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Institutional context and the typology of functions of national development banks.

The case of Development Finance Institutions (DFIs) in Malaysia

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Abstract

Conceived as policy institutions, development banks are specialized financial firms that follow a dual mandate: to operate in line with developmental goals and to be financially sustainable. At the same time, emerging literature on mission-oriented finance and development banks tends to focus on their policy roles while overlooking the overall institutional landscape, which affects such specialized financial institutions. Following institutionalist approach, the study looks at how Malaysia's development finance institutions (DFIs) evolved over time and how they have been positioned in the overall policy landscape. Following a historical description of Malaysia's specialized development banks, the study proposes a contextualized institutional framework and the typology of functions performed by national development banks, which can be further applied to other national contexts and especially in comparative studies.

Keywords: development finance institutions, financing of industrialisation, Malaysia, Southeast Asia, typology

JEL codes: G21, O20

1. Introduction

National development finance institutions have been increasingly capturing attention of academics and practitioners across the globe. Emerging literature on the various roles development banks – more precisely, state investment banks – play, has been dealing with their institutional histories (Griffith-Jones and Ocampo 2018), financial instruments (Mazzucato and Penna, 2015a; 2015b; 2017), political economy of their operations (Rezende, 2015). At the same time empirical, especially comparative studies are scarce. In this regard, a considerable contribution to empirical literature was made by a series of case studies from Latin American countries as well as China and Germany (Griffith-Jones and Ocampo 2018).

The revival of development banking in both developed and developing countries has been largely spurred by the consequences of the Global Recession and therefore contemporary literature gravitates towards policy-oriented approach, which emphasizes counter-cyclical lending, greater willingness to take risks, long-term orientation of state-backed financing and the ability of development banks to undertake projects with non-bankable positive externalities such as, for example, employment, preservation of environmental, financial inclusion. The major theoretical underpinnings of existing literature are located on the continuum of market efficiency/inefficiency and refer either to the need to 'fix market failures' or to go beyond 'fixing' towards 'creating markets' (Mazzucato and Perez 2015; Mazzucato and Wray, *forthcoming*). In other words, framed within the debate 'markets vs state' the discussion so far has been dominated by empirical cases of success stories. Namely, in empirical terms, contemporary literature on development banks has been centered over strategic development finance institutions such as German *Kreditanstalt für Wiederaufbau* (KfW), Korea Development Bank (KDB), Canadian Business Development Bank (BDC) or China Development Bank (CDB). This is not surprising since the idea of state-backed finance complementing market-based financing has been continuously in and out of fashion since the beginning of the 20th century. At the same time, echoing a survey by the World Bank, there is a growing need to inquire into the heterogeneity of over 500 national development finance institutions existing today. (Luna-Martinez and Vicente, 2012) The great variety of mandates, tasks and financing facilities provided by development banks has been widely acknowledged (Luna-Martinez & Vicente, 2012; Bruck, 2005; Fresneda, 2008; Yeyati *et al*, 2004; Lazzarini *et al*, 2015) and now that some of the most successful cases have been presented and discussed, the next step would be to move from micro-level (single institution) analysis towards macro-level studies. If we are to understand why some Development Finance Institutions (DFIs) work while others don't – or rather, perform or not perform strategic complementary roles – there is a need to build a broader framework, which would put a DFI into the national context and help identify how a DFI is positioned vis-à-vis private financial institutions, vis-à-vis industrial sector, and vis-à-vis government agencies. Such an approach is based on the initial assumption that state-backed DFIs are specialized financial firms operating with financial and non-financial (developmental) goals thereby being uniquely positioned at the intersection of public, financial and socio-economic interests.

Current study, therefore, aims at identifying a broader institutional context of development finance institutions (DFIs) in Malaysia and at constructing a typology of their functions. Malaysia represents a rich case study due to the variety of DFIs, their long history and continuity of their mandates as policy-relevant specialised financial institutions (Thiruchelvam *et al*, 2011). The main focus remains on development banks in charge of financing of industries and services sector and excludes guarantee agencies, export promotion banks, and DFIs in charge of consumer lending. Empirically-historically grounded, the study aims to contribute to existing scholarship on development banking and to provide directions for further empirical research on the various functions of development banks and their institutional context. Availability of data and its consistency remains the main limitation of empirical findings and, subsequently, their defining factor. Empirical data collection for this study was based on extensive archival work with reports of Malaysia's Central Bank for 1960–2016, annual reports of selected DFIs for the same period, and semi-structured interviews with representatives of DFIs, both acting and retired, as well as government officials (a total of 12 interviews were conducted between October 2015 and October 2016).

The structure of the paper is as follows: next comes a brief overview of literature on national development banks including theoretical propositions and historical accounts; next, the provision of industrial capital in Malaysia and evolution of Malaysia's DFIs are presented; empirical findings are then summarized by suggesting an institutional framework and the typology of functions; the paper concludes with suggestions for further research.

2. Historical and theoretical perspectives on financing of industrialisation and development

Financial aspect of economic development has been an essential part of classical development theories developed by A. Hirschman, R. Nurkse, P. Rosenstein-Rodin, G. Myrdal in the mid-20th century. The main focus of the time was on whether finance for development should be imported (come from external sources) or 'made at home' and the so-called 'high development theorists' argued in favor of the latter. (Kattel *et al*, 2009; Kregel, 2004) Analysis of financial structures, which emerged in the 1960s, put 'financial deepening' on policy agenda[1] and national development banks have been long associated with facilitating the development of domestic capital markets thereby sharing this policy task with Central Banks. Gerschenkron's (1962) notion of the *extent* of economic backwardness and respective extent of state-led mobilization of resources has been also reflected in literature on catching-up industrialisation: policy finance comprised an essential part of rapid industrialisation in newly industrialized countries of East and Southeast Asia. (Amsden, 1989; Hobday, 2003; Wade, 2004)

[1] Goldsmith (1969) looked at national accounts of developed countries. Financial deepening, which continues to be one of the key policy dimensions of Central Banks (in ASEAN and beyond) is measured by 'financial interrelations ratio' (ratio between total financial assets and GNP), which was widely used by Goldsmith. (Rimall, 1987, p. 239) Later discussion was framed by Zysman (1983), Mayer (1989) and more recently – by Demirguc-Kunt and Levine (1996) and Levine (2002).

Historically, the idea of a state-backed financial institution directly assisting in industrialization was institutionalized during the first decades of the 20th century: initially, public ownership was minoritarian (Armendariz de Aghion, 1999) and fully state-owned development banks were largely a product of post-WWII development discourse characterized by massive reconstruction efforts and the process of decolonisation. The World Bank's Industry Department has been a vivid promoter of the concept of development finance institutions since 1950s (Diamond, 1957; Boskey, 1959), although it was latter recognized that development financing from international lenders is not sufficient in the long-run and "a critical element in the institutional context [of a development bank] is to have sufficient capital on its own to back its operations and, over the long run the[se] institutions also must [be] able to mobilize domestic resources to become an integral part of the domestic financial system." (Bruck, 2001, p. 15) In the long run, nevertheless, the enthusiastic advocacy of development banks during 1950s-70s changed to more cautious approach, following a wave of mismanagement in public banks during 1970s, especially in Latin America. The danger of political capture was the main argument against 'financial repression', which developed into the outright criticism of public development banks during mid-1980s–90s.[2] At the same time, studies on information asymmetry and credit rationing (Stiglitz and Weiss, 1981; 1988) helped recognize that there are certain types of risks that private investors and financial markets are not able to undertake as well as certain types of positive externalities (such as employment, education, preservation of environment, better infrastructure) that cannot be internalized by private financial agents. In light of the recent Global Recession, complementary roles of 'fixing market failures' and counter cyclical lending have been attributed to state-backed development banks. Further, an emerging literature on mission-oriented financing extends the notion of 'fixing markets' towards 'creating markets' thereby arguing that state-backed development banks have the potential to facilitate structural change and innovation-led growth by investing into riskier technologies and ambitious projects. (Bruck 2005; Mazzucato and Semeniuk, 2018; Griffith-Jones *et al*, 2017; Mazzucato and Penna, 2015a; 2015b; 2017; Mazzucato and Wray, *forthcoming*) In addition, the most recent survey by the World Bank (Luna-Martinez and Vicente, 2012) indicated a returning interest towards what national development banks do, how they operate and what roles they perform.

