometers. Bullish sentiment has been an ongoing theme with market expectations for macroeconomic policy—namely, high borrowing costs and the high cost of capital. Moreover, credit spreads, inflation rates, and foreign exchange reserves are quantitatively improved regarding financial system resilience and economic competitiveness. Market liquidity and volatility measures supply depth based on market efficiency and risk reflected. These indicators allow policymakers and investors to gauge market situations jointly, recognize trends, seek disruptions, and identify how to stabilize and grow them.

2.4.4. Product Diversity

Financial markets' product diversity is the number of financial instruments and other products of use to consumers and businesses available in the market. Markets exist in a financial sector that offers many different products like loans, mortgages, insurance, investment funds, derivatives products and payment services. That diversity lets organizations manage risk, allocate resources more efficiently, and provide more custom financial options tailored to the specific needs of different market participants.

A high product diversity indicates a mature and innovative financial system which can support a variety of economic activities and changer with time in market. It promotes competition, promotes financial inclusion and enhances economic development by providing access to a range of financial service. Regulatory frameworks can help policymakers and financial institutions to promote product diversity by pushing for innovation, competition and consumer protection (Dar et al., 2022, p. 68).

Furthermore, product diversity increases the resilience of a financial system by distributing risk in new instruments among more participants. For example, 'green finance products' like green bonds and sustainability-linked loans represent the market responses to new emerging environmental and social issues (Ehlers & Packer, 2017).

Furthermore, financial markets with various products allow businesses to raise capital from nontraditional sources, including venture capital funds and crowdfunding platforms. Both are very helpful for startups and small businesses, which can find it hard to get funding via traditional banking (Hornuf & Schwienbacher, 2017).

As a result, digital financial products have exploded, including mobile wallets and peer-to-peer lending platforms, which have expanded the range of financial services available to underserved populations. This technological innovation helps excluded populations close gaps in financial inclusion and participate in economic activities (Arner et al., 2015).

However, the growing product diversity also requires vital regulatory interventions to limit the complexity-induced risk, like the multiplication of elusive financial instruments that caused the 2008 global financial crisis. Innovation must be transparent and well-understood by consumers and meet unnecessarily high regulatory standards since regulatory bodies must ensure innovative products' market integrity (Acharya et al., 2013).

Financial markets' product diversity is essential for promoting innovation, risk management, and economic growth. Diverse financial systems provide a range of instruments and services to address different needs, and they have a greater capacity to ensure access to financial solutions for a more significant number of people and cushion them against economic shocks. Green finance and digital services are also emerging products that demonstrate how financial products respond to technological and social shifts. However, maintaining this diversity depends on solid regulatory frameworks to help address the complexity and risk of innovative products.

2.4.5 Cost of Change

About Change Cost: The money and time required to move from a current financial product, service or system to something new. These incorporate technology upgrades, regulatory

conformity, staff preparing, and client adherence costs. Change imposes high costs that may prohibit innovation and efficiency within the financial system by disincentivizing institutions to adopt technologies or enhance existing services.

However, for the financial sector to truly be dynamic and responsive, we have to minimize the cost of change. It is possible by streamlined regulatory processes, technological advancement incentives and workforce development. It lowers the cost of change allowing the acceptance of best practices, increasing competitiveness, and making the financial system more resilient and more adaptable (Oanh, 2023, p.89).

In addition, transitioning to blockchain or artificial intelligence-based digital financial systems requires significant infrastructure investment and training. If implementing these innovations reduces long-term transaction costs and creates a smoother operational flow, the ex-ante expense is reasonable (Tapscott & Tapscott, 2016).

Moreover, introducing new financial products or services implies additional costs for institutions in compliance with regulatory requirements. Adoption requires expertise, and in many cases, expert counsel is required, which results in delay and can be too costly (Hoffmann & Zülch, 2014).

Moreover, adapting customers' costs refers to the time and effort they bear to familiarize themselves with new systems, such as digital banking platforms, and the inferior product offered in return. Financial literacy programs can then help mitigate these challenges and customer-centric designs (Lusardi & Mitchell, 2014).

Links are forged between private financial institutions and public bodies to increase efficiency and reduce the cost of change. Government funding to institutions or incentives for workforce training can help institutions ease the burden of the upgrades and help the sector advance (Brown & Osborne, 2013).

The cost of change influences the changeability and growth of financial systems. However, the transition costs, such as technology upgrades, regulatory compliance, and customer adaptation, might be high enough to hinder innovation and efficiency. Still, the expenses can be managed by

specific deliberate mechanisms such as eliminating regulations, investing in the training of its workforce, and supporting public-private partnerships. It also makes financial institutions more resilient and competitive while increasing the amount of innovation.

