Public Banks, Public Purpose, and Early Actions in the Face of Covid-19

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Abstract
With the outbreak of the global Covid-19 pandemic and associated lockdowns, economic activity came to a grinding halt as demands for financial support in health, business, and government skyrocketed. In spring 2020 we assembled a team of experts to conduct rapid response research on how public banks worldwide responded to the Covid-19 crisis. The team employed case study methods to examine cases in the global north and south. A synthesis of our findings is presented here. We conclude that the most promising public bank responses to the crisis were those substantively guided by public purpose. Where public purpose had a more challenging relationship to public bank responses, the responses were more ambiguous and more difficult to differentiate from private banks. This rapid response study also points to promising lessons for how public banks can help to catalyse 'build forward better' momentum and it raises a series of questions in need of further research.

Keywords
public banks; finance; crisis; Covid-19; response; counter-cyclical; development finance institutions

JEL Codes

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Public Banks, Public Purpose, and First Actions in the Face of Covid-19

This paper presents new and original findings on the important roles played by public banks across the globe in the early months of the Covid-19 lock-down and social distancing. It synthesises a 'rapid review' global research project carried out and written up between May and October of 2020. The project has been the most ambitious effort to date to explore and document in real-time the first actions of public banks in the face of Covid-19. The research sheds light on public bank policies and actions in light of their mandates and public purpose.

We launched the research initiative because of the observation that governments and government-owned or 'public' banks were the frontline of economic defence in many countries around the world, particularly at the start of the Covid-19 outbreak. By and large, private banks were not expected to take up this role given their profit-maximising and short-term investment horizons that manifest in pro-cyclical lending. Instead, public purpose, not profitability, was needed to shape decision-making. The future of stable, sustainable and equitable societies will depend on building on the lessons now being learned.

Conducting such an immediate review was no easy task as the ground was constantly shifting: bold new policies were surpassed just weeks later by even bolder ones; programmes announced were not always put in place directly; some seemingly "new" ones were really just being fast-forwarded. Bank officials, government policymakers and researchers alike were stumbling with "working from home", often under difficult professional and familial circumstances. Nevertheless, this paper, and the detailed research that it synthesises, provides an important snapshot of a tumultuous time - a unique perspective on how things unfolded that contributes to a better understanding, both theoretical and empirical, of how public banks can function well, function better, and be better supported for the future. The results should help to guide policy decisions and to ensure that this pandemic does not lead to another "lost decade" and to the exacerbation of the already dire global climate crisis (UNCTAD 2020; IPCC 2021; Marois 2021b). The rapid response research may also help support researchers more generally by sharing some of our experiences of working as an international team during this difficult period.

Two other contextual factors are important to gaining an understanding of the contributions of the review. The first is that Covid-19 did not strike a world economy that was otherwise stable and in good shape. The last few decades of excessive de-regulation, hyper-financialization, privatization and globalization had left the world economy in an unbalanced, inequitable and precarious state (Tooze 2018; UNCTAD 2019). Covid-19 served to pull back the curtains and shine a light on this fragility, but it did not create it. Second, the coronavirus is widely believed to be related to global warming and climate change. Continued clashes between humans and nature are expected, which must be addressed through socially just processes and with more equitable outcomes. This future makes it vital to learn the lessons of Covid-19 responses.

The results of our rapid response study revealed important insights into the world of public banking. The core aspect highlighted in this paper is that not all public bank responses showed the same degree of promise. Rather, where societies, governments and mandates made public purpose a guiding principle for how a public bank functions, this often translated into stronger social equity-oriented and public interest responses. In some cases, this was linked positively with the availability of adequate finance. Our research also found cases where public purpose had a more challenging relationship with public banks' Covid-19 responses. We conclude by reflecting on the lessons of Covid-19 responses for the financing of green and just transitions, and on areas for further research stemming from this project.