2 The discussions within a community of policy makers in the Asian regiona reflected the same trend – see, for example, SEANZA lectures published by Reserve Bank of India in 1990. (SEANZA is an Association of Central Banks from Southeast Asia, New Zealand, and Australia, established in 1956, which initially included members of the British Commonwealth. Association later expanded towards 20 members from the Asian region.

Besides financial constraints, developing countries are believed to experience organizational and managerial constraints (Kregel, 2004), following Schumpeterian notion of entrepreneurship as the driver of innovation and development. Operating within economic policy mandates, development banks can become, at least in theory, the focal points of such organisational and managerial learning: as specialized financial institutions they interact with newly established industries, both domestic and foreign-owned operating locally; with international lending agencies and capital markets; they conduct feasibility studies and industry research; and finance imported technologies. If during the course of development, learning occurs in industry (Lazonick and O'Sullivan, 1996; Dosi, 1990; Aoki and Dosi, 2000) *as well as* in finance (Sraffa, 1929-30; Minsky, 1988), then development banks, tasked with facilitating the development of industries, would be exposed to both processes. Mayer (1989) suggests that indeed managerial competences tend to accumulate within banking institutions at first place. At the same time, because development usually conceived as policy institutions, the process of internal competence building is also affected by policy trajectories. Further, as specialized financial firms, development banks would also respond to changes in both, industrial and financial structures, which, in turn, occur on domestic as well as international levels.

3. Provision of industrial capital through the banking system in Malaysia

Resource-rich Malayan peninsula (tin, rubber, palm oil, oil and gas) has been generating extensive revenues for Colonial administration since late 19th century and its trade accounts have been in substantial surplus even during the times of Great Depression (Li, 1982, p. 40-62). Malaysia, which continues being one of the most dynamic economies in the region, has been credited with successful economic diversification: from commodity-based economy in the 1970s towards middle-income nation with manufacturing becoming one of the major components of GDP, at least until 2000s. (Rasiah 2011) Backed by the discovery of new oil fields and as a response to social unrest of 1969, New Economic Policy (1970) has been associated with substantially increased state intervention aiming at both growth and redistribution of wealth among ethnic groups. Financial intervention was limited to state ownership of banks and did not involve extensive use of 'policy' loans as was the case of Northeast Asian developmental states (South Korea, Taiwan). Most of Southeast Asian countries have a richer natural endowments and hence had larger trade accounts at the start of industrialization while Rasiah and Hing (2009) note the difference in capital used for industrialization: unlike Northeast

Asian experience, not local capital but foreign ownership led export-oriented growth in most of Southeast Asian countries. Yun (1987, 421-422) reports that by 1985 the proportion of loans advanced to agriculture, manufacturing and mining altogether stood at only 23.4% and, referring to Bank Negara (BNM)[3] sources, confirms that internal financing, that is, retained earnings and allowances for depreciation (also incl. foreign investments) constituted the bulk of financing that went to supporting productive activities. Jomo and Hamilton-Hart (2003, 244-245) also conclude that even specialized industrial finance institutions accounted for a very small share of lending to industry; most industrial development in the 1970s was due to foreign investment, often in export processing zones, with little linkages to the domestic economy.

According to the first comprehensive economic assessment of the Federation of Malaya and Singapore conducted by the IBRD (World Bank) mission in 1954, public investments in Singapore had been already higher than on the peninsula while the state of private enterprise in both cases has been identified as strong and well-established, and infrastructure services such as roads, communication, power, shipping and post – of relatively high quality. In this light, recommendations for public investments were related to expansion of existing facilities, provision of official housing and, industry-wise, greater support to agricultural sector to increase the yields. Medium- and long-term capital was recognized as a growing need, for which a pan-Malayan industrial finance institution was recommended: private ownership to ensure independence from the government, no subsidized lending, funds to be raised through loans from the Central Bank, minority equity participation in borrowing enterprises possible in principle, technical expertise needed for project appraisal should come from an Industrial Research Institute (to be established) and from commercial banks. (IBRD, 1955, p. 231–232) Malaysian Industrial Development Finance Company (MIDF) was established in 1960 and, indeed, with the exception of a few interest-free loans during the very first years, MIDF was raising funds from Bank Negara (BNM) at non-subsidized rates (5.5-7.5% on average), which in practice at times were higher than from certain external sources, such as ASEAN-Japan Development Fund (3.5-4.85%)[4]. (MIDF annual report 1989) At the same time, other DFIs kept receiving government long-term loans at subsidized rates (between 2% and 5%). (Salim,[5] 1980)

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3 Malaysia's Central Bank

4 Japan needed to recycle some $20 bln of current account surplus by aiding developing economies in the region through Overseas Economic Cooperation Fund.

5 The then acting Executive Director of *Bank Pembangunan Malaysia* (Development Bank of Malaysia, est. 1973).

The case of MIDF makes another trend in provision of industrial capital in Malaysia apparent: newly established development bank benefited large, often foreign-owned firms due to a large size of loans and strict requirements towards borrowers (e.g. managerial experience, collateral). Adherence to prudent banking practices and low non-performing-loan (NPL) ratio have been emphasized by MIDF from early on as becomes evident from its annual reports while Jomo (1986) refers to the general high risk-averse attitude of industrial bankers.[6] Following another IBRD report, "there [wa]s a considerable amount of capital available in Malaysia but not enough capital of the right type and on the right terms." (IBRD, 1963, p. 15) At the same time, a number of State Development Corporations carried out industrial investment functions similar to development banks. Established in mid-1950s to advance commerce and industry[7], they were subject to state-level jurisdiction with the state Chief Minister appointed as chair. (Gomez *et al*, 2015) State Development Corporations served as important vehicles in wealth redistribution in line with the New Economic Policy[8] by holding around 250 subsidiary companies and agencies by the end of 1980s.[9] (Puthucheary, 1990)

In terms of policy intervention, policy lending was low, as compared with Northeast Asian developmental states such as Korea and Taiwan, with the exception of export credit. (Chin and Jomo 2000; Chin 2001; Thillainathan, 2003) Priority sectors were mentioned in guidelines issued by Bank Negara since 1974 and included rather broad categories: the *bumiputras*,[10] SMEs, low-cost housing, manufacturing and agriculture. (Chin, 2001) Commercial banks had to make sure that lending to manufacturing was no less than 20% of their loan portfolio (1970s and mid-

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6 This, however, helped MIDF maintain a reputation of a prudent borrower among its international lenders such as World Bank and German KfW.

7 E.g. Sabah Credit Corporation (1955) and Borneo Development Corporation (1958) were initially set up as wholly owned subsidiaries of the Commonwealth Development Corporation to assist diversification of predominantly agricultural Malaysian states of Sabah and Sarawak on North Borneo. (Nik, 2000) Yet, the first federal DFI was MIDF (1960).

8 Backed by the discovery of new oil fields and as a response to social unrest of 1969, New Economic Policy (1970) was associated with substantially increased state intervention aiming at both growth and redistribution of wealth among ethnic groups. In 1971 indigenous people of Malay ethnicity (*bumiputra*) comprised 64% of population but owned 2% of national wealth; Chinese owned 25% while foreign ownership was 63%. (Yun 1987)

9 Today, Borneo Development Corporations in both Sabah and Sarawak belong to respective State governments and are included in the list of DFIs although having a clear regional scope together with Sabah Development Bank. Johor State Development Corporation has been in operation since 1968 while is not included in the Bank Negara's list of main DFIs.