2.4.6 Financial Development Index

Financial Development Index (FDI) represents a comprehensive indicator which merges various quantitative and structural measures on the matter of the financial development of an economy. Indicators of financial depth (e.g. credit to GDP ratios and stock market capitalization), financial access (e.g. branches per head), financial stability (e.g. nonperforming loan ratios) and financial efficiency (e.g. interest rate spreads) often feature in this index.

The FDI is achieved by compiling these disparate indicators to give a better, more comprehensive picture of how the financial system is performing, what it is doing well, and what it needs to improve upon. The FDI can be used by policymakers, investors and researchers to benchmark financial development across countries and regions and then monitor progress through time using the FDI and also design targeted interventions to increase the efficiency and inclusiveness of the financial sector. Therefore, it can be considered that the FDI is an important tool for the promotion of sustainable economic growth and development, by possessing the robust, efficient and accessible financial systems to different segments of the society (Dar et al., 2022, p. 71).

Furthermore, the FDI offers a critical basis for developing the link between financial development and economic resilience in times of crisis. For example, economies with higher FDI scores tend to have a lower capacity to handle financial shocks and keep economic stability during global downturns (Beck et al., 2013).

In addition, digital financial indicators like mobile banking adoption and fintech usage are being added to the scope of the FDI. These metrics demonstrate how technology is becoming increasingly influential in promoting financial inclusion and access in underserved areas (Arner et al., 2016).

In addition, the FDI provides a tool for policymakers to identify gaps in financial literacy and consumer protection to design educational programs and regulatory reforms that address the issues faced by the population. Filling such gaps builds trust in financial systems, which is crucial in sustained development (Lusardi & Mitchell, 2014).

Additionally, given regional differences in FDI scores, they could serve as a proxy for biasing financial development across regions, for which targeted regional interventions would be necessary to enhance balanced growth. For instance, improving the financial infrastructure in rural or underdeveloped areas can greatly contribute to FDI (Claessens & Feijen, 2007).

The Financial Development Index (FDI) scores multiple dimensions of financial systems on their robustness, efficiency, and inclusivity of financial service provision. While the FDI covers more than the standard metrics, it adds technological advancements and financial literacy measures. By identifying strengths, weaknesses, and regional disparities, the FDI helps drive sustainable economic growth and resilience through informed policymaking.

Chapter 3

Research Methodology

3.1 Research Design

A quantitative research design is utilized in this study; panel data analysis is considered the best form to establish relations across multiple entities over time (Wooldridge, 2010). This study uses panel data analysis that effectively controls unobserved heterogeneity—that is, country-specific attributes that might affect financial development to provide more accurate estimates of the impacts of each independent variable (Baltagi, 2008). Using panel data analysis, the study will examine the cross-sectional differences in the following 11 countries and the changes in the time series from 1992 to 2021.

By using such a design, this research can isolate the effects of changes in trade openness, globalization, technological innovation, and GDP per capita on financial development while controlling for country-specific effects that do not vary over time but may be important determinants of that relation, such as cultural or institutional characteristics (Hsiao, 2014).

Panel data analysis provides a robust methodology for handling endogeneity concerns by including lagged variables and fixed or random effects models to control for bias. This method allows us to control omitted variable bias by controlling for time (varies within the country) and using country (constant over time) fixed effects. In particular, the fixed effects model is preferred when the unobserved characteristics of countries are likely related to the regressors; thus, the former is a more credible estimator (Arellano, 2003).

In addition, the design of this model also allows the analysis of dynamic relations by including lagged dependent variables in which past levels of financial development affect observed trends in the presence of dynamics. Also, the random effects models can be used when unobserved heterogeneity is assumed to be uncorrelated with explanatory variables, which provides greater generalization (Greene, 2012). Using cross-sectional and time-series data together enables a better understanding of long-run patterns and short-run variation, thus contributing to the validity and application of findings in understanding the dynamics of financial development in the Next 11 countries (Hsiao, 2014).

The study adopts a quantitative research design, employing panel data analysis to analyze relationships over time and across countries and overcome unobserved heterogeneity. This methodology is well suited to analyzing such complex dynamics and disentangling the effects of important variables such as trade openness and GDP per capita on financial development.

3.2 Data Collection and Sources

The paper is based on secondary data from reliable sources to ensure its reliability and comparability. We collected data for the Next 11 countries from 1992–2021. Key data sources include:

1. **Financial Development Index:** This index is based on the World Bank's Global Financial Development Database and from the International Monetary Fund (IMF) and measures for each country the depth, access, and efficiency of financial markets and institutions (Beck et al., 2009, p.78). It is the dependent variable that stands for the level of economic development.
2. **Trade Openness:** We obtained data on trade openness, defined as the sum of exports and imports as a percentage of GDP, from the World Bank WDI. High values of trade openness represent a

country's participation in international trade as measured by its external trade activities (Dollar & Kraay, 2004, p.493).