FROM HEALTH CRISIS TO A FINANCIAL AND ECONOMIC CRISIS

When Covid-19 struck in early 2020, for most governments the only response was to impose policies of social distancing and eventual lockdown. Within weeks, or even days, this caused a previously unimaginable 'sudden stop' to the economy where consumer demand and supply dried up simultaneously, cascading across the globe even to countries that did not lockdown. The shock sparked record flows of capital in and out of financial markets and foreign exchange, interrupting productive processes and employment everywhere. At the same time as local and federal government fiscal revenues fell because of the abrupt stop to economic activity, the health, social and economic demands on their expenditures rose. No country was spared the economic effects of Covid-19 contagion, even if they yet had few confirmed cases of the virus.

Ideally, in such times, governments lead the way with responses that are rapid, bold, generous and crisis-facing, as they have done in momentous times in the past (UNCTAD 2017). Political will is essential, as is the fiscal space or economic capacity to unblock the flow of finance, to fund increased health sector bills and unemployment benefits, and to underwrite the firms, households, public services, local authorities and even banks that are reeling as the flow of money is interrupted. What individual countries in practice did varied according to their fiscal resources and the contexts of their unique political economies within global capitalism. Even just months into the crisis, when this research was being conducted, it was evident that the poorest countries and most marginalised communities were struggling with having much less capacity than their wealthy counterparts (IMF 2020). By August 2020, Japan had spent as much as 52.6 per cent of its GDP on a variety of fiscal and monetary packages; Germany 38.5 per cent, Canada 30 per cent and the United States 27.5 per cent, while even the large and higher income developing countries could manage only a fraction of this (UNCTAD 2020). In the global south the International Monetary Fund (IMF) and the World Bank scaled up their financial responses, yet many criticized their responses for being too little, too conditional and too unevenly distributed (Kentikelenis et al. 2020). These international financial institutions (IFIs) are not the focus of this research, however. Instead the research project aimed to investigate the responses of national and regional public banks (commercial; universal; developmental), which have too often been overlooked and under-studied despite their extremely significant roles in socio-economic development, in supporting government policies, and in providing alternative public financial capacity (see Griffith-Jones and Ocampo 2018; Marshall and Rochon 2019; Marois 2021b).

WHY PUBLIC BANKS AT A TIME OF COVID-19?

Banks were particularly important in the first months of the Covid-19 outbreak because the effect of lockdown was manifested extremely quickly in a crisis of liquidity. Firms that had been viable before Covid-19 suddenly found themselves without operational finance or reserves with which to pay loans, bills and salaries; households could not pay mortgages or rent; exporters found themselves unpaid for products that were stuck in ports and docks uncollected; importers could not access stock they had already pre-sold; municipalities, local authorities, hospitals and even national governments faced huge unanticipated and unbudgeted expenses. Hence what began as a health shock, rapidly became an economic and financial one. To unlock this blockage, banks exercised their unique capacity to make money, and hence *time*, available, commanding where and for how long it is available.

Banks, be they public or private, are historically unique financial institutions that specialize in collecting, directing, accelerating, and magnifying money as capital and as credit. Banks do so because they have acquired over time the political right to perform these powerful economic functions in society, not least of which is the ability to create money itself by extending credits well in excess of the actual money held in bank reserves (Spratt 2009; McLeay et al. 2014; Pettifor 2016; Hudson 2018). For this reason, banks have become one of the most important institutions in capitalist society, financial or otherwise. It is also a reason why governments and communities worldwide have founded *public* banks and why public banks persist as credible, if contested, financial institutions (Marois 2021b).

A public bank is a bank that can be understood as located in the 'public sphere'. This can happen in different ways. A bank can be *owned* publicly – that is, by a government, public authority or public enterprise; or it can be *controlled* publicly – that is, governed according to a legally binding public purpose mandate, or according to public law, or by meaningful public purpose representation on the governing board, or by some combination of these factors. Either or both situate a bank within the public sphere and as a *public* financial institution.

