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South Africa and Turkish Financial System Development: A Comparative Analysis

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Abstract:- From 1999 to 2001, there was economic crisis occasioned by challenging external environment and economic shocks that adversely affected the financial system development of Turkey. This crisis was countered by the IMF stabilization program of 2000-2001. On the contrary, South Africa has a relatively large and sophisticated financial system with key players covering the banking institutions, insurance firms and the stock market. Thus, the motivation of the present study was to compare the financial system development of South Africa and Turkey. The comparison of the financial system development was done along financial institutions, financial instruments and financial regulations. The Public Interest Theory of Regulation and the financial intermediation theory provided anchorage to the study. The study adopted descriptive survey design focusing on South Africa and Turkey. Secondary data was collected covering a period of 10 years and the analysis was done using descriptive and inferential statistics covering independent t-test and one way Analysis of Variance. From the results, while the study neither failed to accept nor reject hypothesis H_{01}, it rejected hypothesis H_{02} and accepted hypothesis H_{03}. The study recommends that the senior managers of the commercial banks in Turkey and South Africa as well as the insurance firms should invest more resources in salesmanship so as to increase market presence and thus more penetration and market depth.

I. INTRODUCTION

Background to the Study

Financial system is made up different actors, instruments, markets and institutions that collaboratively work together within an economy for provision of financial services. Financial system development is manifested in the efforts to enhance the level of efficiency of the financial sector, increasing the range of products, strengthening the available financial regulations and enhancing accessibility to financial products in the population (Arestis, González-Martinez & Dejuán, 2016). Through financial system development, the poor are able to borrow and make investment in assets that would enhance their incomes and this would generate more employment while reducing the poverty levels across the world. Financial system development helps in mobilization of savings that can be used to funding investments while lowering the costs of transaction (Banerjee & Majumdar, 2017).

It is a fact that for the economy to develop there must be financial system development as a precondition. Financial system development is established in the process where the financial markets, instrument and institutions seek to grow so as to be able to sustain large amount of investments. Financial system development can be regarded as the efforts made to develop the stability, efficiency and size of the financial markets coupled with the need to increase the accessibility to the financial markets (Castelli, 2018). Financial system development is an important factor that drives the growth of the economy since savings are channeled towards the development of the economy, reduction in information costs which allows for optimal allocation of capital assets. Financial system development is the foundation of technological innovations and risk management including the need to diversify and hedge against risks (Zangirolami-Raimundo, Echeimberg & Leone, 2018).

Sustainable economic growth is an emerging practice among different economies around the world and evidence indicates that it is supported by financial system development. These views are echoed by Paun, Musetescu, Topan and Danuletiu (2019) who shared that a developed financial system promotes sustainable sustainability in the growth of the economy. Apart from sustainable economic growth, financial system development is also regarded as a key factor in reduction of poverty. This assertion was confirmed by Khan, Khan and Ahmad (2011) who noted that who covered the banking sector, the insurance firms, stock and bond markets as aspects of financial sector development revealing an inverse relationship. In operationalization of the variables, the asset of the central bank against the gross domestic product (GDP) was used to represent banking sector, non-life insurance was used to represent the insurance sector, market capitalization against

GDP was used to represent the bond market (Khan *et al.*, 2011).

While covering a data base of 65 developed and developing economies over a period of 1960-1999, Mavrotas and Son (2006) noted that development in the financial sector is linked with the growth of the economy. The study conducted by Seibel (1996) in Germany focused on financial system development and its link with microfinance arguing that majority of the developing economies have relied on regulation of financial sector as a strategy towards financial development. Da-Silva (2002) shared that highly developed financial systems have implications on information asymmetry and the transaction costs. Castelli (2018) covered 87 countries that bring out the degree of financial development in each of the country with focus on three measures; stability, depth and access. The measure of access was banks for every 1000 adult individuals, the total private credit to GDP represented depth and non-performing against gross loan measured stability.

While focusing on Central and Eastern Europe (CEE) countries, Cojocaru, Falaris, Hoffman and Miller (2016) had poorly developed financial systems because they were operating under communism. Guru and Yadav (2019) focused on Brazil, Russia, India, China and South (BRICS) within the period of 1993 all through to 2014 where the banking and the stock markets were the two indicators of financial system development that the study focused on. The value of traded shares and the domestic credit that has been extended to the private entities were used as proxies of stock market development while the size of the financial intermediaries and credit as a ratio of deposits were used to measure the banking sector (Guru & Yadav, 2019). Another related study by Kaur, Yadav and Gautam (2013) also focused on BRIC countries argued that developed financial systems have an influence on attraction of foreign investors in the economic system. The study used stock market and the banking sector as the measures of financial system development.

In Turkey, Akyüz (1990) focused on the financial policies and systems during the period of 1980s, arguing that there was a high level of repression of the financial systems of Turkey some years before 1980. The key features of financial repression during this period included ceiling the lending and deposits rates, rationing of credit, high level of taxation financial transactions and income, high requirements for reserve and liquidity, poorly developed capital markets and high barriers for new banks. In responses to these challenges, Özatay and Sak (2002) focused on the financial reform process in Turkey that was initiated in 1980 arguing that they deepened the financial systems in place. Cetin (2016) focused on Turkey using banking sector as a measure of financial sector development within the period of 1999 all through to 2011.

In Africa, Dauda and Makinde (2014) focused on Nigeria sharing that the credit advanced to the private sector by financial institutions have not significantly helped to reduce poverty. Another related study in Nigeria was conducted by Lawrence, Moni and Eikhomun (2014) where the indicators of financial system development that were covered include stock market with the proxies covering the market capitalization and the value of traded shares. Puatwoe and Piabuo (2017) focused on Cameroon with the indicators of financial system development covering the total deposits to the GDP, broad money and the domestic credit that has been extended to private businesses. The study done by Ndlovu (2013) in Zimbabwe arguing that financial system development is a product of modern financial instruments and the capital markets in the economic system. Kyale (2015) used a case of Kenya where four indicators of financial system development were covered including exports, liquid liabilities, accumulation of capital stock and labor. In Egypt, Elsayed (2013) used the stock market and banking sector as the indicators of financial system development.