3. Globalization Index: The Swiss Economic Institute's KOF Globalization Index measures globalization's economic, social, and political dimensions for every country. This index uses a composite measure of a country's degree of integration into the global economy (Dreher, 2006, p.1092).

4. Technological Innovation: The sources for the data on technological innovation, proxied by the number of patent applications (resident and non-resident), came from the World Intellectual Property Organization (WIPO) and the World Bank. Together, patent applications measure innovation because they represent the extent to which each country is engaged in research and development (R&D) activities (Griliches, 1990, p.1661).

5. GDP per Capita: The World Development Indicators collected data on GDP per capita (current USD). According to (Levine et al., 2000, p.31), the growth of the financial sector reacts to this variable to develop the overall economy and welfare of the country.

These variables are then combined into a final dataset using a panel structure across the Next 11 countries for multiple years. Linear interpolation was used whenever possible to remove the missing data points and minimize the data gaps without compromising the quality of the data set.

It was a sign of Thu's manipulation of law and order, and we quietly fled while the freak was hollered at and then moved on by another.

3.3 Variable Description

The variables examined in this study include one dependent variable (Financial et al.) and four independent variables, as described below:

1. Dependent Variable:

The Financial Development Index is each country's developed financial sector level. This composite measure contains dimensions such as depth of markets, access to financial services, and institutional efficiency (Svirydzenka, 2016/005). A country's economic system index value can be higher, which means the government has an advanced financial system with higher accessibility and efficiency.

2. Independent Variables:

Trade Openness: Trade openness can be measured as total trade divided by GDP, the ratio between export and import volumes, and the GDP level. The higher the, the more open the economy is to foreign markets (Rodrik, 1998, p.997).

Globalization Index: The composite index measures how far a country has moved toward becoming globalized economically, socially, and politically. It also broadens the picture by indicating how open a country is to external influence and the degree of its international connection (Dreher et al., 2008).

Technological Innovation: This variable is the level of innovation and R&D (measured by resident and non-resident patent applications). There is a strong relationship between technological innovation and growth in the financial sector and its infrastructure (Griliches, 1990, p.).

GDP per Capita: The indicator measures a country's economic prosperity in U.S. dollars. In countries with higher GDP per capita, more resources should be available for investment in financial infrastructure and services (King & Levine, 1993, p.717).

The beginning of Britten's opera is Oscar Wilde's vapors. . .

3.4 Econometric Models

Three econometric models—the Fixed Effects Model, the Random Effects Model, and the Arellano–Bond dynamic panel data model—were employed to analyze the data and test the study's hypotheses. We chose each model to represent a particular facet of the data best.

That is all.

3.4.1 Fixed Effects Model (FEM)

Fixed Effects Model (FEM) is the most common method used in panel data analysis to account for unobserved heterogeneity and remove the effect of time-invariant country-specific factors (Wooldridge, 2010). This model contains only changes within countries so that the impact of the independent variables on financial development is isolated.

The model specification is:

$$FD_{it} = \alpha + \beta_1 TO_{it} + \beta_2 GI_{it} + \beta_3 TI_{it} + \beta_4 GDP_{it} + u_i + \epsilon_{it}$$

Where:

FD_{it} : Financial Development Index for country i at time t

α : Intercept

$\beta_1, \beta_2, \beta_3, \beta_4$: Coefficients of Trade Openness (TO), Globalization Index (GI), Technological Innovation (TI), and GDP per Capita, respectively

u_i : Unobserved country-specific effects

ϵ_{it} : Error term

The Fixed Effects Model was chosen to deal with omitted variable bias from unobserved, time-invariant factors that are particularly relevant in cross-national data studies (Hsiao, 2014).

3.4.2 REM: Random Effects Model

The FEM (FEM) assumes that the coefficients of all the explanatory variables are identical across the countries, and the Random Effects Model (REM) assumes the unobserved country-specific effects are uncorrelated with the independent variables, hence if true, that allows for more efficient estimates than FEM. (Greene 2003). The REM is defined as:

$$FD_{it} = \alpha + \beta_1 TO_{it} + \beta_2 GI_{it} + \beta_3 TI_{it} + \beta_4 GDP_{it} + u_i + \epsilon_{it}$$

A Hausman Test was run to see whether the Random Effects Model consistently estimates compared to the Fixed Effects Model. The FEM is preferred if the test shows that country-specific effects are correlated with the predictors (Hausman, 1978, p.1251). Nevertheless, including the REM is an additional robustness check and a further perspective on the model results.

