

THE INVOLVEMENT OF NATIONAL DEVELOPMENT BANKS IN PROMOTING SUSTAINABLE FINANCE

Györgyi NYIKOS^a, Zsuzsanna KONDOR^a

^a National University of Public Service, Hungary, Budapest, nyikos.gyorgyi@uni-nke.hu;

^b National University of Public Service, Hungary, Budapest, kondor.zsuzsanna@uni-nke.hu

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Abstract

The need to take action to mitigate the effects of climate change is widely recognized by governments and economic actors around the world. Likewise, an awareness of a more holistic approach to financing policy goals, so that all social, economic, and environmental aspects receive adequate consideration, has been on the rise, too. The UN sustainable development goals (SDGs) combined with the European Green Deal objectives have themselves induced a major funding challenge, which is now aggravated by the COVID crisis and the war in Ukraine. Development finance and investment are strongly needed. In the public finance sector, besides European institutions and national governments, national development banks (NDBs) play an important role in providing funds and implementing development and investment programmes. By using public and private funds, they are actively involved in financing infrastructure projects as well as they are acting as holding fund managers or financial intermediaries for different financial instruments such as investment platforms or EU funded financial instruments.

The paper assesses the compliance of European national development banks with sustainability requirements by exploring their strategic objectives and investment activities. The aim of the paper is to examine whether and how the contradiction between stimulating growth and maintaining a sustainable fiscal strategy can be resolved. The new obligations stemming from the EU Taxonomy rules and the weight of national development banks in investments and specifically in infrastructure finance gives particular relevance to the enquiry.

European National Development Banks satisfy a wide range of specific missions to address market failures. They can be clustered based on the basis of the duration of their operations, the financial market situation and level of economic development in their country as well as the sustainable development index. The level of commitment the government makes to green growth and of the influence it holds over the bank has been observed to correlate with bank's contribution to sustainable finance. The results of the analysis of their various management and investment areas show that the investments they currently finance are to a large extent harmonized with the sustainable finance requirements and regulations of the European taxonomy. Meanwhile, their mandates and the wider context of national development strategies continue to provide strong incentives for sustainable finance.

Keywords: development banks, public finance, sustainable finance, EU taxonomy

INTRODUCTION

While traditional finance and financing solutions focus on financial returns, where the financial sector is separated from society and the environment, the sustainable finance approach considers financial, social and environmental returns together. The question may occur: why should public and private finance contribute to sustainable development? The main role of the financial system is to allocate resources and provide finance for the most productive solutions. At the same time,

the financial sector can play a leading role in financing sustainable companies, projects and investments thus accelerating the transition to a low-carbon, circular economy. Sustainable finance takes into account how finance (investment and lending) impacts on economic, social and environmental factors. Via its allocative role, finance can contribute to strategic decisions on sustainable goals. By pricing risks from a valuation perspective, finance can contribute to the appropriate management of uncertainties related to environmental issues. Finance and sustainability are mutually reinforcing and forward-looking areas.

The financial and economic crisis reinforced the focus on public financial institutions, particularly development banks. Public financial institutions can play an important role in financing development, too. National development banks are specialized state-owned entities, their long-term development objectives are essentially aligned with the country's development priorities. Given that a significant proportion of the world's countries are committed to implementing the Paris targets, investment policies of development banks seem to evidently allocate resources to projects that meet ESG criteria. National development banks perform a wide variety of duties, such as development tasks of general interest (addressing market failures) and they use a variety of financial resources, mainly from public sources. Development banks can be either 'sectoral' banks, focusing on specific sectors, e.g. SME development, or 'universal' development banks, dealing with all aspects of development banking. Export-import banks carry out the traditional activity of export-import financing. Most development banks focus on providing services to both the public and private sectors and to companies of all sizes. Interest in development banking to promote growth and boost investment has recently increased, particularly in Europe (Nyikos, 2017).