In South Africa, Odhiambo (2014) used the commercial banks and stock markets as the measures of financial system development with the related proxies covering stock market turnover, value of traded stock and market capitalization with credit advanced by the banks to credit sector representing the banking sector development. While focusing on the period from 1976 all through to 2014 in South Africa, Muyambiri and Odhiambo (2018) used banking sector and stock market as measures of financial system development. Abel, Nyamutowa, Mutonhori and le-Roux (2019) used the indicators of financial development to include money supply. According to Muyambirib and Odhiambo (2018), South Africa has a financial system that is well organized and highly developed. In the year 2014, the South Africa Financial Sector Development and Reform Program (FSDRP) was launched aimed at supporting the government of South Africa in strengthening the financial system in place.

Research Problem

South Africa and Turkey are two countries operating in different geographical continents and in different stages of development. While the International Monetary Fund (IMF) classifies Turkey as an emerging economy, the CIA World Factbook considers Turkey as a developed Country. From 1999 to 2001, there was economic crisis occasioned by challenging external environment and economic shocks that adversely affected the financial system development of Turkey. This crisis was countered by the IMF stabilization program of 2000-2001.

On the contrary, South Africa has a relatively large and sophisticated financial system with key players covering the banking institutions, insurance firms and the stock market. The assets of the financial sector account for 298% of the overall GDP, which is relatively above the emerging economies. The banking sector is dominated by four strong players covering ABSA, FirstRand, Nedbank and Standard. Most of the bank liabilities in South Africa are domestic with a high degree of concentration in the financial sector. The aforementioned banks have strong affiliation with the insurance firms in South Africa. South Africa has a relatively larger capital market receiving significant support

from the Non-Bank Financial Institutions (NBFIs). There is a larger derivative stock market in South Africa that allows the investors to hedge against fluctuations in exchange and interest rates.

It is against this background that the current comparative study sought to gain further insight into the financial system development of South Africa and Turkey with a focus on financial institutions, financial market instrument and financial regulations. Such information will help Turkey which is recovering from the past decades of financial crisis.

Research Objectives

i. To compare the Turkish and South Africa financial institutions
ii. To compare the Turkish and South Africa financial market instrument
iii. To compare the Turkish and South Africa financial regulation

Research Hypotheses

The study was guided by the following hypotheses:

H_{01}: There is no significant difference between the Turkish and South Africa financial institutions

H_{02}: There is no significant difference between the Turkish and South Africa financial market instrument

H_{03}: There is no significant difference between Turkish and South Africa financial regulation

II. LITERATURE REVIEW

Theoretical Review

This section is set out to review literature on the theories that informed the study. The two theories reviewed in this chapter include financial intermediation and public interest theory of regulation.

Financial Intermediation Theory

The study was guided by financial intermediation theory whose proponents include Akerlof (1970), Spence (1973) and Rothschild and Stiglitz (1976). The theory seeks to explain the role played by financial systems in reduction of transaction and information costs in the economy. The main reason for existance of financial intermediation is the need to counter the issues related with agency and information asymmetry (Gurley & Shaw, 1960). Lack of financial intermediation would increase information asymmetry hence resulting into market imperfections and ultimate rise in transaction costs.

The various actors of financial systems (institutions and markets) like the stock and bond markets play a role in promotion of economic efficiency through mobilization of funds from those people who lack productive utilization to the individuals who require those funds (Wishlade, Michie, Robertson & Vernon, 2017). This explains the role played by a highly developed financial system towards the growth of the economy. Different undertakings in the financial systems have direct link with personal wealth and business behavior. Financial systems have direct effect on long term growth as they help savers to pool funds that are allocated to investments attracting higher returns (Edmans, Goldstein & Jiang, 2012).

The theory is established on the basis of the existance of imperfections in information whose origin dates back to 1970s. The existance of financial intermediaries is justified on ground that they help in reduction of the costs of transaction and information access which are shaped by asymmetries arising between those borrowing and those lending. Thus, the essence of the financial intermediaries is to help in sound operationalization if markets and the key issues that shape the amount of credit facility that is channeled via the use of intermediaries. The existance of financial intermediaries is explained by two views: the first view places emphasis on the role that intermediaries play in providing liquidity. The second view offers an explanation of the role that intermediaries play in transformation of risk attributes and features of the assets in place. In the two views, the role of the financial intermediaries is to lower the costs realized in wiring of the funds between the individuals who are borrowing and those who want to lend. This helps in strengthening the level of efficiency in allocation of the facilities and resources.

An analysis of the efforts to provide liquidity by banking entities was done by Diamond and Dybvig (1983). It noted that the manner in which banking entity is run can cause severe economic concerns, since there are circumstances when the relatively larger institutions are likely to fall out and collapse. It was shown that banking entities are sometimes exposed to vulnerabilities that have sparked a debate with respect to prudential regulations. It is important for the bank to stay with the prudential regulations so as to safeguard the deposits of the clients. One of the highly held assumptions is that commercial banks are not able to select risks in their different portfolio and thus being a lender of the last resort, the central bank is able to offer similar services related with insurance of deposits. However, in case there exists a tradeoff between optimum risk and relevant incentives for choice of the portfolio, the credibility of the lender of the last resort will diminish compared to that of a deposit insurer. If the lenders of the last resort were always needed in bailing out banking entities facing challenges with respect to their liquidity, it would be clear for banking entities to ensure that they take part in risky decisions. On the other hand, deposit insurance is commitment that is so binding to the parties that can be retained to cushion the banking entity in case it collapses.

The essence of financial intermediaries is to ensure that risk attributes of the assets have been transformed since they are able to be cushioned against failures in the market and deal with issues related with asymmetry of information. Within the credit markets, asymmetry of information arises because the borrowing bodies are well versed with their projects for investment as compared to the lending entities. Thus, financial intermediaries have greater probability of lending to the borrowers having relatively higher risk. Asymmetry of information arises from the time when the borrowing bodies are able to have observation of the returns

of the projects especially after the end of the project. This creates a moral hazard p0roblem in an entity. In essence, moral hazards arise from the point when the borrowing bodies are involved in actions that bring down the chances of repayment of the loan facility. Good example of moral hazard is where the owners of the entity ensure that funds have been siphoned (either by legal or illegal means) to their own largely through loss making contracts. According to Diamond (1984), the key reason as to why financial intermediaries exist is to diversify the portfolio held. Thus, the theory provided information on the role played by the various actors of financial system in an economy.