10 Indigenous people of Malay ethnicity, see ft. 8. Chin (2001) notes that *bumiputra* lending targets did not contain any discriminatory measures among various uses of loans and the majority of loans went to unproductive investments: mostly broad property (over 30% on average; author's calculations) and consumption (around 40% on average; author's calculations), based on data for 1976–96. Looking at lending statistics of DFIs, a similar trend becomes apparent.

1980s) while from 2006 onwards the primary focus has been solely on credit access for SMEs. Despite government's interference via ownership, private banks (except for those belonging to politically connected *bumiputra*) did not establish any synergetic relations with business conglomerates, largely due to effective regulation that aimed at preserving arms-length relations between banks and corporate interests and to keep their market power in check: banks were limited to holding 10% of equity in any firm and bank officials were prohibited from sitting on any company's board of directors. (Yun, 1987) At the same time, the government has exercised a substantial influence over allocation of investments: throughout the time of Mahathir (in PM office 1981-2003) certain 'mega' projects were implemented with commercial banks making their decisions not only based on project cash flows but also on collateral and implied government support (the projects were meant not to fail); the government held significant equity in domestic financial institutions (through statutory bodies) and directly controlled DFIs. (Lai, 2012, p. 89-91)

4. Evolution of DFIs in Malaysia

Since 1960, when MIDF was founded upon recommendation of IBRD, more specialized development banks emerged with the latest reorganisation taking place in 2005 when SME financing was transferred to the newly established SME Bank, a former integral unit of *Bank Pembangunan* (Development Bank). Gomez et al (2015) provide a good historical overview: Agrobank (former *Bank Pertanian*) was established in 1969 with a special emphasis to support agricultural SMEs; *Bank Pembangunan dan Industri* (Development Bank) founded in 1973 was meant to assist *bumiputra* investors through each stage of enterprise development, which after the merge with *Bank Industri dan Teknologi* (Industry and Technology Bank) and re-organization in 2005 was mandated to finance four major strategic sectors: maritime, oil and gas, infrastructure, and technology. The Bank does not engage in retail banking, its client base consists of around 400 corporate clients and its current lending portfolio is made of 85% infrastructure lending. (*The Sun Daily 26.08.2015*) The Export-Import Bank was incorporated in 1995. The two savings banks *Bank Rakyat* (The People's Bank) and *Bank Simpanan Nasional* (National Saving's Bank) promote thrift, financial inclusion and affordable housing, and both engage in deposit taking. State-controlled *Bank Rakyat* was established in 1954 by merging 11 union banks owned by cooperatives and by mid-2000s it had 1200 cooperatives (Gomez *et al*, 2015) and in 1989 was placed under the Ministry of Land and Cooperative Development and the Ministry of Finance; in 2002 it became subject to the DFI Act 2002 and direct supervision of Bank Negara and in 2004 – an agency under the Ministry of Entrepreneurship and Cooperative Development. (Ahmad and

Kazmi, 2011) *Bank Simpanan* emerged in 1974 by taking over the Post Office Savings Bank and was tasked with facilitating financial inclusion and providing micro financing. (Islam 2011) Credit Guarantee Corporation was established in 1972 to ensure credit access for SMEs and was owned by Bank Negara (76%) together with commercial banks. Sabah Credit Corporation, Sabah Development Bank and Borneo Development Corporation in both Sabah and Sarawak have been predominantly established to facilitate regional development in poorer areas and tasked with various activities, from financing and corporate participation to act as financial intermediaries for state governments and its agencies to engage in joint ventures with local land owners for development of residential, commercial and industrial properties. (Gomez *et al*, 2015) In addition, Tabung Haji was established in 1963 to act as a specialized fund to facilitate savings for *hajj* to Mecca by devoted Muslims living in Malaysia. In other words, the system of specialized development banks in Malaysia (Table 1) reflects a broader definition of development finance, which combines industrial development with wealth redistribution and, more recently, financial inclusion and consumer lending.[11]

11 This paragraph draws on Mikheeva 2018.

Table 1. System of Development Finance Institutions (DFIs) in Malaysia

DFI	Founding year and scope	Sectors	Ownership and supervision
Sabah Credit Corporation	Est. 1955, regional (Sabah state)	Regional industrial development	Sabah state government; not covered by DFI act (2002)
Bank Rakyat (The People's Bank)	Est. 1954, federal	Savings, financial inclusion	Federal government (Ministry of Domestic Trade, Cooperatives and Consumerism since 2004); supervised by Bank Negara under DFI Act (2002)
Borneo Development Corporation	Est. 1958, regional (Sabah and Sarawak states)	Regional industrial development, commerce, housing	Sabah and Sarawak governments (until 1975); Sarawak government (since 1975); not covered by DFI act (2002)
Malaysian Industrial Development Finance Institution (MIDF)	Est. 1960, federal	Industrial development (and services), SMEs	Indirectly controlled by federal government (through investment company *Yayasan Pelaburan Bumiputra*); not covered by DFI act (2002); agency under the Ministry of International Trade and Industry (MITI)
Lembaga Tabung Haji	Est. 1963, federal	Specialized savings (*hajj*)	Federal government; not covered by DFI act (2002)
Agrobank (former *Bank Pertanian*)	Est. 1969, federal	Industrial agriculture, SMEs, financial inclusion	Federal government (Ministry of Finance); supervised by Bank Negara under DFI Act (2002); agency under the Ministry of Agriculture and Agro-based Industry (MOA)
Credit Guarantee Corporation	Est. 1972, federal	SMEs in manufacturing, agriculture, commerce	Majority owned by Bank Negara (78%); not covered by DFI act (2002)
Bank Pembangunan dan Industri (Development Bank)	Est. 1973, reorganized 2005, federal	Assisting *bumiputra* entrepreneurs; since 2005: maritime, oil and gas, infrastructure, and technology	Federal government (Ministry of Finance); supervised by Bank Negara under DFI Act (2002)
Bank Simpanan Nasional (National Saving's Bank)	Est. 1974, federal	Financial inclusion, micro-financing	Federal government (Ministry of Finance); supervised by Bank Negara under DFI Act (2002)
Sabah Development Bank	Est. 1977, regional (Sabah state)	Regional industrial development, advisory to regional government	Sabah state government; not covered by DFI act (2002)
Bank Industri dan Teknologi (Industry and Technology Bank)	1979-2005, federal	Industrial development, maritime	Was owned by the Ministry of Finance
Export-Import Bank	Est. 1995, federal	Export and imports	Federal government (Ministry of Finance); supervised by Bank Negara under DFI Act (2002)
SME Bank	Est. 2005, federal	SMEs	Federal government (Ministry of Finance); supervised by Bank Negara under DFI Act (2002); agency under the Ministry of International Trade and Industry (MITI)

Source: compiled by the author.

The most appropriate way of looking at DFIs in any given national context is to inquire into their share in total *long-term loans* extended to local industry. Technically this is possible by gathering data from banks' balance sheets but availability of archival records often leaves much to be desired: in Malaysia an entire collection of annual reports exists only for MIDF. For other DFIs materials are substantially more fragmented and are not always available in English. Figure 1 depicts industrial loans by selected DFIs during the first three decades of industrialisation in local currency, while Figure 2 – as a share of GDP.