It will become clear that the current strategy of governing through financial markets in the EU employs constrained public funds as well as the radiance of anchor investments by public institutions to steer market-based finance. The financial system is in transition to address the lessons of the financial crisis and to help the forming of a greener and more sustainable economy. Reorienting public and private capital to more sustainable investments became a requirement. In view of the current state of affairs, an important question relates to what extent the investments made by the national development banks and the resources they use meet sustainability requirements. The issue is further exacerbated by the so-called EU taxonomy regulation which imposes new sustainability requirements for the European financial sector as a whole. To answer this research question we have analyzed the mission and functioning of national development banks and categorized their operations and investment activities according to the EU taxonomy

rules. This is one of the publications which presents the results of an extensive survey and data analysis to explore this issue.

LITERATURE REVIEW

Sustainability and the transition to a low-carbon, more resource-efficient and circular economy are critical to a globally competitive EU economy. Sustainability has long been at the heart of the European Union project and the EU Treaties give recognition to its social and environmental dimensions¹¹.

There exist many definitions of sustainability and sustainable development in particular (see Pezzey, 1989; Toman et al., 1995; van den Bergh & Hofkes, 1999; Ayres et al., 2000). Neoclassical models tend to use growth and development synonymously, however, environmental economists no longer see the concepts of development and growth as being unreconcilable. This is well-illustrated by the fact that the discipline's representatives have replaced GDP with GPI, an indicator of real development. In ecological economics, the concepts of development and growth are clearly separated. In the second half of the 20th century, it was recognised that growth, due to its ecological and biological limits, is development-friendly only up to a certain point, (Meadows et al., 2005). Beyond this level it causes significant socio-psychological and environmental damage. On the other hand, economic growth without welfare state interventions leads to social polarization, income and territorial inequalities, mainly in favour of the owners of capital. Quality of life is seemingly unrelated to the economy and sustainable development, nonetheless in reality, social perceptions of the quality of life have a profound impact on sustainability (Kerekes, 2018).

Literature on state-owned financial institutions has principally focused on their financial performance (e.g., Micco et al., 2007). State-owned financial institutions mostly present a modest track record. This is for that reason that they prioritise to remain financially solvent, maintain good credit ratings, reduce high arrear ratios, and to stay adaptable to changing market conditions (Berger et al., 2005; Lin & Zhang, 2009; Mian, 2003). Direct government ownership of banking institutions is also correlated with increased corruption (Barth, Caprio Jr, & Levine 2004). A study of German banks from 1995 to 2007 concluded that state-owned banks are more stable, although less profitable, than private banks (Beck et al., 2009).

Authors of previous studies defined “development bank” in various terms. Diamond conceives them as “an institution designed to promote and finance enterprises in the private sector”.

¹¹ See, among others, art. 3.3 of the Treaty on the European Union (TEU) and the role of environmental and social issues in international cooperation (art. 21 TEU).

However, Keynes and Akintola provide a wider definition by interpreting a DB as a financial intermediary supplying medium and long-term funds to bankable economic development projects. World Bank defines development banks as financial institutions that derive their funds mainly from the government, other financial institutions, and supranational organizations.

State-owned development banks are dedicated to promote pre-defined socioeconomic goals. Their role, institutional set-up, and size differ significantly across countries and these attributes are closely linked to the historical trajectory of national political economies and their distinctive public-private financial networks to furnish growth and development (Shonfield, 1965; Zysman, 1983). During the crises, most development banks have assumed a counter-cyclical role by scaling up their lending operations precisely when private banks experienced temporary difficulties in granting credit to the private sector (De Luna-Martínez, & Vicente, 2012; Farkas, 2018). Griffith-Jones et al. (2012) and Ocampo et al. (2012) provide empirical evidence for the counter-cyclical response of regional and multilateral development banks, whilst Brei and Schlarek (2013) and Luna Martinez and Vicente (2012) illustrate evidence for the counter-cyclical role national development banks play. Development banks can serve as focal points for regional and subregional cooperation (Józsa, 2016; Rácz, 2019), thus promoting economic integration (Bloch, 1968). Wruuck (2015) notes that not only were many European national development banks engaged in counter-cyclical activities, but many also launched financial activities additional to their original scope. In recent years, the valuable role that national, regional and multilateral development banks fulfill has received a growing recognition in wider and ever-growing circles (Griffith-Jones, & Cozzi 2015).

