Public Banks and Development in Egypt: Overview, Issues and the Way Forward[1]

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Abstract

Public Development Banks (PDB), like any other bank, serve as a financial intermediary, yet with a strong developmental role. This paper provides an overview of PDBs in Egypt. The latter is of particular interest for two reasons. First, while PDBs have a long history in the Egyptian economy, their role and the intervention are rather limited. This applies to banks that were created during the socialist era of Nasser. Second, the largest share of the PDBs-related projects implemented in Egypt is undertaken by government-owned commercial banks, namely National Bank of Egypt, Banque Misr and Banque du Caire. Thus, the objective of this paper is twofold: first, to analyze how and why the role of PDBs can be played by public banks; second, to highlight the lessons that can be learned from the resilience of the Egyptian financial systems to the succession of crisis/disruptions.

Keywords: Public Development Banks, Commercial Banks, Egypt.

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1. Introduction

While a Public Development Bank (PDB) like any other bank serves as a financial intermediary, its main goal is to promote development. Indeed, many development banks focus on a limited specific number of sectors of the economy according to the needs of the country, such as agriculture, industry, housing, health or education. In this case, the development bank will be specialized in one sector and hence entirely dedicated to its development. At the global level, such banks represent 10% of global financial flows.

Development banking will always be a risky initiative but, with efficient and proper management, it can help achieve development objectives (Janine Thorne & Charlotte du Toit, 2009). The most celebrated role of PDB since the outbreak of the global financial crises has been their countercyclical function. During the crises PDBs were able to provide liquidity to financial markets, which enabled them to avoid the downtrend. The financial sector operates pro-cyclically, so private banks' behavior tends to aggravate crises by decreasing the flow of liquidity to the system when it is most necessary (Minsky, 1986). It is therefore crucial that PDB play this proactive role to protect the economy and correct market failure (Wray, 2009). This is the main argument that justifies public intervention in the credit market. PDBs can play this important role through various channels (Mazzucato and Penna, 2015): (1) ensuring the security and soundness of the financial system through managing liquidity in times of crises, (2) creating an information base to combat the negative effects of asymmetric information on the financial market, (3) financing of socially important projects; and (4) promoting financial development (Stiglitz, 1994). This is very important in developing countries where markets' imperfections or failures exist, such as asymmetry of information, imperfect competition and underdeveloped fragile capital market. In this context and when private banks are not able to achieve these objectives, then public banks emerge as the second-best alternative (Feijo, Horn, and Feil, 2020).

The Egyptian case is of particular interest for several reasons. First, while PDBs have a long history in the Egyptian economy, their role and the intervention are rather limited. This applies to banks that were created during the socialist era of Nasser. The decreasing role of these banks can be explained by four main reasons. On the one hand, Moheildin and Nasr (2003) argue that with the Egyptianization[6] and nationalization measures in the 1950 and 1960s, the banking sector became highly concentrated with the application of sectoral and functional specialization making the system a sector-based mono-bank one (with mandatory public ownership/governance). This led to less competition and less innovation. On the other hand, most of these banks were always backed up and sponsored by the government. Yet, with the lack of incentives, political

[6] Egyptianization refers to the act or process of transforming foreign assets into Egyptian ones.

interference, poor governance, complicated bureaucratic procedures for loans processing, and overstaffing, their performance deteriorated and their profits decreased. This affected their interventions and financing capabilities. Moreover, with the privatization of the banking sector that took early 2000s, most of the banks that remained public were the largest commercial ones only. Second, the lion share of the development project implemented in Egypt is undertaken by government-owned commercial banks, namely National Bank of Egypt (NBE), Banque Misr and Banque du Caire (BdC). These three banks are of interest for three reasons. First, generally, their mission statement is aligned with the concept of development bank. For instance, NBE's one refers to "*NBE believes that it has a significant role to play in improving the quality of life of Egyptians. Such contributions were vigorously engaged in supporting healthcare, education, slums development, combating poverty, alleviating the distress of imprisoned indebted persons, and empowering people with disabilities, as well as supporting culture and maintaining heritage*". In the case of Banque Misr, "*Banque Misr was established in 1920 by the pioneer economist and financial expert Mohamed Talaat Harb Pasha, who spearheaded the concept of investing in national savings and directing them towards economic and social development*". Moreover, BdC operates as a subsidiary of Banque Misr and is largely known for its comparative advantage in microfinance, which is highly correlated to development activities. The second reason in choosing these three banks is their large market share. In fact, while NBE has the highest market share (total assets accounted for 31.5% of Egyptian banks' total assets in 2020), Banque Misr's market share is EGP 967.3 billion and Banque du Caire EGP 211billion. The third reason is related to their public ownership making them more likely to implement the development agenda of the government. Finally, it is important to note that the law 88-2003 of the Central Bank of Egypt (CBE) did not include a particular definition of development banks. This partially explains why commercial banks were able to have a developmental role given that the latter was neither limited nor exclusive to banks specialized in development. Thus, the objective of this paper is twofold: first, to analyze why and how public banks can play the PDB role; and second, to highlight the lessons that can be learned from the resilience of the Egyptian financial systems to the succession of crisis/disruptions.

Against this background, *Agence Française du Développement (AFD)* co-organized the first edition of the "Finance in Common" Summit in November 2020. Its objective is to boost commitment of all PDBs to support a more sustainable financial trajectory and to help the governments respond to the crisis. This is particularly important with the COVID-19 pandemic and its subsequent socio-economic crisis that negatively affected the global economy. Indeed, with the increase of firms and households' vulnerabilities, the role of PDB has to be reconsidered in order to make their intervention more effective and curb the negative effects of the pandemic. Hence, the second part will chiefly focus on the Egyptian case in order to examine the determinants of resilience and analyze why commercial (public) banks have substituted classic PDBs.

The remainder of the paper is structured as follows. Section 2 presents a mapping and a general overview of the banking system in Egypt. Section 3 reviews the literature on the role and the structure of PDB. Section 4 provides an analysis of the PDBs in Egypt. Section 5 analyzes the regulatory framework and governance of PDBs in Egypt. Section 6 presents the lessons learned from the Egyptian experience during the pandemic and beyond and section 7 concludes and provides some policy recommendations.

2. Mapping of the banking sector in Egypt

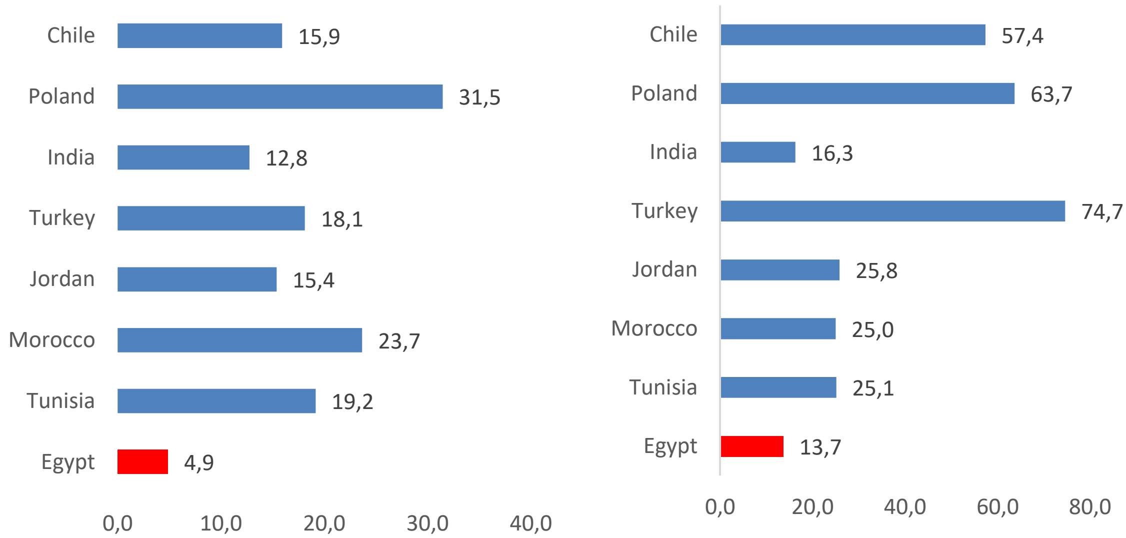
Before presenting the characteristics of the Egyptian banking sector, it is important to position Egypt with respect to other comparator economies in order to examine to what extent its banking sector is more or less developed compared to them. These countries include Tunisia, Morocco and Jordan (being Arab and diversified economies), Turkey, Poland, Chile and India (emerging markets). All these countries offer interesting cases either because they belong to the same geographic region or the same income group, have been established as successful transition economies, or are simply providing fascinating examples of economic success.

Among the measures used to measure financial development (Beck et al., 2000), Figure 1 shows banking coverage in Egypt through the number of commercial bank branches (1a) and automated teller machines (1b) per 100,000 adults. For the two indices, Egypt has lower figures pointing out the need to improve the infrastructure of the banking system (measured by the number of branches and ATMs) in order to increase access to finance and its role in development. A similar observation holds for the number of borrowers and depositors (Figure 2a and 2b) and for the share of credit going to the private sector (Figure 3a and 3b). This is why, from a development perspective, it is crucial to implement deeper reforms in order to increase access to finance and make liquidity more available for the private sector (Herrera et al., 2013) to boost private investment and development.

Figure 1: Banking Coverage in Egypt (average of 2010-2019)

(a) Commercial bank branches (per 100,000 adults)

(b) Automated teller machines (per 100,000 adults)

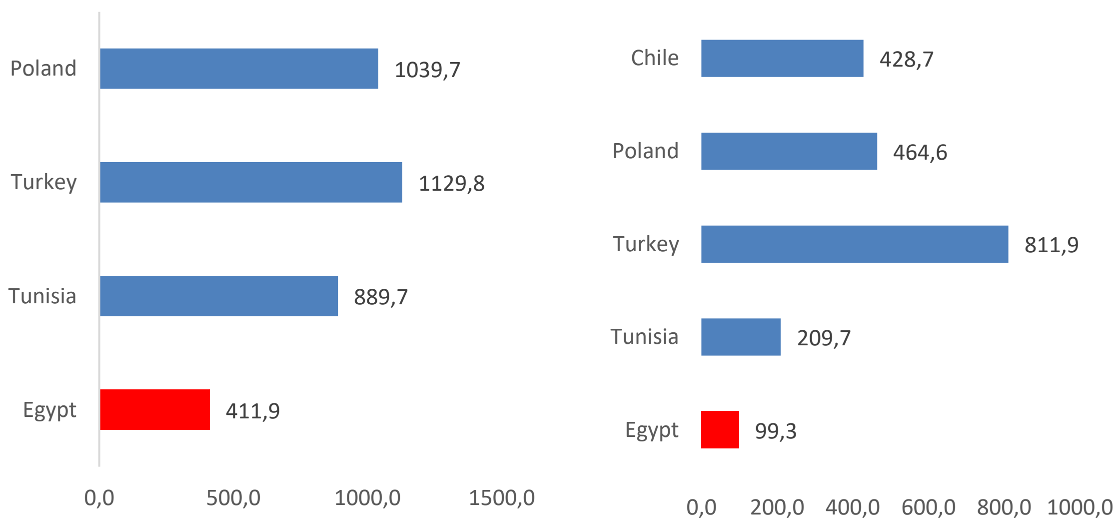


Source: Authors' elaboration using the World Development Indicators online dataset.

Figure 2: Depositors and Borrowers and commercial banks (average of 2010-2019)

(a) Depositors with commercial banks (per 1,000 adults)

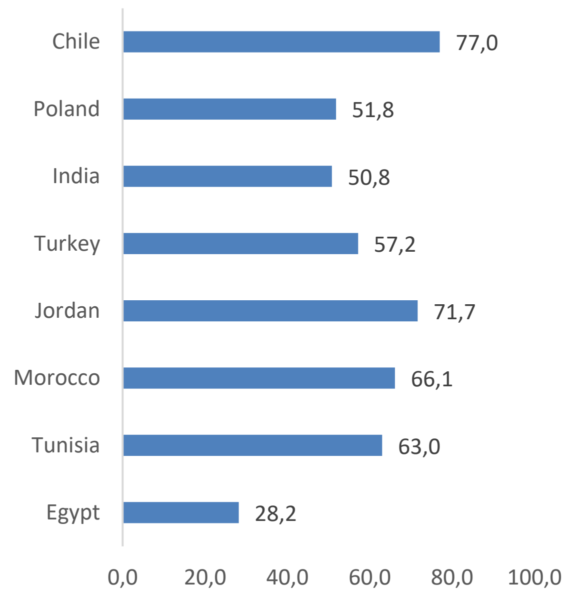
(b) Borrowers from commercial banks (per 1,000 adults)



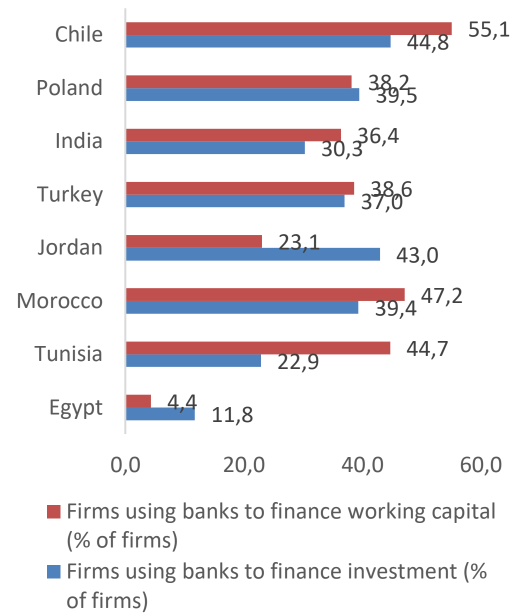
Source: Authors' elaboration using the World Development Indicators online dataset.