Being located within the public sphere opens up the *potential* for, if not the necessity of, public banks to function differently from private banks. Private corporate banks are directly exposed to competitive market imperatives and to the short-term profit-maximizing horizons of shareholders. Public banks might also be, but they need not follow these competitive imperatives. The public sphere can shield public banks from market imperatives as a matter of political will and policy frameworks. Consequently, public banks can offer and direct loans, credits, and grants in ways that are otherwise impossible for private, profit-seeking banks – and do so over longer terms, at more favourable rates, and for activities or actors that private finance would eschew because of high risk or low profitability (see Marshall 2010; Barrowclough and Gottshalk 2018; Scherrer 2017; von Mettenheim 2010; Griffith-Jones and Ocampo 2018; UNCTAD 2019; McDonald et al. 2020; Epstein and Uğurlu 2020; Marois 2021b).

This potentially special role to command money and time is of no small consequence, not least amidst crises. Public banks comprise a large and diverse part of the global financial sector. As of mid-2020, there were 910 public development, commercial/retail and universal banks worldwide with nearly US$49 trillion in combined assets, which equate to 34 per cent of 2019 global GDP (Marois 2021b, 55). If we include public central banks and multilateral banks, as well as public pension and investment funds, there are some 1,651 public financial institutions commanding just under US$82 trillion in public financial assets (equating to 58 per cent of global GDP). In general, research confirms that the scale of public banking worldwide has been systematically under-represented for decades (Xu et al. 2019; FiC 2020; Marois 2021b; *cf.* De Luna-Martínez and Vicente 2012; UN IATF 2019, 143). Historically many public banks and financial institutions have been created at times of or in response to crises – be they economic, developmental, financial, social, and now climate, including recent public bank examples like the new Southern owned public banks, the Scottish National Investment Bank, the Canada Infrastructure Bank, the UK Investment Bank, among many others (UNCTAD 2019, pp. 143-172; Barrowclough 2020a; FiC 2020).

RESEARCH METHODOLOGY AND THEORY

Our research project took shape in a context too raw and fluid to have an established academic literature on public banks and Covid-19 responses. We approached the topic with a necessarily exploratory and largely bottom-up inductive and case study approach informed by existing theory about public banks in general and by previous research of team members. Our aim was to generate the first evidence on public banks Covid-19 responses, with the hope of contributing useful findings to the search for useful and relevant policy responses. The research focused on accessing data and evidence from multiple sources quickly, including from the banks' data and annual reports, online media, and from semi-structured interviews. We aimed to answer the question of what public banks did in their first responses to the liquidity crisis and economic slowdown and how they did it. We sought to highlight promising responses as well as any problems and limitations.

The primary research focus was on case studies of public banks financing a variety of crisis responses to COVID-19, which was supported by several additional cross-cutting thematic topics. Potential contributors were contacted in April/May 2020, shortly after the declaration of a global pandemic. We cast a wide net from the global north and south as it was not clear who would be able to participate given the difficult circumstances and what kind of information researchers might be able to collect in light of the health and mobility issues on top of the challenges of working from home - a first for most researchers, banking officials and government policymakers alike. Our core selection criteria were pragmatic given the context: does the proposed study look at 'public bank' responses (defined below)? Is there sufficient access to information, primary and secondary? And, can a high quality 'rapid response' study be delivered in time?

Overall, the study engaged with 24 researchers and four regional public bank and development finance associations[1], the results of which were published together in a 22-chapter online book format. Therein at least 28 cases of public banks and financial institutions were discussed, in greater and lesser detail, in addition to the wide-ranging survey reports from the regional associations. Five studies were thematic in character, looking at the initiatives and policies of development banks, central banks, microfinance alternatives, public banking movements, and south-south cooperation during those early months. It constituted the most wide-ranging study of public banks' responses to Covid-19 available.

Researchers were provided with a standardized list of questions to investigate, including background information on the bank, context of the pandemic outbreak in the study location, key actions taken in response and their intended beneficiaries, the effectiveness of these actions (as much as could be ascertained in the immediate view), and the extent of collaboration with other public service providers and public banks. The constantly shifting nature of the crisis, and the very different personal and geographical contexts of the researchers, made consistency across the contributions difficult but nonetheless rendered a valuable snapshot of a highly uncertain time.