The so-called pro-market activism model acknowledges that development banks could play a key role in developing specialized knowledge as well as offering tools to address problems of accessing finance through working closely with the private sector. NDBs have a financial advantage as they can access finance at longer maturities and at more economical terms than private actors. Therefore, they can provide lower-cost, longer-term financing for investment and/or co-investment in infrastructure. Professionally managed and independent, development banks are well suited to detect un- or under-served market niches and fill the gaps (Schmukler, 2017; & Nyikos, 2016). NDBs have a development mandate and are well placed to offset market failures and financing constraints, which approach is associated with the theory of market failures (Stiglitz & Weiss, 1981; Stiglitz, 1990). NDBs could pursue multiple economic development activities, with diversified scope and focus, targeting a broad base of customers or specific types of clients, such as SMEs or start-ups (Nyikos et al., 2020a, 2020b) and they could also be engaged with

infrastructural projects that are regarded as growth-related (Béres et al., 2019). Development banks also seek to generate positive development impacts, among others social and environmental benefits.

DATA AND METHODS

We chose a combination of qualitative and quantitative methodological approaches for this research. First, we conducted a desk-based review and analysis of relevant literature on NDBs, infrastructure finance, green finance and the financial instruments employed by MDBs, DFIs and sovereign wealth funds as well as European regulations, policy documents, supervisors' and institutions' websites. We also reviewed the annual reports on activities of the NDBs (balance sheet, annual volume of loan, guarantee and equity) as well as relevant country-specific data (real GDP per capita, SDI¹²). In the cluster analysis we used the K-means cluster method. The variables were tested in different combinations: the combination of the variables SDI, GDP and annual volume of loans allowed the construction of three well distinguishable clusters. Second, we analyzed publicly available data on NDB activities and investments. Third, we interviewed 18 European development banks or financial organizations with the help of a survey including 46 questions. Additionally, we used the results of a questionnaire comprising 138 questions prepared by the World Bank with inputs from the WFDFI. This questionnaire was sent to the 230 members of the WFDFI in 2017, and 64 responses were received.

While there are several historical, organizational and strategic differences between (European) national development banks, they all are devised to fulfil politically set tasks. The analysis builds up decision-making/functional models based on an examination of their governance and activities. Supplementary to the descriptive comparative analysis the research approach has been based on the clustering of NDBs by combination of SDI, GDP and the annual volume of loan variables, enabling the examination of their role in addressing market failures and improving access to finance. The data were analyzed in SPSS database using cluster analysis, which included the application of the K-means cluster method.

¹² The Sustainable Development Index (SDI) measures the ecological efficiency of human development, recognizing that development must be achieved within planetary boundaries. It was created to update the Human Development Index (HDI) for the ecological realities of the Anthropocene. The SDI starts with each nation's human development score (life expectancy, education and income) and divides it by their ecological overshoot: the extent to which consumption-based CO₂ emissions and material footprint exceed per-capita shares of planetary boundaries. Countries that achieve relatively high human development while remaining within or near planetary boundaries rise to the top.

As a second step we describe the broader regulatory shift towards sustainability in the EU and assess whether strategic goals, key functions and the activities of EU NDBs are in line with EU taxonomy criteria.

We analyzed the specificities of the NDBs in the different clusters and presented the different groups. Despite the common goals, mandates and main specificities we could still capture differences between the NDBs, even variations linked to the economic situation and SDI of the country.

RESULTS AND DISCUSSION

An important question relates to what makes development banks and their products sustainable and how. The definition of sustainability relating to the bank's investments should be linked to transparency over the nature of each financial product/investment; the impact on the economy, society and environment is a critical factor, as well.

As European development banks are public entities, their activities align with national strategies and programmes to promote economic growth. They should ensure that development outcomes take precedence over profitability, and they should reinvest any profits in reinforcing the development focus of the institution. Strong public accountability must be in place as NDBs are frequently financed by public funds and due to increasing pressure they must become more efficient in justifying the use of public money. This requirement translates into clear and transparent goals and key performance indicators, which are based on broad public consensus looking for the best deal for the taxpayer while fulfilling the economic policy goals defined in the institution's mandate. Requirements on development banks do not differ from standard commercial banks in terms of a professional approach to risk management and banking operation in general. However, development banks are using public money to overcome market failures and financing gaps and therefore they must satisfy a higher level of transparency and sustainability in terms of the modalities they employ when using the funds to reach their goals. NDBs need to cooperate with other institutions and complement their services to efficiently fulfill their tasks. Successful development banks have evidenced a clearly defined mandate and an efficient split of roles and responsibilities with other institutions. Development banks can be "sectoral" banks, which focus on specific sectors, or "universal" development banks, which deal with all aspects of development banking. In defining the development objectives and mission statements of the European national development banks, there are differences in the way the development of

different sectoral areas is reflected in the founding regulations and strategy documents (see Table 1).