One reaction involves adding a proton to create an electrophile that VD captures. In contrast, the other consists of a hydride transfer reaction with VD followed by an intramolecular cyclization to provide the dipyridine chelate.

A Hausman test was conducted to determine whether the Random Effects Model (REM) or Fixed Effects Model (FEM) provides consistent estimates. If the test is significant ($p < 0.05$), the FEM is preferred, as it assumes that country-specific effects are correlated with the predictors (Hausman, 1978).

3.4.3 Arellano and Bond (AB) Estimator of Dynamic Panel Data Model

To test the persistence of financial development over time and overcome potential endogeneity, the Dynamic Panel Data Model uses the Arellano and Bond Estimator, including a lagged dependent variable (Arellano & Bond, 1991, p.277). Dynamic panel data with possible serial correlation are particularly well suited to the Arellano-Bond estimator. The Sargan test was used to validate the over-identifying restrictions in the Arellano-Bond model, ensuring that the instruments used are valid and exogenous.

The model is specified as:

$$FD_{it} = \alpha + \gamma FD_{it-1} + \beta_1 TO_{it} + \beta_2 GI_{it} + \beta_3 TI_{it} + \beta_4 GDP_{it} + \epsilon_{it}$$

Where

FD_{it-1} : Lagged Financial Development Index for country i at time $t - 1$

γ : Coefficient for the lagged dependent variable

The Arellano-Bond estimator is applied to account for dynamic relationships where lagged values serve as instruments to correct for bias arising from endogeneity (Blundell & Bond, 1998, p. 115).

3.5 Diagnosing and validating the 6 Model

To ensure the reliability and validity of the models, the following diagnostic tests were conducted:

1. Hausman Test: The Hausman test was performed to decide between FEM and REM. A significant result ($p < 0.05$) supports FEM as the more consistent model, while an insignificant result justifies using REM.

2. Autocorrelation Tests: Autocorrelation was checked using the Arellano-Bond test. First-order autocorrelation (AR ((1)) is expected, but the absence of second-order autocorrelation (AR) ((2)) confirms a well-specified model.

3. Multicollinearity Check: Multicollinearity arises when there is a high correlation between two or more predictors. The independent variables' variance inflation factors (VIFs) were calculated to detect such. Due to high multicollinearity, standard errors are inflated, and the reliability of the estimated coefficients decreases (Gujarati & Porter, 2009). With all the VIF values less than 10, we can state that the problem of multicollinearity is not considerable in this study.

4. Heteroskedasticity Test: The Breusch Pagan test was performed to test for heteroskedasticity (uncertainty in the error terms different across observations). If heteroskedasticity exists, estimates and test statistics could be more efficient and biased. Robust standard errors, when necessary, were applied to correct for heteroskedasticity of unknown form (White, 1980, p.817).

5. Stationarity Tests: Given the panel data structure, the stationarity of the variables was verified with the help of the Levin-Lin-Chu and Im-Pesaran-Shin panel unit root tests. Nonstationary data can lead to spurious regressions, which makes stationarity necessary in dynamic panel data models (Levin et al., 2002; Im et al., 2003).

The selected models are validated and reliable using these diagnostic checks, enabling meaningful interpretations of the results.

6. Sargan Test: The Sargan test was applied in the Arellano-Bond dynamic model to verify the validity of instruments. A non-significant p-value indicates that the instruments are valid.

7. Diagnostic Tests: If heteroskedasticity or serial correlation is detected, robust standard errors were applied to ensure the reliability of estimates.

3.6 Data Analysis Procedure

The data analysis procedure in this study was conducted in three stages, each aligning with the research objectives:

1. Descriptive Analysis: Descriptive statistics were generated for each variable, such as their mean, standard deviation, minimum, and maximum values. This initial analysis provided some

insight into the distribution and variability, as well as some patterns or trends, among and within the Next 11 countries for the study period.

2. Econometric Modeling: In the primary analysis, we estimated Fixed Effects, Random Effects, and Arellano–Bond dynamic panel models. We interpreted the relationships between financial development and the independent variables for each model and compared the results across the models to determine their robustness.

3. Interpretation and Policy Implications: The results are discussed in the context of financial development in the Next 11 countries, and a set of practical policy recommendations is developed based on the findings. Emphasis was put on actionable insights to support policymakers wishing to advance financial sector growth through openness to trade, globalization, technological innovation, and economic development.

The selected models are validated and reliable using these diagnostic checks, enabling meaningful interpretations of the results.

Openness to trade, globalization, technological innovation, and economic development.

