SPECIALISED MASTER IN INTERNATIONAL AND DEVELOPMENT ECONOMICS

Finance development for post-crisis economic recovery

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Award date:
2023

Awarding institution:
University of Namur

FINANCE DEVELOPMENT FOR POST-CRISIS ECONOMIC RECOVERY

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Academic year 2022-23

Project presented as part of the requirements for the award of the Specialized Master in International and Development Economics Jointly organized by the ESLN and the ESL

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DECLARATION

I hereby declare that this research project is my original work; it has not been presented to any other institution of higher learning for academic purposes.

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This project has been submitted for examination with my approval as the University Supervisor

Signature……………………………… Date. ……………………………………

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ACKNOWLEDGMENT

I wish to thank God the Lord Almighty first and foremost, for without him nothing is possible. Every human Endeavour cannot be successful without the inspiration, coordination, and counsel of human beings.

I therefore should recognize the invaluable contribution of a host of helpful individuals. My gratitude and thanks go to Professor Yuliya Rychalovska for her patience and hardworking supervision, without her help this research could not have come to completion. Also, my gratitude goes to all my professors for their tremendous assistance and encouragement during my second-degree education and all persons and organizations who took part in this research.

I further extend my appreciation to my friends and family for their encouragement and prayers during this journey

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ABSTRACT

In today's uncertain world, the role of financial development in stabilizing the economies of emerging and developing countries has become a topic of great interest. This research focuses on the Middle East and North Africa region, specifically examining how finance contributes to post-economic crisis recovery, with a special emphasis on Egypt's economy.

To achieve our objective, we employ descriptive analysis of various macroeconomic indicators, such as real gross domestic product (GDP), inflation rate, and unemployment levels, to gauge economic recovery. Additionally, we consider different financial variables, including private credit to GDP, bank lending-deposit spreads, and qualitative aspects of the financial system, as measures of financial development in Egypt. Furthermore, we take into account the interaction of monetary and fiscal policies, as well as trade openness, to understand other factors influencing the recovery process.

Our analysis confirms that the level of financial development in Egypt played a crucial role in mitigating macroeconomic shocks. Thanks to economic reforms and regulatory measures taken since the 2008/2009 global financial crisis, Egypt's financial sector has shown significant improvement. During recent crises, such as the Covid-19 pandemic and the Ukraine-Russia conflict, the financial sector demonstrated resilience in facing economic shocks and played a vital role in facilitating lending and borrowing through deposit channels. Rapid credit supply at low-interest rates, which increased by 21.1% in 2022, and substantial inflows of deposits to households and firms, rising by 13%, were instrumental in supporting the recovery. Additionally, the domestic treasury bills market attracted foreign direct investment, further boosting the country's recovery.

These findings underscore the positive relationship between finance and economic recovery. Notably, the private sector and household consumption levels experienced steady growth in 2022. Furthermore, this research highlights the importance for oil-exporting countries to develop their stock capital markets, as this move can provide them with greater benefits. Moreover, the study identifies relevant systemic risks that policymakers should consider.

In conclusion, this paper sheds light on the vital role of financial development in Egypt's post-crisis economic recovery. The findings can serve as valuable insights for policymakers and stakeholders seeking to promote economic stability and growth in similar contexts.

CHAPTER 1: INTRODUCTION

Finance is a vital element in the modern economy. The contribution of financial development to economic growth in a national economy has been largely studied by many authors. Early studies by Goldsmith (1969), McKinnon (1973), and Shaw (1973) were able to show that financial development is good for growth. Theoretical and empirical research papers have discussed the channels through which finance development impacts economic growth: providing credit to the best prospects, facilitating savings, exerting governance and control, properly allocating resources, and improving technological innovation. Countries that experience faster and higher levels of financial development tend to enjoy the benefits of higher economic growth and reductions in poverty (Levine, 2005a).

An economy may be considered financially developed when the overall financial system, financial institutions, and financial markets, integrate and effectively work together to perform the key functions of finance in an economy, reducing the effects of imperfect information, transaction costs, and limited enforcement(Čihák et al, 2012). The concept of financial development discusses the positive effects of proper allocation of resources and an increase in investors' confidence and risk diversification to ease the flow of capital, facilitating economic recovery and improving the standards of living. (Martin et al, 2012) .A functioning financial system also facilitates trade and specialization in a country (Hollander, 1776). It plays a role beyond long-term growth; it reduces the gap between the poor and the rich in an economy. (Demirgüç-Kunt, The, and Bank 2009). Finance systems influence economic growth, and reduce poverty and inequality, (Cecchetti & Kharroubi, 2012).

Empirical evidence suggests that access to credit by individuals increases education investment by parents for their children, reduces the number of school dropouts, and reduces financial distress when adverse shocks in the family. This tends to increase economic opportunities and reduce poverty inequality. ((Belley & Lochner, 2007).Additionally, firms gain access to credit and capital through a well-functioning financial system. The financial systems can fund the right and better projects, making it easier for efficient firms to enter the market. (Kerr, n.d.). The empirical literature by (Barajas et al., 2013a) provides widespread evidence that the degree to which an economy utilizes bank intermediation and financial market is expected to have high economic growth rates.

The role of finance in mitigating economic setbacks during a macroeconomic shock has received a lot of attention at a global level. With the recent crisis, the 2020 pandemic, and Ukraine- Russian War, both financial institutions and non-financial institutions have shown resilience and have continued to play key roles in stabilizing economies. Economies need to monitor closely these shocks and the subsequent risks because even though households and firms are affected the most, they have huge consequences on the entire economy through various channels that link the financial health of households, firms, financial institutions, and the government. For example, when households and firms are faced with financial instability, they are less likely to repay their loans hence the risk of high loan defaults, and the financial sector is faced with the risk of inability to supply credit. Additionally, when the government faces high public debt, they are unable to provide public goods and a safety net for households and firms (The World Bank, 2022a)

In recent years, the banking sectors in emerging and developing countries have had significant developments and thus were able to meet the needs of households, firms, and governments when the macroeconomic shock occurred. A study establishing the link between finance sector development and economic growth states while holding other factors equal, a well-elaborated finance system facilitates savings leading to higher investments which encourage growth(Hemingway & Charles Scribner's Sons, n.d.)

The main motivation of this study is the fact that in emerging and developing economies, the vulnerable, the poor, and women suffer the most when there is an economic crisis. Access to finance is vital during these difficult times in an economy. The overall objective of this paper is to show the importance of well-developed financial systems in ensuring the equitable recovery of EMDEV countries. It also seeks to show the evolution of financial development characterized by several economic reforms and their contribution in specific episodes of the 2008/09 global financial crisis, the covid-19 pandemic, and the recent Ukraine -Russian war.

The main research question in this study is to what extent are the development and liberalization of the finance systems able to contribute as one of the main drivers of the economic recovery after the post-crisis? Several other macroeconomic variables such as favorable trade openness, and fiscal and monetary policies are discussed to reveal the factors explaining the recovery process. It emphasizes the need for the development of the banking and financial market systems in supporting policies and favorable economic shocks in stabilizing the economy. The value of this study will help policymakers in making policies and improving guidelines for financial sector development.

Using secondary information from world bank journals, publications from the central bank and IMF, review papers, and time series data, the study focuses on a descriptive analysis of the role of finance in promoting economic recovery.

CHAPTER 2: REVIEW OF LITERATURE

2.1 The concept of financial development

The need for financial instruments, markets, and intermediaries is to improve the effects of market imperfections (Čihák, Demirgüç-Kunt A, Levine R 2012). It is expensive to acquire information about potential investments, additionally, there are costs incurred while enforcing contracts and transactions. With the motive to make profits, people create financial intermediaries to ease these imperfections (Levine and Wiegand 2021).

At a broader level, finance systems play five key roles in the economy to reduce market imperfections, to boost the performance of firms, and expand favorable economic opportunities that are crucial in promoting economic recovery. These roles include (1) providing information to investors on where to allocate their capital and hence fostering economic opportunities, (2) monitoring and exerting proper governance on households and firms after receiving capital, (3) facilitating trade, diversification, and risk management, (4) mobilize savings and (5) allow the flexible exchange of goods and services (Levine and Wiegand 2021).

The development of the financial sector plays a crucial role in driving economic growth, leading to direct impacts on various sectors. Consequently, these sectors experience higher GDP growth rates, thereby contributing to overall economic recovery. Finance plays a crucial role in driving private sector development. Firstly, it fosters an environment conducive to business, entrepreneurship, and investment, resulting in the accumulation of capital and a boost in productivity, innovation, and competitiveness among private enterprises. Secondly, finance contributes to macroeconomic stability by absorbing shocks and minimizing the impact of financial crises, thereby promoting economic recovery and encouraging long-term, high-return investments. Thirdly, it supports the public sector by facilitating essential infrastructure development and reducing the pressure of private investment. Lastly, well-developed financial systems positively affect households by creating avenues for increased consumption and economic growth.

Hence, the overall impact of finance development on an economy is positive. The following subsection provides an overview of both theoretical and empirical literature that highlights the various roles of finance in facilitating economic growth.

2.2Theoretical Review: Finance Development and Economic Growth

Numerous studies have extensively examined the role of finance in driving economic growth. In this discussion, we will delve into an in-depth exploration of the five key channels through which finance influences development.

2.2.1.Providing information to investors on the allocation of capital

One of the fundamental functions of finance in an economy is its capability to mitigate the impacts of imperfect information. This enables the integration and effective collaboration of the overall systems within the economy. The excessive costs of processing detailed information on individuals, firms, and market conditions by savers may hinder the free flow of capital in the economy. information costs encourage entrepreneurs to invest in new production processes and identify new production technologies that support Development Bank et al. 2009). It also limits allocating scarce resources to the most promising ones (Levine 2005a).

Reducing information costs encourages entrepreneurs to invest in new production processes and identify new production technologies that provide support to economic activities(Development Bank et al. 2009). It also influences economic growth by creating investments in human capital (Galor and Zeira 1993). Additionally, (Bernanke et al., 1999) Shows that financial development reduces volatility by reducing information asymmetries, lessens the sensitivity of financing conditions to changes in the net worth of borrowers, and decreases cycle amplifications through the financial accelerator.

2.2.2 Mobilize savings

The mobilization of savings plays a significant role in finance, despite the associated transaction costs and informational asymmetry challenges. However, financial systems can overcome these barriers by efficiently pooling capital from diverse savers, thereby promoting investment and fostering economic activities. Consequently, this process contributes to the overall recovery and growth of an economy. Effective savings mobilization improves resource allocation and encourages technological innovation (Levine & Wiegand, 2021a). The economic growth model (Acemoglu & Zilibotti, 1997) shows that large and indivisible projects with financial arrangements that encourage savings and investment into risky diversified portfolios encourage re-allocation in activities with higher returns, which potentially has positive effects on economic growth.

2.2.3. Facilitating trade, diversification, and risk management

Through savings mobilization and improved resource allocation, finance systems play a vital role in mitigating risks within a nation's economy, firms, and individual projects, and the degree to which they can manage and diversify these risks has ramifications on the long-run economy recovery (Levine & Wiegand, 2021b).

Cross-sectional risk diversification is a traditional finance theory that discusses the importanceof how financial intermediaries allow investors to trade, manage, and diversify risks (Development Bank et al., 2009). This line of literature explains how financial systems help to facilitate capital flow into projects that have higher expected returns, spurring economicgrowth (Greenwood & Jovanovic, 1990; Gurley & Shaw, 1955). A model by (King & Levine, 1993a) shows the degree to which financial systems can lower costs to investors holding a diversified portfolio reducing risk, increasing investment in innovative activities, and promoting technological changes which accelerate economic growth.