Table 1 Definition of the mission of European national development banks

Agriculture, rural development	Export promotion	SME support	Environment and energy-efficiency	Education health	RDI	Employ. culture, sport	Real estate, financial system dev.
36,1%	39,7%	60,7%	42,9%	46,6%	29,8%	17,4%	55,9%

Source: Nyikos’ compilation from websites and the Survey on European Development Banks and Promotional Financial Institutions 2016

The degree of government involvement in decision-making is an important indicator too. The degree of government involvement typically increases with the breadth of the mandate. A minimum government involvement in decision-making is typical in case of a dedicated and exclusive focus on SMEs. As regards large deals, these actions are often backed up politically, which results in a higher degree of overall dependence on the government, incl. profit orientation vs. subsidy role. The role of government is generally wider in institutions operating in Eastern Europe. On the contrary, more recent institutions present a lower level of government involvement. These institutions are profit oriented and focus on finding the “best deal for the taxpayer”.

Figure 1 Decisions/functions models of development banks

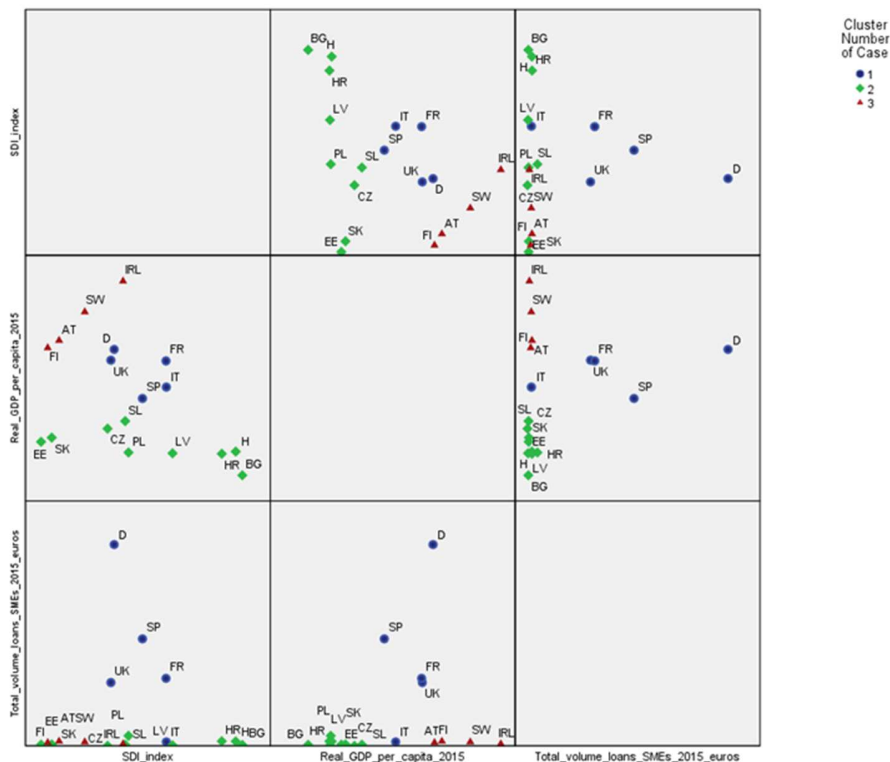
The owner of the strategic initiative is responsible for financing the operations		
Government	Mandate	Government
Development bank	Strategic initiative	Government
Development bank	Execution	Development bank
Development bank	Financing	Government

Source: Nyikos compilation

This means that if the national government is strongly committed to green and sustainable development, a higher degree of overall dependence on this government by the NDB will lead to sustainable finance.