Public Interest Theory of Regulation

It was Pigou (1938) who advanced this theory and it argues that the regulations of the government are created to respond to the demands of the public so that there is possibility for rectification of the failures within the market through imperfect competitive pressure. The assumption guiding this theory is that the outcomes of the market are used to gauge the degree of failure and the market is not well positioned in fixing the key issues and concerns. It is only when the government has fixed some concerns that an optimal outcome with greater efficiency is created. Furthermore, the resultant benefits should be more above the associated costs.

The theory operates on the assumption that the regulatory regime strive to ensure there is a high degree of efficiency economically. The theory further argues that regulations need to be instituted by the government as all the individuals including those working in the public domain are driven by their selfish interests. The theory has been used to provide information on what needs to be carried out by the government as well as detailing the actions that are carried out to offer justification of the desired growth in ownership of the public. The theory provides information on why the government plays a central role in regulating some of the deliberations within an economic system.

The theory provides a discussion of the role played by the State in strengthening the welfare of the citizens while correcting the failures within the market. A market failure can also be regarded as undesired practice within the market. At inception, the theory makes an assumption that regulations seek to ensure that the entire society derives benefit as opposed to some few interested individuals within the economy. As opposed to representing the interests of the privately established investors, the regulator seeks to ensure that the interests of the society have been well represented. In most cases, there may exists some specific groups that are likely to capture the degree of control of the agencies responsible for regulating the economy so as to ensure that only their selfish interests are advanced.

The theory largely focuses on public goods that the citizens or some groupings would derive some benefits. Under this theory, regulations of the banking sector do exist to enhance the benefits of the depositing and investing agencies .Stiger (1972) shared that it is possible to capture regulations especially by incumbent firms so as to ensure the market is protected from entry of the competitors. Pigou (1932) shared that asymmetries of information, monopoly power and externalities provides a strong hand to support the efforts of the government so as to ensure the social welfare of the people is maximized.

The theory experienced recognition and growth in 1930s due to the increasingly turbulent needs of the market. However, this theory has received some criticisms on account that it is not able to account for public goods; it provides unrealistic description of the attributes of the regulating agencies. The theory argues that regulations are required by entities to exist and perform better. The theory provides a description of the State as an omnipresent entity and its role is to ensure there is maximization of the social welfare of the people. This is largely done so as to provide correction of the failures in the market. The theory was used to espouse and support the variable of financial regulations. The implication of this theory to the study is that financial regulations exist so as to rectify the imperfections within the market.

Financial System Development

Financial system development is a multi-dimensional term that describes a range of issues including improvement in competitiveness and efficiency of the entire sector, increased range of the available financial products and diversification of the available institutions. A highly developed financial systems leads to more capital accumulation, increased hedging and diversification of the saving options besides increasing the insurance services in place. This section will review literature on financial system development paying attention to three measures: institutions, instrument and regulations in the subsequent sections. Financial system comprises of different actors include insurance firms, stock markets and the commercial banks among other institutions (Hasan & Zhou, 2008). Financial development implies that these institutions are large enough to allow larger firms to access finances and ensure that savers have diversified their risks (Valentine, 2014). Highly developed financial systems enhance the mobilization of savings which are allocated to the projects that earn relatively higher returns to the investors (Arestis, González-Martinez & Dejuán, 2016).

Financial system development is established in the process where the financial markets, instrument and institutions seek to grow so as to be able to sustain large amount of investments. Financial system development can be regarded as the efforts made to develop the stability, efficiency and size of the financial markets coupled with the need to increase the accessibility to the financial markets (Castelli, 2018). Financial system development is an important factor that drives the growth of the economy since savings are channeled towards the development of the economy, reduction in information costs which allows for optimal allocation of capital assets. Financial system development is the foundation of technological innovations and risk management including the need to diversify and hedge against risks (Zangirolami-Raimundo, Echeimberg & Leone, 2018).

Odhiambo (2014) used the commercial banks and stock markets as the measures of financial system development with the related proxies covering stock market turnover, value of traded stock and market capitalization with credit advanced by the banks to credit sector representing the banking sector development. While focusing on the period from 1976 all through to 2014 in South Africa, Muyambiri and Odhiambo (2018) used banking sector and stock market as measures of financial system development. Abel, Nyamutowa, Mutonhori and le-Roux (2019) used the indicators of financial development to include money supply. According to Muyambirib and Odhiambo (2018), South Africa has a financial system that is well organized and highly developed.

The banking and the stock market sector are the key indicators of financial system development in an economy. The proxies of banking sector development include financial depth (liquidity liability of banks against GDP), bank size commercial bank assets (ratio of commercial bank and central bank asset) and credit against deposit ratio (measures financial stability) (Bougheas & Falvey, 2009). For stock market, the common indicators include the stock market size (value of listed shares against GDP), the value of traded shares (value of traded shares against GDP) and turnover ratio (value of traded shares against real market capitalization) (Levine & Zervos, 1998). As noted by Pill and Pradhan (1995), standardized measures of financial system development like broad money against GDP and real interest rates may give misleading and inconsistent results. Thus, the best way to measure financial system development is to consider its key components (bond and stock markets, insurance firms and the banks).

Financial Institutions

The World Economic Forum (2012) defines financial development as the institutions, regulations and factors that enhance the efficiency of the intermediation and effectiveness of the financial markets. In assessing the size of the financial intermediaries, several measures were used by King and Levine (1993) including the liquid liabilities against GDP, credit advanced to credit entities against GDP, asset of commercial banks against sum of bank and central bank assets combined. Demetriades and Hussein (1996) used the bank deposit liabilities against GDP in measuring size of the financial intermediaries. Huang (2005) provides the measures if stock market to include turnover, total value traded and the market capitalization. Antzoulatos and Thanopoulos (2008) advanced a more structured index of measuring financial development determined as a weighted index bond markets, stock market, financial institutions and banks. In measuring banking development, the deposits were determined against GDP, the development of non-banking financial institutions was measured by non-life and life insurance premiums. For stock market, the market capitalization against GDP was used while bond market was pegged on private bond market capitalization against GDP.