Further to cross-sectional risk diversification, finance systems reduce liquidity risks, increase investment in a higher return, longer-term assets and promote economic growth. Liquidity risks are the costs and uncertainties of easily changing financial instruments into the medium of exchange (Development Bank et al., 2009). The link between liquidity and economic growth is through the commitment of long-run capital into higher return projects which most savers do not like to give up their savings for long periods. Financial systems help to increase the liquidity of high return-long run projects, to encourage investment and trade that potentially accelerates growth rates in an economy (Levine & Wiegand, 2021b).

2.2.4. Monitoring and exerting proper governance on households and firms after receiving capital.

Additionally, (Stiglitz & Weiss, 1983) discusses that the lack of proper governance hinders the mobilization and flow of savings. The extent to which shareholders and creditors effectively monitor and influence how firms make use of their capital has ramifications on savings, allocation, and utilization of those resources (Coase 1937; Jensen and Meckling 1976).

Many studies have been done suggesting that good cooperate governance improves firms' performance which positively impacts the national growth rates (Development Bank et al., 2009).. Shleifer and Vishny (1997) explain some of the barriers small shareholders may face in efforts to exert proper governance over large firms. Such as large information asymmetries between firms' managers and shareholders, lack of expertise to follow up on the firm's performance, and high monitoring costs which make them rely on others to exert governance additionally, the board of directors may not fully represent the interest of the minority shareholders. Therefore, through financial intermediation, there are reductions to these barriers, improving the efficiency of the utilization of scarce resources and motivating investors to be willing to finance production and innovation (Levine & Wiegand, 2021b).

2.2.5. Allow the flexible exchange of goods and services.

Consequently, finance plays a pivotal role in facilitating the exchange of goods and services, specialization, technological innovation, and growth. Adam Smith's Wealth of Nations mentioned one of the important roles of financial instruments in lowering transaction costs allowing specialization and fostering technological innovation. Greenwood and Smith (1996) show that more transactions increase the level of specialization which spurs economic development through higher productivity gains from those markets. A study by (Levine & Wiegand, 2021a) shows that these productivity gains may lead to financial sector development through economic development.

Theoretical studies have consistently demonstrated a positive correlation between finance development and economic growth.

2.3 Empirical Evidence: Finance Development and Economic Growth

A growing range of empirical work tries to ascertain the relationship between financial sector development and economic growth. This work discusses the degree and the extent to which banks or stock markets contribute to growth at different stages of economic development. Much study evidence argues that financial deepening has a positive and statistically significantimpact on the level of economic growth. However, some studies such as (Favara, 2003) whichprovided a reassessment of the relationship between financial development and economic growth did not find a strong relationship.

The first part will discuss cross- country literature using country-level data based on growth regression analysis.

2.3.1 Cross-country studies

Early work done by Goldsmith (1969) and (King & Levine, 1993b) used data from 80 countries from 1960-1989 to show that the level of financial development is positivelyand strongly associated with economic growth. They used a ratio of liquid liabilities toGDP as a measure of finance development and per capita income growth as a measureof economic growth. The results show that increasing the ratio of liquid liabilities to GDP from the mean slow-growing countries quantile to the mean of the fast-growing countries quantile would increase the per capita income in a year by almost one percentage point.

Additionally, (Levine, 2005b)Looked at 77 countries from 1960 through to 1989 and used private credit as a measure of financial development. Private credit has been used widely as a variable since it shows that finance systems are extending funding support to private firms and assuming that it is a measure of the degree to which they can perform the five roles of mobilizing savings, exerting proper governance and control, trade, and risk diversification, facilitating the exchange of goods and services and minimizing transaction costs. They also used the average growth rate of real per capita GDP, physical capital stock per person, and total productivity growth as measures of growth. Cross-country regressions to assess the relationships of these three growth indicators on the average level of private credit over the period 1960 -1989 and the initial level of private credit in 1960. Additionally, also controlled for country-specific factors that are associated with economic growth such as income per capita, level of education, trade, the interaction of fiscal and monetary policies, and exchange rate indicators. This showed a positive and statistically significant relationship between financial development and economic growth. They predict that at the initial private credit in 1960 that the average growth rate of real per capita GDP, real physical per capita, and total productivity growth will grow over the next thirty years. This result holds even after controlling other factors such as fiscal and monetary policies, education and level of income, and political stability.

A recent study (Popov, 2017) provides evidence that in a wide range of countries and over a range of periods, financial intermediaries and markets are important for economic growth. Other studies show that high degrees of publicly owned banks are less effective in performing the five roles of financial development in an economy of acquiring information, mobilizing savings, managing risk, and proper governance hence are characterized by slower levels of economic growth.

2.3.2 Instrumental Variables and Panel

Some researchers have used instrumental variables, panel, and time series data to analyze theimpact of financial development on economic growth.

Early studies by Levine (1998, 1999, and 2000) and La Porta et al. (henceforth LLSV,1998) used legal origin as instrumental variable for private credit financial development. The results are positive, large, and significant that higher levels of financial development led to higher economic growth. (Beck et al., 2004) discuss widely the effect of the operations of a financial system that can be influenced by original legal traditions within the country.

Levine (2000) and Beck (2000) moved from cross country to panel generalized method of moments to evaluate the impact of financial development on economic growth. The advantage of utilizing cross-sectional and time series data variation is twofold. Firstly, it helps to mitigate biases and potential confounding factors, leading to more accurate estimations of the relationship between finance and growth. Secondly, it enables instrumental variable techniques to be employed, allowing for a more precise estimation of the causal impact of finance on economic growth. The positive and large estimated effect is similar to those on cross-country and instrumental variable regressions.

2.3.3 Within Country Studies (Industry or firm level)

Several studies are also based on industry- or firm-level data across a broad section of countriesto try to evaluate the various channels such as reduction of macroeconomic volatility and firms' external constraints through which finance sector development affects economic growththrough the different channels.

Earlier studies done by Rajan and Zingales (1998) reveal that well-developed finance development lowers the costs of external finance which leads to the growth of firms hence economic growth. Claessens and Laeven (2005) also find that countries with many users of external finance grow faster with highly competitive banking systems. Federici and Caprioli (2009) used quarterly data for 39 countries from 1981 to 2000 and showed that well-developed financial systems help the country avoid currency crises. Beck, Lundberg, and Majnoni (2006) used terms of trade volatility as a proxy for real volatility and inflation as a proxy for monetary volatility where they found evidence that financial intermediaries amplify the effect of inflation volatility where firms have minimal or no access to external finance. Through these findings, they find by reducing macroeconomic volatility that finance sector development enhances growth.

Nevertheless, alternative perspectives exist regarding the pathways through which an increased level of financial development can have negative implications for an economy.

Empirical studies have revealed that the expansion of financial sectors can incur costs for the economy as they compete with other vital resources. (Cecchetti & Kharroubi, 2015) studies on the crowding out effect of human capital from the real sector to the financial sector which leads to ineffective allocation of resources. A recent study by (Dabla-Norris et al., 2015) shows that before the 2008-2008 financial crisis, resources in advanced economies were being moved away from productive sectors to the finance sectors. This empirically examined the U-shaped relationship between the sizes and growth of the financial system on productivity growth.(Cecchetti & Kharroubi, 2012). This literature concludes with evidence that there is a first-order relationship between financial development and economic growth. At a certain point, the financial sector growth competes for scarce resources and its growth begins to drag on the productivity growth (Cecchetti & Kharroubi, 2012).

Furthermore, concerning the connection between macroeconomic stability and the function of finance, there exists a contrasting viewpoint (Sahay et al., 2015) suggesting that financial development, when inadequately supervised and regulated, can encourage increased risk-taking and leverage. If financial systems are characterized by poor execution of their functions, for example extending credit to untrustworthy may slow economic recovery, or failing to offer proper governance over the allocation of capitalto the firm may distort the allocation of savings and prevent economic growth(Levine, 2005d). This, in turn, may exacerbate economic volatility and raise the likelihood of a financial crisis. Moreover, if the quality and size of the financial system do not develop in tandem, it could heighten vulnerability.

Lastly, many models have also discussed the effect of financial development being slow in the long run through savings and investment channels(Bencivenga & Smith, 1991a). (King & Levine, 1993c) dicusses that by ensuring optimal resource allocation, the returns to savings may be slower saving rates. (Levine, 2005d). These studies emphasize that a well-functioning financial system exerts influence on efficient resource allocation, andfosters economic growth but at the same time, these models continue to show that financial development slows long-run growth. In addition,

To conclude, while there exists substantial theoretical and empirical evidence supporting the positive effects of finance development, it is crucial for policymakers to recognize the associated risks that come with high levels of development. Building upon these insights, this literature expands by providing a summary of the economic consequences incurred during the ongoing Covid-19 crisis and the Russian-Ukrainian war. Additionally, a brief comparison is drawn with the previous 2008-2009 crisis, highlighting the key roles played by financial systems in each of these contexts.

2.4 Economic impact of a crisis

The global economy sometimes goes through a period of significant economic downturn which is characterized by adverse effects on the real economy, such as the decline in economic activities, reducing gross domestic product (GDP), and financial sector instability. Understanding the root causes of a crisis is vital for policymakers. The economic crisis is caused by different factors such as financial mismanagement, natural disasters, government policy, and other global economic conditions. The adverse effects can be extensive impacting both firms and households. Emerging and developing economies tend to suffer the most when there is a crisis.

2.4.1 Global Financial Crisis of 2008 -2009

The Global Financial Crisis of 2008 -2009 was an economic downturn that originated in the United States and spread across the whole world. It was triggered by a rise in housing market prices, sub-prime mortgage lending, failure in the market discipline, distortion in risk information, and asset pricing on (Zaman and Georgescu 2009). Most financial institutions collapsed, leading to a credit crunch hence economic activity contraction. The effects of this crisis were severe and took most countries a long period to recover. Governments and Central banks implemented various reforms to stabilize the economy and the financial markets. This led to changes in the regulations of the financial system and increased awareness of the risks associated with subprime lending.

2.4.2 Covid-19 crisis of 2020 -2021

It is important to note that the origin of the covid-19 crisis was health while the great recession was financial, and both required different policy responses(Barberis et al. 2020). The covid -19 crisis was severe in that it led to millions of thousands losing their lives and had vicious economic impacts on markets and individuals.

Whilst the recent covid-19 was a result of a health crisis that led to individuals being unemployed and with no income, firms survived with little or barely any streaming revenues. Hospitals stretched to meet the needs of the increasingly high number of healthcare patients. And governments increased their public expenditures to support the healthcare systems and experienced a sharp fall in their tax revenues. This global pandemic crisis caused sharp declines in the economic growth of emerging and developing economies where the poor suffered and were most. In this context, this paper discusses the extent to which financial systems were able to stabilize the economy, which was important for recovery and poverty alleviation. The overall goal of financial development is to stabilize, limiting the extent of the economic impact of the pandemic.

2.4.3 Ukraine -Russian War

The recent Russian – Ukraine war has posed food security challenges across the globe. The Middle East and North Africa region has been affected the most due to its high food import dependence and vulnerable to trade shocks. This has affected the poor and the vulnerable in the region. We will discuss the extent to which financial systems have supported government- related programs, for example subsidies and social protection measures.

To conclude this section, according to recent evidence,[1] since the global 2008/2009 financial crisis, due to the G20 regulatory reforms adopted in most countries, the financial systems had the capacity of coping with the macroeconomic shock through the ability to extend credit, capital buffers, high liquidity ratios, improvement in the credit risk management and more resilient transparent derivatives. Most of the financial systems across the globe were well prepared to handle the macro-economic volatility as compared to the situation during the 2008 great recession. In addition, according to the Bank for International Settlements(BIS), access to credit to support households, firms, and governments increased on a global basis by over $2 trillion boosting real economic activities during the beginning of the pandemic in YR2020.