Data was gathered from a broad range of sources. For key financial indicators, researchers used Orbis Bank Scope data and drew from bank reports and press statements. Secondary resources on individual banks provided background, although the extent of any secondary literature on the banks differed enormously (for example, there is a huge literature on some

[1] The Association of African Development Finance Institutions (representing 60 member institutions), the Association of Development Financing Institutions in Asia and the Pacific (87 institutions), the European Association of Public Banks (91 institutions) and Latin American Association of Development Financing Institutions (42 institutions).

institutions, including the Latin American, the Chinese, and the German banks, but practically nothing on others, like the Council of Europe Development Bank. Researchers were encouraged to conduct online or phone interviews. Again, the ability of researchers to gain access to public bank staff amidst the pandemic varied significantly. The strength of the research project is captured in the wide-ranging nature of the results, which illustrate both a universality of public bank experiences in advanced and developing countries, alongside very diverse realities. Subsequent studies that also find an important contribution of public banks, although without looking at them individually as in this project, include ECLAC (2021).

The rapid response research did not have the objective of making a theoretical intervention. However, our current analysis contributes to renewed theoretical debate around rethinking public banks (Marois 2021a). To date, most research on public banks has fallen into either orthodox 'political' or heterodox 'development' approaches. These views are often distinguished by polarised understandings of the 'public' ownership of banks as typically negative (orthodox) or positive (heterodox). Orthodox views are the most stark. In effect, 'bureaucrats make bad bankers' because public banks are by virtue of being publicly-owned inherently prone to political abuse, corruption, and moral hazard (see World Bank 2001; La Porta et al. 2002; Barth et al. 2006; Demirgüç-Kunt and Servén 2010; Marcelin and Mathur 2015). Heterodox views are often posed in contradistinction to orthodox ones. Commonly, public banks are defined as banks that function according to a distinct extra-market logic of action and as having an *a priori* role in economic expansion and additionality, again by virtue of being publicly-owned (Levy Yeyati et al. 2007; Marshall 2010; Skidelsky et al. 2011; Ribeiro de Mendonça and Deos 2017).

Heterodox approaches, however, demonstrate broader appreciation than orthodox ones for the historical influences giving shape to public banking functions, including changes in governing parties and power relations within society. Yet heterodox theory has yet to adequately capture the diverse specificities of public banking institutions across time and space. Consequently, narratives on public banking are often expressed in terms firmer than history allows for or heterodox scholars may intend (for example, stating that public banks are not subject to market competition, speculative excesses or profit imperatives, when they can be, or that public banks are meant to provide additionality, when they may not be). In short, more conceptual weight and clarity have to go into the social and political forces that give evolving and indeterminant meanings to being a public bank within heterodox views, building off of recent advances in this direction (see Butzbach et al. 2018; Marshall and Rochon 2019). Yet in the absence of a theoretical rethinking of the meaning of the 'public' in public banks, typical orthodox and heterodox views will continue to reproduce ultimately polarized conceptualisations of public banks that over-determine otherwise historically variable institutional functions according to ownership form. In short, ownership will conceptually continue to predefine institutional function.

The results of this study support calls to rethink public banks as more complex and less historically fixed institutions, wherein mandate, sources of finance and performance appraisal matter alongside ownership form (Romero 2017; Butzbach et al. 2018; Romero 2020; UNCTAD 2019, pp. 160-166). It is not only this research project's research that points in this more diverse direction. Other contributions to the literature have focused on "solidarity" as a motivating factor in one of the major new trends of the last decade, namely the growth of new and expansion of existing southern-owned and led banks (Gallagher and Chin 2019; Barrowclough 2020a). Conceptually, an alternative 'dynamic' view aims to further the rethinking of public banks, seeing public ownership not as over-determining institutional functions but as opening up "a particular public realm of possibilities" wherein "change becomes possible and is a result of social forces making it so" within the structures of capitalist society (Marois 2021a). In this view, historical and socially contested institutional functions give meaning to dynamic interpretations of public ownership. There remains a need for further research that engages in these deeper theoretical challenges, which have important and urgent practical implications as we confront multiple crises and societal grand challenges in need of supportive financing.