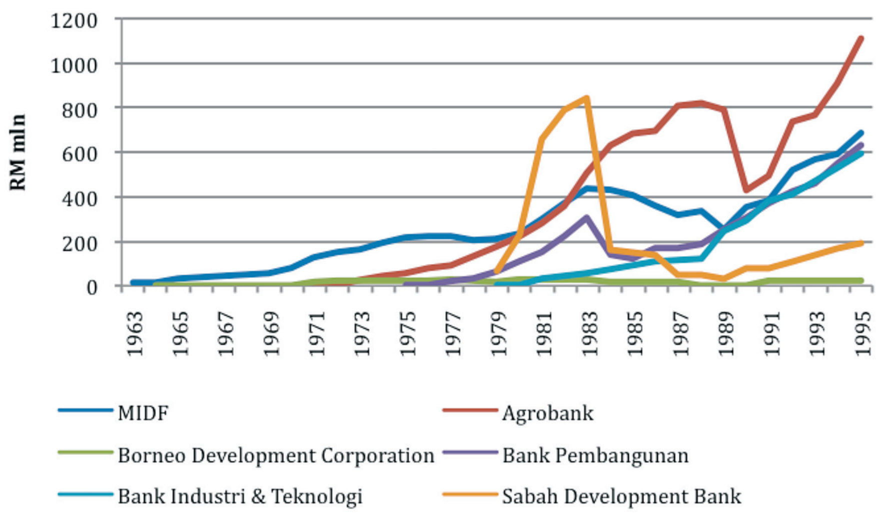

Figure 1. Loans to the industrial sector by selected DFIs 1963-1995

Source: BNM annual reports, various years; compiled by the author.

Notes: Until 1997 BNM reported for selected DFIs separately with a sector-specific breakdown of loans for large DFIs such as MIDF and Agrobank. A sharp decline in lending by MIDF during 1989-1991 reflects a gap between availability of government funds. (MIDF annual report 1989) Sharp decline in lending by Sabah Development Bank and Bank Pembangunan in 1984 owes to the change of methods of BNM's reporting. Sharp decline in lending by Agrobank in 1990 was due to 'substantial erosion of deposits'. (BNM annual report 1990)

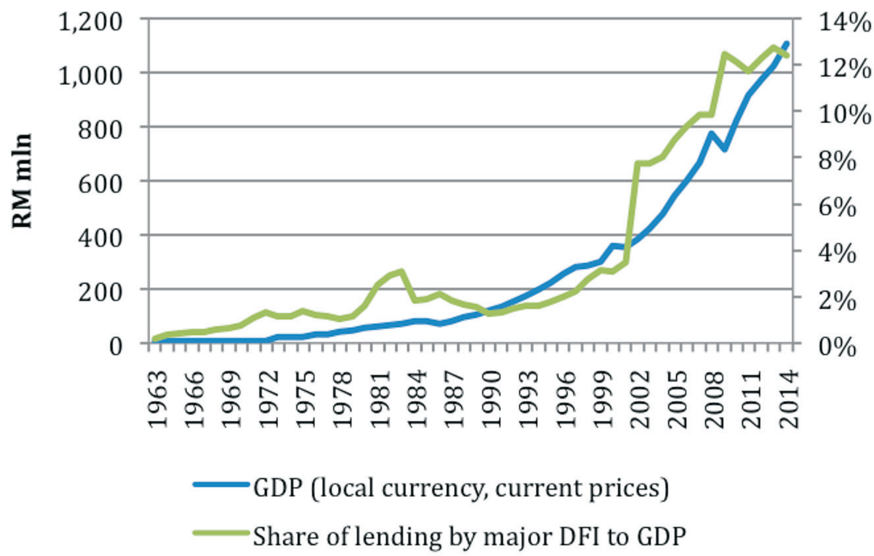

Figure 2. Lending by major DFIs as a share of GDP 1963-2014.

Source: BNM annual reports, various years; World Bank for GDP.

Notes: sharp increase in 2002 reflects changes in reporting following the DFI Act.

In terms of share in total financing of economy, DFIs accounted for 4.7% of total assets and for 2.9% of total loans outstanding in the banking sector in 1999[12]. Of total loans extended by DFIs in the same year, 31% was to manufacturing, 17% - to construction, 13.4% - to agriculture, 12.1 % - to transport and storage, and 10.3 % - to the real estate sector. (Md. Noor,[13] 2001, p. 18) DFIs that lent to industry, accounted for 17.4% of total industrial loans extended in Malaysia in 1983, which gradually decreased to 4.3% in 1995. The trend parallels a gradual decrease in public financing of fixed investment from 51% in 1983 to 31.8% in 1994, although the upward trend could be observed from mid-1970s until the peak in 1983. (Bank Negara annual reports, various years, author's calculations) Subsequently, the share of industrial loans extended by commercial banks grew from 41% in 1982 to 83.4% in 1995. (BNM annual reports, various years)

Although Bank Negara has been diligently providing statistics on DFIs from 1961 onwards, the consistency of data varies due to changing number of DFIs following changes in regulatory framework, and differences in

12 Although an increase in government funds aiming to assist recovery from the Asian financial crisis should be taken into account. After a year of austerity policies recommended by the IMF, Malaysian government reversed the course towards expansionary measures. (Interview 4)

13 The then acting Group Managing Director in *Bank Industri & Teknologi*.

reporting itself. The most consistent statistical period can be observed from 2002 onwards, i.e. after the DFI Act came into force, although aggregate data do not differentiate between the types of loans made and therefore include a substantial portion of consumer credit and lending to real estate. (Figure 3)

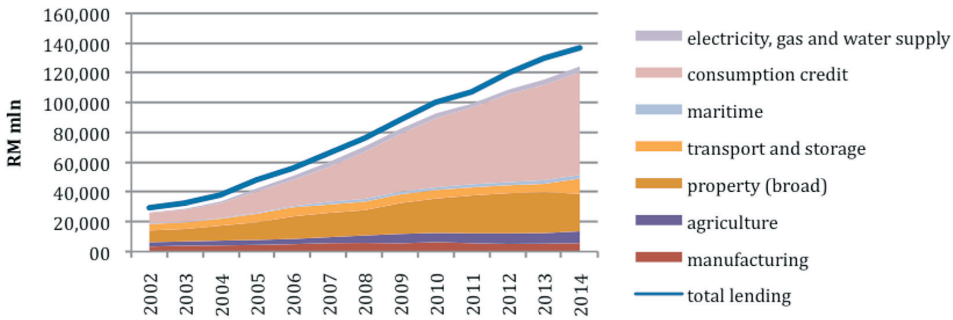

Figure 3. Lending of Malaysia's DFIs to selected sectors 2002-2014

Source: BNM annual reports, various years; author's calculations.

Notes: For 2002 - 2004 the list of DFIs includes Bank Rakyat, Bank Simpanan Nasional, Malaysia Export Credit Insurance, Bank Pertanian Malaysia (Agrobank), Credit Guarantee Corporation, Bank Industri & Teknologi, Sabah Credit Corporation, and Lembaga Tabung Haji. From 2005 the list of DFIs excludes Malaysia Export Credit Insurance and Bank Industri & Teknologi, and includes Bank Perusahaan Kecil & Sederhana (SME Bank). Data for MIDF is absent from 2002 onwards, although MIDF accounted for substantial amount of industrial lending.

4.1 Status, regulatory framework and supervision of DFIs

Before specific legislation was introduced in 2002 (DFI Act), the Central Bank ordered DFIs to establish own R&D departments, following a formulation of the Financial Sector Master Plan. (*Bank Industri* annual report, 2000) The main piece of legislation, the DFI Act, was promulgated in 2002 and represented an important landmark in supervision of DFIs by increasing the supervisory powers of Bank Negara. Before the DFI Act, supervision of development banks in Malaysia was more fragmented with various banks reporting to various Ministries (see Table 1). Moreover, classified as non-banking institutions, DFIs were not subject to respective banking regulations but were to provide annual reports to the Ministry of Finance.[14] (Development Bank of Japan and Japan Economic Research Institute, 1999, p. 105-106) Currently, all 13 institutions that are listed as DFIs by Bank Negara continue being classified as non-banking institu-

14 E.g. *Bank Pembangunan*, in charge of assisting *bumiputra* entrepreneurs, were supervised by the Ministry of Entrepreneurial Development; Agrobank was supervised by the Ministry of Agriculture. Under such arrangements, budgets of these DFIs were entirely dependant on state budget allocations.