However, we cannot overlook the interplay of monetary, fiscal, and financial sector policies in achieving a more stable economic performance. Fiscal policy, when combined with monetary policy, can exert a more substantial impact on the economy, as highlighted in studies on monetary-fiscal policy interactions (stream on monetary-fiscal Policy Interactions, 2003). During the recent Covid-19 pandemic, many governments responded with expansionary policies (Kassab Dina, 2022). In particular, numerous emerging economies increased their spending through direct tax transfers and tax exemptions for firms and households (World Bank, 2022b). They also utilized monetary tools such as lowering interest rates and providing liquidity support through the Central Bank.

[1] A joint report by the financial services forum, Institute of international finance, and International Swaps and Derivatives Association examines the role of financial markets and institutions in supporting the global economy during the covid-19 crisis, May 2021.

CHAPTER 3: DRIVERS TO ECONOMIC RECOVERY IN EGYPT

This section outlines the primary factors influencing Egypt's economic growth both during and after the recent pandemic crisis. We will commence by examining an economic overview of Egypt's financial landscape across the three crisis phases. Following that, we will delve into the impact of Egypt's financial development attributes, degree of trade openness, and the significance of fiscal and monetary policies.

3.1 Economic Review of Egypt

Egypt holds a significant position in Africa's economy, standing as the third largest after Nigeria and South Africa. Situated in the Middle East and North Africa region, Egypt's unique geographical characteristics include over 96% of its land being occupied by desert. The country faces challenges such as high food import dependence. Its main economic activities revolve around Suez Canal remittances, tourism, and oil trade.

3.1.1 The REAL GDP growth rate

The overall trend in GDP growth has displayed volatility yet managed to maintain a positive trajectory despite facing challenging economic periods. The impact of the Global Financial Crisis (GFC) in 2008 had pronounced effects on Egypt's economy, particularly in the sectors of tourism, trade, and capital inflows, which constitute key components of its economic structure. Another significant setback occurred in 2012, marked by a political revolution that swept through the country, resulting in elevated unemployment rates and a substantial budget deficit. This deficit surged from 8.1% in 2009/10 to nearly 10% in 2010/11 due to heightened government spending intended to mitigate the aftermath of the political turmoil.

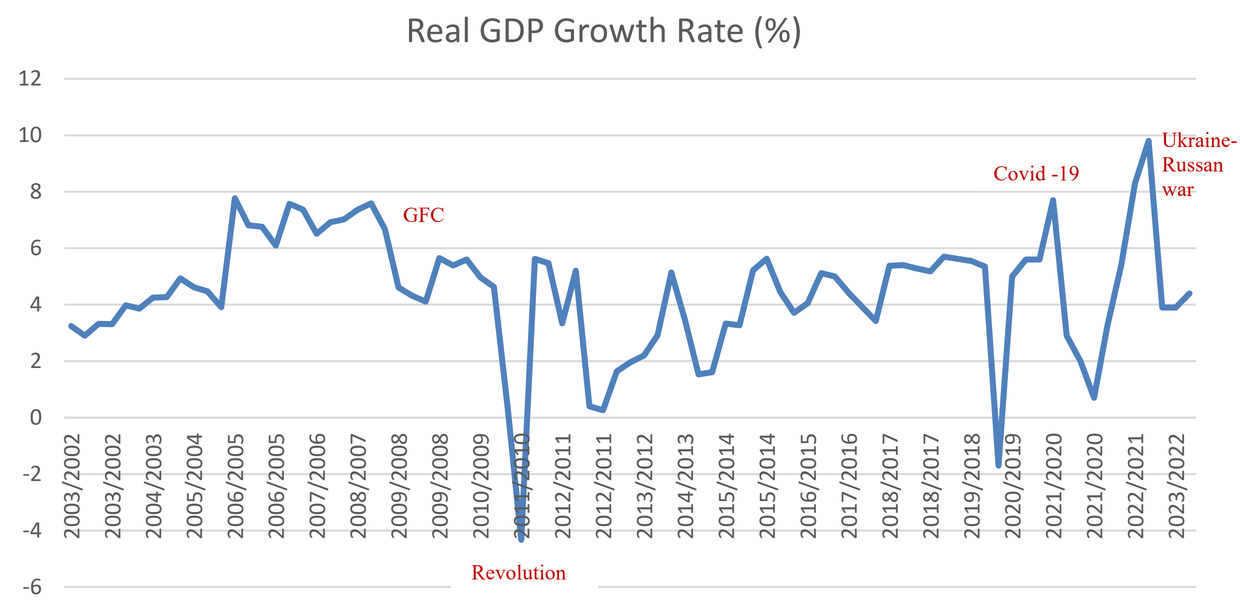
Table 1: ***Real GDP growth rate***

	REAL GDP growth rates (%)		
	2008/2009	**2020/2021**	**2020/2021**
Real GDP at market prices, annual % growth	4.67	3.57	6.6
GDP by expenditure components at market prices, constant prices for 2021/2022	4739.07	7121.63	7842.5

Source: Ministry of Planning and Economic Development; the GDP by expenditure is given in Billion EGP

Amid the COVID-19 crisis, Egypt's Gross Domestic Product experienced a decline, reaching 3.6% in FY2020/2021, followed by a subsequent rise to 6.6% in the recent FY2020/2021. However, a recent IMF report projects a downturn to 4.0% in FY2024/2025, primarily attributed to the ongoing economic crisis. Furthermore, the country has not escaped unscathed from the ongoing armed conflict between Russia and Ukraine, bearing a significant burden as a major affected party.

Figure 1: ***REAL GDP growth rate (%)***

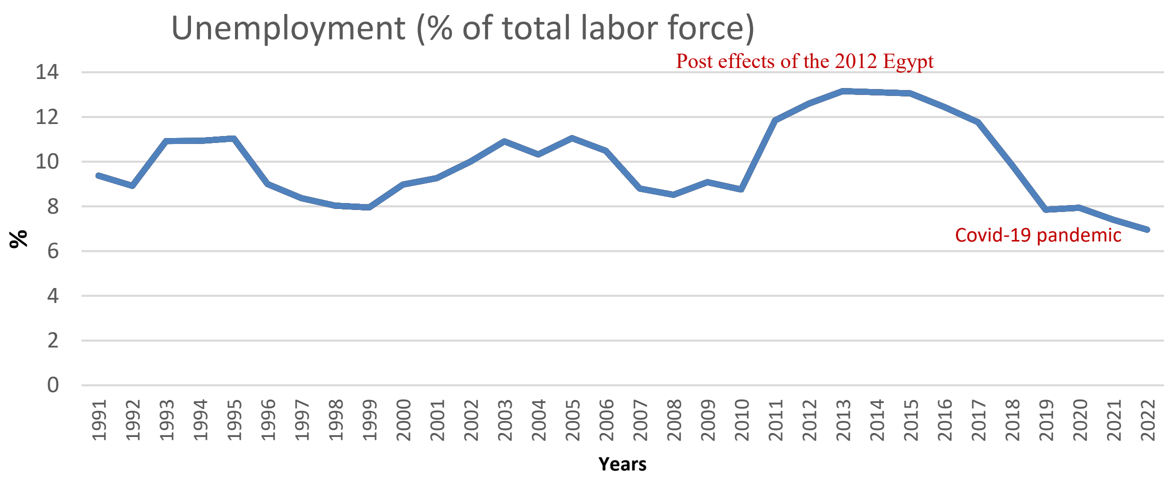


Source: World Bank

3.1.2 The Unemployment Rate

According to the world bank, the highest unemployment rate was13.2% in YR2015 which reduced remarkably after the structural reform with IMF supervision in 2016. During the COVID-19 crisis, this rate increased to 7.9% but in the recent year, 2021/2022 it has reduced to 7.4%. The unemployment rates are still high in Egypt.

Figure 2: Unemployment rate

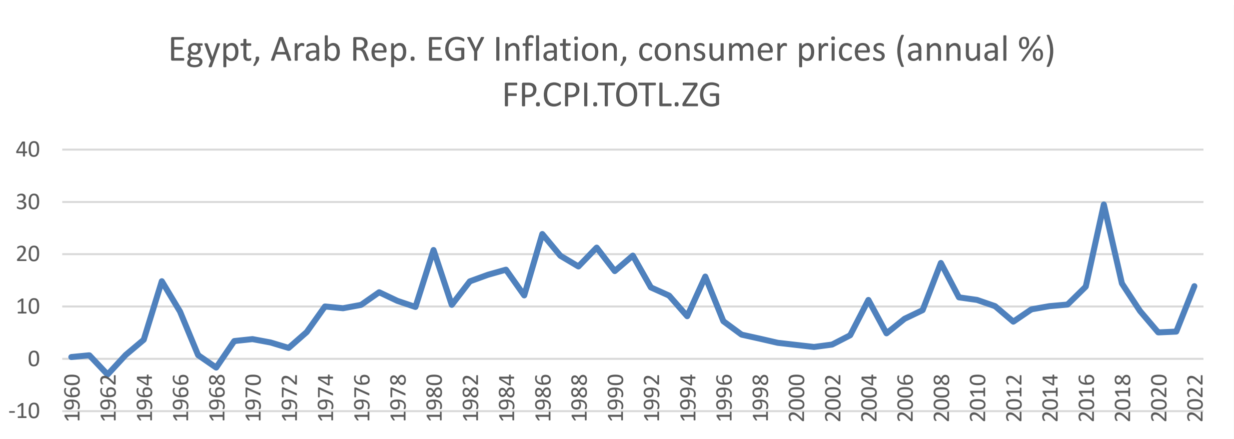


Source: World Bank

3.1.3 The Inflation Rate

As per the data provided by the Central Bank of Egypt, the prevailing headline inflation rate in the country stands at 36.46%, reflecting a notable elevation. This increase can be attributed to the ongoing Ukraine-Russia conflict, which has exerted upward pressure on energy and food prices. The historical trajectory of Egypt's overall inflation rate has exhibited fluctuations. Notably, 2016 saw the highest inflation rate, prompting collaboration between Egypt and the IMF. This partnership aimed at revitalizing the economy through the implementation of various reforms.

Figure 3: Inflation rate



Overall, the economy of Egypt was able to show resilience during the pandemic, the financial sector played a key role in mitigating the sharp decline of the GDP during these periods of difficult times.

3.2 Finance sector development

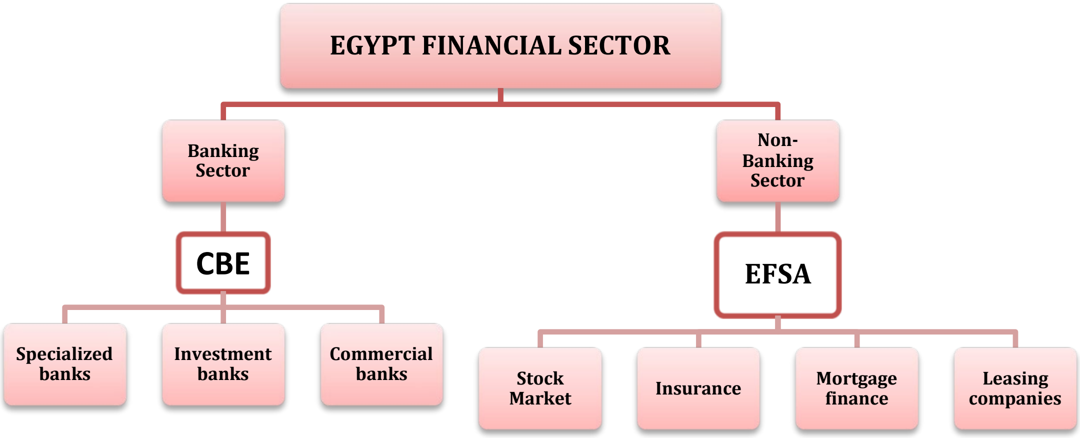
The majority of emerging and developing economies are dominated by the banking sector which plays a traditional role of connecting households, firms, and the government through savings, borrowing, and payments (Barajas et al,2013).