THE POWER OF PUBLIC BANKS – PROMISING LESSONS AND FINDINGS

Based on our research at the start of the Covid-19 crisis, the most promising lessons learned from the project demonstrated that public banks could **respond rapidly**; act according to **public purpose mandates**; **act boldly**; **mobilize their existing institutional capacity**; and build on **'public-public' solidarity** (Chapter 1 by Barrowclough et al. 2020).[2] In these ways public banks helped to navigate the tidal wave of Covid-19, often as private lenders were turning away. Not every public bank responded in the same way or to the same extent or even showed signs of each promising lesson. Yet in general we found that funds could be found or created, often enabling generous, rapid, and bold actions, as collaborations with other public enterprises took shape with ease and in ways that reflected a clear public purpose. The project research also revealed some very weak public bank responses, underscoring the theoretical point that public ownership per se does not predefine institutional functions. At the same time, the results point to the need for greater historical understanding. Having a long organisational history helped public banks benefit from existing lines of communication, reservoirs of expertise, and established capacity to co-ordinate with others. Such historical legacies cannot be created suddenly in times of crisis. However, even when banks were relatively new, such as those from the global South, when they had a clear sense of public purpose and public-public solidarity, responses could also be bold, generous and rapid. Alongside these broad lessons, the research revealed a wide range of tools and instruments used by public banks to carry out their roles, often depending on their position within the overall global financial system.

Given the diverse range of public banks examined, with their various and varying roles in the financial system of their countries, as well as differing national developmental and political contexts, there are many different elements on which one could focus for highlighting essential lessons. Similarly with the findings of the banking associations, which synthesise almost 300 different institutions from a heterogenous mixture of countries. Here, however, we focus on and draw out the promising, and challenging, lessons relating to the banks' public purpose.

Promising public purpose

Whether small or large, when public banks had clear mandates and unambiguous backing from their governments and a strong public purpose, they could respond very quickly and generously. Italy's Cassa Depositi e Prestiti (CDP), which launched a Social Response within one week of the first Italian case registered of Covid-19 on 21 February 2020, offered up to 1 billion euros in loans for SMEs and deferred payments for local authorities (Chapter 14 by Vandone et al. 2020). Within the first few months as many as 40 per cent of all firms in Italy were suffering the impact and 44 per cent of the workforce, or 4 million workers. Italy's GDP fell by 6 per cent and further declines were expected. By April, its "strong prompt and relevant" response included launching a Social Response Bond raising another 1 billion euro and rolling out a series of further measures with loans and guarantees or renegotiated loans worth another 10 billion euros. These actions were firmly in line with the mission of the CDP, which was founded in

[2] All 'Chapter' references in this section refer to the separate researcher contributions in the edited book compilation, McDonald et al. 2020.

1850, and today has an explicit public purpose of fostering sustainable development and supporting employment. It is classified as a national promotional bank ('development' bank), as defined by the European Commission, and it is mandated to lend only to national and local governments and to corporate entities, not to individuals. It has a tradition of providing counter-cyclical support in times of crisis, which it had already exhibited during the global financial crisis.