3.7 Ethical Considerations

Secondary data is derived from the World Bank, IMF, and KOF Globalization Index database. Because the data were aggregated and contained no identifiable personal data, few ethical issues about privacy or confidentiality were raised. They have followed best practices in data management and reporting, which ensure that the representation of the findings is transparent and accurate (Corti et al., 2019). Ethical concerns also included proper attribution of data sources and documentation of the data collection and analysis processes to allow reproducibility.

Also, the study complies with ethical guidelines by conducting data used by the original data providers' terms and conditions, the World Bank and IMF. It prevents publicly available data from being used in a creepily misrepresentative or misused way. They acknowledge that all data possess some limitations and biases that will hinder the integrity of the analysis and the interpretation of results (Smith, 2020). The research methodology is, to this end, transparent, deliberately reporting methods and outcomes to facilitate peer review and criticism aimed at maintaining academic integrity. Additionally, the study does not cherry-pick data points or 'spin' trends, following the ethical rules of mainstream honesty and standards of rigor of academia. Secondly, this commitment

guarantees the validity and reliability of the findings and contributes to the discussion of financial development in the Next 11 countries.



Chapter 4:

Results and Analysis

4.1 Descriptive Analysis

Descriptive analysis provides an overview of the central tendencies and variations in each variable contained in the study. Each variable's mean, standard deviation, minimum, and maximum in the Next 11 countries for the period of 1992–2021 is presented in Table 4.1. These results align with earlier studies (Demirgüç-Kunt & Klapper, 2012) that also showed wide variability in financial development in emerging economies. According to Chinn and Ito (2006), technological innovation disparities follow the dictates of technological adoption in shaping financial systems, especially in developing countries.

Table 4.1. Descriptive Statistics

Variable	Mean	Std. Dev.	Min	Max
Financial Development Index	45.32	22.67	10.24	90.12
Trade Openness	70.15	25.46	28.60	115.80
Globalization Index	61.03	15.34	31.27	88.12
Technological Innovation	520.45	468.76	15.00	1750.00
GDP per capita (USD)	4320.67	2193.34	1000.25	8500.45

Interpretation:

- **Financial Development Index:** The Financial Development Index has a mean of 45.32 and a standard deviation of 22.67 from country-to-country when measured, giving much variability around the measure. Because of this, this signifies that the financial development at the country level, and hence, at various stages of economic development process, of the Next 11 is substantially diverse.
- **Trade Openness:** There was an average of 70.15 % of GDP in terms of average trade openness in 1980 with the standard deviation of 25.46. Other countries are highly dependent on international trade (range 28.6% to 115.8%).
- **Globalization Index:** A moderate level of score of 61.03 is found on the average globalization score, but there are some countries with high globalization score, as they are highly connected in the global interconnection network.
- **Technological Innovation:** This variable, when measured by patents applications, varies highly, with a value between 15 and 1750. The magnitude of this gap across countries suggests that the level of the debt accumulation process can change due to the level of technological development, thus having an impact on the growth of financial sector in these countries.
- **GDP per Capita:** Next 11 are middle income to approaching a high-income GPC country (\$4,320.67 avg GPC), with a fairly small range of difference between the poorest and

richest. That is to say, incomes are different and income differentials can affect financial development too.

The econometric models of the relationship are based on these descriptive models.

4.2 Model Assumptions and Justification

For econometrics analysis, when we have to like precisely understand the relationship between the following variables we use Fixed Effects, Random Effects, and Arellano Bond Estimator:

- 1. Fixed Effects Model (FEM):** By controlling for time invariant country specific effects, this model enables us to explore differences across countries over a period of time.
- 2. Random Effects Model (REM):** Under the REM, it is assumed that the country effects are orthogonal to the predictor variables. Therefore, if this assumption holds, then this model yields more efficient estimates.
- 3. Dynamic Regression Model (Arellano and Bond Estimator):** The lagged dependent variable, which captures persistence in financial development, is controlled for by the Arellano–Bond estimator, which accounts also for dynamic effects.

Prior research, e.g., Levine (2005), argued that time-invariant factors need to be accounted for when investigating financial systems; these models thus find support in previous research. Furthermore, the Arellano-Bond model considers the dynamic nature of financial development, in agreement with Beck et al. (2010), that financial sector growth can be self-reinforcing.

Diagnostic tests—The Hausman test validates the model choice. The results of the Hausman Test favored the Fixed Effects Model to find relevance in country-specific effects.

Hausman Test Results

Conducted to compare FEM and REM. The test favored the Fixed Effects Model (test statistic = 12.34, p-value = 0.01), indicating that country-specific effects are correlated with explanatory variables.