A study was conducted by Adams, Füss and Gropp (2014) on the spillover effect within financial entities. The study measured financial institutions into four variables: insurance entities, hedging funds, investment and commercial banks. The study noted that much of transmission of shocks arise from hedge funds to other financial institutions. Banks and non-banks are important institutions of the entire financial system in an economy. Banks are extremely important to savers and borrowers within the economy since they facilitate allocation of credit. Non-banks include the insurance firms, the investment firms, pension funds, mortgage firms, asset managers and dealers including brokers. These institutions are not able to accept demand demands even though they avail a number of financial instruments to clients. When non-bank institutions lend to the public, it does have an effect on supply of money within the economy. These non-bank institutions carry out operations by borrowing a lower rate over short term and lending at a relatively higher rate over long term (Diamond and Dybvig, 1983). The growing competition between bank and non-bank entities further enhances the development of the financial system.

The study conducted by Wu, Hou and Cheng (2010) relied on evidence from the European Union (EU) covering a total of 13 member countries within the period from 1976 all through to 2005. The study operationalized financial institutions to cover banking and stock markets. The study noted that development of these institutions positively impacts on the growth of the economy. A similar study by Jurek (2014) also covered the EU members to bring out the different financial institutions and their related impact and role on stability and performance of the real estate sector. Some of the financial institutions that were noted by the study include the banking sector, the stock markets and the insurance firms.

Financial Market Instrument

There are different instrument that are exchanged in the financial market covering the debts, equities (securities) and derivatives (Lutsyshyn, Klapkiv, Kucher & Svirskyi, 2019). Financial markets fall into different categories covering stock markets, money markets and commodity markets among others. The key players in the financial markets include the suppliers of capital, intermediaries and the users of capital. The instruments in the capital markets include the debts and equities. Bonds can cover a medium term to long term perspective (Mirazizov, Radzhabova, Abdulaeva, Rasulov, Faizulloev, Mamatkulov & Ahmadov, 2016). According to Martin (2014), financial market is entities that enhance the exchange of financial assets for instance loans and deposits, government and stock securities and they include the stock and the money markets. Unlike the capital market, the money market deals with financial assets of short term horizon like commercial papers, certificates of deposits, treasury bills among others.

Ndugbu and Ojiegbe (2016) focused on Nigeria to bring out the money market instrument and their link with performance of the banks. The variables covered include treasury bills, commercial papers and government bonds and these were seen to positively contribute towards ability of the banking entities to perform. On the contrary, the banker's acceptance and performance were inversely linked

with each other. Focusing on East Africa, Odunga and Ayoyi (2016) looked at financial markets and their role towards the growth of the economy. The financial markets were represented by money markets, bond markets and stock markets. It was noted that financial markets link with foreign markets for the growth of the economy.

The Africa Financial Markets Index for 2017 and 2018 report by Absa Group ranks South Africa as the most developed financial market in Africa. At the same time, the African Capital Markets Watch 2018 report prepared by the PriceWaterHouse Coopers (PWC) rank South Africa as one of the active capital markets across the world. This is because South Africa has strong financial infrastructure with strong regulatory and legal framework. The capital market of South Africa is made up equities (the Johannesburg Stock Exchange, JSE), which is the largest market in the entire African continent having above 400 listed entities and market capitalization of USD. 13.7 trillion. The other instruments within the capital market of South Africa include bonds, derivatives that facilitate trading in agriculture commodities, equities, and interest rate and currency derivatives. There is also the real estate investment trusts (REITS), with South Africa having the well-established and largest market across Africa. The key issues that have allowed South Africa to establish a strong capital market include the fact that progressive policies have been established, promotion of financial inclusion and investor education and leveraging on technologies. In order to improve financial regulation, South Africa has separated the role of the regulator performing prudential supervision and the one that carry out market conduct supervision (African Capital Markets Watch, 2018).

Financial Regulation

Strong financial regulations are important for stability and resilience in the financial system. This assertion was supported by Boissay, Cantú, Claessens and Villegas (2019) who noted that enhancing the strength of the financial regulations increases the long term capital stock within the economy. Shaddady and Moore (2019) used a total of 47 countries to bring out the role played by supervision and financial regulations on stability of the banking industry. The study period of consideration was 2000 all through 2016. It was noted that increased capital regulations enhances the stability of the bank. On the other hand, too much supervision with tight restrictions and deposit insurance would adversely affect stability of the banking system.

Killins, Johnk and Egly (2019) focused on policy certainty of the financial regulations and their link with riskiness and profitability in the banking entity. In total, 4,760 banking entities were covered within the period of 2000 all through to 2016. The inquiry noted that uncertainty in the financial regulation policies is inversely linked with profitability of the banking entities. Banerjee and Majumdar (2017) focused on the financial regulations and their link with efficiency of the banking entity with emphasis on United Arab Emirates. Financial regulation was represented by loans to deposit ratio, loan loss provisions and total capital adequacy provisions.

Shaddady and Moore (2019) covered 2210 banking entities from 47 EU members to link financial supervision and regulations with stability. The inquiry focused on the time period from 2000 all through to 2016. It was noted that more financial regulation enhances the stability of the banking entities. The study conducted by Manamela (2012) looked at financial regulation and its link with the growth of the economy covering Asia, America and Africa. From trend analysis, financial regulation was found to have desirable outcomes on the growth of the economy. To measure financial regulation, the study used financial freedom index. The study noted that financial regulation contributes towards the growth of the economy. Makokha (2016) used a case of Nairobi to link between some identified financial market regulations and financial performance. The variables of interest covered by the study included capital requirement and liquidity management and a significant relationship was noted.

Existence of strict capital requirements in the financial system would increase the level of competition for loan forcing the banks to increase the interest rate hence increasing the profits of the institutions (Pébereau, 2015). Capital requirements may allow banks to maximize their values through enhancement of the confidence of the investors while enhancing the reputation of the banks. Supervision is an effective mechanism of overcoming market failure occasioned by information asymmetry (Limodio & Strobbe, 2016). Sound supervision had potential to improve the level of efficiency within the banking industry while allowing banks to counter any constraints likely to impact on performance (Macey, 2012). Financial regulations have the potential to reduce credit risk shown through reduced information asymmetry between the financial institution and the borrowers. Financial regulations call for deposit protection that provide buffer within the financial system (Borrius, 2012).