The Chinese study showed a very particular example of how 'state-owned' public banks can be deployed in times of crisis, even when they have a commercial mandate (Chapter 13 by Yeung 2020). The Peoples' Bank of China (PBoC), the central bank, directed its five major state-owned commercial banks to such an extent they "could be functioning more like ministries in the central government than private commercial banks (p. 285). The banks' responses were focused on SMEs, who were impacted by the lockdown of Wuhan and its domino effects. More than 18 million private enterprises were under threat, affecting the jobs of 200 million people. The PBoC increased liquidity, as did central banks more or less everywhere, although they did it through reducing the reserve requirement ratio rather than the quantitative easing policies used by banks in hard currency countries. More interesting, however, in terms of public purpose, the PBoC gave the commercial banks the most explicit directions in more than a decade, to "sacrifice profits to benefit corporate borrowers". Banks were instructed to give up $210 billion in profits for the year, equivalent to up to 75 per cent of profits the year before. The state banks were also required to reduce fees and defer loan repayments. Such measures reflect the hybrid nature of these banks, in which the Chinese state still holds the majority of equity and will use it to support the public policy when deemed necessary. According to Yeung, "Ownership here translates to effective control, should state authorities choose to exercise it". The policies were not without controversy amid claims that funds were lent to shell companies and diverted to real estate speculation. But the issue of commercial banks being required to support national goals was not in question.

The Council of Europe Development Bank (CEB) provides a different kind of example where a much smaller multilateral public bank could nonetheless play an important role, especially considering other regional institutions like the EIB were more ambivalent. The CEB lent over three billion euros in emergency finance to 15 member governments in the first three months of lockdown in Europe – an amount which was a full 2/3 of total lending for the previous year. This response reflects the kind of rapid and public purpose commitment possible of a small bank with a clearly social mandate, relatively flexible governance structure and a well-established programme of lending to the public sector. Funds were raised on international capital markets in April and again in June at very favourable rates, and it quickly implemented emergency lending by amending its rules to "fast track" public funding to health systems and small businesses under strain (Chapter 5 by Reyes 2020). Because the CEB had long-established lending schemes it could use its existing institutional history, experience and contacts to act rapidly, and its strong non-profit ethos meant that borrowers received the benefit of its ability to raise capital at favourable rates.

The benefit of the CEB's public purpose and its actions shows in the ease with which it can raise funds on capital markets, especially where investors are looking for socially responsible investments. The CEB has a history of successfully issuing 'social inclusion bonds' that are aligned with international impact investment principles. The CEB maintains a high credit rating with the major agencies despite being a non-profit institution. These both reflect the perception that the CEB's government owners will support the bank if need be. This finding chimes with pre-Covid-19 general advice from the major Credit Rating Agencies, which acknowledged that many public banks could lend more without hurting their credit ratings, especially if their lending decisions were for public purposes because this allowed the banks' owners to support it (S&P

Global 2017; UNCTAD 2019, p. 164.) Moody's found that "CEB's involvement in the coronavirus crisis response and the associated increase in lending further supports the importance of its mandate for shareholders (Member states)" (Chapter 5 by Reyes, p. 129). Reyes reports that Fitch reached a similar conclusion that the bank's strong response had increased "its importance for its member states".

The public purpose mandate of the Germany KfW is to provide for "the sustainable improvement of the economic, social and ecological conditions of peoples' lives" through "financing with a public mission". The KfW response to Covid-19 was wholehearted as it doubled the total volume of the previous year's lending in the first half of 2020, providing more than 750 billion euros in response to the call from its government owners (Chapter 7 by Marois 2020). KfW responses involved a variety of Covid-19 support packages that included aid and loan programmes to companies, self-employed and freelance workers; instant loans to medium-sized companies that offered 100 per cent guarantees, and other packages expanding credit and guarantees to industry, credit insurers and other banks and institutions. That the KfW has acted according to a clear public purpose was expressed by the Chair of the Board of Managing Directors: "*The banks and KfW have prepared intensively for today. Never before have we been able to put a full programme together this quickly.*" (p. 158)

The KfW is one of those public banks with a legacy of strong coherence between its public purpose mandate and the support of its government owners. This is expressed in a formal guarantee of its financial stability and is further evident in the fact that the bank has a track record of winning the lowest possible rates for its bond issuances. In the current low rate environment the KfW is borrowing at negative yields – meaning that the market essentially pays the Bank to borrow and not the other way around. As with the CEB, not only has the KfW's public purpose been good for a rapid Covid-19 response, it has also been good for financial terms.