Figure 3: Firms and credit in Egypt - 2013

(a) Domestic credit to private sector by banks (% of GDP)



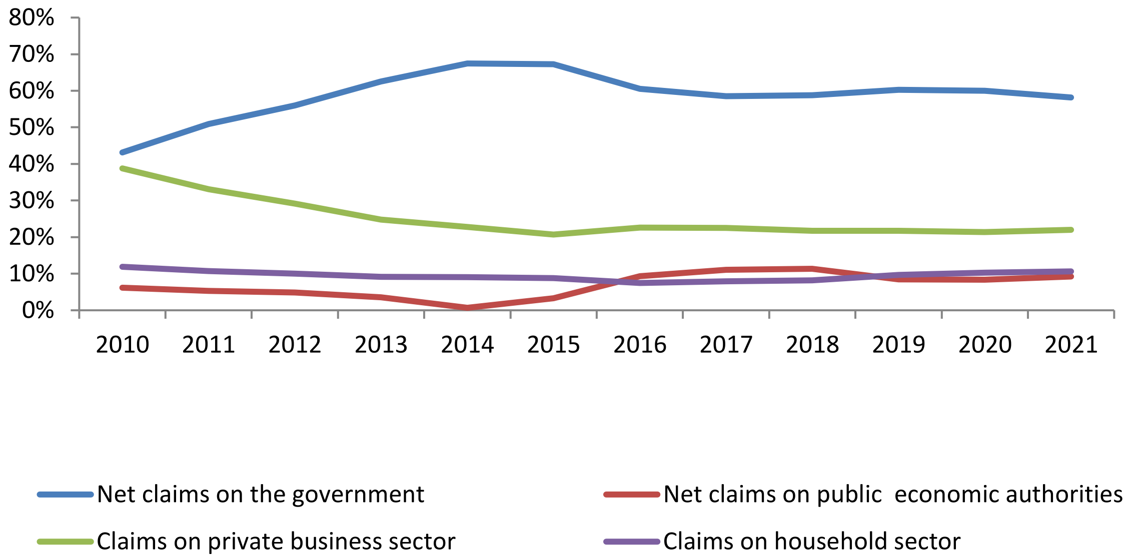
(b) Firms using banks



Source: Authors' elaboration using the World Development Indicators online dataset.

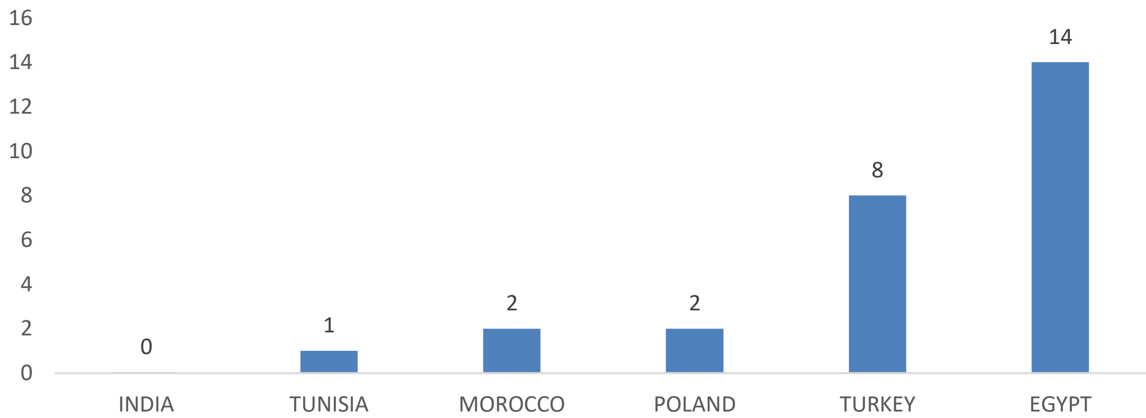
Such a low level of credit to the private sector can also be explained by the low level of liquidity and financial repression. First, Figure 4 shows that, in 2021, 58% of the domestic credit is to the government and 9% to public economic authorities and the public business sector with only 22% of the claims that are allocated to the private sector. Second, the required reserve ratio in Egypt is higher compared to several emerging markets as it reached 14% in 2021 compared to Turkey (8%), Morocco (2%) or Tunisia (1%) as it is shown in Figure 5. This is also confirmed by the high level of the bank liquid reserves to bank assets ratio (Figure 6). Indeed, this indicator shows the ratio of domestic currency holdings and deposits with the monetary authorities to claims on other governments, nonfinancial public enterprises, the private sector, and other banking institutions. This ratio reaches 34.6% in Egypt, whereas it is 25% in Jordan, 14.5% in Turkey and 6% in Tunisia pointing out the fact that lending activities in Egypt are lower than those in comparator economies. Third, Figure 7 shows that Egypt is characterized by a high interest compared to other emerging markets (with the exception of Turkey), which further negatively affects the private sector and deters investment.

Figure 4: Domestic Credit - by agent (%)



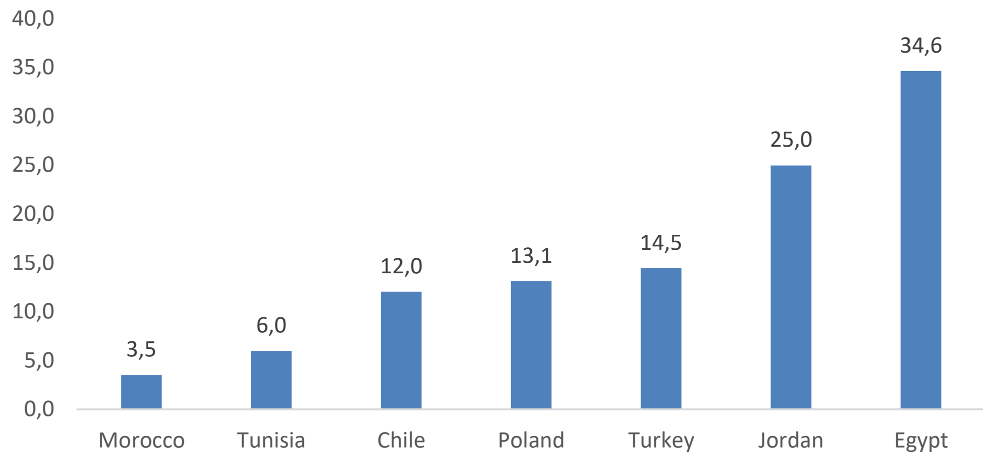
Source: Central Bank Online Dataset.

Figure 5: Required Reserve Ratios – 2021 (%)



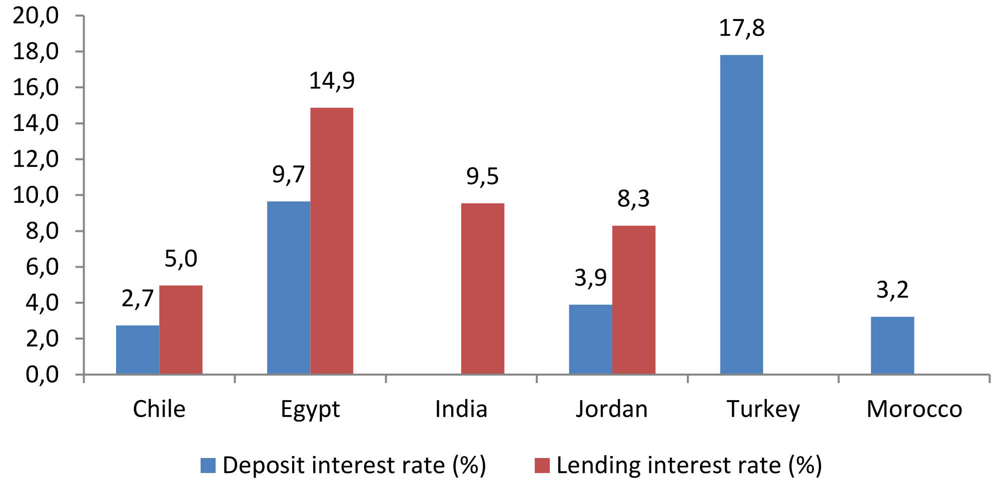
Source: Central Bank News (http://www.centralbanknews.info/p/reserve-ratios.html).

Figure 6: Bank liquid reserves to bank assets ratio (%)



Source: World Development Indicators.

Figure 7: Interest Rates (% - average of 2015-2019)



Source: World Development Indicators.

Like many emerging markets, banks in Egypt are the dominant financial institutions, as they control most of the financial flows and possess most of the financial assets (almost 95% of total financial system assets). It is noteworthy that, over several decades, different economic reforms have directed more of bank ownership and activity towards the private sector, and have activated a long-dormant securities market.

Banks operating in Egypt can be classified as public sector, private and joint venture, or foreign according to ownership. Public sector commercial banks have a volume of business that constitutes a significant share in total bank transactions. Private and joint venture as well as foreign banks (operating through branches) are private sector institutions established under investment law and the law No. 88 of the year 2003 of the Central Bank, the Banking Sector and Money promulgated by the presidential decree number 101 of the 2004. Foreign banks are all registered as business and investment banks as their envisaged role is principally to raise long-term funds on the international financial markets and to promote investment. The banking industry is highly concentrated since the three public sector commercial banks are the largest operating banks in Egypt in terms of balance-sheet size, accounting for more than 50 percent of total bank assets. While they have a close relationship with state-owned companies, hey are also major participants in the equity capital of most joint-venture banks. By contrast, the private banks play a less dominant role in the market for loanable funds and focus on trade-related financial services to the private business sector; they have recently diversified their financial services by widening their retail (personal loans, mortgages, insurance products, individual retirement plans, and credit cards).

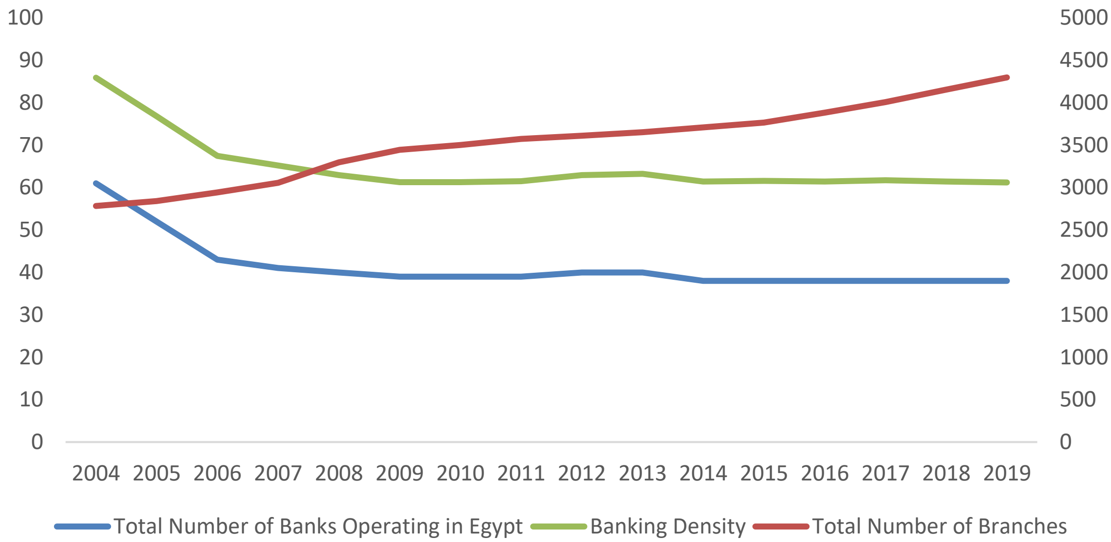
In order to improve the efficiency of the banking system, the CBE in 2004 adopted a reform program that aims at building solid infrastructure and more efficient and sound banking sector. Although the global financial crisis led to many negative repercussions on several world economies, the Egyptian banking sector weathered the negative repercussions due to the successful reform program that have launched in 2004. This reform has been implemented in two phases. The first phase had three main pillars: first, strengthening the legal, regulatory and supervisory framework; second, consolidating the banking sector and increasing private participation within banking assets and finally the financial, operational and institutional restructuring of public-sector banks. Those reforms led to a robust, solid and well capitalized banks (see Table 1), as banks decreased from 61 in 2004 to 40 in 2008, while assets increased by 88% to reach EGP 1.1 billion in 2008 up from EGP 0.57 billion in 2003; total deposits increased by 85% over the same period; and capital adequacy ratio increased from 12.2% to reach 15.1%. In addition, the flow of new capital through mergers and acquisitions in the banking system reached EGP 24.24 billion in 2008. Moreover, as it is shown in Figure 8, the banking reform plan reduced the number of operating banks in Egypt from 61 banks to 38 while increasing the number of branches by 50% to reach 4258 branches in 2019, up from 2783 in 2004. This was mainly due to the significant decrease in the number of private and foreign banks that ended their business. Furthermore, banking density has slightly decreased from 24.9 to 23.2 thanks to this increase in the total number of branches (see Figure 7).