tions (hence not subject to certain banking regulations such as Basel), although besides having a development finance division, many of them provide regular banking services in both consumer and investment banking (except for *Tabung Haji* and Government Guarantee Corporation) while three of them engage in deposit-taking from the general public (Agrobank, *Bank Rakyat, Bank Simpanan Nasional*). Separate guidelines for capital adequacy requirements, financial reporting, corporate governance, external audit, and for key responsible persons in DFIs are issued while regulations regarding new product development and risk governance are the same as for commercial banks. DFIs operating under the DFI Act report on developmental (non-financial) performance since 2014. Upon request from the Ministry of Finance, Bank Negara designed a unifying framework, which, however, targeted not all but six systemically important DFIs: *Bank Rakyat, Bank Simpanan Nasional, Bank Industri & Teknologi, Bank Pembangunan dan Infrastruktur*, Ex-Im Bank, Malaysia Export Credit Insurance.[15] The banks under the DFI Act's purview are to submit monthly management reports, which "contain[ed] quantitative and qualitative indicators on the economic and social contribution of the individual DFIs, including their financial performance." (BNM annual report, 2002, p. 195) In addition, banks are to submit two major documents on an annual basis: Statement of Corporate Intent (planned business activities, sources of funds, performance targets) and Annual Funding Requirement (projected funds including additional funding from the government for projected year). Both documents should be approved by the Central Bank, after which the second report is submitted to the Minister of Finance in order to subsequently become part of development expenditures in the federal annual budget.

Nominations for directors and CEOs in DFIs that are under the DFI Act are approved by Bank Negara. DFIs have also become subjects to certain restrictions for lending although the range of sectors remained broad.[16] Most recent amendments to the Act came into force in January 2016, aiming at strengthening corporate governance of DFIs, prudential requirements, supervisory intervention mechanisms, widening scope of investigation and examination. The amendments also introduced a number of new aspects: elements of Shariah governance in accordance with existing Islamic Financial Services Act 2013 (of relevance to Islamic-banking

15 Following subsequent mergers and restructuring, from 2005, the list includes *Bank Rakyat, Bank Simpanan Nasional, Bank Pembangunan*, Ex-Im Bank, Agrobank, and SME Bank. MIDF has not been subject to the DFI Act although with 2016 amendments to the Financial Services Act, it would be more closely supervised by the Central Bank. (Interview 8)

16 The sectors include SMEs, *Bumiputra*-owned SMEs, infrastructure projects, capital-intensive and high-technology industries, exports, imports, personal and consumer financing, housing, and retail financing. (BNM annual report 2002)

types of DFIs such as Agrobank), consumer protection in line with the Financial Services Act 2013, and a comprehensive enforcement framework to enable proportionate treatment of non-compliance. (BNM annual report 2015)

4.2 Policy mandates

Despite the lack of *specific* strategic targets – both in terms of narrowly defined industries or amount of exports, for instance – the overall policy notion of operations of DFIs has been continuous, as follows from annual reports of Bank Negara, Ministry of Finance, and the Ministry of International Trade and Industry. The (large) number of currently existing DFIs reflects the tendency of Malaysian government to launch a specialized DFI following a new major policy initiative: promotion of heavy industries (*Bank Industri & Teknologi*), assistance to *bumiputra* entrepreneurs (*Bank Pembangunan*), promotion of SMEs (SME Bank), rural development (Agrobank), industrial diversification (MIDF). (Nik, 2000) Further, already existing savings banks operating purely on commercial basis (*Bank Rakyat, Bank Simpanan*) were given a status of a DFI in 2002 following a set of additional objectives: financial inclusion, and affordable housing loans. This can be contrasted with the experience of Northeast Asian countries (Korea, Taiwan, to some extent Japan), where development banks remained in niche, industry-related, sectors.

For instance, *Bank Pembangunan*, the smallest DFI in terms of funds, was tasked with investing into infrastructure projects starting from 1999 following an increase in the share of private ownership in the sector. This was an addition to initial scope of operations: to develop *bumiputra* entrepreneurs by training, provision of medium- and long-term loans, working capital loans, investment capital loans (for ethnic Malays to buy stocks), and leasing – all within the overall scope of SMEs. Similarly, Industry and Technology Bank (*Bank Industri & Teknologi*, in operation 1979-2005) reported on the following scopes of financing reflecting a broad range of sectors prioritized within short spans of time:

- 1979 Shipping and shipyards
- 1985 Engineering industries, including metal-based and electrical and electronic engineering
- 1986 Medium to long-term export financing for Malaysian manufacturers of capital goods
- 1988 Emerging sectors like boat building, pharmaceuticals, computer software development, and materials technology
- 1995 Food processing industry, plastic industry

- 1996 Indigenous technology development
- 2000 Institutions of higher learning, high technology sectors (Md. Noor 2001, 22)
- In addition, from 1990s SMEs and *bumiputra* entrepreneurship development. (*Bank Industri & Teknologi* annual report 1992)

Further, soft-loan schemes channeled through development banks are policy-specific and often involve multiple DFIs sub-lending resources from a single Fund, launched to target specific activities. For example, following MITI's report form 1993 (170–75):

- Industrial Adjustment Fund launched in 1991, was managed by Bank Negara but administered by three DFIs: MIDF, *Bank Pembangunan* and *Bank Industri & Teknologi*;
- Industrial Technical Assistance Fund was set up in 1990 to provide matching grants to SMEs in four areas: feasibility studies (administered by *Bank Pembangunan*), product development and design (by Standards and Industrial Research Institute of Malaysia), quality and productivity improvement (by same agency), market development (by Malaysian External Trade Development Corporation);
- New Entrepreneurs Fund was set up in 1989 to provide financing at concessionary rate to wholly-owned *Bumiputra* firms with funds channeled through 11 commercial banks and 2 DFIs;
- Small and Medium-scale Industry Promotion Programme was set up in 1992 to support Malaysian-controlled companies with funds administered by MIDF, *Bank Pembangunan* and BIMB;
- The Swedish Fund for Environmental Protection and Control with funds channeled through MIDF; and
- ASEAN-Japan Development Fund introduced in 1988 to promote Malaysian-controlled SMEs in manufacturing, agriculture and tourism with M$900 mln of funds channeled through MIDF, *Bank Pembangunan*, *Bank Industri & Teknologi*, and *Bank Pertanian* (Agrobank).

In 1983 the government adopted a privatisation programme and the DFIs were entrusted with the task to help identify projects for privatisation, seek out potential private investors, arrange financing and provide the necessary corporate advisory services. (Salim, 1986)

The issue of competition with commercial banks has been a recurrent theme for DFIs since early 1980s. Development bankers themselves referred to the dual mandate of following developmental goals and practical targets of profitability. (Saleh, 1985;[17] Darwis, 1985;[18] Salim, 1986[19]) Increasing competition with commercial banks became inevitable following "the growing sophistication and complexity of economy, the local financial market and the policy directions from the Central Bank, the banking system is now more developmental than it was before" (Salim, 1980,[20] p. 76); domestic private savings were recognized as a source of cheaper funds although DFIs were not allowed to receive deposits (with exception of Agrobank); to ensure sustainable operations, DFIs ought to become 'financial supermarkets' similar to the experience of MIDF; specialized DFIs at some point were faced with smallness of domestic market. Moreover, competition with commercial banks was at times perceived *desirable* as it would "benefit savers who would have more options for deposits" and other retail products (Lim, 1983, p. 5), and therefore was encouraged by the government and the Central Bank. (Salim, 1980) Moreover, the trend towards 'universal banking' was seen as inevitable but also an effective way of re-orienting DFIs if they were to remain: "the route taken by the Development Bank of Singapore, a DFI which has successfully turned into a universal bank." (Salim, 1986, p. 62)

4.3 Sources of funds

Owing to banks' specialized nature, sources of funds are stipulated in the founding statutes. Today banks usually raise most of the funds through domestic capital markets while funds for soft-loan schemes come from the government – either BNM, Ministry of Finance or other respective ministries (usually MITI) – in the form of either grants or loans. The former is preferred by banks since grants do not imply re-payment, although loans often get rolled-over. (Interviews 6, 8) In addition, Malaysia's Central Bank established a few specialized development Funds, which have been simultaneously administered by certain DFIs. Foreign loans were initially raised solely by MIDF through obtaining a few lines of credit from international investors such as KfW, ADB, and the World Bank. Such ability to obtain foreign funds was connected to recommendation of IBRD to keep the majority of shares in private hands (direct state ownership has never exceeded 40% for MIDF). Central Bank guaranteed 3% of currency-related risk, although MIDF has not been raising funds in foreign currencies since early 2000s following a rapid decline in government loans and the need to borrow from domestic capital market. (Interviews 1, 6, 8)

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17 The then acting General Manager of *Bank Kemajuan Perusahaan Malaysia Berhad* (Industrial Development Bank of Malaysia, est. 1979).
18 The then acting General Manager of MIDF.
19 The then acting Executive Director of *Bank Pembangunan*.
20 See ft 12.