However, besides the strategic commitment the economic importance of the NDB in the financial market is relevant, too. Data on the activities of national development banks (balance sheets, annual loan, guarantee and capital balances) and country-specific data (real GDP per capita, SDI) allow us to assess the role of EU national development banks in addressing market failures in the provision of access to finance. Two iterations of this analysis were performed as identified in the chapter “Data and Methods” and the cluster are presented in Figure 2.

Figure 2 Clusters of European NDBs



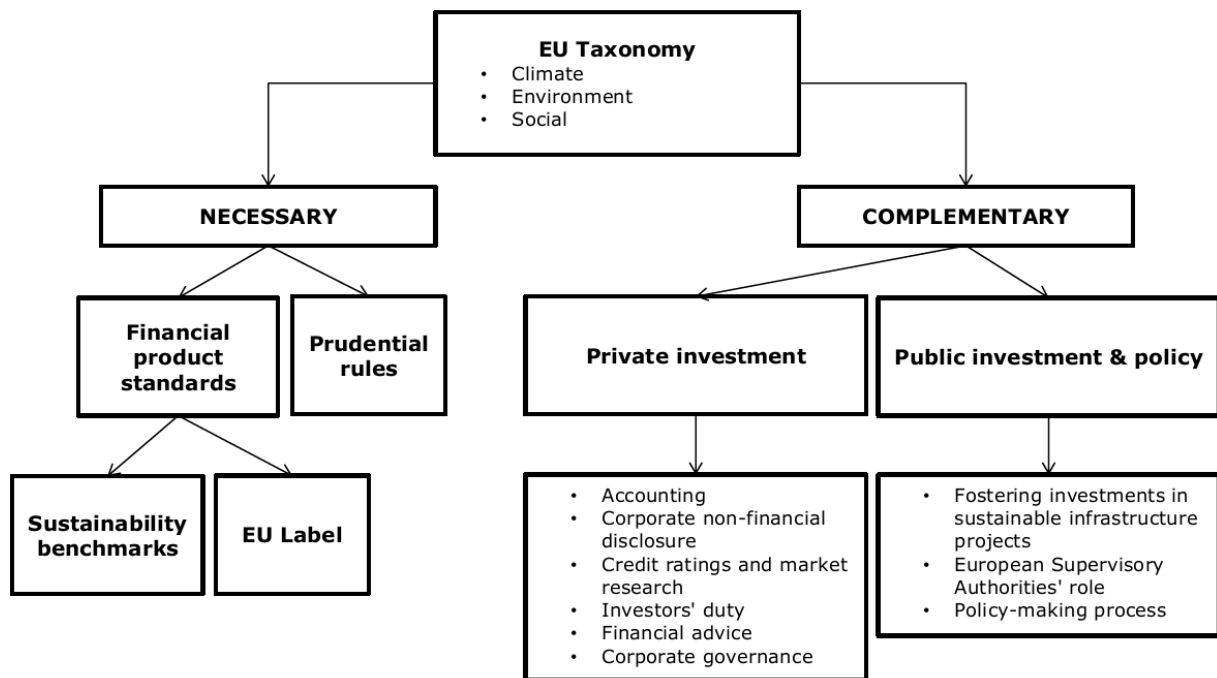
D Germany	1	CZ Czech Re	2
UK United K	1	SL Slovenia	2
IT Italy	1	HR Croatia	2
FR France	1	H Hungary	2
SP Spain	1	PL Poland	2
EE Estonia	2	AT Austria	3
LV Latvia	2	FI Finland	3
SK Slovakia	2	IRL Ireland	3
BG Bulgaria	2	SW Sweden	3

Cluster 1 includes countries with a higher development index and GDP (AT, SE, IE and FI), and a strong financial market. For this reason, ensuring better access to finance for SMEs is less of a priority in their economic development policy. Cluster 2 includes countries (HU, BG, HR, LV, SK, SL, CZ, PL and EE) with lower levels of GDP and different levels of SDI. These so-called cohesion policy countries provide significant amounts of EU support for sustainable economic development, however, the results of these efforts show divergences (see SDI values). These countries have started to use repayable financial assistance and are therefore characterised by a lower volume of loans to SMEs. Cluster 3 is composed of countries (IT, FR, UK, ES and DE) with moderate SDI and a higher use of SME lending as a share of GDP. In these countries, NDBs have a longer tradition and play a greater role in national economic development policies. Although

financial markets are well developed and strong in these countries, their governments support SMEs with substantial financial assistance and a wide range of business development instruments. The results show that, despite common objectives, mandates and main specificities, there are identifiable differences between national development banks that are linked to the country's economic situation and the SDI.