Table 1: Banking Aggregates

LE million (End of June)	2003	2008	2020
Total Assets (in EGP)	577,938	1,083,311	7,022,145
Total Deposits (in EGP)	403,144	747,199	5,133,648
Capital adequacy ratio	12.20%	15.10%	19.5%

Source: Central Bank of Egypt.

Figure 8: Number of Banks and Banking Density



Source: Authors' own elaboration using the Central Bank of Egypt Economic Reviews.

The second phase of the banking sector reform program that started in 2009 aimed at deepening the Egyptian banking sector and enhancing its efficiency and competitiveness through enhancing access to financial services, continuing the strengthening of the regulatory and supervisory framework through the implementation of Basel II/III and enhancing the implementation of Corporate Governance rules and regulations.

Yet, in light of the technological developments that the world is witnessing and that affected the financial systems, a new law was promulgated in 2020 in order to cope with such changes. This law is "the Central Bank and the Banking System Law No. 194 of 2020" (published in the Official Gazette on September 24, 2020). It includes 235 provisions (while the one of 2003 includes 135 ones) related to the Central Bank, the banking system, electronic payment services, foreign exchange, protection of customer rights, competition and dispute settlement, with a special focus on financial technology and the governance of commercial banks. The law also introduces a chapter that regulates banks in financial distress instead of the bankruptcy law no. 11 for the year 2018.

All these different reforms made the banking sector more resilient in Egypt, especially in the aftermath of the financial crisis of 2008 and the period of political instability (2011-2013). After presenting the overview of the banking sector in Egypt, the following sections analyze more thoroughly the role of public development banks in Egypt by first analyzing the literature and second providing an overview of their role, structure, and mandate.

3. PDBs, economic growth, and SDGs: Literature review

3.1. What is a development bank?

Public development banks (PDBs) are "financial institutions initiated and steered by governments with the official mission to proactively orient their operations to pursue public policy objectives…. PDBs…lie at the intersection of state and market; because they are aimed at using market means to achieve development goals." (Xu et al., 2021, p.274). The following criteria should be met in PDBs:

(1) They should have a separate legal personality and financial account.
(2) They should deploy financial instruments such as loans, equity, guarantee, or insurance and ensure financial discipline of clients to sustain the PDB operations.
(3) Their funding sources go beyond periodical budgetary transfers.
(4) They have a proactive public policy orientation. They are initiated by governments to address market failures and incubate markets in a proactive manner.
(5) Governments play a steering role in setting their corporate strategies (governments initiate or establish PDBs, sit on the board of directors to play a steering role in pursuing the development-oriented mandate, or provide the support for fundraising).

Kovachev (2013) defines development banks as a form of government intervention in the financial sector that aims to compensate for the market failure that hampers the provision of finance to achieve socio-economic objectives and support economic development of a country. Development finance are specific financial services which private-owned commercial banks are unwilling to perform due to their relative high risk and where the social gains are higher than the economic return.

According to Kovachev (2013) the following conditions must be fulfilled in PDBs: The bank provides credit lines to targeted sectors of the economy according to the development plan (export-oriented industry, infrastructure, agriculture, SMEs etc.).

- The bank fosters new investments in major global activities such as clean renewable energy, bio-technology, and environmental projects.

- The bank functions in a free-market context and does not crowd out the private sector.
- The bank makes enough profits to be self-sustainable.

The requirement that development banks should be financially sustainable and should have funding sources beyond periodical budgetary transfers allows these banks to provide additional sources of finance to complement public resources while crowding in private investment. In other words, “development finance complements government resources and market funding by filling the niche between fiscal funding for projects from which no cost recovery is possible and private funding for projects with profit opportunities. Development finance aims to lower the risks of investment in certain sectors or areas and hence crowd in private sector investment" (J Thorne & C du Toit, 2009, p.678).

While market failures justify the existence of public development banks in economic literature, these banks are also criticized for being subject to government failures. The creation of PDBs is a form of government intervention in the financial sector that could be associated with inefficiencies caused by moral hazard, crowding out the private sector, and under weak institutional framework, poor governance and political manipulation can lead to bank insolvency and high fiscal costs. The empirical research on the impact of PDBs on growth and development provide mixed evidence (Gutierrez et al., 2011). Hence, while PDBs is a form of government intervention to correct market distortions, it has its limitations and should not be an alternative to financial reforms that guarantee a more competitive financial sector and mitigate information asymmetries through better credit history bureaus. In the following sections the main arguments for/ and roles of PDBs are reviewed along with their limitations.

3.2. The Role of PDBs in economic stability and sustainable development

Public Development Banks are legally independent financial institutions that are usually majority-owned or totally owned by the government with the main-aim of supporting development goals. In this regard, PDBs serve to provide financial and non-financial services to projects that have social externalities and hence, *these banks distinguish themselves from commercial banks as they are not only driven by financial profits but by the socio-economic impacts of the financed project*. The general mandate of PDBs must emphasize the objective of these banks in supporting development projects in fields that are in accordance with government development plans and imply high social externalities and not on the main agenda of private banks.

3.2.1. Bridging market gaps and crowding in private sector

As stated in the economic literature (Feil and Feijo, 2020), the private financial sector sometimes fails to meet the demands for certain economic sectors, geographic areas, and specific services. It is therefore widely accepted that because of market imperfections; particularly the asymmetric distribution of information, PDBs are needed for improving resource allocation efficiency and, therefore, have a role to play in modern economies.

PDBs play an integral role in the growth and sustainable development of the economy by filling the market gaps that exist due to the inability and/or unwillingness of the private sector to finance certain projects that have social and developmental returns but are either too risky or too costly for the private sector to finance. In doing so, they mobilize and crowd in private funds to achieve development plans. *Accordingly, PDBs should not crowd out private sector* as the reason of their existence is to fill the gap between the needs for development projects and the abilities of the private sector. PDBs do not substitute the role of governments in providing basic services that have important social impact but are financially unprofitable. These services can only be covered directly by government spending (International finance consulting, 2017).

One of the tools that PDBs can use to crowd in private investors is the extension of guarantees. PDBs can extend guarantees to private investors instead of direct lending. This is more relevant to investments in start-up projects that would be too risky for private creditors to finance but have high social externalities. This applies to projects that are credit constrained due to low credit-worthiness but assumes that PDBs have informational superiority and is more relevant to the case where commercial banks are excessively risk-averse. It is important, however, that PDBs do not engage in guarantees unless they have adequate information and expertise in the underlying project to avoid transferring private losses to PDBs (Fernandez-Arias et al., 2019). Another strategy proposed by Fernandez-Arias et al. (2019) is through equity holding. This allows PDBs to share in the profits of the firms and play a role in the management of these venture projects and help with non-financial technical assistance to these firms. The equity provided by PDBs will also act as collateral and thus help crowd in private creditors. This strategy can be superior to guarantee extension for PDBs due to the profit sharing advantage since the profit sharing in successful ventures would account for the losses in failed ones and hence would avoid the high cost of guarantees borne by banks.

3.2.1.1. Financing or co-financing projects with the private sector

In order to fulfill its role, PDBs make use of their close relationships with governments, and their stable capital structures that allows them to *mitigate political risks* of new projects and intervene to either directly finance or co-finance with the private sector projects that have high positive externalities for development (Mohieldin et al., 2018). PDBs maintain a good relation with both the government and the private sector, and this allows them to coordinate between them and fill the gaps in both. *PDBs optimally choose the best public-private source of funds mix* so that a major part of their sources of finance would be public and/or private financing through long-term bonds to prevent them from focusing only on the financial profit target as commercial banks (Romero, 2017). It is for this reason that the capital structure of PDBs is more stable as it relies more on long-term sources of finance and hence can finance long-term projects (Marodon, 2020). Accordingly, PDBs finance infrastructure projects that usually require long-term financing and a large amount of capital. They also finance export-oriented projects to make up for limited foreign currency available to private investors. Moreover, they also focus on micro-finance and rural development in marginalized areas due to lack of access to private finance, as well as new technologies due to their relatively higher levels of risk (Marodon, 2020 and International finance consulting, 2017).

Since the importance of PDBs is to help in establishing projects that would otherwise be impossible with private financing only, these banks need not provide the required finance at a low lending rate. Financial assistance to projects is justified on the grounds of "big push" models where multiple projects need to be established simultaneously to reap their positive externalities because these projects are complementary. "A big push, therefore, requires either commercial banks with market power or a large state-owned bank that does not aim at maximizing profits." (Fernandez-Arias et al., 2019, p.9). *PDBs should develop a business model to help them select projects that are in line with their development mandate, but are also financially profitable at the same time to help them remain resilient and sound. This will prevent them from becoming a burden on the government. By achieving financial profits, they also signal to the private sector possible profitable investment opportunities, and thus crowd in the private sector and help fill the market gap (International finance consulting, 2017).*

3.2.1.2. Providing non-financial services to development projects

PDBs can aid in mobilizing and crowding in private sector to certain development projects *by providing non-financial services* for these projects, thus making them more bankable. In this regard, PDBs help the project without the need to directly share in its financing. Examples of such services include training and advisory services, technical assistance, entrepreneurship programs and, seminars. Some PDBs also invest in technologies to allow entrepreneurs in marginalized areas to better access the financial services (International finance consulting, 2017).

3.2.1.3. Subsidizing financial services

PDBs often serve development goals by *providing cheap sources of finance to projects with high levels of social externalities.* These projects usually exist in poor areas where commercial bank loans would be too expensive. PDBs can hence provide loans with lower interest rates compared to commercial banks and thereby allow the implementation of such projects. It is worth-mentioning here that PDBs should not resort to providing lending rates that are below their cost of capital thus making the project financially non-profitable (International finance consulting, 2017). Subsidized lending could be financed through grants and official development assistance, yet the use of grants should come with caution as they may lead to moral hazard from the PDBs side and thus support failing businesses (Romero, 2017). Subsidized loans can be a powerful tool when commercial banks are not competitive and are lending at inefficiently high rates and therefore -in this case- subsidized loans will not be a cost to the government (Fernandez-Arias et al., 2019).

Subsidized financial services must be adopted when the projects to be financed are expected to generate higher externalities in terms of productivity and innovation to be justified (IDB, 2014). In order to avoid subsidized loans from crowding out private banks, Fernandez-Arias et al. (2019) argue that cheap credit should be granted to projects with high positive externalities and are not credit-constrained. The authors argue that subsidized lending should be based on "real activity rather than defective financial systems" (Fernandez-Arias et al., p.8), while when the project faces tight credit constraints but is expected to have social externalities the more suitable strategy would be the extension of guarantees to crowd in private creditors.

3.2.2. Maintaining economic stability during times of crises

As argued earlier, PDBs have more stable capital structures since their capital structure depends mainly on long term sources of finance. Accordingly, in times of volatility they show lower liquidity risk and can be a source of stability for the economy during crises as these banks are at a greater opportunity for investing in development projects and granting credit when the private sector falls short of liquidity (Marodon, 2020) [7]. Empirical evidence reviewed by Leon (2020) confirmed that this *counter-cyclical role* applies to public commercial banks without explicit development mandate as well due to

[7] While this role for PDBs is not a developmental role, this argument is presented here as one of the main arguments for the establishment of PDBs in an economy and one of its main roles.

four reasons. *First*, the implicit mandate that public banks share due to their public ownership makes them more focused on long-term objectives rather than profitability alone. *Second*, political manipulation of public banks affects their credit policies in times of crises, so in general, governments use public banks as a tool to gain support during economic downturns. *Third*, the stability of their capital structures renders them less prone to liquidity risk compared to private banks. Public banks rely on their own resources and they enjoy government guarantee on their deposits and so are less likely to be prone to bank runs. *Finally,* they maintain long-term relations with investors as they tend to grant long-term loans and this relation and deep knowledge of their customers makes them more willing to maintain their credit policy during crises. The effect of this *counter-cyclical role* on long-term development, however, is dependent on the bank's independence from political bias in project selection, their success in choosing worthy projects to support, their success in risk management and overall financial resilience after the crisis, and the quality of institutions in the country. *The importance of good governance practices and the quality of institutions is key to the success of these counter-cyclical effects on development even for PDBs.* A counter-example is the case of Mexico post the global financial crisis, the counter-cyclical lending strategies of PDBs focused mainly on the support of heavily indebted businesses and thus led to higher fiscal costs for the government (Romero, 2017).

Marshall and Rochon (2019) show how PDBs can play an important role as part of the economic policy toolkit. According to the authors, *public banks could be used along with monetary and fiscal policies, to control aggregate demand in the short term.* When the regulator faces many difficulties in the regulations of private financial institutions, then the public banks can serve the role of public policy arm, giving functionality to the financial system through targeted credit policies. This strategy would be more efficient than public spending and would enhance fiscal policies. The authors argue that public banks unlike private banks are not driven by profits and do not engage in speculation. The speculative activity of private banks lead to financial crises and their profit-seeking goal leads to credit rationing during downturns even with the government bailouts, banks "would not lend out the new money, but rather use it to reconstruct balance sheets" (Marshall and Rochon, p.5). Within this context and under only private banking the impact of expansionary fiscal policy such as higher government unemployment benefits and lower taxes on aggregate demand will be hampered. "If families and businesses use fiscal stimulus to pay off bank loans, then fiscal policy offers similar results to monetary stimulus – an increase in bank profits but little increase in aggregate demand." (Marshall and Rochon, p.13). The authors accordingly, suggest the introduction of public banks as a policy tool to aid in limiting the negative effects of the too-big-to-fail private banks. The argument for directing credit policy through public banks broadens the understanding of their role beyond their countercyclical function. Thus, public banks would be part of a permanent toolkit for managing aggregate demand and finance and fund long-term investments, act countercyclically and ensure that productive investment is not held hostage to private financial sector liquidity preference.