The decline in government funding has been attributed to fiscal consolidation during recession of mid-1980s (Nik, 2000, p. 39) as well as the overall strengthening of industrial sector. Changes in economic structures affected the types of financial instruments development banks provided: Agrobank reported on the strategy to move towards agricultural entrepreneurship and industrial agricultural business units since lending "to small farmers, fishermen and livestock breeders [we]re coming to saturation point" (Ibrahim, 1995,[21] p. 46), which, in turn, demanded the bank to heavily invest in IT to upgrade operation processes and to develop new financial products and services, following demands from the urban market (as compared to its initial focus on mobilisation of savings among farmers in rural areas). With decline in government funding, development banks were to raise funds from domestic capital market thereby making development loans more expensive (Interviews 1, 2, 6, 8, 10). Only three DFIs could engage in deposit-taking – which is another source of cheaper funds – and given that despite a few mergers in 2000s, the number of DFIs remained large, diversification into commercial activities was inevitable. Another restriction stipulated in founding acts, prohibited most of DFIs from tapping into Employees' Provident Fund (EPF) and other long-term funds (Lim, 1983;[22] Salim, 1986) although MIDF obtained the first loan from EPF in 1981, which was its largest creditor throughout 1980s. (MIDF annual reports, various years) Funds from foreign sources such as ADB, IBRD, Islamic Development Bank (Jeddah) gradually declined as well.[23]

DFIs that do not engage in deposit taking from the general public are exempt from a requirement to keep deposits at the Central Bank, which therefore does not serve as the 'lender of last resort' in case when a DFI gets into troubles. In case of substantial non-performing loans, a DFI would be seeking assistance either from respective Ministry or from the Ministry of Finance. Figure 6 reflects diversification of sources of funds (borrowings remain low as a proportion of total funds) and these aggregate data include DFIs, which are actively engaged in deposit-taking (*Bank Rakyat, Bank Simpanan Nasional*, Agrobank). Borrowings have been declining from 20% to 9%, although the share of borrowings from the government remained above 60% of total borrowings (Figure 4 presents absolute numbers). At the same time, above 50%[24] of funds have

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21 The then acting CEO of *Bank Pertanian* (Agrobank).

22 TThe then acting Managing Director of Sabah Development Bank.

23 This has led the Association of Development Financing Institutions of Malaysia (ADFIM) to appeal to the Minister of Finance to assist the DFIs in alleviating their funding dilemma by allowing them greater access to alternative sources of funds by relaxation of legislative constraints and the adoption of new legislative measures. (Lim, 1983)

24 For 2002-2006 figures are lower than 50% but from 2002 statistics no longer includes MIDF thereby affecting consistency of data. MIDF no longer publishes reports since 2002 but its lending figures are available through BNM annual reports.

been used for extending loans while the share of investments (government securities and shares) increased from 11.1% in 1993 to 31.8% in 2014. (Figure 5) Yet, without differentiating between the types of loans and their maturity it is hardly possible to judge upon the nature of lending by DFIs.

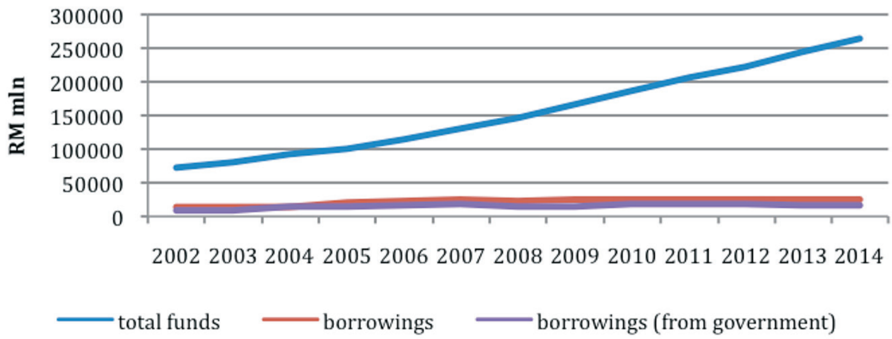

Figure 4. Selected sources of funds (borrowings) of DFIs in Malaysia 2002-2014

Source: BNM annual reports, various years; author's calculations.
Notes: see notes for Figure 3.

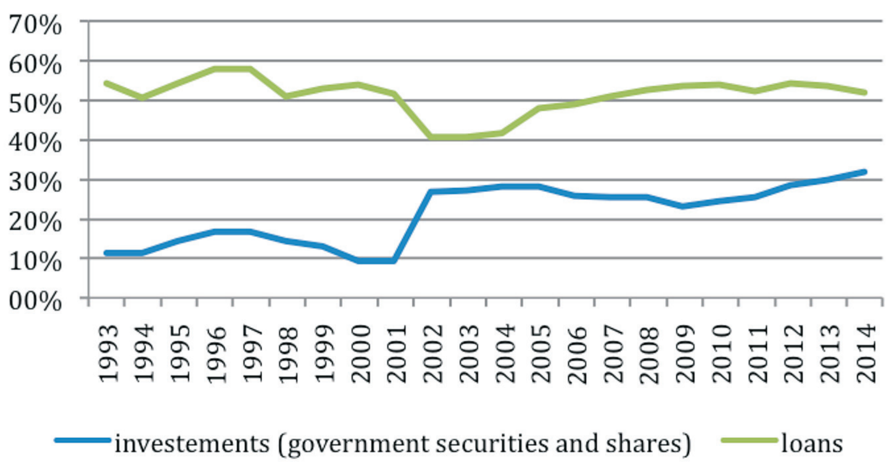

Figure 5. Selected uses of funds by DFIs in Malaysia 1993-2014 (as a share of total funds)

Source: BNM annual reports (prior 2002), BNM Financial Stability and Payment System reports (from 2002 onwards); author's calculations.
Notes: see notes for Figure 3 (the chart reflects changes in reporting following DFI Act 2002). MIDF is excluded: although BNM provides annual lending figures, the lack of methodological notes (e.g. loans approved vs loans outstanding) risks further affecting consistency of data.