Development banks can lend directly to customers (1st tier/retail) or channel credit via other (private) banks (2nd tier/wholesale). Many development banks operate with a mix. Most of the banks hold a comprehensive portfolio, i.e. also offering other types of development activities than loans and guarantees, e.g. venture capital investments or advisory services. Accordingly, the different financial tools need to be examined and evaluation with regard to sustainability and European Taxation¹³. This regulation prescribes specific rules for financial market participants, investors, large companies and national regulators. Indeed, when an economic activity¹⁴ meets the EU Taxonomy performance thresholds it is certified as “EU Taxonomy-aligned”.

Figure 3 Structure and effect- of EU Taxonomy



Source: European Commission¹⁵

¹³ REGULATION (EU) 2020/852 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 June 2020

¹⁴ The EU Taxonomy adopts NACE for industrial classification. The selected NACE Macro-Sectors are: Agriculture, Forestry and Fishing; Mining and Quarrying; Manufacturing; Electricity, Gas, Steam, and Air Conditioning Supply; Water Supply and Waste Management; Construction; Information and Communication. Within each NACE Macro-Sector, 72 economic activities are identified as eligible.

¹⁵ COM(2018) 97 final

Financial market participants should demonstrate the environmental objective(s) to which their investments contribute as well as the taxonomy of their investments as a percentage of the investment, fund or portfolio. The taxation regulation states the specific requirements related to reaching the six environmental objectives¹⁶ and also the economic activities have to be qualified on the basis of the NACE¹⁷ system. NACE codes were used as a framework to capture all economic sectors, and hence almost all economic activities. In the qualification system the defined Macro-Sectors are as follows: Agriculture, Forestry and Fishing; Mining and Quarrying; Manufacturing; Electricity, Gas, Steam, and Air Conditioning Supply; Water Supply and Waste Management; Construction; Information and Communication. Within each NACE Macro-Sector, 72 economic activities are identified as eligible environmentally. However, NACE codes do not directly cover certain economic activities despite their relevance to climate change mitigation and adaptation. Therefore, some themes are identified as a cross-cutting activity for both climate change mitigation and adaptation.

National Development Banks also support infrastructure¹⁸ projects under long-term financing facilities: from transport networks (railways, motorways, seaports, airports, etc.) to energy networks (electricity grids, gas and oil pipelines, etc.) and production (power plants, renewable energy, etc.), and social housing and education infrastructure. However, the capacity to develop and implement sustainable projects varies widely across the EU and across sectors (Hoffman, 2018; Hajdu et al., 2016). In addition to large-scale infrastructure projects (Béres et al., 2019), national development banks can also provide appropriate financing for smaller-scale, distributed projects for the clean energy transition.

The quality and design of infrastructure plays a key role in how we live, what we do and how we interact with each other in almost every aspect of life (Nyikos, 2022). They determine economic structures and outcomes, social systems, personal well-being, environmental impacts and development pathways. Infrastructural systems such as health, energy, water and sanitation,

¹⁶ Climate change mitigation, climate change adaptation, sustainable use and protection of water and marine resources, transition to a circular economy, pollution prevention and control, and protection and restoration of biodiversity and ecosystems.