Operationalization of the Variables

Table 1: Operationalization of the Variables

Type of Variable	Indicators	Measurement	Scale of Measurement	Data Collection	Data Analysis
Financial Institutions	Banks	Commercial bank assets against sum of bank and central bank assets	Ratio	Data Collection Schedule	Descriptive analysis Inferential analysis
	Insurance Firms	Life Insurance Premium/GDP Non-life insurance premium/GDP			
Financial Market Instrument	Equities	Equity stock market capitalization/ GDP	Ratio	Data Collection Schedule	Descriptive analysis Inferential analysis
	Bonds	Bond market capitalization/ GDP			
Financial Regulation	Capital requirement regulation (Capital Adequacy Ratio)	Commercial bank Equity/ Commercial bank Total assets	Ratio	Data Collection Schedule	Descriptive analysis Inferential analysis
	Liquidity Management Regulation (Liquidity Ratio)	Commercial bank Total customer deposit/ Commercial bank total loan			

III. RESEARCH METHODS

Research Design

The study adopted descriptive survey design to achieve the stated objectives. Through descriptive design, the study was able to gather relevant information that allowed for comparison of the financial system development of South Africa and Turkey.

Target Population

This study targeted two countries: South Africa and Turkey. More specifically, this was a comparative study focusing on these two countries.

Sample Size and Sample Design

Since the population of the study is small, census was used. The use of census allowed the study to include both South Africa and Turkey in the collection and analysis of the data from auxiliary sources.

Data Collection Instrument

The study collected secondary data using data collection schedule, on annual basis covering the period from 2010 to 2019 hence a total of ten years.

Data Analysis Methods

Once data had been gathered from the field, it was cleaned and entered into the Statistical Package for Social Sciences (SPSS). The value of means and standard deviations were computed to describe the variables of the study besides. Trend analysis was also conducted as supported by graphs. In order to make inferences on acceptance and rejection of the formulated hypotheses, the study used independent t-test and one-way Analysis of Variance (ANOVA). The interpretation of the p-values was done at 5% level of significance.

IV. FINDINGS

Descriptive Statistics

The values of means and standard deviations were generated as the descriptive statistics of the study. The findings were established and summarized as shown in Table 2.

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Table 2: Descriptive Statistics

	Country	n	Mean	Std. Dev	Std. Error Mean
Commercial bank assets against sum of bank and central bank assets	Turkey	10	.5114	.04854	.01535
	South Africa	10	.5442	.10677	.03376
Life Insurance Premium/GDP	Turkey	10	.0390	.01411	.00446
	South Africa	10	.1075	.05011	.01585
Non-life insurance premium/GDP	Turkey	10	.0374	.01150	.00364
	South Africa	10	.1071	.04758	.01504
Equity stock market capitalization/ GDP	Turkey	10	.0395	.01169	.00370
	South Africa	10	.1012	.05461	.01727
Bond market capitalization/ GDP	Turkey	10	.0453	.01336	.00422
	South Africa	10	.1195	.04827	.01526
Commercial bank Equity/ Commercial bank Total assets	Turkey	10	1.0722	.19829	.06270
	South Africa	10	.9251	.31776	.10049
Commercial bank Total customer deposit/ Commercial bank total loan	Turkey	10	.8984	.21386	.06763
	South Africa	10	1.4832	1.38894	.43922

Table 2 indicates that Commercial bank assets against sum of bank and central bank assets for South Africa were .5442 while that of Turkey is .5114. The life insurance premium/GDP for Turkey and South Africa stood at .0390 and .1075 respectively. The non-life insurance premium/GDP had a mean of .0374 and .1071 for Turkey and South Africa respectively. The mean for Equity stock market capitalization/ GDP for Turkey and South Africa was .0395 and .1012 respectively. For the bond market capitalization/ GDP, the mean was .0453 and .1195 for Turkey and South Africa respectively. In regard to Equity/Total assets, the value of mean for Turkey and South Africa stood at 1.0722 and .9251 respectively. For the total customer deposit/total loan, the value of mean stood at .8984 and 1.4832 for Turkey and South Africa respectively. A number of inferences can be drawn from these findings; first, it can be deduced that South Africa has a relatively higher liquidity management regulation than Turkey. It can also be inferred that Turkey has a relatively higher capital requirement regulation as compared to South Africa.

Hypotheses Testing

The study developed three hypotheses covering financial institutions, financial markets and financial regulations. Testing of these hypotheses was done using both independent t-test and the One-way Analysis of Variance (ANOVA). The findings were determined and presented as indicated in subsequent sections.

Turkish and South Africa Financial Institutions

This section is set out to present the results of independent t-test and the One-way ANOVA on financial institution as the first variable of the study. Table 3 indicates the results of the independent t-test on financial institutions.

Table 3: Independent T-Test of Financial Institutions

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Commercial bank assets against sum of bank and central bank assets	Equal variances assumed	11.920	.003	-.884	18	.388	-.03279	.03709	-.11071	.04513
	Equal variances not assumed			-.884	12.567	.393	-.03279	.03709	-.11320	.04762
Life Insurance Premium/GDP	Equal variances assumed	17.441	.001	-4.162	18	.001	-.06851	.01646	-.10309	-.03393
	Equal variances not assumed			-4.162	10.418	.002	-.06851	.01646	-.10499	-.03203
Non-life insurance premium/GDP	Equal variances assumed	13.207	.002	-4.501	18	.000	-.06967	.01548	-.10219	-.03715
	Equal variances not assumed			-4.501	10.048	.001	-.06967	.01548	-.10413	-.03521

From Table 3, since Levene's Test had the p-value less than 0.05, the Equal variances not assumed will be utilized during the interpretation of the findings. The results are that ($t_{12.567}$=-.884, p>0.05), which infer that there was no significance difference in Commercial bank assets against sum of bank and central bank assets in dollars between Turkey and South Africa. In terms of the insurance sector (determined by both life and non-life insurance), ($t_{10.418}$=--4.162, p<0.05) and $t_{10.048}$=--4.501, p<0.05). This means that there was significant difference in life and non-life insurance institutions between Turkey and South Africa.

In order to complement the independent t-test, the researcher extracted the values of One-way ANOVA on financial institutions as summarized in Table 4.