4.3 Fixed Effects Model Results

Table 4.2. Fixed Effects Model Results

Variable	Coefficient	Std. Error	t-Statistic	P-Value
Trade Openness	0.052	0.018	2.89	0.004
Globalization Index	0.038	0.015	2.53	0.012
Technological Innovation	0.045	0.021	2.14	0.033
GDP per capita	0.023	0.010	2.30	0.022
Constant	1.002	0.304	3.30	0.001
Hausman Test (p-value)	-	-	12.34	0.01

Interpretation:

- **Trade Openness:** The results also confirm the proposition that significant international trade contributes positively to financial sector development, as revealed by a 0.052-point increase in financial sector development associated with a one percentage point increase in trade openness.
- **Globalization Index:** The positive coefficient (0.038) suggests that globally integrated countries should be more likely to be more financially developed.
- **Technological Innovation:** This means that technological innovation is positive, and what it does is improving financial processes and infrastructure.
- **GDP per capita:** Economic prosperity is reaffirmed again as we see a stronger relationship between financial development and higher GDP per capita.
- The Hausman test was conducted to compare FEM and REM. The test statistic was 12.34, with a p-value of 0.01, confirming that the Fixed Effects Model is more appropriate. This indicates that country-specific effects are correlated with the explanatory variables.

This is consistent with Sachs and Warner (1995), who found that trade openness promotes financial development. Like Stiglitz (2002), our results support the positive association between

globalization and financial development, as it benefits financial innovation. As Demirgüç-Kunt et al. (2013) pointed out the potential of technology to effect transformation, our results emphasize the importance of technological innovation for financial inclusion.

4.4 Random Effects Model Results

Table 4.2. Random Effects Model Results

Variable	Coefficient	Std. Error	z-Statistic	P-Value
Trade Openness	0.049	0.017	2.88	0.004
Globalization Index	0.035	0.014	2.50	0.012
Technological Innovation	0.047	0.020	2.35	0.019
GDP per capita	0.020	0.009	2.22	0.026
Constant	0.989	0.298	3.32	0.001

The variable relationships are, similarly, highly robust with results similar to the Fixed Effects model.

Both of these findings are still consistent with earlier results by Rajan and Zingales (1998), indicating that trade openness 'eases' the constraints imposed by financial system inefficiency. This also supports Levine (2005), who suggested that multiple model validation should be used to determine financial development determinants.

4.5 Dynamic Regression Model (Arellano and Bond Estimator)

Table 4.3. Dynamic Model Results (Arellano and Bond)

Variable	Coefficient	Std. Error	z-Statistic	P-Value
Lagged Financial Development	0.262	0.048	5.46	0.000
Trade Openness	0.050	0.018	2.78	0.005
Globalization Index	0.032	0.016	2.00	0.045
Technological Innovation	0.043	0.021	2.05	0.040

Variable	Coefficient	Std. Error	z-Statistic	P-Value
GDP per capita	0.022	0.011	2.00	0.046
Sargan Test (p-value)	-	-	-	0.12
AR (2) (p-value)	-	-	-	0.41

The dynamic model results indicate that financial development is cumulative: past financial development remains productive for future economic growth. The investors and firm managers will contribute positively towards trade openness, globalization, technological innovation and GDP per capita.

This is consistent with King and Levine (1993), who looked at the compounding effect of early financial development on long-run growth. Our findings that trade openness and globalization positively affect financial development are consistent with Chinn and Ito's (2006) finding that global integration is essential for financial resilience.

Diagnostic Tests:

The Sargan test was performed to validate the instruments in the Arellano-Bond dynamic model. The p-value of 0.12 indicates that the instruments are valid and appropriately specified. Additionally, the Arellano-Bond test for autocorrelation confirmed the absence of second-order autocorrelation (AR (2), p-value = 0.41), ensuring the model is well-specified.

4.6 Discussion

The results from this study indicate a positive relationship between financial development and several key factors: GDP per capita, trade openness, globalization and technological innovation. Taken together, all of the characteristics make a unique contribution to explain financial development, with lessons for policy and stakeholder efforts to accelerate financial development in the Next 11 countries. Our findings are consistent with existing literature on Sachs and Warner (1995), Stiglitz (2002), and Demirgüç-Kunt et al. (2013) but provide new insights into the particular dynamics of middle-income countries. This study uses the Next 11 to illustrate the need to focus on tailored policies to address the unique constraints of individual regions and structures. The diagnostic tests confirmed the robustness of the models used in this study. The Hausman test

validated the use of the Fixed Effects Model. The Sargan test ensured the validity of the instruments in the dynamic model, while the Arellano-Bond test confirmed no second-order autocorrelation, further reinforcing the reliability of the dynamic panel model results.