3.2.3. Information collection and identifying areas of market and government failures

Another role played by PDBs is proposed by Fernandez-Arias et al. (2019) in their discussion on the creation of smart development banks. They argue that due to the close proximity of PDBs to investment projects, whether through the screening of projects or the direct involvement in the establishment of the project, these institutions can act as a source of information to discover possible areas of market and government failures. PDBs can be used as a tool to collect and analyze information for the designing and implementation of development policy based on defining actual market failures rather than assuming their existence, which can result in the financing of inefficient projects adopted by uneducated government development plans. They defined the main areas that PDBs can help collect information about with the direct help of private investors in the following (Fernandez-Arias et al., 2019, pp.21-22).:

i) What are the business ventures that the private sector is exploring?
ii) What type of inputs (e.g., goods, services, skills) pioneering firms need in order to develop and become viable?
iii) What are the bottlenecks that affect specific industries?
iv) What are the industries that could benefit from the experiences already acquired in other parts of the economy?
v) What economic activities can generate positive externalities or would benefit from interpectoral coordination.

Accordingly, these smart development banks can use their information database in not only defining market failures and the subsequent designing of development policies but also aid in evaluating the success of these policies at a later stage. This information collection role of PDBs would also facilitate both governance and accountability of these institutions as it would lead to more transparency and improve the measurement and assessment of their development role.

3.2.4. PDBs and SDGs

It is well-established that the achievement of SDGs needs the cooperation of countries on the global level since most of these goals are interlinked, so that a shortage in one country affects the rest of the world. On another note, a shortage in one goal affects the achievement of other goals even in a given country. This calls for that development projects be implemented in parallel with other institutional reforms and measures to guarantee that they will produce their expected social externalities. It also requires that the private sector follows and adheres to some governance rules in its investment, as government investments in development projects will not yield the expected social gain if the private investors did not alter their selection mechanism to be in line with the same goals. According to Marodon (2020), the private sector continues to invest heavily in the industries that they are well-acquainted with, even though some of these projects have negative impact on the environment and contribute to loss of nature. Despite the negative impacts of oil industries to the environment, it is estimated that investments in oil-related sectors in 2019 were almost triple the total annual amount of official development assistance directed to reducing pollution and the achievement of SDGs. Thus, the achievement of SDGs requires the cooperation of both the private and public sectors on the national level, and the cooperation of countries together on the international level. Depending on the government budgets alone to finance such transition is unattainable due to the high fiscal cost and hence there is a need for private sector engagement to guarantee the expected results. *This emphasizes the importance of the involvement of PDBs in the national, regional and international contexts*.

The earlier discussion of the functions of PDBs and the justification of their existence highlights three main reasons why the SDGs cannot be efficiently sought by governments without the help of PDBs (UN, 2021).

First, due to their *more stable capital structures*, their close relation to governments and their role in stabilizing the economy during times of crises, PDBs can take on macro-relevant risks. These risks impede development and hinder financing decisions of long-term development projects by private banks. However, due to the counter-cyclical role that PDBs play, they can take on the responsibility of financing or co-financing with the private investors long-term development projects that would be resilient during economic downturns which would facilitate the transition to sustainability.

Second, PDBs can have a catalytic role in countries with under-developed financial markets. In these countries due to poor financial systems, there is lack of information on the credit rating of investors and inefficient lending rates which contribute to difficulty in calculating the expected returns of projects for the private investor, adding to that the lack of access to banking products by the poor and marginalized. This is where PDBs can step in with their resources and in coordination with regional and international development banks to make the market more competitive.

Third, PDBs can provide the long-term funding needed for the establishment of long-term development plans needed for the transition and due to their development mandate, they can accept low profits if positive social impact is expected. Furthermore, due to their co-financing programs and long-term relations with private investors, knowledge of the local markets and barriers to investment, PDBs can crowd in private investment and direct them towards the achievement of SDGs. On climate policy finance, for example, Smallridge et al. (2012) show that climate finance funds are not sufficient to induce the needed transition, as they are directed to governments that use them to change the policy barriers with little effect on actual private investments. *Furthermore, the transition requires the coordination between different players, and these last two points stress the importance of PDBs with their knowledge of the markets, investors, investment barriers and their ability to induce private sector engagement and coordination.* PDBs can also help reduce the risk of new technologies for the private sector and thus encourage them to participate through constructing project incubators and providing other non-financial assistance.

3.3. Financial Regulations of PDBs: more or less prudent is better?

The failure of a majority of public development bank has been attributed to poor regulation. The conflict-of-interest issue is reflected in the government as both the owner of these banks as well as in control of the regulation and supervision entities that hence suffer from lack of governmental independence. It is important to balance between the government as the owner of development banks and the government as the supervisor of banks (Mazzucato and MacFarlane, 2019).

To achieve this, it is important to ensure that the government ownership does not distort the policies or regulations. One way to achieve this is to create an entity independent from the government, however reports to a legislative assembly and hence allow management complete independent operational control. The same is crucial for the supervisory bodies, which should also be independent to protect the state from reputation and credit risk and allow the private sector to operate in a competitive environment.
Public development banks requirements are not different from private banks. PDB should have independent boards, sound risk management, efficient monitoring and high levels of disclosure. It is very important to ensure that the playing field is competitive and that public banks do not crowd out private banks. In terms of capital adequacy, there is a view that development banks should be exempted all together from the Basel requirements, while others suggest that the development banks should not be exempted in their commercial activities. Credit rating is another important tool to help banks and governments to assess their financial management ability. Credit ratings are not a formal tool; however, they can complement the formal role of the regulatory entities.

3.3.1. Should DBs be regulated?

De Castro (2018) adopts the point of view that PDB should not be regulated but supervised. His point of view rests on the notion that market failures occur due to externalities, asymmetric information and low levels of competition and monopolies. He highlights that PDBs do in fact lower the risks of market failure as they reduce social and regional disparities, have a positive impact on the environment, promote technological advances and are able to provide public information and hence lower the issues of asymmetric information.

Supervision and not regulation are required to avoid systemic crises, increase the efficiency in capital allocation and to allow for consumer and investor protection. The supervision should focus on two main aspects; to verify that the credit is allocated efficiently and, that the social benefits of the projects surpass the fiscal costs associated with them. Another matter of concern for supervision is ensuring that PDBs do not practice monopoly due to their relative low interest rates compared to private banks. However, PDBs can by no means be classified as a case of monopoly, since a monopoly rests on higher prices and not lower interest rates (De Castro, 2018).

3.3.2. Is Basel regulation a suitable framework for DBs?

The Basel regulations have been under scrutiny after their failure in hindering the global financial crises. The flexibility of the Basel II framework allowed many PDB to voluntarily adhere to it, benefiting from the "quality seal "as well as the flexibility of its risk management tools. It is however important to affirm that PDB are different from private banks and hence should require different risk management tools and accordingly, Basel regulations should consider the PDB specific characteristics and adopt a more flexible specific set of regulations for them. This flexibility will not only allow PDB to pursue their developmental role but also allow them to practice their positive impact on the economy and reduce financial fragility. This can be achieved by their ability to offer stable long- term funds, lowering uncertainty, and protecting the economy from external shocks (De Castro, 2018).

3.4. PDBs best practices and good governance

The justification of PDBs and their existence relies on the existence of market failures due to information asymmetry which leads to credit rationing by the private sector and calls for the intervention of PDBs to carry on the development process. It is important to note however that providing credit will not solve this problem. PDBs demonstrate government failures which might come at great cost. Government failures related to wrong financing decisions or poor monitoring of the financed projects lead to high fiscal losses, misallocation of resources and the creation of public sector "white elephants" (Fernandez-Arias et al., 2019). Additionally, public-private financing of development projects might create moral hazard since the private partner benefits from the favorable terms offered by PDBs and the knowledge of political pressure for project implementation might lead to lax collection (Marodon, 2020).

It becomes, hence, important for PDBs to ensure that they are more efficient compared to the private sector in obtaining and analyzing information about the underlying projects to avoid government failures (Gutierrez et al., 2011; Fern´andez-Arias et al., 2019). Better information collection and analysis also aids in the accountability and governance of these banks. Poor governance in PDBs not only leads to fiscal burden, but has social costs that are difficult to calculate since most governments provide either direct transfers to these banks or guarantees on their debts. These subsidies entail social costs even for financially profitable banks, if the PDBs fail to reap the positive externalities of the underlying projects.

In order to avoid such failures, PDBs should operate within rules that guarantee their achievement of their development mandates while minimizing the direct and social cost of the subsidies granted by governments to them. *This requires PDBs to develop operational frameworks that allow them to select the worthiest development projects and ensure that they provide them with the suitable form of assistance without crowding out the private sector while maintaining financial resilience.*

According to Janine Thorne and Charlotte du Toit (2009), there are several factors that lead to the success of PDBs, namely; an enabling environment, public mandate, regulation and supervision, governance and management, financial sustainability and performance assessment. In what follows, we shed some light on international best practices of successful PDBs.

3.4.1. Clarity of the mandate

Development banks need clear and appropriate mandates. The several success stories of development banks in Malaysia, Brazil and Rwanda show the importance of flexible, well-defined and institutionally fit mandates (BAR, 2006). The mandate should have several important characteristics that include clarity, fitness, scope and flexibility (Thorne & C du Toit, 2009). In terms of clarity, the bank needs to have a clear concise mandate that will allow it to achieve the stated objectives. If the mandate is not clear or vague, the bank can drift from its main objective and lose in terms of accountability. The scope of development banks ranges from a very wide scope; which are the multi-sectoral development banks, to a narrow scope which includes the specialized development banks that focus on one sector. While a multi-sector development bank has the advantage that it can accommodate for several sectors, diversify risk across different sectors, and achieve larger benefits for the financial sector, it can be unfocused, ineffective, and more prone to political interference leading to high costs borne by the economy. On the other hand, specialized development banks are more focused, yet as they cover only projects within one sector, countries would require several specialized banks which can be a challenge in the case of small financial sectors. Hence, the choice of the broad or narrow option will be dictated by the macro-economic environment, the potential market size for the bank, and the efficiency of the supervising and regulating institutions. The changing and evolving environment in which development banks operate make the flexibility of the mandate another important characteristic. PDBs should be able to regularly revisit and adjust the mandates in order to allow them to be compatible with the developments in the economy, the development agenda and, the advances in the financial sector.

In practice, not all PDBs have clear-cut mandates. In fact, some PDBs have explicit development mandates stating the bank's role in certain sectors, while others have general development mandates underscoring the support of the bank to development plans. It is argued that banks with a narrow mandate are better aligned with their development goals as they do not lead to crowding out private banks, unlike banks with general development mandates that end up competing with private banks. Narrow and clear mandates also facilitate the overall transparency and accountability of PDBs. On the other hand, more general mandates lead to better information collection and coordination between different sectors, which creates economies of scale for these institutions (Fern´andez-Arias et al., 2019). Romero (2017) defines a clear development mandate –one of the key features of a successful business model- as one that is strong; avoiding dual or vague purposes, stable and counter-cyclical with a long-term perspective, targets finance where it is most needed or where it has the highest social return, takes care of social and environmental standards and is aligned with national plans. As mentioned earlier, public banks with no explicit development mandates were found to have a counter-cyclical role in stabilizing the economy during downturns in many countries. Accordingly, the *clarity of public mandate* can be one factor contributing to the accountability and governance of PDBs; however, it might not be necessary or sufficient since the *quality of institutions and independence from political pressure* play a major role in how the bank's policies actually contribute to the country's development.

3.4.2. Establishing a theory of change and a results chain for the projects

In order to avoid PDBs from becoming a burden on the government budget, they have to be financially sustainable while financing projects with the highest social returns. This implies that PDBs should have a framework to define and measure the social return of a project to select the best projects for investment. This social return can be in the form of rural development, expansion in SMEs, women empowerment, climate friendly projects, poverty reduction, creation of job opportunities, capacity building and knowledge transfer, and the achievement of SDGs in general (International Financial Consulting, 2017; Romero, 2017). Having identified the areas of development of a project, well-governed PDBs should be able to make the use of *a theory of change to develop a results-chain linking all the financial inputs of a project to its expected developmental outputs.* This would "*establish what should be measured and reported; communicate to stakeholders the rationale for chosen activities and how these activities lead to development outcomes; and prevent unrealistic expectations of impact directly attributable to the PDB's interventions"* (International Financial Consulting, 2017, pp.5-6). The bank and government should be aware of the costs and benefits of the various development projects in order to be able to take the correct decisions and perform efficiently. Project assessment must cover two main aspects:

1- Outreach (Thorne & C du Toit, 2009): covering the depth and breadth of the service, the cost and benefit, how many will benefit from it and for how long.
2- Financial sustainability of the services provided to the project.