4.4 Lending principles and project appraisal

At the turn of industrialisation, newly established development banks often assume the role of technical advisors as they gradually develop a consistent overview not only of technologies *per se* but of their market potential. MIDF performed such a role until Malaysian Industrial Development Authority (MIDA) was established in 1967 as the main national industrial planner and the licensing authority for manufacturing enterprises.[25] The library of MIDF still contains a considerable collection of old materials while nowadays its research department belongs to Investment Division and conducts financial market analysis. Although, in 1971 its research unit expanded towards MIDF Industrial Consultants subsidiary[26] in order to focus on SMEs and to provide services to commercial banks, government, and semi-government bodies. (MIDF annual report 1972) Other DFIs, for which annual reports are available, do not refer to internal research departments explicitly, i.e. do not emphasize specific research competences or services. Although SME Bank established a dedicated unit in 2013 – Center for Entrepreneur Development and Research (CEDAR) – which is mostly in charge of business coaching activities and involves external consultants for research activities. Agrobank revitalized an internal research unit in 2014 where around 10 people work on general industry assessments and outlooks. (Interview 11)

Development banks covered by the DFI Act 2002 are to follow lending guidelines stipulated by Bank Negara. Overall, the terms of lending and interest rates charged by all DFIs vary according to soft-loan scheme agreements (between a DFI and a government agency) although roughly until 1990s banks had a greater discretion in determining terms of lending, which varied across the projects to be financed. (Interview 8) At the same time, in some cases – most notably MIDF – project appraisal was rigorous and included such parameters as verification of sponsors, eagerness of commercial banks to provide supplementary working capital loans right at the start of investment project, a solid collateral, and other non-financial indicators such as market potential, management capacity, technical feasibility, and socio-economic aspects. Such conservatism has been justified by bankers due to volatile economic environment associated with Malaysia's dependency on resource-based exports. (Darwis, 1988) Agrobank exercised a similar policy by prioritising collateral financing. (Martini, 2008,[27] p. 41) At the same time, such extensive require-

25 Other central research agencies included Federal Industrial Development Authority (est. 1971), National Institute for Scientific and Industrial Research (est. 1971), Malaysian Agricultural Research and Development Institute (est. 1969). (BNM report 1971)
26 With the assistance from ILO and UNDP.
27 The then acting President of Agrobank.

ments go somewhat contrary to often-referenced principle of development project assessment based on project's potential and projected cash flow rather than collateral.[28]

Reporting on utilisation of government funds has mostly involved the types and the amount of borrowers while the most recent initiative (2016) to introduce non-financial KPIs by BNM and to include measurements of total factor productivity by MITI (Interviews 6, 8) might indicate intentions to move towards impact assessment of soft loan schemes.[29]

4.5 Internal organisation and competences (based on interviews 1-3 and 5-11)

Among development banks that do not engage in deposit taking, usually there are two major divisions – investment and development – reflecting the two major types of customers and two types of funds – concessionary and commercial. In banks where Development division only deals with government soft-loan schemes, interest rates charged for development loans are lower (around 4%) than for commercial lending (between 5.5% and 8%) as in MIDF. In banks where no such clear demarcation line exists and most of loanable funds are raised from capital markets, interest rates vary similarly: higher for development loans and lower for commercial customers. For example, in SME Bank around 40% of customers belonged to development finance division in 2015, although the bank reports on aggregate amount of loans made to various sectors without differentiating between the types of customers.

Personnel-wise, specific expertise in development finance is rarely required while for managerial positions solid experience in general finance is a must. Recruitment for development finance units is generally done by the central Human Resource office and so is with training and acquiring additional expertise outside the bank. Staff working in Development finance division of a bank would not be required to have any specialized licenses from the Securities Commission or other licensing authorities in relation to various trading or securities as these financing facilities are

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28 Meanwhile, given that lending to *bumiputra* community was a lending target in itself, combined with provision of entrepreneurship trainings, internships, and other non-financial supporting services, there are grounds to conclude that loans extended to emerging class of *bumiputra* entrepreneurs were subject to less scrutiny and to a greater extent were based on project's potential rather than collateral. This might be reflected in a few annual reports available from *Bank Pembangunan*, which was established (1973) precisely for the purpose of supporting *bumiputra* business projects and its two-digit NPL ratio, at least during 1980s.

29 At the same time, the emphasis on mechanisation through the launch of another soft-loan scheme for Automation and Mechanisation, was initiated by the government also to offset financial pressures on employers associated with the introduction of minimum wages in 2013 while increasing mechanisation was also thought as an attempt to decrease firms' reliance on cheap foreign labor. (Interview 5)

under Investment Division. The back office, which is in charge of supervision, is staffed by employees with formal training in finance. Staff recruited for the front office to conduct site visits often comes from various fields of expertise, including non-financial. In the back office, account managers have a portfolio of customers and might either rotate among industry-specific fields (as in Agrobank) to acquire a broader overview or rather not (SME Bank), which, in turn, can be also related to either good or lacking internal database of clients – in the latter case, a rotation of credit officers is avoided. Overall, despite state ownership of DFIs there is little rotation among the staff and no common 'development banking' ethos exists either. Although recently (2015) the potential of staff exchange between various DFIs and related government-linked companies was considered.

Applications for loans are often reviewed by committees, which are formed by representatives from DFIs, a respective Ministry to which a given DFI reports or listed as its agency, and might involve invited business actors or civil servants from respective ministerial departments (e.g. Sectoral Policy Division in MITI). For example, in MIDF a committee meets bi-monthly and includes representatives from MITI (Investment Division), MIDA, MATRADE (export promotions agency), and Ministry of Finance. Development bank is responsible for financial side of project appraisal and is tasked with making recommendations to the committee, which issues the final decision. The overall project appraisal procedure goes through similar steps in almost all DFIs: marketing department and sales conduct the first analysis, then disbursement and supervision units take charge[30]. Agrobank, tasked with financing of upstream borrowers (that is primary sectors: fisheries, plantations)[31] considers projected cash flow at first place while risk assessment is conducted on similar grounds as in other banks. DFIs report, sometimes on a monthly basis, to respective ministries on the amount of loans made to enterprises, in order to ensure that loans are distributed according to specific objectives stipulated by every Fund agreement or by five-year plans issued by Malaysia's Central Planning Unit.

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30 At the same time, in the field of development banking in general, credit processing has become more standardised already in 1970s when account managers replaced multiple-member team in charge of project appraisal. In other words, instead of staff members with diverse expertise – from finance to technical skills – a single person would be in charge of a single project application. In some banks, however, research departments continue playing important role and industry consultation takes place. Although, the general trend towards standardisations and credit processing in line with more stream-lined organisation of commercial banking can be observed.

31 Downstream borrowers, such as commodity operators and agro-manufacturing are financed through commercial banks.

Introduction of productivity measurements in 2016 requires DFIs to ensure that borrowers (which have credit applications approved) allow a representative of the National Productivity Commission to access their production site, which often involves trust issues on the side of borrowers. Yet, the effectiveness of measure rests on the need to conduct such a visit twice: before purchase of machinery or equipment and some time after.

5. Institutional context: towards conceptual framework

As follows from the notion above and as the case of Malaysia clearly demonstrates, development banks evolve in a dynamic institutional environment. Industrial structures mature and new forms of business as well as new economic activities require different types of financing facilities and of various scales. Financial institutions respond to this as well as to competition within financial sector by readjusting their operation strategies, range of services, and subsequently internal competences. Simultaneously, policy trajectories, regulatory regimes and other institutional arrangements affect the way development banks fulfill their mandates. Therefore, the context in which development finance institutions operate includes a variety of actors, both from private and public sector, which, in turn, define as well as get reflected in banks' internal competences. Table 2 differentiates between external and internal contextual factors.

In addition, defined by the institutional context, there are various functions carried out by development banks. These functions can be mandated *a priori* by legislation, policy tasks, reporting requirements, but at the same time, they can be reflected in ways how banks operationalize and perform their mandates. For example, if a research unit previously conducting industrial and economic research was transferred to investment banking division and now publishes studies of capital markets, then the development research function of the bank became less relevant but more in line with practices of investment or commercial banks. Similarly, if project evaluation committee consists of representatives from agencies in charge of economic planning while bank's representatives perform the role of financial advisors, the bank is more likely to conform to guidelines from ministerial bureaucrats rather than act as a strategic investor, that is, its managerial function would over-write its investment function in terms of policy role[32]. The types of functions are not mutually exclusive

32 It can still be a strategic investor in generating income to remain a sustainable financial firm but that would be related to its operations and not policy role. The two are certainly interrelated but singling out policy functions helps to fill the persistent gap between normative assessment of policy finance and empirical study thereof.

and are dynamic. By identifying institutional context and differentiating between the types of functions, we can better understand the variety of policy roles development banks perform.

Table 2. Suggested framework for analysing institutional context of a national development finance institution.