3.2.1 Financial structure and trends in its development

The financial structure in Egypt comprises both financial institutions and financial markets. However, the banking sector is the dominating economic structure as it contributes to a larger share of the economy's GDP. According to the Central Bank of Egypt, Egypt's banking sector represents approximately 90% of the total assets of the financial system. The growth of the capital markets has remained relatively slow due to weak infrastructure, regulatory framework, and a lack of potential domestic investors (Sahar Nasr, world bank, 2010)

Egypt follows a twin peek approach in its regulation where the Central Bank of Egypt provides oversight to the banking sector and the Egyptian financial supervisory authority regulates the non-financial sector. Banks in Egypt are categorized into business models and ownership, andit comprises commercial, investment, and specialized banks. Commercial banks raise capital through deposits and savings. Investment banks assist corporations with operations and issue securities. Specialized banks are typically public banks that operate in certain economic activities such as real estate, agriculture, exports, and industrial development. Most of the banks are privately owned while others are public, state-owned, and foreign-owned. The non-banking institutions include stock exchanges, insurance and leasing companies, and mortgage finance.

Table 2: Financial structure of Egypt



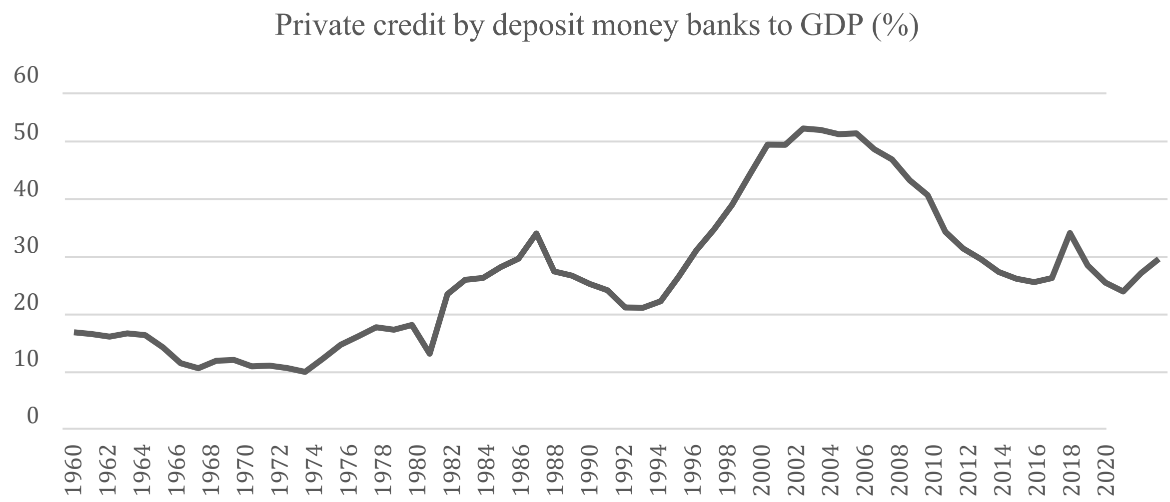
Trends in the development of the financial sector in Egypt

Since the global financial crisis of 2008 / 2009, financial systems in Egypt have improved in terms of their qualitative aspects. By using measures of the characteristics of financial systems; depth, access, efficiency, and stability we have an overview of the characteristics of the banking and stock markets in Egypt (Čihák et al. 2012).

Financial depth

Bank-based financial depth indicators such as the private sector credit to GDP have a positive impact on higher per-capita GDP. To measure financial sector development in comparison with the GDP we use private credit to GDP. Immediately after the pandemic, it is at 29.7% which is an increase of 2% since 2017 before the 2020 pandemic (World Bank 2023).

Figure 4: Evolution of private credit in Egypt



Source: Authors' development based on the world bank database

The fluctuations and lagging in Egypt's private credit by deposit money bank to GDP ratio can be attributed to various macroeconomic and financial reforms implemented by the government. According to Mohieldin et al. (2019), the removal of the ceiling on bank lending to the private sector drove lending to the private sector during the 1990s and early 2000s. As a result of the removal of the ceiling on bank lending in the 2000s, Egypt's financial system was approximately 50% of the GDP compared to high-income countries at approximately 80%.

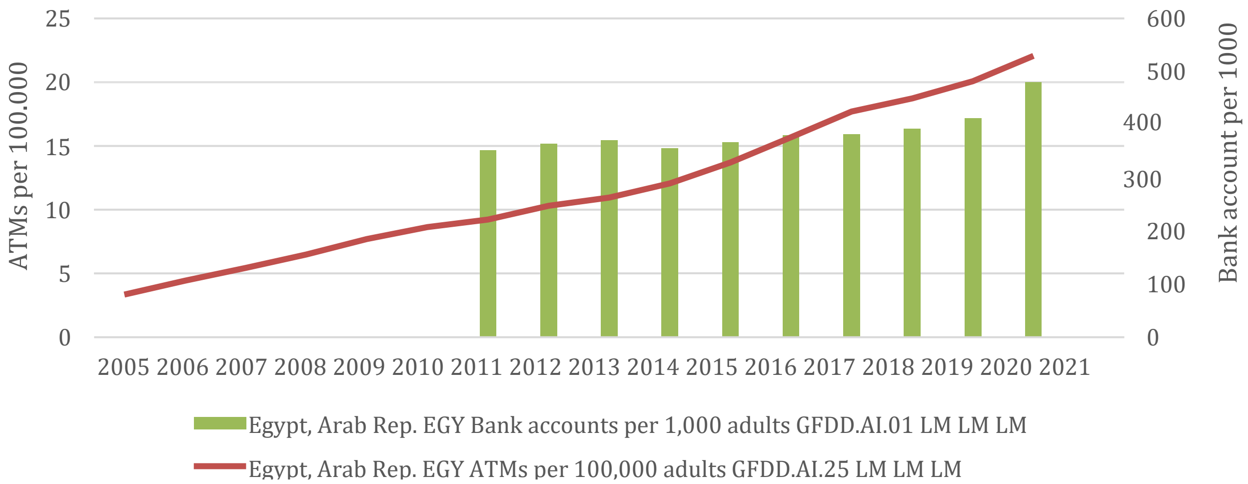
However, the recent drop in the ratio is mainly explained by the crowding-out effect caused by the high-security issues faced by the Egyptian government in financing its budget deficit, as noted by Haika et al. (2021). According to the world bank, the decline in the mid-2000s is because most of the lending was going to only large firms while the SMEs received little financing.

Financial access

EMNES Studies (Ayadi et al., 2018) reported a positive impact of financial inclusion on economic growth. When policy intervention focuses on the financial inclusion process, the majority of the MENA countries; Egypt being one of them and will reap the benefits of a high level of economic growth and lower poverty levels.

However, since the global 2008 financial crisis, most countries have adopted reforms that ensure the development and inclusivity of their financial systems. A case study of sub-Saharan Africa has successfully implemented the use of mobile services (Mugo 2017). The number of ATMs has increased by 86% for the past 5 years since 2018 from 11,754 in 2018 to 21,975 by December 2022. The Central Bank of Egypt has,on the other hand, taken the lead in coordinating financial inclusion in Egypt through advancing fintech reforms in line with their country's vision 2030 of financial inclusion (Ayadi et al., 2018). Recently according to the Central Bank of Egypt statistics, the use of mobile phone wallets in Egypt has improved recording an increase of 27% in 2021 as compared to 2020 with over 25 million mobile wallets

Figure 5: Evolution of Bank accounts and ATMS

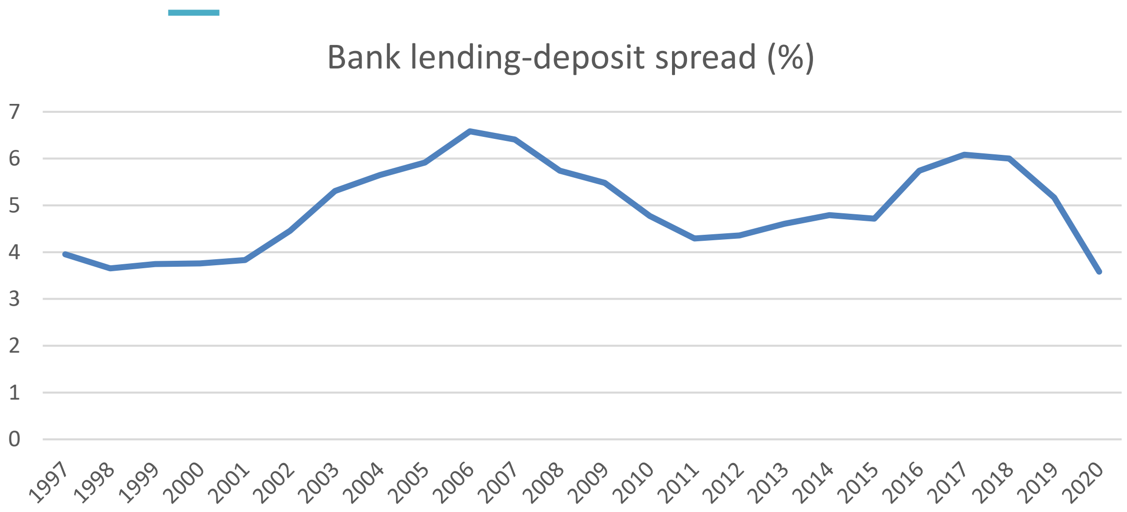


Source: Authors' development based on the world bank database

Financial efficiency

To measure the competitiveness of the Egyptian banking sector we use the ratio of interest rate spread. The spread between the lending and the deposit rate fluctuated by about 3 percentage points in Egypt from the 1980s until 2021. The largest spread was 8.3 percent, in 1992; the smallest was 2 percent, in 2021. These figures suggest that despite economic reforms and the privatization of the banking sector, competitiveness has remained steady.

Figure 6: Evolution of bank lending deposit spread.

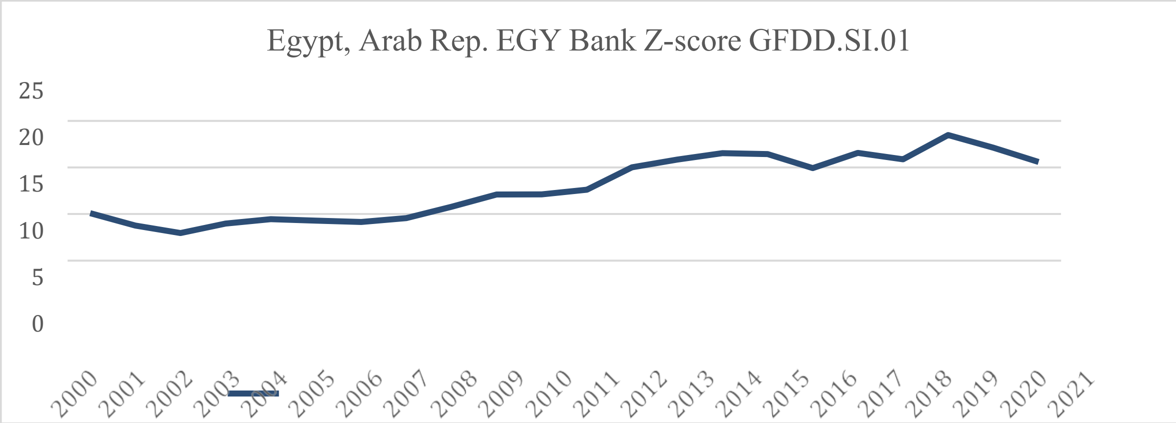


Source: Global Financial Database

Financial stability

The Z-score is a metric that evaluates a bank's financial stability and overall health. It is determined by analyzing various financial ratios. Additionally, investors may utilize other indicators such as capital adequacy and liquidity ratios to assess risk and solvency. Examining Egypt's situation from the 2008-2009 financial crisis until before the 2020 pandemic reveals positive trends in profitability, liquidity, and solvency within its financial system. However, it is worth noting that the Z-score has declined following the pandemic, indicating the need for close monitoring of the financial system. This decline may be attributed to a reduction in the average liquidity position of the domestic currency.