3.4.3. Monitoring and evaluating the projects post financing

A successful PDB should establish a monitoring and evaluation department to measure the actual impact of the project post finance. Thus, while the theory of change defines the expected development impact, the monitoring and evaluation department measures the actual impact and guarantees efficiency and good governance. This is particularly important since as argued by Fernandez-Arias et al. (2019), PDBs might be too pressured by their financial resilience that they become more concerned with it than with - the more difficult to measure- development mandates and hence end up functioning like private commercial banks. Measuring and evaluating the development impact of projects post finance can allow banks to judge their success and weigh the development and financial returns against the financial costs. It also allows the bank to anticipate problems and intervene early in the project implementation to ensure the achievement of the anticipated results. Monitoring allows the bank to make sure that projects comply with the development objectives and environmental standards of the bank and projects not complying with the bank requirements should not receive more funds and the bank should have the right to stop supporting projects that do not abide by development goals (Romero, 2017). Best practices suggest that PDBs should use *scenario analysis to calculate the expected effect of policy changes on the output and impacts of a project and hence expect problems and intervene early enough to aid the investors and avoid the failure of the project.* This also aids in decision making and helps in creating a database that can be used to crowd in private investment and guide government plans. The development impact indicators used by PDBs may be linked to specific government policies, specific bank programs, influenced by donors, or can be macro-economic indicators (International Financial Consulting, 2017).

Publicizing the results and actual impacts post financing adds to the transparency and accountability of the bank and helps in crowding in private investors to new sectors. In this regard, it is important to stress that the accuracy of the publicized information is key to financial sustainability of the bank. Poor governance practices to manipulate publicized performance indicators include publicizing only expected returns and not actual returns, non-prudent regulations of provisioning for expected and unexpected losses and, more forbearance with non-performing loans, while "*best-in-class PDBs take a sober view of the NPLs to determine the main reasons for the non-performance: Quality of credit underwriting? Political interference? Borrower perception that the PDB is "government"*" (International Financial Consulting, 2017, p.8).

In addition to the above-mentioned best practices, it is important to note that the socio-economic environment plays a major role in the success and sustainability of PDBs. While the mandate of the development bank is usually to improve the economic situation in the country where it operates, *it is nearly impossible for a development bank to operate efficiently when countries have major problems in their economic and political systems. In order to be successful, resilient, and sustainable, PDBs need efficient prudent regulation, proper infrastructure, and independence from political manipulation.* They also require a stable political environment and well-functioning legal and supervisory entities that allow the banks to play their important role in both the financial sector and development (De la Torre, 2002 and; Bruck, 2005).

4. PDBs in Egypt over the last decade.

Egyptian national banks have long played a vital role in Egypt's economy throughout the years, especially during crises where the whole economy was put under pressure. The role of public commercial banks is not limited to offering commercial services but those banks do equally fulfill several developmental mandates.

Public banks engagement in development projects has been known for years but has been reinforced and is recently connected and empowered by the government's recent efforts towards sustainable development and sustainable finance. The CBE has taken initiatives in this respect in the fields of promoting and subsidizing loans to SMEs, industrial, agricultural, and housing projects, mortgage finance, and the vehicle substitution initiatives, which targets environmental protection and controlling carbon emissions (CBE, 2021). The CBE principles on sustainable finance sets the guidelines for all Egyptian banks operating in Egypt towards achieving sustainable finance, and accordingly SDGs. These include six main principles to create sustainable finance; meaning creating a banking system that supports environmental protection and takes into account the social elements of projects, along with good governance and reporting policies. These principles are:

- Building the necessary capabilities and knowledge.
- Enhancing sustainable finance.
- Involvement of all stakeholders.
- Managing climate change risks.
- Applying the principles of sustainability to the bank's internal activities.
- Reporting.

Moreover, public banks, under the auspices of the CBE, do engage in corporate social responsibility (CSR) activities, which aim to address the most critical issues of community needs such as Education, Health, Housing, Debt Relief, Women Empowerment and Disability Integration in order to ensure quality of life for all Egyptian citizens. Such community roles are rather humanitarian than developmental, though they can contribute to development through different indirect channels.

The biggest national Egyptian banks in terms of activity and market share are National Bank of Egypt, Banque Misr and Banque du Caire. Banks generally follow the Central Bank's directives regarding lending rates and national strategies. Financial inclusion and entrepreneurship are among the key priorities on the current national agenda; therefore, one-fifth of national banks' lending portfolio are now directed to SMEs. Furthermore, banks have upgraded their digital banking systems in response to COVID-19 pandemic where internet banking has become essential in carrying out banking transactions.

Before presenting a detailed analysis of these banks, it is important to note that Egypt is endowed with some public development banks (that are not commercial) but whose role is rather limited (with the exception of the National Investment Bank, see Appendix 1). These banks are:

1) *National Investment Bank* whose role is to finance and follow-up projects of the national plan for economic and social development through either sharing or lending such projects as well as following up the implementation of those projects.
2) *Egyptian Agricultural Bank*: that provides the necessary support and financing to farmers for all types of crops and all activities related to agriculture, as well as providing all banking services, financing projects, natural gas, and biogas loans, especially in the countryside.
3) *Nasser Social Bank*: whose role is to achieve social solidarity for all members of the society to have a decent life and to achieve social and economic development among citizens.
4) *Housing and Development Bank*: whose key mandate is to finance moderate housing units for Egyptian inhabitants while bridging the gap between supply and demand in the real estate market.
5) *Industrial Development Bank*: that offers its services in economic and development activities and projects, besides savings vessels with multiple advantages, and providing the foreign currencies necessary for importing raw materials, machinery, and equipment.
6) *Export Development Bank of Egypt*: its mission is to boost and facilitate the access of Egyptian products to markets worldwide in all sectors.

Yet, as it was mentioned before, the role of these banks from a development perspective is rather limited given that most of the development-related activities are implemented by commercial banks that are government-owned. This section analyzes the largest three banks that dominate the market. The order of presenting them pertains to their size and market share.

4.1. National Bank of Egypt (NBE)

The National Bank of Egypt (NBE) is the largest and oldest financial institution in Egypt. Established in 1898, NBE's mission is to maximize the efficiency of financial intermediation and promote financial inclusion while safeguarding depositors' funds and maximizing returns to shareholders. NBE contributed to Egypt's comprehensive economic reform program since 2016 as a key player for the monetary and fiscal policies by availing the necessary domestic resources and foreign reserves. Following the floatation of the Egyptian currency, NBE offered high interest rate investment certificates with a total of EGP 545 bn. Additionally, NBE offers a variety of retail banking lending services that are in continuous expansion. In 2019, NBE extended its outreach by opening 38 new branches, established 101 new ATMs and attracted 1.4 mn new customers (NBE, 2020).

Sustainability is a key principle in NBE's business strategy, which is in line with the UN Sustainable Development Goals (SDGs) and Egypt Vision 2030. Among NBE's strategic priorities are financial Inclusion, SMEs support, e-commerce, empowering youth, green financing, and community investment. NBE also contributes heavily to social responsibility[8] in the areas of healthcare, education, slums development, among others. NBE's total donations increased by 70 % year-on-year reaching EGP 2.6 bn in FY2019/2020. NBE supported families suffering from personal debt burden with EGP 75 mn in tandem with Misr El Kheir foundation.

NBE's lending facilities to the private and public sectors constitutes one of the main channels through which the bank contributes to Egypt's economic development. NBE total investment portfolio across Egypt's economic sectors accounted for EGP 583.6 bn in 2019. NBE private corporate portfolio reached EGP 143.9 bn in 2019, out of which EGP 96.4 bn are directed to the production sector, and EGP 47.5 bn to the service sector, which conforms to CBE initiatives towards industrial deepening. More recent figures show that in H1 2021, NBE's top financing contributions were for the 'Mining and Quarrying', 'Construction and Real Estate' and 'Food and Beverage' with total values of EGP 304.8 bn, EGP 210.4 bn and EGP 40 bn, respectively. Table 2 presents a number of development projects partially or fully financed by NBE that target different economic sectors such as the construction, infrastructure, and transport sectors.

[8] NBE lunched the first ever "Corporate Social Responsibility (CSR) Unit" in the Banking Sector in Egypt.

Table 2: NBE's financing contributions to private and public development projects across sectors

Project	Sector	Description	Amount
Egyptian Chemical Industries Company (KEMA)	Feltilizer Industry	NBE supported the Egyptian Chemical Industries Company (Kema) in the implementation of its expansions through providing approximately 30% of the required finances.	EGP 532.4 mn + USD 88.4 mn
Sidi Krier Petrochemical Company SEDPEC	Petrochemical Industry	NBE supported Sidi Krier Petrochemical Company in the partial payment of the company's gas supply bill, as well as other credit facilities for the company's investment in expansions & financing of major operating needs.	EGP 500 mn
Bahr Al-Baqr Water Treatment Plant	Infrastructure	NBE contributed by 44% of the required finance for the construction of Bahr Al-Baqr water treatment plant.	EGP 4 bn
Social Housing Finance	Construction	NBE partially financed infrastructure projects in the new administrative capital through providing the required funds to the New Urban Communities Authority. NBE also supported the Social Housing Finance Fund to support in providing proper low-income housing category since April 2018.	EGP 3.2 bn
National Railway Authority	Transport	NBE provided finance facility to the National Railway Authority as part of a joint facility for GENERAL Electric to supply locomotives, spare parts, & technical support.	USD 575 mn

Source*: Constructed by authors using 2020 NBE Sustainability report.*

One of the bank's main mandates is to promote and support small and medium enterprises (SMEs); offering both financial and non-financial services. The total SME loan portfolio in relation to the bank's overall portfolio grew from 19.9% in H1 2019 to 27% in H1 2021. NBE signed two cooperation protocols; one with the Arab Academy of Science, Technology & Maritime Transport amounting for EGP 2-4 mn and the other with Danone-Egypt as part of "Al-Omda" project amounting for EGP 7.5-10 mn to support and enable young entrepreneurs to establish startups.

NBE provides a set of specialized financing programs to foster a number of industrial activities including the plastic recycling projects, marble workshops and factories in Shaq El- Teaban. Other financing programs target the service sector's activities, among which the Veterinary services program and Al-Ahly program for hotels and resorts. SMEs specialized in agriculture related activities are eligible for a variety of financing programs, such as livestock-raising projects, agricultural development programs using solar power applications and agro-processing programs.

NBE does equally provide non-financial services to SMEs through "Nile Preneurs" project, which is a nationwide initiative powered by the CBE with the aim of offering business development services (BDS), training and consultancy services and mentoring services to SMEs. "Youth in Business (Yib)" initiative is designed by NBE and the European Bank for Reconstruction and Development (EBRD) to support distinguished young people to create their own SME by acquainting them with the necessary technical and managerial skills. Another non-financial program initiated by NBE is the "Skills in Business" where consultancy services in the areas of HR management are provided to SMEs at affordable costs. Moreover, the national bank of Egypt supports green economy projects via its "Green Economy Finance Facility (GEFF)" program that provides free technical and consultancy support for green economy projects.[9]

4.2. Banque Misr (BM)

Another key player in the Egyptian banking sector is Banque Misr (BM) whose 687 branches are distributed across Egypt offering a variety of corporate, retail, investment banking and Islamic banking services. BM's mission is to facilitate access to affordable and reliable banking services for all Egyptians as well as ensuring inclusive and sustainable development for the national economy. It plays a vital role in supporting different industries within the national economy serving a large base of more than 10 million clients in Egypt, with a total paid-up capital amounting to EGP 15 bn[10].

BM offers vital support to the economy at large through its lending activities both to public and private sectors. BM has facilitated funds for the development of the New Administrative Capital and the renovation of Egypt's road network as well as affordable housing projects. Moreover, BM extends credit across Egypt's economic sectors, including the petroleum, energy, electricity, gas, telecommunication, real estate and construction sectors where the bank's total loan portfolio reached EGP 584 bn in FY 2020/2021[11]. As shown in Table 3, BM was part of different development projects over Egypt's main

[9] More details on the different NBE financial and non-financial initiatives for SMEs and their respective eligibility criteria and required documents are accessible on NBE website https://www.nbe.com.eg/.
[10] Banque Misr. Banque Profile. Accessible via: Banque Profile (banquemisr.com).
[11] Data for FY2020/2021 are preliminary.

economic sectors and areas such as manufacturing, agriculture, infrastructure, health care, renewable energy, among others. The highest share of BM's contributions in 2020 was in the manufacturing sector with a value of EGP 73.9 bn, followed by the agriculture sector (EGP 6.9 bn), Infrastructure development (EGP 1.9 bn) and Health care (EGP 1 bn).

Table 3: BM's financing contributions to development projects across sectors in 2020

Sector	**Value (EGP mn)**
Manufacturing sector	73972
Agriculture sector	6869
Infrastructure development	1880
Health care	1020
Rural areas development	502
Education	299
Clean and renewable energy	72
SMEs	39
Women empowerment	20

Source: *Constructed by authors using data from Banque Misr*.