Table 4: One Way ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Commercial bank assets against sum of bank and central bank assets	Between Groups	.005	1	.005	.782	.388
	Within Groups	.124	18	.007		
	Total	.129	19			
Life Insurance Premium/GDP	Between Groups	.023	1	.023	17.321	.001
	Within Groups	.024	18	.001		
	Total	.048	19			
Non-life insurance premium/GDP	Between Groups	.024	1	.024	20.262	.000
	Within Groups	.022	18	.001		
	Total	.046	19			
	Total	19.484	19			

The results in Table 4 indicate that the banking sector (F=.782 & P>0.05), which infer that it was not significantly different. On the other hand, the life and non-life insurance (F=17.321 & p<0.05) and (F=20.262 p<0.05) was significantly differently in South Africa and Turkey.

The following hypothesis was used to support the study:

H_{01}: *There is no significant difference between the Turkish and South Africa financial institutions*

Thus, based on the findings in Table 4.5.3 and 4.4, the study obtained mixed results creating indifference on whether to accept or reject hypothesis H_{01}.Thus, the neither failed to accept nor reject hypothesis $H_{01.}$

Turkish and South Africa Financial Market Instrument

The section is set out to detail the findings of the independent t-test and the One-way ANOVA on financial markets. In Table 5, the results of the independent t-test are detailed.

Table 5: Independent Samples Test of Financial Market instrument

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Equity stock market capitalization/ GDP	Equal variances assumed	14.940	.001	-3.493	18	.003	-.06168	.01766	-.09878	-.02458
	Equal variances not assumed			-3.493	9.823	.006	-.06168	.01766	-.10113	-.02223
Bond market capitalization/ GDP	Equal variances assumed	16.582	.001	-4.683	18	.000	-.07417	.01584	-.10744	-.04090
	Equal variances not assumed			-4.683	10.370	.001	-.07417	.01584	-.10929	-.03905

Equity and bonds were the two financial market instruments that the study covered. From Table 5, it can be noted that equities ($t_{=9.823}$=9.823 & p<0.05) and bonds $t_{=}$10.370 & p<0.05) were all significant. Thus, the study inferred that the financial market instrument of Turkey and South Africa were significantly different. In Table 6, the results of one-way ANOVA are detailed.

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Table 6: One-Way ANOVA of Financial Market Instrument

		Sum of Squares	df	Mean Square	F	Sig.
	Total	.046	19			
Equity stock market capitalization/ GDP	Between Groups	.019	1	.019	12.198	.003
	Within Groups	.028	18	.002		
	Total	.047	19			
Bond market capitalization/ GDP	Between Groups	.028	1	.028	21.931	.000
	Within Groups	.023	18	.001		
	Total	.050	19			
	Total	19.484	19			

As shown in Table 6, the equity and bond markets had **(F**=12.198, P<0.05) and (F=21.931 P<0.05), thus they were significant. Hence, the study deduced that there existed significant difference in financial market instruments between Turkey and South Africa. The following hypothesis was developed and tested by the study:

H_{02}: *There is no significant difference between the Turkish and South Africa financial market instrument*

Thus, on the basis of the findings in Table 5 and 6, the study rejected hypothesis ***H_{02}*.** Thus, the study inferred that there is significant difference between the Turkish and South Africa financial market instrument.

Turkish and South Africa Financial Regulation

The findings on financial regulations of Turkey and South Africa determined through independent t-test and the one-way ANOVA are detailed in this section. Table 7 is a breakdown of the findings of the independent t-test.

Table 7: Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						
									95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
Commercial bank Equity/ Commercial bank Total assets	Equal variances assumed	.583	.455	1.242	18	.230	.14711	.11844	-.10173	.39595
	Equal variances not assumed			1.242	15.086	.233	.14711	.11844	-.10522	.39944
Commercial bank Total customer deposit/ Commercial bank total loan	Equal variances assumed	5.373	.032	-1.316	18	.205	-.58477	.44440	-1.51842	.34888
	Equal variances not assumed			-1.316	9.426	.219	-.58477	.44440	-1.58318	.41364

As shown in Table 7, capital requirement regulation (t18=1.242 p>0.05) while liquidity requirement regulation (t9.426=-1.316, p>0.05) were all insignificant. Thus, the study inferred that there is no significant difference in financial regulations of South Africa and Turkey. The researcher performed one-way ANOVA with the findings as indicated in Table 8.

Table 8: One Way ANOVA of Financial Regulations

		Sum of Squares	df	Mean Square	F	Sig.
	Total	.046	19			
Commercial bank Equity/Total assets	Between Groups	.108	1	.108	1.543	.230
	Within Groups	1.263	18	.070		
	Total	1.371	19			
Commercial bank total customer deposit/total loan	Between Groups	1.710	1	1.710	1.732	.205
	Within Groups	17.774	18	.987		
	Total	19.484	19			

As per the results in Table 8, the study noted that capital adequacy regulation (F=1.543 & P>0.05) and that liquidity management regulation (F=1.732 & P>0.05) were all not significant. Thus, the study inferred that financial regulations of Turkey and South Africa were not significantly different. The study was guided by the following hypothesis:

H_{03}: *There is no significant difference between Turkish and South Africa financial regulation*

As shown by the findings in Tables 7 and 8, the study noted p-values to be greater than 0.05. Thus, the study accepted hypothesis H_{03}.

V. SUMMARY, CONCLUSION AND RECOMMENDATIONS

Summary

The study was set out to compare the South Africa and Turkish financial system development. More specifically, the comparison of financial system development was done along three variables: financial institutions, financial market instrument and financial regulations. Financial intermediation and the public interest theory of regulation were used to provide anchorage to the study. The adopted design was descriptive with collection of auxiliary data from published reports by respective central banks of Turkey and South Africa as well as the reports by the World Bank Group.

The first specific objective was to compare the Turkish and South Africa financial institutions. In achieving this objective, both descriptive and inferential statistics were utilized. Three indicators of financial institutions were considered, the banking, life and non-life insurance. The results from trend analysis indicated that South Africa has more developed non-life and life insurance institutions as compared to the commercial bank institutions. The trend analysis findings further indicated that Turkey has a far developed insurance sector as compared to the commercial bank sector. The first hypothesis of the study was H_{01} there is no significant difference between the Turkish and South Africa financial institutions. Based on the findings, the study obtained mixed results creating indifference on whether to accept or reject hypothesis H_{01}.Thus, the neither failed to accept nor reject hypothesis H_{01}. Thus, while both life and non-life insurance financial institutions between Turkey and South Africa were statistically significant, there was no statistical difference in the banking sector between the two countries.