1. Trade Openness as a Key Driver:

- First, all the results consistently suggest that an economy can have stronger financial development with more trade openness. It should tell us that when countries open their economy for international trade and have access to foreign capital, investment opportunities and financial know how, the financial sector grows.
- **Policy Implication:** However, the following 11 governments could reduce trade barriers, tariffs, and quotas, and could encourage their participation in global trade agreements. The next thing they do is they promote trade friendly policies which attract more foreign direct investment (FDI) and also attract more ‘cross border financial activities’ which the financial sector is already so strong in.

2. The Role of Globalization:

- Finally, it is shown that the globalization index has a positive association with financial development. We find that greater global integration leads to better financial development outcomes, suggesting that global integration brings about the inflow of more capital, access to latest developments in financial technology and knowledge sharing.
- **Policy Implication:** These 11 countries, however, are able to exploit the benefits that can accrue from globalization, because they develop a conducive and stable, open environment for foreign financial institutions and foreign investors to get involved in. It may involve beefing up regulatory and financial infrastructure frames so that investors trust the financial system, both foreign and domestic.

3. Technological Innovation as a Catalyst:

- There is an apparent positive effect of technological innovation on financial development. Moreover, it shows that spending on and adoption of new

technologies can result in greater efficiency, accessibility, and reach of financial services by countries. At the same time, the expansion of the sector can be leveraged to ensure their growth and advancement of financial inclusion technologies like digital banking, mobile payments, etc.

- **Policy Implication:** In turn, financial development can be achieved through R&D investments and the policies which encourage innovation. Innovation Hubs must be supported by governments, a promising environment for incentivizing new fintech startups should be presented, as well as a regulatory environment that allows for new financial technologies. For countries with large unbanked populations, technology can be a powerful force for increasing financial access, and this is particularly true for countries with large unbanked populations.

4. Economic Prosperity and Financial Development:

- Financial and economic prosperity, however, firms and individuals foster it through financial development and GDP per capita are positively correlated with financial development. If the economic environment is stable and the GDP per capita is high, there are more resources, the government and institutions can divert resources to finance the infrastructure of finance, regulatory improvement and financial products innovation.
- **Policy Implication:** To foster financial development, countries should focus on reducing trade barriers and increasing participation in global trade agreements. Governments must also invest in technology and innovation to expand financial inclusion and improve the efficiency of financial systems.

5. Cumulative Nature of Financial Development:

- Financial development is cumulative—Dynamic Regression Model indicates financial development is positively associated with the past levels. Next, this suggests that if financial development is initiated, then over time it works autonomously, attracting further investments and opportunities with a more developed financial sector.

- **Policy Implication:** Policymakers should attempt to lay a strong financial development foundation to consolidate this effect. To keep early advancements in the financial sector as a base for sustainable growth, they need to maintain an atmosphere of continuous improvement and must keep consistent financial policies in place.

Overall Implications: The findings show that the following 11 countries have a clear path for broadened trade influence instead of technological innovation and economy improvement to improve financial development. These approaches are in sync with all the broader economic objectives and support the development of the financial market, but they are characterized by the existence of a cyclical process of increase and improvement.

Chapter 5:

Conclusion and Recommendations

5.1 Summary of Key Findings

At the same time, the results of the study also point to why financial development is lower in the Next 11 countries, given their unique production structures:

1. **Trade Openness:** Trade openness was positively correlated with financial development. Economic growth is fueled by the open trade in accessing the foreign investment funds, information and skills available from the partaking countries that actively participate in the international trade.

2. **Globalization:** Financial development is positively determined by globalization. This encourages capital inflows and cross border transaction when countries are integrated in the global economy. This is possible due to such global connectivity in support of more advanced economic systems.
3. **Technological Innovation:** Financial development need technology innovation. Those countries allocating more resources for R&D and implementing new technologies are better equipped to modernize financial services, improve efficiency and access, particularly in low populated economies with underserved populations.
4. **GDP per Capita:** Economic prosperity, as measured by GDP per capita, goes with stronger financial development. Because richer countries have the resources to invest in financial infrastructure and to improve regulations and support a potent financial system.
5. **Cumulative Effect of Financial Development:** The dynamic model results also indicate that financial development is cumulative in the sense that the progress of the past is passed on to the future with the sign of a positive function. The implication is that such early investments in economic infrastructure and policies will lift the country's financial sector as a whole.
6. The robustness of the models was validated through diagnostic tests. The Hausman test confirmed the Fixed Effects Model as appropriate, while the Sargan test validated the instruments in the dynamic panel model. The Arellano-Bond test confirmed the absence of second-order autocorrelation, ensuring the reliability of the dynamic regression results.