Some national public banks were conduits for development finance and aid to other countries. The KfW committed up to 5 billion euros of new lending and grants to developing countries, reflecting that its public purpose can extend beyond national borders. Development banks owned by and lending to developing countries also played an extremely important role for their members in the first phase of the response, which was particularly important given the muted response of the World Bank and International Monetary Fund. The Inter-American Development Bank (IADB) doubled its disbursements to $26.7 billion and offered more than 600 individual loans to its members, many of whom had already severely under-financed health systems and limited social welfare capacities (Chapter 11 by Carreras and Griffith-Jones 2020). The IADB was officially founded in 1959 and is owned by 48 countries, but only 26 of them can borrow. Its mandate is "to foster the economic and social development of the IDBs borrowing member countries, both individually and collectively". While its institutional strategies do not include health issues, the social and economic impact of Covid-19 fitted the mandate sufficiently that within just a few months the IABD adapted flexibly. In addition to increasing sharply the number of loans offered, it increased non-conditional transfers and fast-tracked systems so as to save processing time by 2/3, which meant it took less than one month or maximum two to issue loans.

At the same time however, the IADB case study hints at tensions and constraints that can occur when banks have a multi-government structure with heterogeneous countries as shareholders and a wide spectrum of duties around shareholders' country-specific and general priorities. The new development banks that are either entirely Southern-owned or are Southern-led have shown ways, like the CEB, that multilaterally-owned public banks could respond very quickly, as their public purpose and governing structures were flexible enough to be readily aligned with new demands. These southern banks had from the outset been established to offer a southern-led alternative to the Bretton Woods institutions and this purpose guided their relief responses (Chapter 18 by Barrowclough 2020a). For example, the Asian Infrastructure Investment Bank (AIIB) adapted its priorities beyond the long-term infrastructure purpose for which it had been initially established in 2016. In the first days of March, the AIIB announced a $5 billion Covid-19 Crisis Recovery Facility and within a month requests from members were so high that it doubled the facility to $10 billion. In order to meet the "urgent and extraordinary" needs, it not only identified new priorities for funding but adapted operations to work closely with other international financial institutions and create a network of support options, especially for the most vulnerable economies. Similarly, the New Development Bank had to be flexible as its existing policy framework did not support the special needs of members when Covid-19 struck. Established in 2014, its mandate was to mobilise "resources for infrastructure and sustainable development projects in BRICS and other emerging economies and developing countries". The urgent needs of Covid-19 did not fit the profile and a special waiver was needed for its first loans to China in March and a second to India in April. By June 2020, the New Development Bank announced a new fast track emergency assistance response facility with $10 billion to disburse (divided equally between health and social assistance, and economic recovery). Subsequent loans did not need a waiver. The policy changes are interesting because the New Development Bank adopted a new way of thinking about so-called "emergencies". Previously these were defined as being the consequence of natural disasters or conflict but after Covid-19 fallout included urgent gaps in finance for government welfare and social support – a public purpose for which the Bank had not been initially designed.

Argentina's public bank, the Banco de las Nación Argentina (BNA), is an example where a state-owned but commercially mandated public bank played a role, if perhaps not a leading role, in providing counter-cyclical lending as part of its government's Covid-19 relief programme (Chapter 10 by Schclarek Curutchet 2020). Established in 1891, at a time of crisis in Argentina, the BNA is today the country's largest commercial bank, with pre-Covid-19 loans accounting for 18 per cent of the total financial system. The BNA responded swiftly and within one month of the central bank initiating a series of new policy sticks and carrots, disbursing as much as 15 per cent of the total credit offered by the entire banking system. The central bank's carrots included offering new credit lines to the banking system that were provided at a relatively low fixed nominal rate of 24 per cent (remembering that inflation was over 40 per cent), to be on-lent for purposes such as working capital for micro-, small-, and medium-sized enterprises (MSMEs); teleworking expenses to set up home offices; salary payments of MSME employees; and credit to firms that previously had no credit profile in the banking system. There was also a policy stick, whereby banks that did not lend were charged increased costs for their liquid and short-term assets in the central bank. In this case, the BNA's response is less bold and more in line with its commercial imperatives rather than any bold public purpose.