¹⁷ Nomenclature des Activités Économiques dans la Communauté Européenne

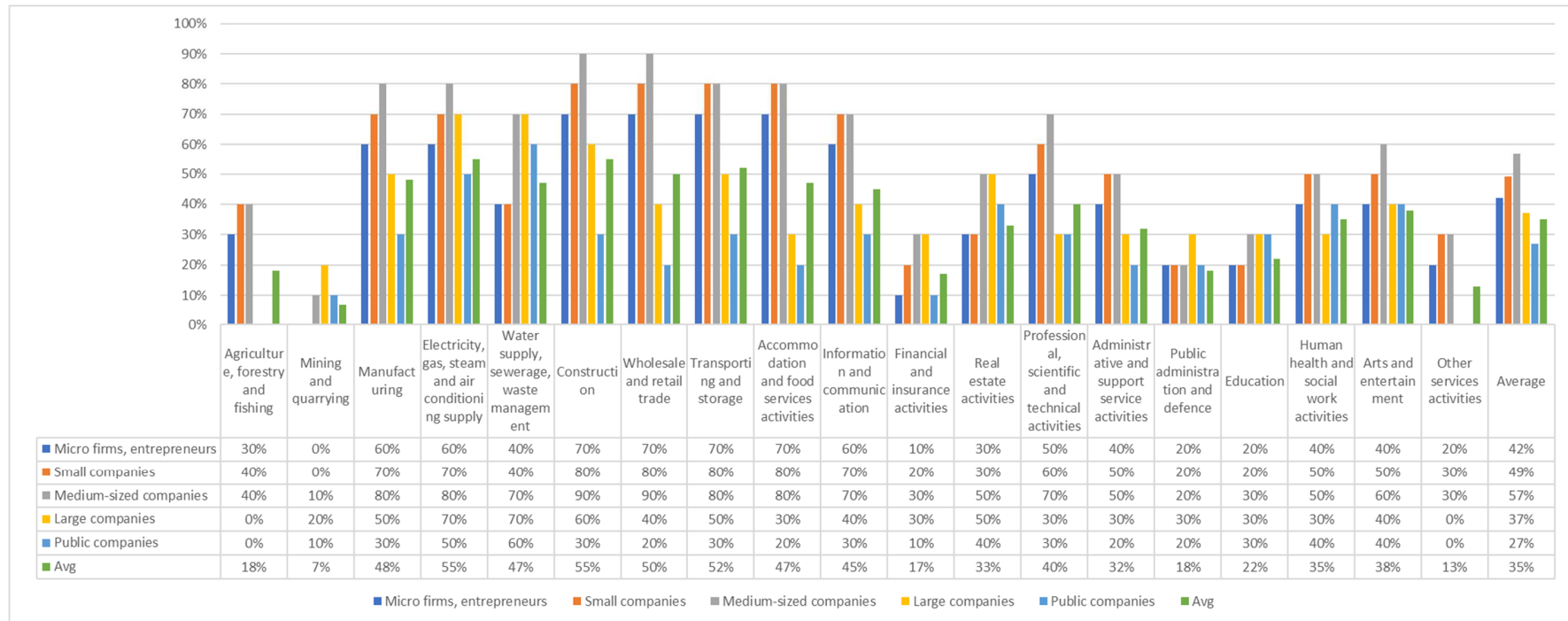
¹⁸ The OECD defines infrastructure as the system of public utilities in a country, state or region, including roads, utility lines and public buildings - essentially the tangible backbone of the basic goods and services that underpin the economy. See <https://stats.oecd.org/glossary/detail.asp?ID=4511>

transport and telecommunications provide essential services, contributing to economic and social activity and fostering wider economic and social resilience. Disruptions and stresses to infrastructure can exacerbate challenges such as underfunding, poor maintenance and mismanagement. Quality Infrastructure Investment (QII)¹⁹, i.e. implemented through appropriate delivery mechanisms and managed effectively throughout the life cycle, is vital to support economic growth and enhance human well-being as well as it is critical to achieving the Sustainable Development Goals and meeting the targets of the Paris Agreement. From a sustainability perspective three types of infrastructure can be distinguished: i) “net zero”, ii) “grey” and iii) “ecological” or “natural capital”. Net-zero infrastructure includes renewable energy and electric buses, which strive for zero or near-zero carbon emissions. 'Grey' infrastructure comprises water infrastructure or roads, assets that contribute to significant pollution during their construction and operation, but which can still be improved. 'Ecological' or natural capital assets, such as mangrove swamps, provide a range of services, such as protection against coastal erosion.