5.2 Policy Recommendations

These findings inform a number of policy prescriptions designed to promote financial development in the Next 11:

1. Enhance Trade Openness:

- Trade barriers should be reduced or traded to be combined or equal. Free trade can be encouraged by these countries and reduction of tariffs so that foreign direct investment (FDI) is attracted and the growth of the financial sector is encouraged.

- Directly, it offers the opportunity to bring the economies into the international trade frameworks or to establish regional trade consents.

2. Foster Global Integration:

- By foreign investment incentive policies, financial transparency regulations, etc attracting foreign investment in the country.
- It will also contribute to creating proper partnerships with the global financial institutions and to adoption of international best practices when the regulatory standards are developed so that more confidence will be fostered in the financial system and capital inflow further enhanced.

3. Support Technological Advancements:

- Investment in technology and innovation is necessary for the modernization of some elements of the financial sector. Then we suggest that governments support R&D in the area, create regulatory sandboxes for the fintech startup and provide incentives for fintech firms operating in the technologically oriented financial services.
- Thus, they can play a role in helping promote digital financial services such as mobile banking and online payments, and enabling increased financial inclusion in underserved regions.

4. Promote Inclusive Economic Growth:

- In a stable and prosperous economy with a foundation of economic policies creating jobs, income growth and poverty reduction in which financial development is fostered.
- But directly, we can do this by investing in education, healthcare, and infrastructure, which will build up the overall economic resilience and will, therefore, also expand the financial sector.

5. Sustain Early Investments in Financial Development:

- These results also suggest that concerning financial development, ongoing investment in the sector will generate lasting returns. In order to sustain growth momentum and the boom of sector growth, governments should have consistent financial policies while supporting regulatory bodies just as equally as they support financial institutions.

5.3 Limitations of the Study

While this study provides necessary information, there are limitations to this study:

1. Data Limitations:

- The data used in the study is both primary and secondary of which are gotten from different sources some of which have been stated to have varying levels of essence on accuracy and completeness in reference to the topic. Fixes were done for specific years per country, and cases without data were imputed, but this may lead to bias.

2. Model Assumptions:

- There are o Fixed effects, Random effects and the Arellano-Bond dynamic models, which make different assumptions. Under these assumptions, the results are less reliable. For instance, in the case of the Arellano–Bond estimator, we do not assume no second order autocorrelation, which is not necessarily the case as real data will be.

3. Scope of Variables:

- I applied four main variables: It is the trade openness, Globalization, Technological innovation, and Gross domestic product (GDP per capita). Factors, such as institutional quality, political stability, and educational attainment which might influence financial development were, however not included for analysis.

4. Limited Generalizability:

- Thus, by limiting the study to the Next 11 countries, the findings would probably not be the same as the other developing or even developed countries. Economic

structure, governance, and financial policies, for example, can influence how the latter may impact financial development in other contexts.

5.4 Suggestions for Future Research

This study's results may serve future research on this issue as a basis for further development, moving in these directions:

1. Incorporate Additional Variables:

- Future research can use other controls to shed light on the variables that help financial development grow such as institutional quality, educational attainment, and political stability.

2. Expand the Scope to Other Economies:

- It would allow studying how countries with a much broader range of countries, developed and developing alike, have experienced financial development. This could help with distinguishing one of a kind factors identified with various pay gatherings or spatial plans.

3. Use Alternative Methodologies:

- In addition, future research on this topic could employ high powered econometric methods such as Structural Equation Modeling (SEM) and Generalized Method of Moments (GMM), in order to deal with endogeneity and capture contemporaneous as well as sequential variables in interactions.

4. Investigate the Role of Financial Inclusion:

- Financial development starts increasingly to include financial inclusion in its region. Financial inclusion initiatives could be studied in terms of how they affect financial development, and how digital financial services can strengthen financial access.

5. Examine the Impact of Crises:

- It may also explain how financial development might respond to economic crises, such as COVID-19, and possibly help to shed some light on the Next 11 financial systems' resilience. It could include the analysis of government intervention and fiscal policies aimed at stabilizing a financial sector in an economic period of instability.



Conclusion

Results from this study show that trade openness, globalization, technological innovation and GDP per capital are all important indicators of financial development in these Next 11 countries. Results show that policies to further promote open trade, globalization, technological progress and inclusive economic growth are essential for the development of the financial sectors of these countries. But the study itself is not without limitations, and it does offer some lessons for those who will plan future research and policy in the future. Going forward, sustaining the Next 11's

focus on financial sector development, and hardening their links into an interconnected global economy, will underpin broader economic growth, stability and resilience.



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