Figure 7: Evolution of Z -Score



Source: Authors' development based on the world bank database

Islamic Banking in Egypt

With over 90% of the population identifying as Muslims in Egypt, Islamic banking is quite prominent in the MENA region. Over the years, researchers have concluded the positive role played by Islamic banks in enhancing economic growth. Islamic banks are particularly developed in Oil exporting countries. The first Islamic banking was founded in 1963 in Egypt ,the Mit-Ghamr savings bank, the MENA region is characterized by dual banking systems where the Islamic continue to work side by side with the other banks (Boukhatem & Ben Moussa, 2018). There is limited literature on the relationship between Islamic banking and economic growth in Egypt.

In the context of this paper, the Islamic banking sector continued to play its role in providing access and mobilizing savings from customers. Islamic banking represents approximately 5% of the total Egyptian banking system. According to a recent statement[2], the volume of deposits recorded a growth rate of 8.7% and represents approximately 6.1% of the total volume of deposits in the Egyptian banking sector.

Financial Markets

Just like the banking sector, the development of the capital markets in Egypt has followed the same pattern as the banking systems (Bolbol et al., 2005b). In its best days, the Cairo stock exchange was ranked as the fifth most active exchange worldwide (Bolbol et al., 2005b). In addition, they also incorporate the bond market which of course helps to finance the country's medium- and long-term needs and to reduce the cost of public debt. But unfortunately, Egypt

[2]Chairperson of the Egyptian Islamic Finance Association for Islamic Finance Mr. Mohamed Al-Beltagy, November 2022

is still lagging in developing this market.

Table 3: ***Stock Market development indicators***

	2019	2020	2021	2022	Jan - June 2023
No. of listed companies (Units)	218	215	218	218	220
Market capitalization (LE)	708.3	649.9	763.1	959.80	1,160.20
# of Traded Companies as a % of Listed Co.	97.71	99.53	100.92	100	96.32
Turnover Ratio (%)	27.31	42.33	48.27	36.06	21.89

Source: Egyptian Stock Exchange

The Egyptian Stock Exchange, despite experiencing gradual progress, holds a prominent position in the region. Prior to the outbreak of the Covid-19 crisis, there were 218 listed companies in 2019, and this number remained relatively consistent throughout and after the pandemic. However, in June 2023, it has grown by an additional 2 companies. The increased number of listed companies on the stock exchange has facilitated access to financing sources, benefiting firms in their pursuit of stability and sustainable growth during the crisis.

The market capitalization that is equal to the no. of listed shares multiplied by the market price end of the year was affected during the covid, reduction from 708.3 in 2018 to 649.9 at the end of 2020. However, it has recorded a positive trend to an increase of 1,160.20 by June 2023. The upward trajectory can be credited to the increasing attraction of foreign investors towards the Egyptian economy, the prevailing stable political environment, effective economic reforms, and the government's endeavors to enhance the investment climate.

The current turnover ratio stands at 21.89%, significantly lower than the 48.27% recorded during FY2020. This decline can be attributed to the prevailing macroeconomic conditions, specifically the slowdown in trading activity caused by the Ukraine-Russia war.In summary, the securities market with proper regulatory framework has played a crucial role in fostering economic recovery and growth by facilitating capital formation, promoting investment, ensuring transparency, and enhancing market efficiency.

3.2.2 Economic reforms and regulations

Egypt's banking sector has shown resilience in recent years despite broader economic pressures, which resilience is partly attributed to the sector's size. According to a recent report[3], Egypt is home to one of the oldest banking sectors in the Middle East, with modern banking activity starting in 1858 with the founding of the Bank of Egypt. Currently, the total number of banks is 37 as of December 2022 as per the Central Bank of Egypt database.

For successful financial sector development, it is important to address the macro-economic instability issues using sound economic reforms. The banking sector in Egypt has evolved since the 1950s because of various economic and liberalization reforms.

The period 1950s t0 1980s

Some of these reforms include the period of British occupation where the banking sector was dominated by foreign banks until the 1952 revolution that affected the banking system. The early 1950s to 1960s; were characterized by a period of socialism (the wave of nationalization) where the government owned the Central Bank of Egypt (CBE), five commercial banks, and three specialized banks. Government control was followed by repressive measures that entailed interest rate ceilings on loans and deposits; preferential rates and allocations of credit to public, industrial, and agricultural enterprises; and high reserve requirement ratios (Saber et al., 2005).

From 1974 to the early 1980s, witnessed the implementation of the open-door policy that increased the number of banks in Egypt to 81 and this required the government to enact laws for banks to be competitive that gave freedom to CBE and the banking sector to run its operations, manage the monetary policy, and allowed foreign capital. However, this was followed by a financial repression situation where there were trade, savings, and investment imbalances that led to low productivity. The banking sector was majorly affected by public banks' dominance interfered with savings mobilization and interest rate ceiling high reserve requirements (Saber et al., 2005).

[3] The Oxford Business Group, 2020 Economic Report

The late 1980s was the economic reform period that entailed trade liberalization, financial sector reform, and investment reform under the IMF andthe world bank supervision where the country embarked on a Structural Adjustment Program (ERSAP) which was done in two phases (Bolbol et al., 2005a).

The period 1990s to 2020s

FY1991 -1995 was the first phase of ERSAP where specific measures were put into place to allow for a liberalized banking system through interest rates, for example, to encourage savings and increase demand for credit (Bolbol et al., 2005a). This was followed by a positive real rate of return because of low inflation rates, and increased interest rates for domestic currency deposits. FY 1993, direct ceilings on bank lending were removed and foreign banks were allowed to operate in Egyptian pounds. In FY1994, the four public sector banks were asked to reduce their shares in joint venture banks to less than 51% and then to 20% (Saber et al., 2005). Majority foreign ownership (more than 49% foreign ownership of joint venture banks) was also permitted under Law No. 97/1996, which also liberalizes charge fees for banking services.During this phase, there was a positive GDP growth rate in Egypt because of these reforms (Saber et al., 2005).

The second phase of ERSAP was from 1995 -1998 and had a specific goal to encourage the FDI in Egypt by increasing competitiveness by deepening the financial system through privatization and enhancement of private sector participation in commercial banking, securities, and insurance companies. In 1997/1998, because of the terrorist attack in Luxor, there was a market crisis, a drop in tourist revenues, a decline in Egyptian expatriate remittances, and a drop in oil prices and this marked the beginning of liquidity shortages in foreign currency (Saber et al., 2005). In September 2004, the Egyptian Government launched the financial sector reform program that entailed reforming the banking sector, capital markets deepening, insurance sector restructuring, activating the non- bank financial institution and mortgage market development.

After more than 10 years of economic reform to enhance competition in the banking sector, the system was exposed to the 2008/2009 global financial crisis that became a concern that the achievements of the banking sector did not manage to buffer itself against the crisis. However, this was a global crisis, that harmed the financial sector. And following the G20 regulatory reforms by the IMF after the 2008- 2009 financial crisis, most of the banking and financial markets globally were prepared to cope with a macroeconomic shock in terms of building their capital and liquidity ratio buffers. However, one of the major challenges is the influence of the state-owned enterprises that receive huge credit support from the banking sector as opposed to the SOEs.

All in all, the above reforms by the Central Bank and the Government of Egypt have received positive feedback from the world bank, they have improved the soundness of the financial sector and helped to promote an efficient, competitive, and resilient financial system that meets Egypt's economic growth and development plan agenda.

In conclusion, the banking sector reforms have taken time in their implementation, for example, the restructuring process of the specialized state-owned enterprises. Also, the informal sector is quite large where small business owners avoid borrowing from financial institutions due to taxes, access, and other regulatory frameworks. On the other hand, the banks prefer to lend to large public banks which they consider risk-free.

The Central Bank of Egypt has intentionally implemented proactive policies to the banking sector’s profitability to achieve economic growth. In recent years, the banking sector benefited from the capital buffer that it had built upin the years before the 2020 crisis. Egypt’s financial system was well prepared for the recent crisis following the post-2008 financial crisis

3.3 Other Drivers to economic recovery in Egypt

This part discusses the role of the factors that played important roles in Egypt's economy such as the policy rate and external sector developments.

3.3.1 External sector

A country with natural endowments has a higher chance of economic growth and recovery(Barajas et al., 2013b). According to International Trade Administration, the top exports of Egypt are oil and gas accounting for 24 percent of the total GDP in FY2019/2020.

Oil refining increased by 25 percent in the same year recording the highest in all the other economic sectors in Egypt, this is attributed to the recent Ukraine-Russian war where the economy was able to capitalize on the high gas prices globally. The increase in oil and gas production has helped to raise revenue by the government used to implement equitable recovery policies and increase reserves. In the FY2021/2022, the Egyptian economy grew by 6.6% which a part is attributed to the boost in the oil net exports as a result of the consequences of the outbreak of the Russian – Ukrainian war on the rise in international gas prices.

In the recent 2020 crisis, because of import restrictions and higher oil and food prices, there was slower growth than anticipated in the last quarter of FY2021/2022. However, it is important to note that the increase of 6.6 percent in the GDP reflected the strength of other economic sectors in the country, such as the Suez Canal, manufacturing, and transport. Additionally, due to the lower non-oil imports and higher oil and gas exports, the government experienced an increase in its current account that increased revenues that eased the fiscal and public debts burden(World Bank 2023b)

3.3.2 Interaction of the fiscal and monetary policy

Following the global economic shock of the 2020 health crisis, there have been increasing levels of private and public sector debt in emerging economies. The governments' immediate response policies effectively stabilize the economies and protect the incomes of households and firms. (World Bank 2021b).

Monetary policy

In Egypt, the Central Bank helped to boost the ongoing economic activities by cutting down the overnight deposit and lending rates from 12.25% and 13.25% to 8.25% and 9.25% respectively. It also introduced other monetary policies such as deferring credit duesfor households, corporates, and SMEs for 6 months and limiting cash transactions by canceling fees and commissions collected at ATMs. These measures reduced the burden on individuals and SMEs to sustain productivity for FY 2021/2022 and they were very critical to smoothen the economic shocks hence reducing the impact on levels of poverty and inequality.

Fiscal policy

Emerging markets and developing economies face tight budgets to respond to severe shocks in a timely and efficient manner. Also, they still face the challenges of a well-developed tax-benefit system. In the case of Egypt was able to be also able to use the fiscal policy tool to continue to provide support to the vulnerable and the poor the neediest groups without affecting its financial position. Due to its tourism sector, the SuezCanal, and remittances from workers abroad, reserves they were able to offset its deficit balances(World Bank n.d.-b).

With the use of monetary policy, fiscal policy, and the role of financial sectors there was economic stability in the Egypt's economy.