As detailed information on the current investments of the NDBs for NACE categorization has not been available yet, the study analyses investment related information obtained via the survey on European Development Banks and Promotional Financial Institutions. Considering the fields of activity and investment of NDBs together with NACE codes (see Figure 4), it should be stressed that in addition to clearly sustainable sectors other economic activities can also contribute significantly to sustainability: for example, economic activities carried out in an environmentally sustainable way, such as so-called greening activities. We also need to recognize the enablers. These include economic activities that enable a significant contribution to other activities through the provision of products or services (e.g. an economic activity that produces a component that improves the environmental performance of another activity).

¹⁹ The World Bank Group and the Government of Japan have established the Quality Infrastructure Investment (QII) Partnership to raise awareness and increase attention to the quality dimensions of infrastructure in developing countries. These include maximising the positive impact of infrastructure, increasing economic efficiency in terms of life-cycle costs, integrating environmental and social considerations, building resilience to natural disasters and strengthening infrastructure governance. The QII partnership will achieve this by providing financial support for project preparation and implementation, as well as knowledge dissemination. The QII Partnership is aligned with the G20 principles.

Figure 4: Economic sectors and size of companies financed by the NDBs



Source: Nyikos compilation, Survey on European Development Banks and Promotional Financial Institutions 2016.

Looking at the economic sectors financed by NDBs, it is clear that their investments are more heavily concentrated in sustainable sectors. Moreover, the long-term financial mandate and the climate change objectives of European countries in their strategic development plans (which NDBs are required to support) suggest that all relevant factors are pressing NDBs towards sustainable financing.

CONCLUSION

The contemporary European political economy, as it is widely recognized, faces a set of challenges that policy makers have tried to address amongst other things through a mode of ‘governance through financial markets,’ (Mertens et al., 2018). With greater attention on international challenges such as climate change and sustainable development, a discourse on how to achieve and finance these goals has been at the forefront of international discussions.

National development banks have a broad range of specific missions. They are addressing market insufficiencies, such as the SME-financing gap or long-term infrastructure finance, covering the hidden transaction costs of exports and fostering innovation, addressing general-interest missions from supporting the agricultural sector to developing infrastructure and promoting tourism. These missions all respond to market needs, which, for various reasons - ranging from the extent of the investment horizon to the presence of external factors - are underserved by the private banking sector. Through assisting policy driven investments, in particular infrastructure expansion and modernization, they have very special influence on the satisfaction of sustainability goals. The new obligations, which the EU Taxonomy rules instigated, add another layer of relevance to the research on their current standing and future prospects for promoting sustainable finance.

In this research, we described the different strategic, governance and investment areas of European national development banks and explored their interactions. We examined whether NDB investment practices are in line with the sustainable financing requirements and regulations of the European taxonomy.

We argue that well-defined and clearly articulated mandates, division of roles and responsibilities with other institutions are central to the successful functioning of national development banks. We found that the commitment the government assigns to sustainable development and growth as well as the influence it holds over the bank directly impacts on the bank’s approach to and active engagement in sustainable finance.

The remit of NDBs dictates that they act in case of a market failure. The national development banks functioning in Europe could be categorized in accordance with the length of their operation, the financial market situation as well as the level of economic development and the sustainable development index of the country. Based on the analyses of the relevant data three distinct clusters emerged which were clearly underpinned by the examined information and accorded with the operational experiences. Accordingly, despite the similarity of their objectives, mandates and main specificities national development banks present marked differences that are closely linked to the economic context and sustainable development index of the country they operate within.

The new Taxonomy regulations have been designed to increase, through mandated adherence to environmental objectives and a robust qualification system, the transparency of how the banks advance the sustainable development goals. The key challenges in analyzing the European situation rest with identifying and assessing all aspects and to defining clear and workable solutions. Although the entire European financial market and its relationship to sustainable development constitute too broad a topic and a high share of the data are publicly not available - this article, as a first step offers a starting point on which further research can be built.

The available data examined in this study confirm that the economic sectors and investments financed by NDBs are more concentrated in sustainable sectors. This is in line with the climate change objectives of the EU and the goals its Member States set forth in their Strategic Development Plans (which NDBs should support). Meanwhile, their mandates, government involvement, although to different degrees across the countries, continue to provide strong incentives for sustainable finance.

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