BM follows CBE directives with regards to certain national objectives such as promoting SMEs, financial inclusion, entrepreneurship and innovation. Financial inclusion is considered as a strategic priority on BM's agenda for promoting sustainable development and social welfare. Integrating marginalized communities and encouraging financial literacy will help ensuring a better understanding of financial products. BM has adopted different channels to promote financial inclusion, among which the organization of workshops and events on financial awareness for youth and unbanked groups during the international financial inclusion week.[12] Other programs also target youth by offering different banking services, including Teen Card, BM Card and Go Card. Moreover, BM launched "Amman El Masreyeen" certificate of deposit for temporary and seasonal

[12] Banque Misr. 2020. "Annual Sustainability Report (2018/2019)". December.

employment insurance and low-income segments as well as “Tahweesha Bezyada”, a saving initiative that aims to support small savers.

As part of its sustainable development agenda, BM supports and empowers SMEs through a number of initiatives to facilitate access to financial services and increase the share of SMEs in the bank’s lending portfolio in line with the CBE directives. In this regard, BM offers a wide range of lending and cash management services to SMEs where around 420,000 businesses are receiving financing from the bank. BM also takes part of the national initiative ‘Nile Preneurs’ and offers business development services and training to young entrepreneurs in order to enable an innovative environment. In cooperation with the Egyptian Banking Institute, BM launched ‘Mashrouak’ initiative to promote young entrepreneurs in establishing small and medium-sized projects by presenting effective methods in dealing with banks in order to meet financing needs.

The Bank’s SME Portfolio reached EGP 31 bn in FY2019/2020, compared to EGP 19 bn in FY2018/2019. BM signed a cooperation protocol with the Ministry of Local Development that enabled to finance 77,367 clients with a total value of EGP 6.3bn. A second cooperation protocol was signed with the Damietta Furniture City company to finance, modernize and stimulate exports of SMEs specialized in the furniture production. Through this protocol, the bank funded 149 projects with a total value of EGP 82.5m. Additionally, BM signed a program with General Electric Healthcare to provide innovative financing solutions that help emerging clinics and hospitals develop and expand their business, thereby providing better healthcare to more patients across Egypt.

Furthermore, BM promotes women empowerment through its partnership with the International Finance Corporation (IFC) to help increase the number of women-led businesses receiving financing from BM as part of its SMEs portfolio.

On a final note, BM contributes to community welfare through its active role in social responsibility where the bank’s total expenditures on CSR activities amounted to EGP 760 mn in 2019. Among the bank’s CSR efforts is the renovation of “Sanofar” primary school in Al Faiyum, which serves 1800 students annually.

4.3. Banque du Caire (BdC)

Banque du Caire (BdC) is one of the major public commercial banks in Egypt with a network of 241 branches across the country and serving more than 3.2 million clients. The bank contributed to Egypt’s economy during several decades by offering a full range of products and services across the economy's key sectors. BdC's total loan portfolio increased by 17% in 2020 to reach EGP 92.8 bn, compared to 2019. Furthermore, BDC is among the biggest contributors to national projects such as "Tahya Masr Fund" earmarked for the new Arts and Culture city within the New Administrative Capital.

In line with CBE directives, BdC attaches a vital importance to Financial Inclusion by building up its microfinance portfolio and customer base. BdC holds 25% of the microfinance market share in Egypt's banking sector, with 40% of the lending portfolio granted to women and 50% to rural areas. Moreover, BDC launched the first Digital Lending program in the Egyptian banking sector where microfinance clients are able to obtain loans electronically.

BdC offers a number of financing services to SMEs including soft loans, cash management, treasury and leasing services. The SME loan portfolio increased by 27% year-on-year to reach EGP 8.9 bn in 2020 and amounting to 10% of the bank's total portfolio.

Additionally, the bank extends non-financial services via three Business Development Services Hubs in Delta & Upper Egypt. In cooperation with Nile University, BdC sponsors the capacity building and educational activities provided to SME clients though the Export Excellence Center with the aim of enhancing their export business capabilities. Furthermore, BdC signed a financing agreement with the European Investment Bank (EIB) to provide SMEs with new lines of credit with lower cost and flexible repayment schedules.

In cooperation with Misr El Kheir, BdC developed the "Youth Training and Rehabilitation" program with the aim of empowering youth and providing them with the necessary skills to ensure their employment in the Egyptian labor market. Through this initiative, Banque du Caire succeeded in supporting 210 young men and women (aged 18-35) in Sohag via providing them with adequate training, enabling them to obtain a stable source of income and reducing therefore the youth unemployment at the national level.

BdC is also involved in corporate social responsibility activities. "Masdar Rizk-source of income" programme was initiated by the bank in partnership with Al Hassan foundation to empower wheelchair users and help them develop their talents allowing them to participate in the economy and earn their own living. Additionally, BdC issued 724 Aman certificates to provide insurance cover for widows and divorce single moms in Beni Suef governorate.

One of the bank's top sectors of priority is the health sector. BdC has participated in the renovation of many university and governmental hospitals across different governorates by supplying them with medical equipment. BdC has also supported the 57357 children cancer hospital and participated in the national campaign to eliminate Virus C by offering several donations. Moreover, BDC offered financial donations to Dr. Magdy Yaqoub Foundation for the treatment of heart patients in Aswan and contributed to the completion of the third phase of Shefa El Orman Hospital in Luxor.[13]

5. Public banks' framework of operations, policies, and governance

The previous section highlighted the size and role of public banks in the Egyptian economy. In this section and building on the determinants of public development banks discussed in section 3, the paper attempts to analyze to what extent public banks in Egypt undertake the role of development banks. The analysis is based on a bank survey conducted with the public banks.

5.1. Survey Methodology

Building on the determinants of development banks listed by Kovachev (2013) earlier in section 3 of this paper and the definition of PDBs adopted by Xu et al. (2021) and the Finance in Common definition of PDBs, a survey of 25 questions has been formulated and distributed on public banks. The main objective of the survey is to determine to what degree public banks in Egypt can qualify as development banks in light of their actual market presence and dominance in government's development projects as highlighted in section 4. The survey questions cover three aspects namely; legal status independence and autonomy, role of the government, and clarity of the public mandate. The first two aspects tackle the independence of the banks from the government in their sources of finance as well as their financing decisions. The third examines whether these banks are obliged by their mandates or the government to support the development process in the economy. The survey also addresses the bank's role during economic crises; one of the main roles of development banks and their main argument for existence. In addition, the survey also addresses the efficiency and governance of operations of these banks in light of best practices highlighted in section 3.4. All survey questions are short answer questions to be answered with either yes, no, or n/a to be filled by representatives from the banks. The survey questions were sent to representatives from the public banks by email and zoom meetings with the representatives were then conducted to follow up with discussing the questions and the main objective of the survey. The discussions were fruitful in adding

[13] More information on Banque du Caire activities and contributions are available on: https://www.bdc.com.eg/bdcwebsite/sustainability/our-activities.html

more illustrations and details to further elaborate the short answers to the survey questions. The discussions were also important to ensure the proper understanding of the underlying questions and their goal and avoid mis-interpretation of the questions. The survey questions along with the responses received are attached in Appendix 2 of the paper. The analysis has been focused on the two main public banks with the largest market shares namely; the National Bank of Egypt and Banque Misr.

5.2. Survey Results

5.2.1. Legal status independence and autonomy

PDBs should enjoy independent legal status and financial autonomy. The responses of both Banque Misr and the National Bank of Egypt both confirm the legal independence of these banks and their autonomy in project financing decisions. The banks government ownership does not interfere with their decisions in project selection, assessment, and monitoring. This finding should, however, be taken with caution as public banks in Egypt are the main dealers in the primary dealers system whose role is to finance treasury bills and bonds and hence these banks play an important role in financing government securities. Thus, while legal independence can be established from the survey, actual independence can be questioned. Moreover, it is important to distinguish between the laws and rules promulgated by the Central Bank and the internal policies (such as credit and risk policy) that are determined within each bank. Indeed, all banks are bound by all the rules and regulations by the CBE but the credit and finance decisions are made by their own management according to the policy applied in each sector.

5.2.2 The Role of the government

According to Xu et al. (2021) definition, PDBs are controlled and supported by governments. The six survey questions denied the existence of any role of the government in both Banque Misr and the National Bank of Egypt rather than ownership. The government does not seem to inject funds, or contribute in financing the bank’s activities or aid in NPLs (which are already very low). The central government does not use the bank as a financial arm to finance development projects by directly subsidizing loans to favorable projects. It is noteworthy here to mention the CBE initiative with regards to the achievement of SDGs which states that banks should increase and encourage “finance or investment in projects that take into consideration the elements of Sustainable Finance and that achieve sustainable development”. The initiative calls for cooperation among all stakeholders in the issue including central governments but applies to all banks equally. In this case, public banks do not have advantage in terms of government support, although the active engagement of Banque Misr in the execution and commitment to the initiative in the forthcoming future is stressed during interviews held in the preparation of this paper.

5.2.3. Clarity of the public mandate

Explicit clear public mandate that states the bank's role in development such as those related to SMEs, infrastructure, women empowerment, housing, entrepreneurship, financial inclusion, green energy and other SDGs, is one of the determinants of PDBs. Having a clear and explicit mandate also has its advantage in terms of PDBs accountability and governance. Both Banque Misr and the National Bank of Egypt emphasized during interviews that they are purely commercial with no explicit/implicit development mandates. All three public banks engage in commercial banking activities and control a major market share in the Egyptian financial sector. Yet, in addition to their actual presence and dominance in development projects as illustrated in section 4, the responses of BM and NBE to some survey questions were of particular interest. Both banks confirmed that some financing decisions reflect general direction towards the financing of projects that serve the development plan of the government. In addition, being committed to the CBE principles on sustainable finance, both banks confirmed that the projects' effects on the environment affect financing decisions and financing terms. During interview discussions of the survey questions, BM representatives that have been interviewed referred to the bank's commitment towards environment-friendly projects in terms of the financial initiative of the UN's environmental program for launching "Responsible Banking Principles", targeting the realization of sustainable development and the social and environmental responsibility of institutions. The interview discussions also proudly referred to BM compliance with the Global Reporting Initiative (GRI) standards on its reporting framework in terms of governance, human rights, combating corruption, community engagement, in addition to environmental protection and safety. While these guidelines shape the banks policies, some challenges are still ahead in terms of defining and measuring the environmental effects with accuracy, an argument that was both brought up during interviews and is reflected in survey responses. The same goes for NBE that stated that they are still in the process of preparing an Environmental &Social Management System.

The three public banks played an important counter-cyclical role in the Egyptian economy. While this is not a developmental role, however, it is one of the arguments for the establishment of a PDB and one of its main roles in an economy. While the survey responses received from BM and NBE only state explicitly that the banks expanded credit during economic downturns with the intention of boosting the economy, public banks' counter-cyclical role can be evident from their portfolio expansions as indicated by data on SMEs portfolio and total assets post-COVID-19 crisis in section 4. This provides evidence to the view that public banks without explicit development mandates can have a counter-cyclical role.

5.2.4. Bank governance

BM response on this part of the survey comes in line with their previously mentioned commitment towards GRI standards. The bank is committed to publicize both expected and actual impacts of financed projects in periodical publications. *The bank is also committed to monitoring projects post finance in line with best practices discussed in section 3.4 despite the non-existence of a department specialized in monitoring and evaluation or a model for project selection.* These issues pose however some limitations and challenges ahead of BM towards achieving better governance. For NBE, the bank confirmed having a monitoring and evaluation department but only publicize actual evaluations of projects after customer's consent. In terms of NPLs management, both BM and NBE stated during interviews that no NPL receives favorable treatment regardless of its objective being developmental or not, owing to the commercial nature of these banks.

6. Lessons learned from the Egyptian realities and the challenges ahead of PDBs

In March 2020, the World Health Organization (WHO) announced the outbreak of COVID-19. The global spread of the pandemic led all sectors of the economy to severe tests for survival, especially the banking sector, which had to undergo the most difficult tests. This is due to several reasons, most importantly due to the upsurge in demand for credit by businesses, hit by economic turmoil and struck by lengthy lockdowns; and consumers who lost their jobs, or had to work for lower hours and decreased salaries. Initially, all the banks suffered tremendously, yet within few months some banks managed to cope better than others. Several factors can help banks absorb unanticipated shocks. One factor is the concentration of assets in loans to households and businesses, and the second factor is how much capital banks hold to handle losses (CRS, 2020).

The Egyptian Banking sector at large is well capitalized to absorb expected credit losses with a minimum capital adequacy ratio set by the CBE at 12.5%, and an actual average capital adequacy ratio of 19.5% in 2020 (CEIC, n.d). Another good indicator for the resilience of the Egyptian banking sector is the relative high bank liquid reserves to bank assets ratio of 34.6%. The percentage of non-performing loans (NPLs) in the Egyptian Banking sector in 2021 reached 3.5% of the total loan portfolio of banks. This percentage ranges from 2.2%-2.6% for the National Bank of Egypt, Bank Misr and Banque du Caire. It is worth noting that National Bank of Egypt and Bank Misr were positioned at rank 9 and 10 respectively of the safest banks operating in Africa (Global Finance, 2021). It is worth mentioning that this is in line with the adoption of Basel III principles (Nguyen,2019), which was mainly initiated by the Global financial crises The Basel III framework aims to strengthen the quality and quantity of the regulatory capital base and to apply new minimum capital adequacy ratios (leverage ratio, common equity, countercyclical capital buffer ...etc).The main role of these ratios is to contain the abilities of banks to take excessive risks (Ashraf et al., 2016). This will enhance the stability of the banking system and improve the resilience of the banks risk profile through the introduction of new minimum standards for funding including liquidity coverage ratio and the net stable funding ratio (BCBS, 2017).