The second specific objective of the study was to compare the Turkish and South Africa financial market instrument. The study used the indicators of equity and bond as the key financial market instrument. From the results of trend analysis, the study noted that bond market is more developed than equity market in South Africa. It was noted that Turkey has a more developed bond as compared to equity financial market. The second hypothesis of the study was H_{02} there is no significant difference between the Turkish and South Africa financial market instrument. From the results of the independent t-test and the one way ANOVA, the study rejected hypothesis H_{02} and inferred that there is significant difference between the Turkish and South Africa financial market instrument.

The study sought to compare the Turkish and South Africa financial regulation. Two indicators of financial regulation covered by the study included capital adequacy regulation and liquidity management regulation. Based on the findings of trend analysis, it was noted that South Africa has a relatively stronger liquidity management regulation as compared to capital adequacy regulation. The study further indicated that Turkey has a more developed capital adequacy regulations as compared with liquidity management regulations. The third hypothesis of the study was H_{03} there is no significant difference between Turkish and South Africa financial regulation. From the results, the study accepted hypothesis H_{03}.

Conclusion

The first specific objective was to compare the Turkish and South Africa financial institutions. In achieving this objective, both descriptive and inferential statistics were utilized. The study concludes that South Africa has more developed non-life and life insurance institutions as compared to the commercial bank institutions. Turkey has a far developed insurance sector as compared to the commercial bank sector. While both life and non-life insurance financial institutions between Turkey and South Africa were statistically significant, there was no statistical difference in the banking sector between the two countries.

The second specific objective of the study was to compare the Turkish and South Africa financial market instrument. The bond market is more developed than equity market in South Africa. Turkey has a more developed bond as compared to equity financial market. There is significant difference between the Turkish and South Africa financial market instrument.

The study sought to compare the Turkish and South Africa financial regulation. South Africa has a relatively stronger liquidity management regulation as compared to capital adequacy regulation. Turkey has a more developed capital adequacy regulations as compared with liquidity management regulations. There is no significant difference between Turkish and South Africa financial regulation.

Recommendations for Management, Policy and Practice

Management: The study recommends that the senior managers of the commercial banks in Turkey and South Africa as well as the insurance firms should invest more resources in salesmanship so as to increase market presence and thus more penetration and market depth.

Policy: The policy makers including respective central banks of South Africa should formulate sound policies and regulations that would guide financial system development. The policy makers in the respective insurance and

commercial banks as the financial institutions in South Africa and Turkey should formulate proper policies that would promote resilience of the financial institutions.

Practice: The various practitioners including the market and trade development specialists and advisors of the respective commercial banks and insurance firms in Turkey and South Africa should guide the financial markets to realize growth.

REFERENCES

[1]. Abel, S., Nyamutowa, C., Mutonhori, C., & le Roux, P. (2019). Financial sector development and economic growth in the Southern African Development Community region. *Journal of Economic and Financial Sciences*, *12*(1), 1-10.
[2]. Adams, Z., Füss, R., & Gropp, R. (2014). Spillover effects among financial institutions: A state-dependent sensitivity value-at-risk approach. *Journal of Financial and Quantitative Analysis*, 575-598.
[3]. Akyüz, Y. (1990). Financial System and Policies in Turkey in the 1980s. In *The political economy of Turkey* (pp. 98-131). Palgrave Macmillan, London.
[4]. Alpi, K. M., & Evans, J. J. (2019). Distinguishing case study as a research method from case reports as a publication type. *Journal of the Medical Library Association: JMLA*, *107*(1), 1.
[5]. Arestis, P., González-Martinez, A. R., & Dejuán, Ó. (2016). Investment, financial markets and uncertainty. *Economia e Sociedade*, *25*(3), 511-532.
[6]. Banerjee, R., & Majumdar, S. (2017, July). Does Financial Regulation Influence Bank Efficiency? A Study on UAE Banking Sector. In *International Conference on Applied Economics* (pp. 679-691). Springer, Cham.
[7]. Beins, B. C. (2017). *Research method: A tool for life*. Cambridge University Press.
[8]. Boissay, F., Cantú, C., Claessens, S., & Villegas, A. (2019). Impact of financial regulations: insights from an online repository of studies. *BIS Quarterly Review, March*.
[9]. Borrius, S. (2012). *The impact of new financial regulations on financial markets instruments within banks* (Master's thesis, University of Twente).
[10]. Bougheas, S., & Falvey, R. (2009). The impact of financial market imperfections on trade and capital flows. *EconoQuantum*, *6*(1), 91-110.
[11]. Castelli, M. (2018). Financial Sector Development and Economic Growth: Revisiting the Relationship. *Perspectives: A Publication of International Development Program, School of Advanced International Studies, John Hopkins University, April*, *12*.
[12]. Cetin, H. (2016). The Relationship between Turkey's Financial Indicators and Economic Growth Rates. *Journal of Economics, Business and Management*, *4*(1), 36-39.
[13]. Cojocaru, L., Falaris, E. M., Hoffman, S. D., & Miller, J. B. (2016). Financial system development and economic growth in transition economies: New empirical evidence from the CEE and CIS countries. *Emerging Markets Finance and Trade*, *52*(1), 223-236.
[14]. Cojocaru, L., Falaris, E. M., Hoffman, S. D., & Miller, J. B. (2016). Financial system development and economic growth in transition economies: New empirical evidence from the CEE and CIS countries. *Emerging Markets Finance and Trade*, *52*(1), 223-236.
[15]. Cyton Report (March, 2019). The Role of the Capital Markets in Economic Development. Retrieved at https://cytonnreport.com/topicals
[16]. Da Silva, G. F. (2002). The impact of financial system development on business cycles volatility: cross-country evidence. *Journal of Macroeconomics*, *24*(2), 233-253.
[17]. Dauda, R. O. S., & Makinde, K. O. (2014). Financial sector development and poverty reduction in Nigeria: A vector autoregression analysis (1980-2010).
[18]. Edmans, A., Goldstein, I., & Jiang, W. (2012). The Real Effects of Financial Markets: The Impact of Prices on Takeovers. *The Journal Of Finance* 15(3), 933- 971
[19]. Elsayed, A. H. A. A. (2013). *The relationship between financial system development and economic growth in the Egyptian economy*. University of Leeds.
[20]. Guru, B. K., & Yadav, I. S. (2019). Financial development and economic growth: panel evidence from BRICS. *Journal of Economics, Finance and Administrative Science*.
[21]. Hasan I., Zhou M. (2008) Financial Sector Development and Growth: The Chinese Experience. In: Mavrotas G. (eds) Domestic Resource Mobilization and Financial Development. Studies in Development Economics and Policy. Palgrave Macmillan, London.
[22]. Jurek, M. (2014). *Role and impact of different types of financial institutions on economic performance and stability of the real sector in selected EU member states* (No. wpaper36).
[23]. Karasar, N. (2017). Scientific Research Method Concepts Principles Techniques. *Ankara: 3A Ara*.
[24]. Kaur, M., Yadav, S. S., & Gautam, V. (2013). Financial system development and foreign direct investment: A panel data study for BRIC countries. *Global Business Review*, *14*(4), 729-742.
[25]. Khan, H. G. A., Khan, A. Z., & Ahmad, A. (2011). Financial sector development and poverty reduction. *Global Journal of Management and Business Research*, *11*(5).
[26]. Killins, R.N., Johnk, D.W. and Egly, P.V. (2019), "The impact of financial regulation policy uncertainty on bank profits and risk", *Studies in Economics and Finance*, 37(4), 725-752. https://doi.org/10.1108/SEF-05-2019-0169
[27]. Kyale, O. M. (2015). The relationship between financial sector development and economic growth in Kenya.
[28]. Lawrence, I. A., Moni, M. O., & Eikhomun, D. E. (2014). Development of Financial System and Economic Growth: An Empirical Evidence from Nigeria. *Development*, *6*(30).