CHAPTER 4: DATA AND ANALYSIS

During the FY2020/2022, the Egyptian financial system managed to continue to perform its primary roles of (1) providing information to investors on where to allocate their capital and hence fostering economic opportunities, (2) monitoring and exerting proper governance on households and firms after receiving capital, (3) facilitating trade, diversification, and risk management, (4) mobilize savings and (5) allow the flexible exchange of goods and services (Levine and Wiegand 2021). Egypt's economy gained its recovery owing to the macro-prudential policies and economic measures which enable stability of the financial and economic sectors. Following the outbreak of the Russian-Ukrainian war, there was a sharp increase in food and energy prices which triggered the outflow of foreign capital in Egypt as is the case with the majority of the emerging countries.

4.1 Banking sector analysis

In the post-crisis FY2021/2022, the banking system in Egypt sustained its access to finance for households, firms, and the government, encouraging financial inclusion. Until recently, the sector has shown high levels of financial soundness, mobilizing additional savings from households and high growth in its assets and loan portfolios. Through these channels, the economic activities were ongoing hence facilitating an annual GDP growth rate of 6.6% in FY2021/2022 a reflection of economic recovery.

4.1.1 Bank lending and deposit-taking roles

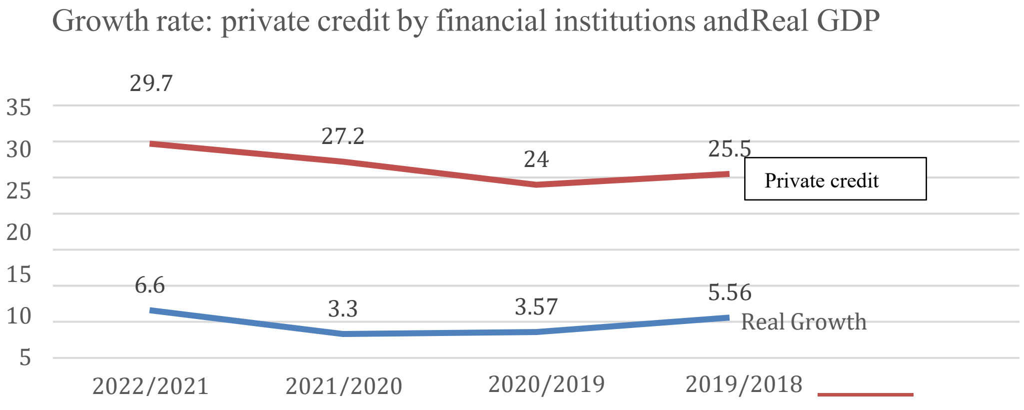
Banks play an important role in connecting savers and borrowers through deposit and lending channels. Households and firms depend on banks to keep their deposits safe and on a day-to-day basis, firms depend on financial institutions to easily access credit for investment and running their economic activities (*The Role of Financial Markets and Institutions in Supportingthe Global Economy during the COVID-19 Pandemic*, 2021). Globally, this recent pandemic experience showed that the banking sector has become an important part of the economy and was able to effectively channel credit to households and firms.

The Egyptian banking system served both households and businesses and prudently managed their risks. To absorb the shock, encourage investment, and keep the economic sector functioning, banks in Egypt. The banking sector assets represent 90.5% of the assets of the financial system in FY2021/2022. Out of this 67.3% represented credit extended to households, governments, and public and private enterprises. In FY2021/2022 it grew by 21.1% driven by credit to households and private businesses as compared to the FY2020/2021 growth rate of 20.1%

Supplied credit in the economy.

To quickly stabilize the economy and restore investors' confidence, they acted fast in supplying credit at low-interest rates to households and firms. Private credit increased as a reflection of economic recovery recording the highest in FY2021/2022 at 22.1%. This credit was extended to firms and households that contributed to the increase in GDP growth rate through the increase in household consumption, private investments, and net export.

Figure 8: Private credit and Real GDP

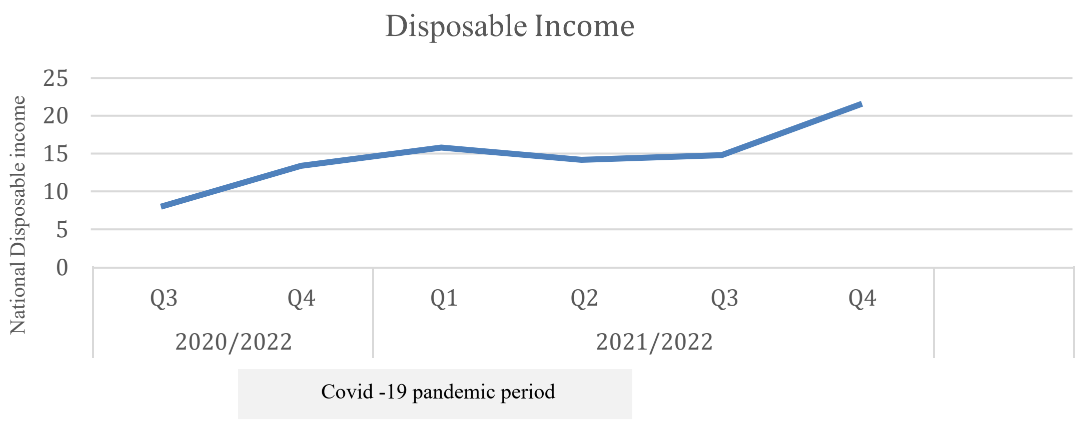


Source: Author's development based on Central Bank of Egypt & World Bank Global Financial Database

Household sector

Individuals lost their jobs and sources of income during the COVID-19 crisis, banks and other financial institutions acted swiftly especially during the first months of the pandemic by providing credit support to families to support their consumption patterns. The role of private credit was reflected in the increase in purchasing power through an increase in disposable income.. However, the Russian - Ukraine War, has led to an increase in prices that prompted monetary policy to increase interest rates that have caused a decline in imports of durable goods.

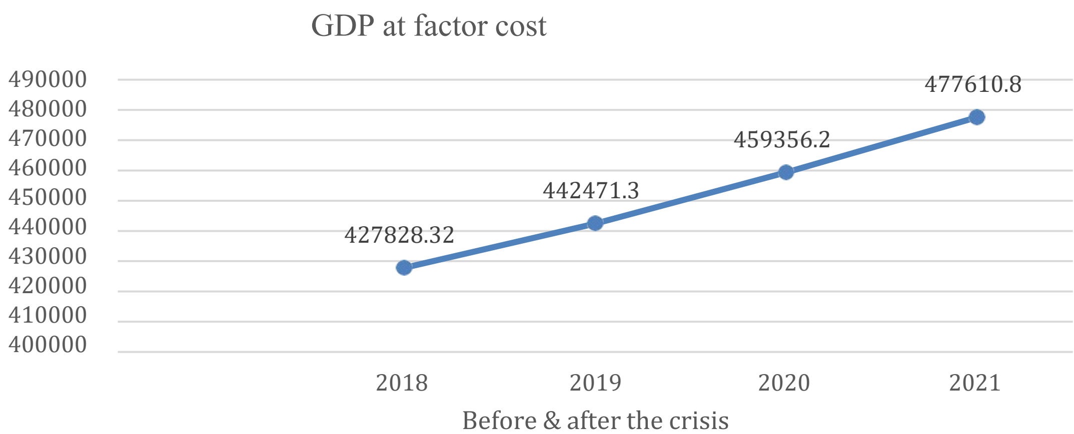
Figure 9: Effect of private credit to households: Disposable Income



Businesses sector

Banks and other financial institutions supplied significant credit amounts to SMEs to help absorb the macroeconomic shock, this resulted in the majority of them remaining in business, maintaining their employees on employment schedules, and continuingto supply goods and services essential to the general public. The effect is reflected in the steadyincrease of the GDP at factor cost which was driven by tourism and manufacturing sectors. Other sectors also contributed to the recovery through their sustained growth. The access to credit by business owners boosted productivity and competitiveness in wholesale and retail trade, construction and building, communications, and agriculture sectors.

Figure 10: Effect of Private sector credit to business sector on GDP at factor cost

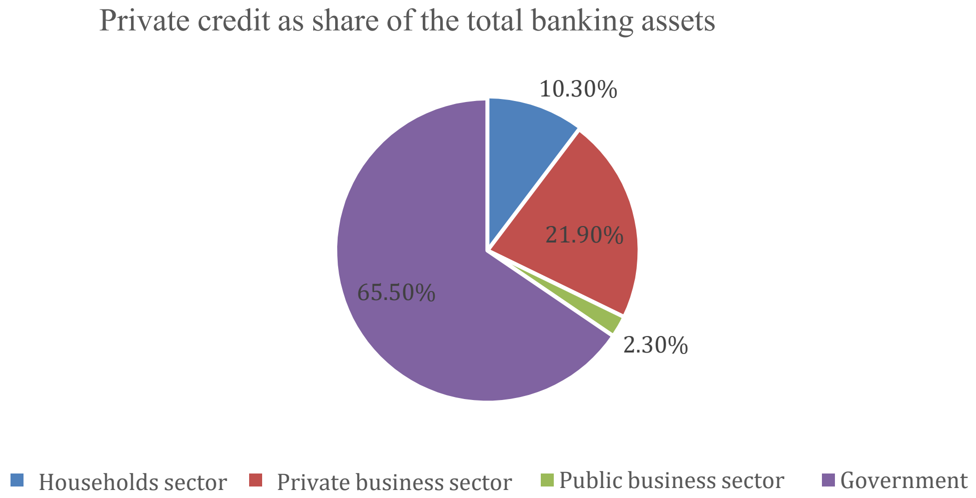


Source: Author's development based on Central Bank of Egypt & World Bank Global Financial Database

Government sector

Banks extended support to government-related programs, and the ratio of credit to the government was higher to the government than in other sectors. This support acted as a supplement to the current account deficit and enabled the government to continue to provide public goods support to healthcare centers and support companies that boosted economic recovery.

Figure 11: Share of private credit to different sector



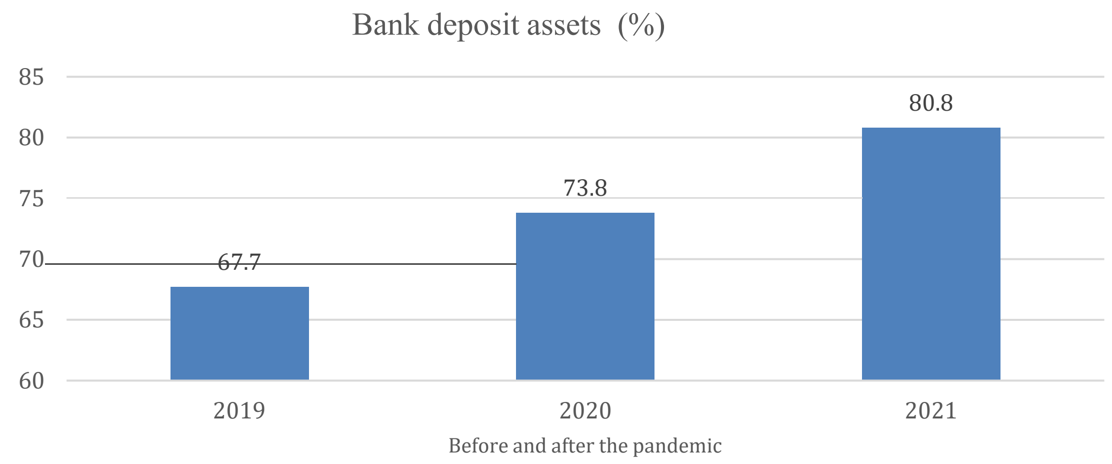
Source: Authors' development based on Central Bank of Egypt

4.1.2 Mobilise deposits

According to the world bank, the majority of the countries globally were able to mobilize large inflows of deposits from households and firms. Customers looked for a safe and easily accessible store for their finances amidst the pandemic crisis. This led to an increase in their deposits that made it easier to extend credit to firms, households, and the government to support economic activity because they have high liquidity to meet their demands. These deposits were extended to investors, encouraging innovation and hence spurring economic recovery in the long run. Egyptian banks increased their deposit base by 13% during and after the pandemic in FY2021.