Recent regulatory developments in Egypt:

a- Set a limitation of $50,000 on the monthly cash and / or wired deposit amounts in foreign currencies for individuals and corporations

b- TheCentral Bank of Egypt (CBE) has also decreased the maximum concentration ratio per client from 20% to 15% of the bank's tier one capital. The maximum concentration ratio per client and its related parties has also been decreased from 25% to 20% of the bank's tier two capital.

c- CBE has also gradually increased the total capital adequacy ratio to 12.5%

d- CBE has introduced the capital conservation buffer to cover bank losses in the case of crises and to protect the banking sector

Starting January 2022 the banks in Egypt will begin applying Basel IV (CBE, n.d)

On another note, various recent measures have been adopted by the CBE to contain the negative effects of COVID -19 on the economy, and include (CBE, 2020):

- Several cuts in overnight deposit rates.
- Deferring all customers credit dues, implementing loan restructuring and assisting customers to decrease their credit risk.
- Encouraging the use of electronic payment methods through a transitional period of lower or no fees and increasing limits.
- CBE's new law allows banking licenses to fintech firms.
- Promoting Banks to finance strategic imports especially food commodities.
- Reduce the interest rates on CBE initiatives including mortgage finance for middle -class housing, industrial, construction and, agricultural private sector initiatives.
- Support the tourism sector through multiple measures.

It is important to analyze how the three banks handled the effects of COVID -19. The National Bank (General Meeting, NBE, Monday 12.4.2021) achieved net after tax profits of EGP 13.1 bn in June 2020. The total financial position exceeded EGP 2 trillion in June 2020 and EGP 2.5 trillion by the end of March 2021.This was also reflected in a high level of equity for shareholders.

Based on the interview with NBE, it was evident that the bank's highest priority is to enhance digital banking services, especially to ensure public health standards and maintain social distancing in all branches. Although digitalization was initiated long before COVID-19, the pandemic has served as a catalyst for the increase in digitalized delivery alternatives. This resulted in an increase in the number of NBE's internet banking "El Ahly net" users to 5.6 MM (March, 2021).

During the pandemic NBE has also provided substantial credit to the tourism sector (EGP1.57 bn) and (EGP11.6 bn) to the industrial sector. This reflects the important role of NBE as a PDB that serves as a vehicle in promoting industrial policy, which is essential for growth in both developing and advanced economies. Even if financing is concentrated in large projects, they bear spillover effects on the rest of the economy (Hopewell, 2017).

NBE has learned from previous crises and performs regular stress testing since the 2011 revolution. This is an important tool to assess the effect of COVID-19 and to mitigate risk.

NBE has enjoyed very low levels of NPLs and manifested the ability to be prepared for a crises and act accordingly.

Also, NBE promotes SMEs which are the true vehicle for development is Egypt, and follows the CBE's directives with regards to supporting SMEs, which is an important vehicle in achieving growth.

NBE and Bank Misr and Banque de Caire are three main players of the primary dealer system, established in 2003, in charge of financing treasury Bills and Bonds through underwriting the initial offering of the government securities in the primary market. This role is not directly linked to development, yet banks perceive it as an important role they play in funding the government, which will then be able to finance development projects. From the perspective of the banks they enjoy complete impendence from the government, and they consider themselves public commercial banks.

NBE also follows the directives of CBE in terms of financial inclusion, which has been achieved with the adoption of several innovative methods and the use of fintech to provide several alternatives for payment. This was reflected in an upsurge in the internet banking subscribers to 5.6 mm, and the increase in the total number of ATMs in June 2020 to 4712 and even reached 4,953 ATMs in March 2021. Furthermore, the number of POS machines in currently 485,962 up from 314,372 in June 2020.

Bank Misr suffered a moderate contraction in profitability due to COVID-19 by EGP 344.2 million in the 2020-2021 fiscal year, reaching EGP 10.70 billion from EGP 11.05 billion at the end of the previous fiscal year (General Meeting, Bank Misr, 2021). Based on our interview with Bank Misr they highlighted that their main priority is financial inclusion. The data confirms this focus, with the increase in credit cards at the bank, that recorded

EGP 1.728 billion by the end of June 2021, compared to EGP 1.119 billion at the end of June 2020. On another note, personal loans increased to EGP 65.76 billion by the end of June 2021, compared to EGP 43.606 billion at the end of June 2020.

Bank Misr as explained earlier has substantially contributed to SMEs. The general assembly's results showed a rise in the value of the SME portfolio to EGP 37.7 billion pounds as of June 2020 compared to EGP 23.9 billion in June 2019. Based on the interview with Bank Misr, they highlighted that they have still a lot planned for SMEs in terms of conventional loans, and mortgages. Another priority for the banks is women empowerment, and a broader outreach to underdeveloped areas through several means i.e. the increase in branches and ATMs. Bank Misr has the largest branch network with more than 700 branches and units across Egypt, with a sophisticated network of 3000 ATM machines by the end of December 2020.

Banque du Caire managed the COVID-19 crisis with the use of numerous risk management tools including a business continuity plan. As a result of the uncertainty caused by the outbreak of the pandemic, Banque du Caire used different models applying quantitative and qualitative factors to measure credit risk of their portfolio investment in all sectors of the economy.

In terms of financial inclusion, Banque du Caire stablished the digital and electronic payments company after obtaining the necessary approvals from the regulators (General Assembly, 11 July 2021).

In summary, the role of the three main public banks in Egypt (NBE, BM and BdC) as development bank is transmitted through three main channels; first and foremost their role as stabilizers, second their input in promoting SMEs and third their part in enhancing financial inclusion.

Their role as stabilizers to maintain economic stability in times of crisis was evident in the COVID-19 crisis. The resilience of the banks in times of the crises is crucial for the overall stability of the economy. COVID-19 crisis would have been worse had the banking sector not been able to absorb the shocks with the available buffers in terms of capital and liquidity. The countercyclical role of these banks reflects their important role in times of crises.

It is also clear that the three banks have played an important role in promoting SME’s, as they have contributed to projects in all sectors of the economy. The three banks have also followed the directives of the Central Bank in terms of enhancing financial inclusion through digitalization and various innovative fintech tools.

There are many lessons learned from the COVID-19 crises that will serve to help face other challenges in the future:

1- Development banks can only play their important role if they have independence, flexibility and expertise. The mandate of development banks is of lesser importance.
2- It is important to understand the factors that has contributed to the different outcomes of COVID-19 on the different banks. The variables include capital, liquidity and the legal and regulatory framework.
3- Stress testing is an important tool to mitigate risk. The introduction of stress testing since 2011 has enabled the Egyptian banks to react to several shocks including COVID-19. After the pandemic stress testing can focus on the effects of political challenges, economic fluctuations and natural disasters.
4- COVID-19 has accelerated the complete adoption of digitalization. It is important in that context to have the regulatory frameworks to protect banks and customers from various cyber threats. While the Financial Regulatory Authority (FRA) has drafted a law to regulate non-banking fintech operations such as nano-finance, consumer tech and insurance tech, the Central Bank of Egypt has not taken visible steps in this direction for the banking sector.
5- Financial resilience is crucial to protect banks and the banking system. Building capital is not an option but a necessity. Liquidity is also of utmost importance, yet the optimal level of liquidity must be determined in order not to suffer from idle money and to avoid credit crunches.
6- The application of a flexible prudential regulation framework to allow banks to operate freely and still maintain high levels of financial resilience.
7- Banks need to apply cost-cutting programs without negatively affecting their relations with their customers.
8- The application of Basel IV principles is a further step in the right direction
9- The future of banking sector will be different and all banks have to equip themselves with all the requirements of the new era, which requires technological infrastructure and knowledge of fintech and sufficient training on all the new financial tools.

7. Conclusion

The aim of this study is to examine how the three main public banks in Egypt namely National Bank of Egypt, Bank Misr and Banque du Caire have played the role of PDBs. In addition, we analyze the ability of the banks and the banking sector to deal with crises and disruption caused by COVID-19. We use the data provided by the banks and the results of a survey to analyze the role of the banks in development and to arrive at a number of lessons learned in how they were able to deal with COVID-19 turbulences.

Our findings suggest that National Bank of Egypt, Bank Misr and Banque de Caire are the important stabilizers to maintain economic stability. They played an important role in mitigating the negative repercussions of COVID-19 on the economy. Their financial resilience is based on high capital adequacy ratios and liquidity. The three banks also contribute to development through their pivotal role in promoting SMEs and various projects in the economy. The banks also play a prominent role in enhancing financial inclusion through digitalization and the application of innovative tools.

These three main roles in terms of maintaining financial stability, promoting SMEs and enhancing financial inclusion allow for the characterization of the public commercial banks as public development banks.

The future of banking after COVID-19 will be different, the lessons learned from stress testing, mitigating risk and acquiring financial resilience should serve as main instruments to deal with future challenges. The future of banking will depend heavily on digitalization and fintech and hence requires institutional and regulatory frameworks that will allow banks to reap the benefits and minimize the costs.

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Appendix 1. Development Banks in Egypt

I- Export Development Bank of Egypt

The Export Development Bank of Egypt (EBE) is an Egyptian Joint-Stock Company established in 1983 under Law 95 of 1983. Its mission is to boost and facilitate the access of Egyptian products to markets worldwide in all sectors. The authorized capital of the Bank is EGP 5 billion, and the issued and paid-up capital amounts to EGP 2,728 million. Its primary vision is to provide and maintain its diversified services and products at a high quality through its well-spread network of branches and ATMs placed throughout Egypt along with its network of corresponded banks abroad. One of the main business lines and activities of the Bank is the Corporate Banking and Loan Syndication Activities providing diversified finance packages including medium-term loans, short term lending to finance working capital requirements for various economic sectors. In addition, EBE is committed to promoting the SME sector, in line with the 2005 IFC Agreement Sustainability Goals.

Since its foundation, the Bank has managed to preserve its identity as a commercial and investment bank. Through its strong performance and policy, based on diversified investments, the Bank was able to grow more. The bank resorted to the opening of new branches and gathering deposits to meet its main goal of establishing and boosting a solid export sector. For instance, the bank affirmed its geographic presence in export-oriented locations like Alexandria (opened in May 1989) and the Tenth of Ramadan (September 1989). Also, with the beginning of the financial reform in 2004 following the amendment of Central Bank Law, as well as The Banking Sector and Money Law no. 88/2003, Central Bank reclassified all banks giving them more freedom to expand and to promote more products. Accordingly, the network of branches had increasingly expanded to 21 branches in March 2012. The Bank currently in 2021 operates through 38 branches with 6 new branches expected to open during the new fiscal year. The Bank aims to reach 58 branches by the end of 2022.

According to the Financial annual report for FY 2019/2020, The Bank’s activities and services have witnessed significant development reflected in growth rates of its loans portfolio, deposits and net profits that exceeded one billion Egyptian Pounds despite the severe slowdown in the global economy by COVID-19. Net profits reached EGP 1.14 billion by the end of the fiscal year 2019-2020 compared to EGP 1.51 billion year-over-year. Moreover, total assets grew to reach EGP 56.7 billion, with an increase of EGP 6 billion and a growth rate of 12% over the previous year. This was driven by growth in the portfolio of net loans and advances by EGP 6.1 billion to reach EGP 31.3 billion at a growth rate of 25% over the previous year. On the other hand, total deposits portfolio increased by EGP 3.7 billion to reach EGP 44.3 billion at a growth rate of 9%, which reflected positively on the loans to deposits ratio of 73.1% by the end of the fiscal year 2019-2020 compared to 64.9% year-over-year. Furthermore, the total shareholders' equity reached EGP 6 billion, with an increase of EGP 561 million at a growth rate of 10% over the previous year.

II- Industrial Development Bank

The Industrial Development Bank (IDB) was established in 1947 by Law No. 131 of 1947 as an Egyptian joint-stock company with a capital of EGP 1.5 million, to finance the industrial private sector. In 1971 the bank was merged into the Bank of Alexandria as a specialized department. However, with the beginning of the policy of economic openness and the state's appreciation of the importance of the bank's independence, it was re-established in 1976 as a specialized bank with a capital of 10 million pounds. The bank's capital was increased several times – for instance in 2003 - so that the authorized capital became one billion Egyptian pounds, the issued and paid-up capital 500 million Egyptian pounds.

As part of institutional reforms to create a stronger and more competitive banking entity and to diversify and deliver its banking services to industrial investors in various geographical areas, the "Egyptian Workers' Bank" was merged into the "Egyptian Industrial Development Bank" on the first of November 2008, and the name was changed to the "Industrial Development and Workers Bank of Egypt". However, in September 2018, the Central Bank of Egypt agreed to re-change the bank's commercial name from "Industrial Development and Workers Bank" to "Industrial Development Bank."