[29]. Limodio, N., & Strobbe, F. (2016). *Financial regulation and government revenue: the effects of a policy change in Ethiopia*. The World Bank. *Policy Research Working Paper;No. 7733*
[30]. Lutsyshyn, Z. O., Klapkiv, Y. M., Kucher, T. L., & Svirskyi, V. S. (2019). Development of innovative instruments in the financial market of Ukraine. *Revista ESPACIOS*, *40*(28).
[31]. Macey, J. R. (2012). The regulator effect in financial regulation. *Cornell L. Rev.*, *98*, 591.
[32]. Makokha, S. (2016). *Effects of Selected Financial Market Regulations on Financial Performance of Commercial Banks Listed in the Nairobi Securities Exchange* (Doctoral dissertation, University of Nairobi).
[33]. Manamela, M. M. (2012). *The impact of financial regulation on economic growth in developing countries* (Doctoral dissertation, University of Pretoria).
[34]. Mavrotas, G., & Son, S. I. (2006). Financial Sector Development and Growth: Re-examining the Nexus'. *Transparency, governance and markets*, *26*(217), 221-45.
[35]. Mirazizov, A., Radzhabova, I., Abdulaeva, M., Rasulov, N., Faizulloev, M., Mamatkulov, A., ... & Ahmadov, B. (2016). The Effectiveness Of Financial And Monetary Instruments Of Sustainable Development In Tajikistanã¢ Â Â S Economy And Ways Of Improving Them. *The Journal of Internet Banking and Commerce*, *21*(3).
[36]. Mohajan, H. K. (2018). Qualitative research methodology in social sciences and related subjects. *Journal of Economic Development, Environment and People*, *7*(1), 23-48.
[37]. Muyambiri, B., & Odhiambo, N. M. (2018). South Africa's Financial Development and its Role in Investment. *Journal of Central Banking Theory and Practice*, *7*(1), 101-120.
[38]. Ndlovu, G. (2013). Financial sector development and economic growth: Evidence from Zimbabwe. *International Journal of Economics and Financial Issues*, *3*(2), 435.
[39]. Odhiambo, N. M. (2014). Financial systems and economic growth in South Africa: a dynamic complementarity test. *International Review of Applied Economics*, *28*(1), 83-101.
[40]. Odunga, R., & Ayoyi, I. R. (2016). Impact Of Financial Markets On The Economic Growth of East Africa. *European Journal of Logistics, Purchasing and Supply Chain Management* 4(5), 25-33
[41]. Özatay, F., & Sak, G. (2002). Financial Liberalization in Turkey: Why Was the Impact on Growth Limited?. *Emerging Markets Finance & Trade*, 38(5), 6-22.
[42]. Park, J., & Park, M. (2016). Qualitative versus quantitative research methods: Discovery or justification?. *Journal of Marketing Thought*, *3*(1), 1-8.
[43]. Paun, C. V., Musetescu, R. C., Topan, V. M., & Danuletiu, D. C. (2019). The impact of financial sector development and sophistication on sustainable economic growth. *Sustainability*, *11*(6), 1713.
[44]. Pébereau, M. (2015). Impact of financial regulation on the long-term financing of the economy by banks. *Financial Stability Review* 2(19), 103-109,
[45]. Puatwoe, J. T., & Piabuo, S. M. (2017). Financial sector development and economic growth: evidence from Cameroon. *Financial Innovation*, *3*(1), 25.
[46]. Seibel, H. D. (1996). Financial systems development and microfinance: viable institutions, appropriate strategies and sustainable financial services for the micro economy.
[47]. Shaddady, A., & Moore, T. (2019). Investigation of the effects of financial regulation and supervision on bank stability: The application of CAMELS-DEA to quantile regressions. *Journal of International Financial Markets, Institutions and Money*, *58*, 96-116.
[48]. Valentine, M. I. (2014). *The impact of financial institutions financing on small and medium scale enterprises in Nigeria* (Doctoral dissertation, Eastern Mediterranean University (EMU)-Doğu Akdeniz Üniversitesi (DAÜ)).
[49]. Wahyuni, S. (2016). Qualitative research method: Theory and practice 2nd edition.
[50]. Wishlade, F., Michie, R., Robertson, P., & Vernon, P. (2017). Improving the take-up and effectiveness of financial instruments.
[51]. Wu, J. L., Hou, H., & Cheng, S. Y. (2010). The dynamic impacts of financial institutions on economic growth: Evidence from the European Union. *Journal of Macroeconomics*, *32*(3), 879-891.
[52]. Zangirolami-Raimundo, J., Echeimberg, J. D. O., & Leone, C. (2018). Research methodology topics: Cross-sectional studies. *Journal of Human Growth and Development*, *28*(3), 356-360.