Position within a wider national context and linkages with relevant public and private actors	Evolution of internal organisational structures and competences
Founding statute: type of legal act, ownership, relation with supervising agency, and formal policy mandate, which defines the place of DFI within national financial structure.	**HR policies and development of internal competences** according to the policy mandate.
Policy mandate and actual scope of operations including sources of funds, fulfilling profitability targets and prudential guidelines, lending and /or equity investments.	**Organisation and bureaucratic practices** reflecting existing (lacking) competences and their ultimate success (failure).
Relations with commercial banks (consortia lending, syndicated loans, both domestically and abroad)	**Specific competences vis-à-vis commercial banks** (how do financial and technical competences are positioned vis-à-vis private financial actors)
Relations with industrial / services sector (industrial research, economic forecasting, technological evaluation, feasibility studies)	**Specific competences vis-à-vis private sector** (how do financial and technical competences are positioned vis-à-vis private non-financial actors)
Relations with other public organisations, especially Central Bank (e.g. provision of guarantees), related Ministries, and relevant agencies (e.g. Productivity Commission, research centers, export agencies).	**Specific competences vis-à-vis public sector** (how do financial and technical competences are positioned vis-à-vis public actors)

Source: compiled by the author.

5.1 The typology of functions

Apart from retail banking and financing of consumption performed by certain DFIs in Malaysia, there are particular functions related to developmental policies, especially in regards to financing of industries that can be identified: *investment* function, *managerial* function, and *research* function. Investment function refers to lending activities (or equity participation) where a bank has a greater discretion in performing project appraisal and determining conditions of financing facilities provided, it usually implies higher risks and corresponding interest rates, and respective competences that a bank has or need to develop, usually both financial and non-financial. In Malaysia DFIs performed this role during the first decades of industrialisation, especially MIDF, arguably *Bank Teknologi & Industri*, and to some extent *Bank Pembangunan*. Managerial function refers to less strategic role whereby a bank channels government soft-loan schemes, allocated within the developmental part of budget, at more standardized interest rates and focuses on financial side of project appraisal, thereby acting as a financial *manager* of the fund. *Research* function implies specific industrial, economic and technological research and evaluation competences a bank can develop to provide industry-related policy input. MIDF performed a strong research function until 1990s while overall banking institutions did not significantly complement federal agencies in providing research input for policy formulation in Malaysia.

Managerial functions do not have to be strictly related to disbursement of government-backed loans. Other types of managerial functions, not discussed above but more prominent in other DFIs such as Korea Development Bank (KDB) or China Development Bank (CDB) include facilitating industrial restructuring by financing mergers and acquisitions; by assuming temporal managerial control over troubled firms, both financial and non-financial; or partaking in privatization programmes. Restructuring can take place either following a major economic downturn (e.g. Asian Financial Crisis) or maturity of a particular industry, which both imply industry consolidation. In either case, development banks are provided with additional government funds to assume this temporary mandate and rely on their knowledge of industries, financial and technical aspects thereof. Malaysian DFIs assumed managerial function while assisting in privatisation programmes as well as in supporting national government in redistribution of wealth following the New Economic Policy agenda: due to the absence of specific targets within *bumiputra* quotas, banks were less concerned about industrial and economic returns of investments made. There is also a countercyclical role state-backed development banks tend to play but since in this case banks channel additional government funds in order to prevent a credit crunch, that is, largely to multiply the total amount of credit extended, this can represent either investment or managerial function, depending on whether certain sectors are prioritized or to what extent lending guidelines are pre-defined. At the same time, financial inclusion, affordable housing and education, or other types of broader socio-economic goals can be classified as *socio-economic* function, which refer to the activities that commercial banks classify as non-bankable.

The functions differ not only across various DFIs but often change throughout the lifetime of a development bank. While looking at a single institution such as MIDF we may suggest that *research* function might appear more strategic during the first decades of industrialisation when domestic industrial sector is in the process of developing own standards, assessing market positions, importing technologies and acquiring skills in professional management, marketing, and other business-related spheres.[33] Similarly, while conducting a countrywide study we may observe that direct government funds for industrial lending tend to decrease along the course of economic and technological development, which may introduce or reinforce the *managerial* and *socio-economic* functions of a development bank, shall it remain on the national scene of development finance. Although DFIs in Malaysia did not have "to cope with unexpected reversals of policies" (Salim, 1986 p. 58) but rather had to follow shifts in priorities, the latter were changing fast enough and without strong enforcement of targets, therefore provision of funding was more supply-based and resembled a transfer of developmental funds rather than its strategically targeted (in industrial terms) utilization. Further, increase in managerial approach to development loans since 1990s and diversification of DFIs into commercial activities and consumer lending coincides with negative de-industrialization, stagnating incomes and lower productivity dynamics in Malaysia since 2000s outlined in Rasiah (2011).

6. Conclusion and suggestions for further research

The study attempted to give a nationwide overview of public development banks in Malaysia and trace its evolution in order to emphasize that despite policy mandates and formal policy roles, these institutions may or may not perform strategic policy functions, which are often attributed to DFIs in scholarly literature and policy studies. The study has suggested broadening empirical frameworks along two dimensions: to assess institutional contexts in which DFIs operate nationally and to inquire into internal competences, especially in regards to how financing decisions are made. The latter is related to the amount of discretion DFIs have in making such decisions and to the actual functions these banks perform. Assessing operations of development banks through the prism of institutional context, in which these banks operate, would inform the discussion and help make more nuanced inferences from the empirical studies. This, in turn, would enable more accurate comparative analysis: comparison of the investment function of German *Kreditanstalt für Wiederaufbau* (KfW) or Canadian Business Development Bank (BDC) with that of Brazilian National Bank for Economic and Social Development (BNDES) is more likely to produce viable results as well as more sensible policy recommendations when performed in conjunction with analysing developments in industrial sector, regulatory and supervisory framework, operational strategy and

33 At the same time, in cases of KDB and China Development Industrial Bank (CDIB; successor of China Development Corporation, Taiwan) the research function remains one of the defining features of development banks that help position themselves strategically vis-à-vis government agencies as well as commercial banks.

goals, as well as position within the national financial system. Otherwise, comparing policy roles and financing facilities of various DFIs would result in distorted conclusions and might facilitate the advocacy of so-called best practices, which, however, would remain outside real-life problems and viable policy solutions.[34] Further research should be done on both single-institution and nationwide scales in order to identify other functions of development banks and refine the suggested typology. Both institutional contextualisation and the typology of functions outlined in the current study, are not limited in its application to the analysis of state-owned development banks and can be equally applied to other types of financing agencies, including privately-owned (e.g. Development Bank of Turkey, Development Finance Corporation of Ceylon (aka DFCC Bank) in Sri Lanka) as well as other specialized financial agencies (e.g. FINNVERA in Finland).

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Interview 3 – December 21, 2015
Interview 4 – December 30, 2015
Interview 5 – January 3, 2016
Interview 6 – January 21, 2016
Interview 7 – January 26, 2016
Interview 8 – January 27, 2016
Interview 9 – February 10, 2016
Interview 10 – February 17, 2016
Interview 11 – October 7, 2016

Interviews (semi-structured) were conducted in Malaysia, and the Philippines between October 2015 and October 2016 and a number of personal communications took place during the same period. All respondents preferred to remain anonymous, including their formal affiliations. Respondents included senior officials from selected DFIs, both acting and retired, representatives from selected government agencies, and a regional association of development banks. Unfortunately, despite two formal interview requests sent to Bank Negara, the author was unable to meet with respective officials.

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34 For example: as policy notes from a number of bankers of Malaysia's DFIs from 1980s demonstrate, there existed a strong advocacy for universal banking through mergers of development banks with commercial banks, following the experience of Singapore where the development bank (Development Bank of Singapore, DBS) ventured into commercial finance almost at the start, thereby complementing lines of industrial finance. Such suggested emulation, however, did not account for differences in external finance (via foreign direct investment) and structures in domestic industrial sector with Singapore rapidly climbing a technological ladder as well as diversifying into services, including financial.

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