The bank works to provide a distinguished range of banking products and services to its various clients of individuals, institutions, and companies. It offers its services in economic and development activities and projects, besides savings vessels with multiple advantages, and providing the foreign currencies necessary for importing raw materials, machinery, and equipment. The Bank also provides support for large, medium, small, and micro-projects in addition to the Bank's distinguished role in real estate financing and financing the delivery of gas to homes and factories. The bank's plan is based on expansion through a wide network of branches covering all parts of Egypt. The bank aims to expand the spread of new branches nationwide, as it aims to bring the number of branches to 50 by the end of 2023.

The bank was chosen locally as the fastest growing in Egypt for the year 2017, according to the Business News Index, which included in its poll 27 banks. The Industrial Development Bank won first place in indicators of growth in the size of assets, net profits, and net return.

The business results of the Industrial Development Bank revealed that the bank achieved profits of EGP 512 million, before taxes, at the end of 2019, compared to EGP 379 million at the end of 2018, representing an increase of 35%. The bank achieved its highest growth rate in its history during 2019, as the bank's financial position increased to EGP 31 billion at the end of 2019, compared to EGP 24 billion at the end of 2018, with a growth rate of 27%. The bank's loan portfolio increased to EGP 13 billion at the end of 2019, compared to EGP 10 billion at the end of 2018, with a growth rate of 32%, while the regular loan portfolio increased to EGP 12 billion against EGP 8.7 billion with a growth rate of 38%. Customer deposits increased to EGP 25 billion at the end of 2019, compared to EGP 19 billion at the end of 2018, with a growth rate of 32%.

III- Housing and Development Bank

Housing & Development Bank (HD Bank) was established as an Egyptian joint stock company and an arm of the Ministry of Housing in 1979 with an initial capital of EGP 18 million. Upon its launch, the key mandate of the Bank is to finance moderate housing units for Egyptian inhabitants while bridging the gap between supply and demand in the real estate market.

By the 1980s & 1990s, the Bank had already successfully concluded many flagship developments, which brought new housing units to many urban communities and strategic investments in the country's northern coastal resorts. In 1993, the continued growth of real estate investments raised paid-in capital to EGP 54 million.
Since 2003, when the new banking law number 88 for the year 2003, the Bank stepped into a new era witnessing its prime strategic plan, aiming to integrate into the market as a competitive commercial bank. This plan included the focus on the growth of core banking business and further expansion in real estate development to be carried out through subsidiaries. At the end of the year 2014, the bank had direct and indirect ownership positions in 14 subsidiaries and sister companies; a total of EGP 912 million.

The bank has a range of banking products and services for its customers: SME's products, retails products, corporate products, and real estate products. HD Bank's vision is to be among the top 10 performing banks in Egypt, as a full commercial bank with core strength in housing real estate, working on sustaining the current high operating efficiency. Since 2017, a new 5-year plan was implemented focusing on investing in new IT systems, renovating its branch network and increasing its marketing efforts. In 2020, HD Bank has reached 97 branches widespread all over Egypt with a presence in all governorates with more than 350 A.T.M.

Regarding its financial position and according to its separate financial statement, total assets grew at the end of 2020 to reach EGP 60 billion with an increase of EGP 9 billion over its previous year. Net profits reached EGP 1.8 billion by the end of 2020 compared to EGP 1.9 billion year-over-year affected by the COVID-19 pandemic. Moreover, total shareholders’ equity reached EGP 7.4 billion with an increase of EGP 1.3 billion over the previous year. The Customers' deposits grew from EGP 41 billion at the end of 2019 to EGP 47 billion for 2020 with a growth rate of 14% in 2020. Total loans increased also to reach EGP 21 billion at the end of 2020 with a growth rate of 8.7% compared to 2019 with EGP 19 billion and a growth rate of 25.8%.

IV- Nasser Social Bank

Nasser Social Bank (NSB) was established as a public authority under the Republican Decree Law No. 66 of 1971 with a capital of EGP 1.2 million as the first social-economic entity in Egypt and the Middle East. The development of its capital and activities grew until it reached EGP 2.5 billion. The Bank started with only one branch on the 25th of July 1972, then with the bank’s development, the number of its branches reached 94 branches spread all over the Republic.

The objectives of the bank, following the law of its establishment, are to achieve social solidarity for all members of society to have a decent life and to achieve social and economic development among citizens through many activities:

First, the social solidarity activity, which aims to achieve social development for citizens, by organizing the collection funds, granting social loans to citizens, granting subsidies and assistance to those entitled to them, and owning the means of production for those entitled following the Takaful regulation. Second, the banking and investment activity, which aims to work towards achieving economic development for individuals and entities while growing the bank’s resources, by providing all banking services, including accepting deposits and regulating their investment, as well as granting the necessary funds to raise the standard of living and investing the bank’s money in projects Public and private. With this activity, society can benefit, and more job opportunities are created. Third, the activity of vacant estates, which is represented in the application of the provisions of Law No. 71 of 62 regarding the estates that are left behind by the deceased without an heir. And finally, the activity of the Family Insurance System Fund to preserve the family entity and its stability, which was entrusted to the bank under Law No. (11) of 2004 to implement the provisions issued regarding expenses and wages.
At the end of 2020, the Board of Directors meeting headed by the Minister of Social Solidarity compared financial position between FY 2018/2019 and FY 2019/2020. The bank’s profits rose to EGP 1.43 billion, compared to EGP 1.81 billion for the previous

fiscal year, an increase of EGP 346 million, or 32%. The bank's budget rose to EGP 22 billion, compared to the same period of the previous year, which amounted to EGP 18 billion with a growth rate of 24%.The net financing and facilities for clients amounted to EGP 16 billion, compared to EGP 12 billion, with a growth rate of 29%.The total customer deposits grew to EGP 10 billion, compared to the previous year at EGP 6 billion, an increase of 37%, because of the introduction of new savings pots for various terms and prices that led to attracting more customer deposits, to the adoption of a list of distributions

V- Egyptian Agricultural Bank

The state established, during the global economic crisis, the Egyptian Agricultural Credit Bank under Decree Law No. 50 of 1930 and the royal decree of the Egyptian Agricultural Credit Bank in 1931 to provide loans to Egyptian farmers to protect them from foreign real estate banks and lenders. The bank started with a capital of one million pounds.

With the economic openness policy, the bank’s management was keen since the issuance of Law No. 117 of 1976 to change the bank’s name to the " Development and Agricultural Credit Bank ", provided that the Development Bank provides the necessary support and financing to farmers for all types of crops and all activities related to agriculture, as well as providing all banking services, financing projects, natural gas, and biogas loans, especially in the countryside. However, a more recent law issued, Law No. 84 of 2016, which stipulates that the “Development and Agricultural Credit Bank” shall be transformed into a public sector bank called “Egyptian Agricultural Bank’ that takes the form of an Egyptian joint stock company whose capital is wholly owned by the state, having an independent legal personality and subject to the provisions of the laws of the Central Bank of Egypt and the banking system.

The Bank’s vision is to become the locomotive of economic development, providing the necessary financing for various types of agricultural and rural development activities, within the framework of the state's plan. The Banks also tends to achieve an added value to the national economy by deepening financial inclusion in society, supporting, and developing the agricultural sector by providing an integrated package of banking and agricultural services to meet the needs of all clients as well as to reach food sufficiency.
As an important development institution for agricultural activity in Egypt and one of the largest agricultural banks in the Arab world and the Middle East, the bank owns more than 1150 branches and village banks covering all governorates. Moreover, the Bank owns more than 4 million square meters of storage capacity, including an area of two million square meters to receive local wheat from farmers.

The Bank is constantly working on developing its performance, diversifying its current services, developing new services, providing support to the agricultural sector in its various fields and applying international principles and standards within the framework of disclosure and transparency rules. Currently, the Agricultural Bank of Egypt is undergoing a complete restructuring, as part of an ambitious plan that includes developing branches and training all workers to raise the efficiency of services provided to customers. The restructuring plan aims to achieve net profits within the next three or four years.

VI- National bank of Investment

National Investment Bank (NIB) was established by law no. 119 of 1980 to the purpose of financing and following up projects of the national plan for economic and social development through either sharing or lending such projects as well as following up the implementation of those projects.

NIB is considered as the state's main economic and investment tool to implement its plans for economic and social development. The bank is also an affiliate of the Ministry of Planning and Economic Development in Egypt. Its mission is the increasing and improving government investment to meet the national obligations of Egypt

This Bank led to the establishment of massive infrastructure in all fields which added to the productive capacities and attracted more investments. This role helped to achieve high growth rates for the Egyptian economy over the past decades.

Considering the recent economic changes witnessed by the local and international arena, emphasizing the activation of market mechanisms, trending towards free economy while limiting governmental intervention to only supervisory, organizing and, regulation one. These changes made the National Investment Bank became one of the major financial and development institutions, with its potentials and capabilities, as a tool to regulate markets and implement economic and social policies.

Over more than 40 years, the bank has carried out the largest process of local savings mobilization to finance the establishment and implementation of projects included in the successive economic and social development national plan. These investments have been able to implement a national wealth of assets that covered all of Egypt including the establishment of electricity generating stations, electricity transmission and distribution networks, water and sanitation stations and networks, as well as networks of roads, bridges, railways, ports, agriculture, irrigation, services, housing, new cities and mining projects and other fields of economic activity. Moreover, the Bank shares in several joint companies in main economic activities sectors such as fertilizers, petroleum, banking, financial services, food industries, urban development, metal industries, building materials and tourism. NIB also shares in several Arab institutions with the participation of all Arab countries.

At the end of 2018, the total proceeds of the bank's savings vessels amounted to about EGP 353 billion. Moreover, the value of the bank's investment contribution increased from about EGP 14.5 billion at the end of June 2014 to about EGP 25.8 billion in the same period of 2018. Regarding investment in treasury bills and bonds, it reached EGP 125.3 billion at the end of June 2018. The bank is underway to implement a plan for the restructuring of the bank announced in 2018 in the framework of the structural reforms of the economy of Egypt.

Appendix 2. Survey questions with responses received from three banks Banque Misr (BM), National Bank of Egypt (NBE) and Banque du Caire (BDC)

Questions	BM	NBE	BDC
Legal status independence and autonomy			
Does the bank have an independent entity?	**Yes**	**Yes**	**N/A**
Does the bank have the freedom to accept/reject projects that do not meet the bank's requirements?	**Yes**	**Yes**	**N/A**
Does the bank have the freedom to independently assess the projects before, during, and after financing?	**Yes**	**Yes**	**N/A**
Does the bank monitor the performance of the projects and have the freedom to alter financing terms if the project's execution comes in conflict with any of the bank's objectives?	**Yes**	**Yes**	**N/A**
Does the bank have autonomy over decisions related to providing support (financial or non-financial) to losing projects if they provide social/ developmental benefits?	**Partially**	**Yes**	**N/A**
Role of central government			
Does the central government contribute in financing the bank's activities?	**No**	**No**	**N/A**
Is the bank backed up by the central government?	**No**	**No**	**N/A**
Does the bank's board of directors include members of the government cabinet?	**No**	**No**	**N/A**
Did the central government inject funds in the past 5 years to support the development goal of the bank?	**No**	**Partially**[1]	**N/A**
Does the CBE provide favorable terms for the bank? (lending rates, help in re-scheduling and financing NPLs)	**No**	**No**	**N/A**
Clarity of the public mandate			
Is there a clear development mandate stated in the incorporation article?	**No**	**No**	**N/A**
Are the projects financed by the bank reflect general direction towards the financing of projects that serve the development plan of the government?	**Yes**	**Partially**[2]	**N/A**
Does the effect of the project on the environment affect the decision to finance it?	**Partially**	**Partially**[3]	**N/A**
Are there environmental requirements that need to be met by the project approaching the bank for finance?	**Partially**	**N/A**	**N/A**
Are there special rates (financial incentives) for projects that are more environment friendly (lower carbon emission, clean energy, energy efficient, less water pollution to the river/sea?	**Partially**	**Yes**[4]	**N/A**

Does the bank calculate the environmental/ climate change/ pollution risk of the financed projects pre-funding?	**No**	**N/A**[3]	**N/A**
Does the bank calculate the environmental/ climate change/ pollution risk of the financed projects post-funding?	**No**	**N/A**[3]	**N/A**
Does the bank expand credit during economic downturns with the intention to boost the economy?	**Yes**	**Yes**	**N/A**
Bank governance			
Is there a specific business model adopted by the bank for project selection that links the cost of the project to its expected development and socio-economic impact?	**No**	**Partially**[5]	**N/A**
Does the bank monitor projects post-finance and measure their actual development impact vs. the expected impact?	**Yes**	**N/A**	**N/A**
Is there a monitoring and evaluation department in the bank?	**Partially**	**Yes**	**N/A**
Does the bank have more forbearance with loans related to development projects?	**No**	**Partially**[5]	**N/A**
Does the bank deal with each on a loan-by-loan case considering the causes of non-performance?	**Partially**	**Yes**	**N/A**
Does the bank publicize the expected development impacts and financial returns of project in its periodical publications?	**Yes**	**No**	**N/A**
Does the bank publicize the results of project monitoring and actual evaluation post-finance in its periodical publications?	**Yes**	**Partially**[6]	**N/A**

[1] NBE is 100% owned by the Egyptian Government can support with its shareholder profit.

[2] The good projects only.

[3] NBE is in the process of preparing an Environmental &Social Management System.

[4] Depends on the fund received from International Financial Institutions.

[5] On a case by case basis.

[6] On a case by case basis after the Customer prior consent.