%

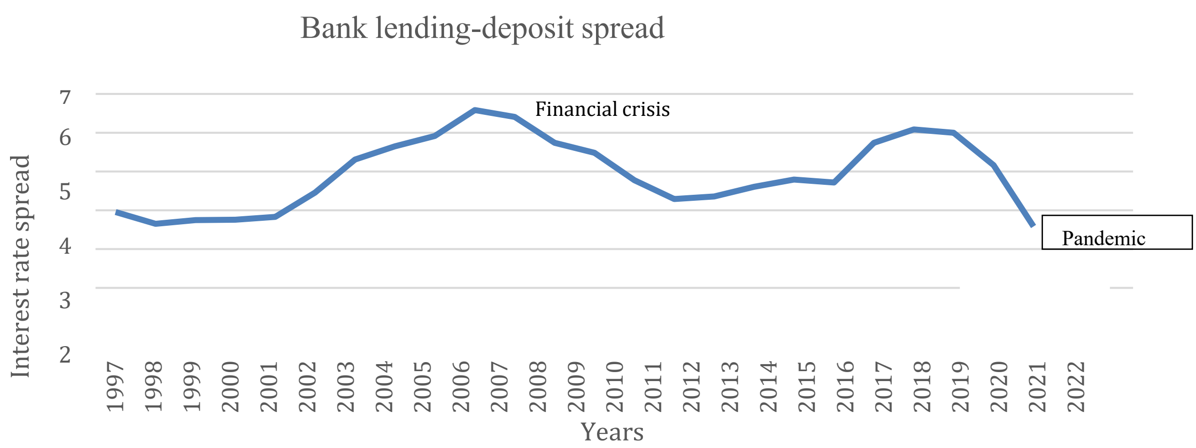
Figure 12: Increase in bank deposit assets



Source: Authors' development based on Central Bank of Egypt

As a result, these bank deposits reduced borrowing costs as they were able to offer loans at lower interest rates thereby making it easier for firms and businesses to access financing and support economic growth. By using the interest rate spread, the gap between the lending and the deposit rate was lowest during the pandemic crisis as compared to the financial crisis. This shows the strength of the banks in remaining competitive by offering low interest rates to their customers, which is positive for economic recovery.

Figure 13: Evolution of Bank lending -deposit spread



Source: Authors' development based on Central Bank of Egypt

4.2 Role of financial regulations in Egypt

Many studies have mentioned the lack of proper regulations and strict supervision in the banking system as one of the main reasons that led to the 2008-2009 global financial crisis. This prompted most countries to embark on regulatory reforms in their financial systems (Čihák et al., 2012). The Central Bank of Egypt is responsible for providing oversight and guidelines to the financial systems. This includes the banks, exchange companies, credit rating and owners of payment systems.

Since the 2008-2009 financial crisis, regulatory reform measures were tightened to ensure financial systems are well prepared to manage macroeconomic volatility. These enabled the resilience of the majority of the firms to provide financial intermediation to the real economy other than propagating it.

The Egyptian banking system exhibited a reduction in credit risks and by the decrease in the NPLs, capital, and liquidity positions were strengthened. The Central Bank of Egypt and the government's ability to take quick actions played a key role in stabilizing the economy. The banking sector collaborated effectively with the regulatory bodies in providing liquiditysupport to mitigate the economic shock.

Table 4: : Financial soundness indicators

	2019	2020	2021	2022
Capital Adequacy Ratio	17.7	20.1	22.2	20.9
Average Liquidity in Local Currency	44.4	53.8	45.4	44.3
Average Liquidity in Foreign Currency	67.7	71.5	67.9	78.4
Non-performing Loans to Total Loans Ratio	4.2	4 3	3.4	3.2
Loans Provisions to Non-performing Loans	97.6	95.2	92.3	92.1
Return on Average Assets	1.8	1.2	1.2	1.2

Source: Central Bank of Egypt

They had high solvency ratios of 20.9% in 2022, higher than the Central Bank of Egypt’s regulatory limit of 12.5%. Additionally, they maintained high liquid in both local and foreign currencies exceeding the regulatory bounds of 20% and 25% respectively. The Egyptian banking system was able to record a decline in the ratio of non-performing loans from 4.2% before the crisis to 3.2% after the crisis.

Micro-prudential supervision of banks

One of the major functions of the Central Bank of Egypt is to ensure the continued resilience and stability of the banking system by identifying and monitoring risks and using macroprudential policy tools to mitigate their effect on the overall stability of the financial systems. It ensures the development of the financial sector, tracks the shocks, and avoids the build-up risks of the financial system.

The Central Bank of Egypt uses qualitative, quantitative,and composite indicators in its analytical and monitoring framework. The qualitative indicatorsshow the financial soundness indicators for liquidity, risks, solvency, and profitability. The quantitative capture detailed information on the banking lending standards to supply and demand for credit. And the Financial Stability Index is a composite indicator that encompasses macroeconomic developments, banking sector performance, financial markets developments, and global economic climate.

The capital adequacy requirements are organized Basel III framework for all banks in Egypt. The minimum required risk-based regulatory capital ratio as of the end of 2019 is 12.5%. The risk covered by the current regulatory minimum capital requirements is financial leverage, liquidity, concentration, and domestic systematically important banks risks. In (Bank World, 2021), the efficiency in the bank's credit risk management is shown in the decrease in the (%) of the total non – performing loans from 4.2% in 2020 to 3.4% in 2022.

The Central Bank of Egypt has set limits for liquidity risks and by providing the banks emergency liquidity to assistthe banks to face a crisis in January 2022, the banking sector is also characterized by high liquidassets using the liquidity coverage ratio and the net stable funding ratio. The LCR in local andforeign currency in 2018 before the crisis was 749 and 238.6 respectively. In 2022, the LCR inlocal and foreign currency was 990 and 127 respectively.

In conclusion, following the policies supported by the IMF to support emerging and developing economies during the 2020 pandemic crisis, Egypt's financial system was able to show resilience. Additionally, due to the G20 regulatory reforms after the 2008- 2009 financial crisis, most of the banking and financial markets globally were prepared to cope with a macroeconomic shock in terms of building their capital and liquidity ratio buffers.

4.3 Non-banking sector

Secondary markets and market-making

In emerging and developing economies, most institutions do not have well-developed infrastructure and regulatory frameworks to support the use of financial instruments such as credit default swaps to encourage investment, innovation, and boost growth. There is limited literature explaining the contribution of the non-banking sector in Egypt.

Historically, it has been accompanied by high volatility and the Egyptian stock exchange has taken measures to encourage the development of this sector. However, through T-bills, it supported the external sector as discussed in the next section.

4.4 External sector analysis

During the recent crisis, the economy globally contracted affecting volume and prices of oil negatively. Natural gas exports, Suez Canal revenues, and personal remittances with support from net international reserves and flexible exchange rates are sources of foreign currency in Egypt that contribute greatly to mitigating the outflow of foreign investments spurring economic recovery.

According to (Barajas et al., 2013c) oil exporting countries from emerging and developing derive higher growth from the financial systems through the capital markets. In Egypt, the banking sector high liquidity ratios in net foreign assets helped to control the outflow from the domestic treasury bills market. This provided a buffer against external shock and allowed the country to finance its operations. This increased confidence and attracted foreign investment which boost economic recovery.

Figure 14: Banking sector Net Foreign Assets flows, Net Foreign Portfolio Investment flows, and

Foreign Investors' share in domestic T- Bills market

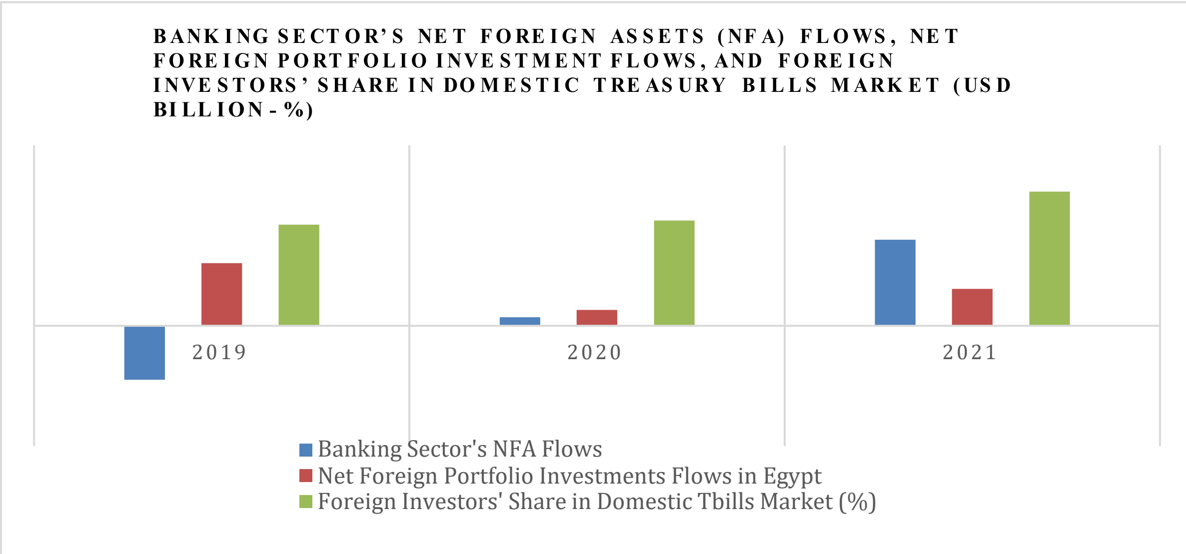
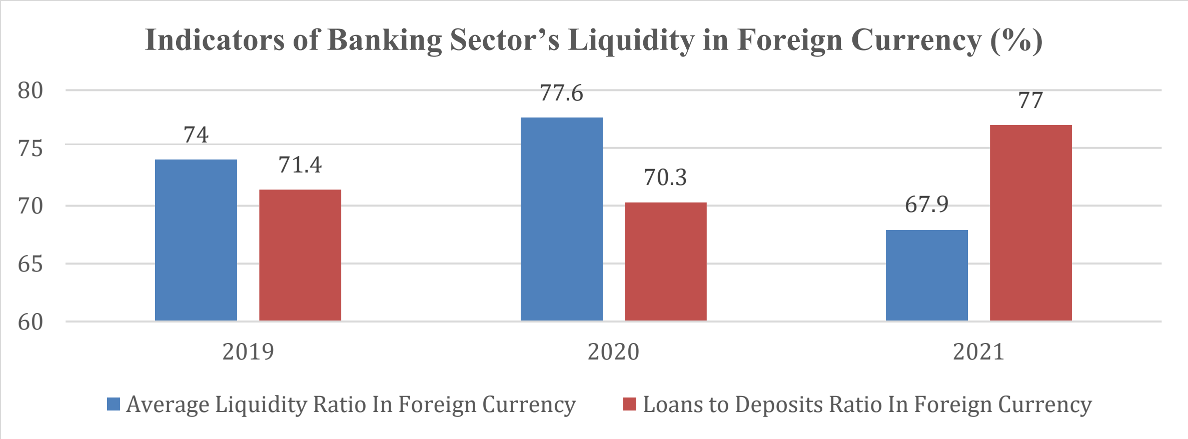


Figure 15: Banking sector indicators of liquidity in foreign currency



4.5 Systemic risks

However, some risks are associated with the interconnectedness of these roles that we cannot turn a blind eye to. One of the major functions of the Central Bank of Egypt is to ensure continued resilience and stability of the banking system by identifying and monitoring risks and using macroprudential policy tools to mitigate their effect on the overall stability of the financial systems. It ensures the development of the financial sector, tracks the shocks, and avoids the build-up risks of the financial system.

To ensure that the financial system withstands shocks in the future, it is important to highlight its vulnerabilities. Through a well-established macroprudential tool, the Central Bank of Egypt has considered the pandemic and the Russian -Ukraine war as real stress tests to the banking sector where it showed the ability to withstand the risks and shocks of both the corona pandemic and the Russian-Ukrainian war. In as much as the liquidity and solvency indicators were strong enough, there are still systemic risks to be highlighted that could arise.

Egypt is currently facing macro-financial risks such as the effects of the recent Ukraine - Russian war on food and energy prices, outflow of foreign capital, decline in performance of some of the economic sectors such as tourism and Suez Canal and increase in government budget deficit as a result increase in fiscal spending that has increased the government debt burden and its ability to meet the debt obligations.

Sovereign credit risk

There is a moderate level of liquidity risk in both local and foreign currencies. The banking sector invests in government securities as they are considered risk-free and highly liquid. However, with the current situation with the fiscal performance and decline in the government's credit rating, there is a possibility of default by the government hence posing a risk in the liquidity of foreign and local currencies of the banks.

Contagion risk

The banking sector is highly exposed to contagion risk between banks or between banksand non-banking systems. Due to the macro-economic situation, if one bank is affectedin terms of its liquidity this spill overs to banks and financial institutions which may lead to a crisis within the country.

CHAPTER 5: CONCLUSION

This paper draws the following conclusions;

Households and businesses bear the brunt of a crisis primarily through income disruptions, triggering a cascade of economic effects that traverse connections between households, firms, financial institutions, and governments. Egypt's financial framework stands at a moderate level compared to regional peers but remains exposed to liquidity and contagion risks.

Given the ongoing global uncertainties, Egypt remains susceptible, necessitating policymakers to safeguard households from soaring inflation costs. Moreover, facilitating increased credit access for small and medium enterprises (SMEs) becomes pivotal to amplify genuine economic undertakings and foster private sector advancement.

Furthermore, as an oil-exporting nation, it's imperative for both the government and the Central Bank of Egypt to prioritize the expansion of capital markets, addressing its current lag. Capital markets would play a more significant role in a recovery scenario.

Lastly, the banking sector has notably underpinned individuals, businesses, and the government in stimulating economic endeavors, thereby positively contributing to the GDP growth rate.

References

Acemoglu, D., & Zilibotti, F. (1997). Was Prometheus unbound by chance? Risk, diversification, and growth. Journal of Political Economy, 105(4), 709–751. https://doi.org/10.1086/262091

Arab Republic of Egypt: 2021 Article IV Consultation, Second Review Under the Stand-By Arrangement-Press Release; Staff Report; and Statement by the Executive Director for the Arab Republic of Egypt; IMF Country Report No. 21/163; June 7, 2021. (2021). http://www.imf.org

Arab Republic of Egypt: Request for Extended Arrangement Under the Extended Fund Facility- Press Release; and Staff Report; IMF Country Report No. 23/2; December 2, 2022. (2023a). http://www.imf.org

Bank, W. (2022a). World Development Report 2022: Finance for an Equitable Recovery. The World Bank. http://elibrary.worldbank.org/doi/book/10.1596/978-1-4648-1730-4

Barajas, A., Chami, R., & Yousefi, S. R. (2013a). The Finance and Growth Nexus Re-Examined: Do All Countries Benefit Equally?; by Adolfo Barajas, Ralph Chami, and Seyed Reza Yousefi; IMF Working Paper 13/130; May 1, 2013.

Barberis, D., Walker, J., Buckley, J., Dahdal, R., Zetzsche, A., Arner, D. W., Barberis, J. N., Walker, J., Buckley, R. P., Dahdal, A. M., Zetzsche, D. A., & Holdings Professor in Law, K. (n.d.). Digital Finance &

Beck, T., Demirgüç-Kunt, A., & Levine, R. (2004). Finance, Inequality, and Poverty: Cross- Country Evidence. The World Bank. https://doi.org/10.1596/1813-9450-3338

Belley, P., & Lochner, L. (2007). The Changing Role of Family Income and Ability in Determining Educational Achievement. Journal of Human Capital, 1(1), 37–89. https://doi.org/10.1086/524674

Bencivenga, V. R., & Smith, B. D. (1991a). Financial Intermediation and Endogenous Growth (Vol. 58, Issue 2). https://about.jstor.org/terms

Bencivenga, V. R., & Smith, B. D. (1991b). Financial Intermediation and Endogenous Growth. The Review of Economic Studies, 58(2), 195. https://doi.org/10.2307/2297964

Bernanke, B. S., Gertler, M., & Gilchrist, S. (1999). Chapter 21 The financial accelerator in a quantitative business cycle framework. Handbook of Macroeconomics, 1(PART C), 1341–1393.

https://doi.org/10.1016/S1574-0048(99)10034-X

Bolbol, A. A., Fatheldin, A., & Omran, M. M. (2005a). Financial development, structure, and economic growth: The case of Egypt, 1974-2002. Research in International Business and Finance, 19(1), 171–194. https://doi.org/10.1016/j.ribaf.2004.10.008

Bolbol, A. A., Fatheldin, A., & Omran, M. M. (2005b). Financial development, structure, and economic growth: the case of Egypt, 1974–2002. Research in International Business and Finance, 19(1), 171–194. https://doi.org/10.1016/j.ribaf.2004.10.008

Boukhatem, J., & Ben Moussa, F. (2018). The effect of Islamic banks on GDP growth: Some evidence from selected MENA countries. Borsa Istanbul Review, 18(3), 231–247. https://doi.org/10.1016/j.bir.2017.11.004

Cecchetti, S. G., & Kharroubi, E. (2012). Reassessing the impact of finance on growth, July 2012. www.bis.org

Čihák, M., Demirgüç-Kunt, A., Feyen, E., & Levine, R. (n.d.-a). Benchmarking Financial Systems around the World. http://econ.worldbank.org.

Čihák, M., Demirgüç-Kunt, A., Soledad, M., Pería, M., & Mohseni-Cheraghlou, A. (2012). Bank Regulation and Supervision around the World A Crisis Update. http://econ.worldbank.org.

Coase, R. H. (1937). The Nature of the Firm. Economica, 4(16), 386–405. https://doi.org/10.1111/j.1468-0335.1937.tb00002.

Dabla-Norris, E., Kochhar, K., Suphaphiphat, N., Ricka, F., & Tsounta, E. (2015). INEQUALITY: CAUSES AND CONSEQUENCES INTERNATIONAL MONETARY FUND 1Causes and Consequences of Income Inequality: A Global Perspective I N T E R N A T I O N A L M O N E T A R Y F U N D

Development Bank, A., Zhuang, J., Gunatilake, H., Niimi, Y., Khan, M. E., Jiang, Y., Hasan, R., Khor, N., Lagman-Martin, A. S., Bracey, P., & Huang, B. (2009). ADB Economics Working Paper Series Financial Sector Development, Economic Growth, and Poverty Reduction: A Literature Review. www.adb.org/economics

Fiscal Policies to Contain the Damage from COVID-19. (n.d.).Galor, O., & Zeira, J. (1993). Source: The Review of Economic Studies (Vol. 60, Issue 1). https://about.jstor.org/terms

General financial stability report. (n.d.). www.cbe.org.eg

Greenwood, J., & Jovanovic, B. (1990). Financial Development, Growth, and the Distribution of Income. In

Source: The Journal of Political Economy (Vol. 98, Issue 5)

Gurley, J. G., & Shaw, E. S. (1955). Financial Aspects of Economic Development (Vol. 45, Issue 4).
Hemingway, E., & Charles Scribner's Sons. (n.d.). For whom the bell tolls

Jensen, M. C., & Meckling, W. H. (1976). THEORY OF THE FIRM: MANAGERIAL BEHAVIOR, AGENCY COSTS, AND OWNERSHIP STRUCTURE. In Journal of Financial Economics (Vol. 3). Q North-Holland Publishing Company

Kassab, D. (n.d.). Switching Monetary-Fiscal Regimes in Egypt: Is the Fiscal Stimulus necessarily good in bad times?
35. Kerr, W. R., & N. R. (2010). B. D. F. C. A. F. E. SIZE. J. of the E. E. A. 8(2), 582-593.

https://doi. org/10. 2307/40601247. (n.d.). Kerr, W. R., & Nanda, R. (2010). BANKING DEREGULATIONS, FINANCING CONSTRAINTS, AND FIRM ENTRY SIZE. Journal of the European Economic Association, 8(2), 582-593. https://doi.org/10.2307/40601247

King, R. G., & Levine, R. (1993a). Finance and Growth: Schumpeter Might be Right. In Source: The Quarterly Journal of Economics (Vol. 108, Issue 3). https://about.jstor.org/terms

Levine, R. (2005a). Chapter 12 Finance and Growth: Theory and Evidence. In Handbook of Economic Growth (Vol. 1, Issue SUPPL. PART A, pp. 865–934). https://doi.org/10.1016/S1574- 0684(05)01012-9
Levine, R., & Wiegand, J. (2021a). Finance, Growth, and Inequality are Authorized for distribution

Martin, Č., Erik, F., Demirgüç-Kunt, A., & Ross, L. (n.d.). Benchmarking Financial Systems around the World.
Mugo, M. (n.d.). Community-level impacts of financial inclusion in Kenya with a particular focus on poverty eradication and employment creation. files/64/Mugo - Community-level impacts of financial inclusion in .pdf
Popov, A. (n.d.). Working Paper Series Evidence on finance and economic growth. https://doi.org/10.2866/996857

Saber, A., Hanan, A., & El-Din, N. (2005). Banking Sector in Egypt THE AMERICAN UNIVERSITY IN CAIRO DEPARTMENT OF ECONOMICSSahay, R., Čihák, M., Barajas, A., Bi, R., Ayala, D., Gao, Y., Kyobe, A., Nguyen, L., Saborowski, C., Svirydzenka, K., Reza Yousefi, S., & by Ratna Sahay, P. (2015).

Rethinking Financial Deepening: Stability and Growth in Emerging Markets INTERNATIONAL

MONETARY FUND Rethinking Financial Deepening: Stability and Growth in Emerging Markets Monetary and Capital Markets Department and Strategy and Policy Review Department, with inputs from other departments 1.

Stiglitz, J. E., & Weiss, A. (1983). Incentive Effects of Terminations: Applications to the Credit and Labor Markets (Vol. 73, Issue 5).

stream on monetary-fiscal policy interactions, W., Debrun, X., Masuch, K., Ferrero, G., Vansteenkiste, I., Ferdinandusse, M., von Thadden, L., Hauptmeier, S., Alloza, M., Derouen, C., Bańkowski, K., Domingues Semeano, J., Barthélemy, J., Eisenschmidt, J., Bletzinger, T., Faria, T., Bonam, D., Freier, M., Bouabdallah, O., …

Pisani, M. (2003). Monetary-fiscal policy interactions in the euro area. https://doi.org/10.2866/068527
The role of financial markets and institutions in supporting the global economy during the COVID-19 pandemic. (2021).

wp03123. (n.d.).

Zaman, G., & Georgescu, G. (2009). THE IMPACT OF THE GLOBAL CRISIS ON ROMANIA'S ECONOMIC DEVELOPMENT. In Annales Universitatis Apulensis Series Oeconomica (Vol. 11,)