Challenging public purpose

There are differences in how public banks responded to the Covid-19 pandemic, with some cases challenging the notion of public purpose having much influence. In the case of Brazil, public banks had a very different Covid-19 experience, reflecting a significant change in their mandates and the roles expected of them compared to the 2008-09 global financial crisis years when they had played a major role providing credit to support recovery (Chapter 12 by de Oliveria 2020). Since 2015 when Brazil adopted a more neoliberal approach, the role of public banks "could not be more different". When the pandemic struck private financial institutions were just as able as public ones to operate the government's special Covid-19 credit lines. Of the 31.5 billion real Federal Government credit programmes implemented by Brazil's banks, 51 per cent was done through public banks, especially the Caixa Economica Federal (a 100 per cent government owned bank serving Brazil's housing credit programme). However, semi-private banks and foreign banks provided the rest and the offer was similar whether banks were privately owned or public. From the borrower's point of view, it made little difference which bank they dealt with – they were "indifferent." Other differences emerged when comparing the outcomes of those early months to other countries, where public banks played a more pivotal role. Firstly, implementation was slow. When government released its measures to expand liquidity in April, a few weeks after the first lockdown, it was not until June that small firms received their loans from either public or private banks. This is a long time compared to the more promising examples above. Secondly, loans through the banks, both public and private, were more expensive to borrowers than those provided directly by government – meaning that all the banks were making a cut. The costs depended on borrowers' profiles rather than bank ownership and some were charged up to 20 per cent for working capital loans. Moreover, it seems the loans were granted mostly to large companies, even when mediated through public banks, rather than favouring MSMEs who would find it difficult to access capital otherwise.

Similar delays in rolling out credit relief occurred in the case of the European Investment Bank (EIB), where it was not until April that a package could be agreed by all the member governments. Even by August, the EIB's lending in the health sector was only 18 billion euros out of an estimated lending for the year of 63 billion euros, compared to other public banks that substantively reconfigured their lending (Chapter 6 by Clifton et al. 2020). Even then some expenditures were ambiguous or seen as "Covid-washing" with the major beneficiaries being private financial investors rather than MSMEs or social and environmental beneficiaries.

India's experience generally spells a cautionary tale about the importance of mandate and public purpose, and it points to the need for consistency between the expectations of public banks and the broader macroeconomic situation in which they are embedded (Chapter 9 by Chandrasekhar 2020). At the time of the research, India was the country, after the United States, with the second largest number of known Covid-19 infections. This was a reflection of its high population but also of India's underfunded and overwhelmed health system. Public banks were given the responsibility for providing relief to the devastated economy but they were unable to do so effectively because their mandates had changed, their public functions had been undermined, or even their institutions had been dismantled in the liberalizations and privatizations of the 1990s. India's public banks had social mandates in the past but now they have been largely commercialized. Their institutional purpose is more about making profit, incentivizing private investors and innovating service delivery. The public banks are in turn judged by their ability to maximise earnings. The government also relied heavily on monetary policy as the sole stimulus, and the public banks were unwilling or unable to lend the augmented funds made available. Some credit was targeted specifically to the National Bank for Agriculture and Rural Development (NABARD), the Small Industries Development Bank of India (SIDBI) and EXIM Bank but, apart from those parts of credit creation that were guaranteed by the government, the risk was carried by public banks and it came at a time when these banks were already burdened with large scale debt defaults caused by the contraction. Hence, credit growth did not pick up during those difficult months, rather it fell. This suggests that without a clear public purpose and the tools to implement it, public banks cannot be expected to do the heavy lifting independently of government support.

Mexico is a case where a newly-founded, high-profile public bank, the Bank of Welfare or Banco del Bienestar, was not able to play the positive role anticipated. Even though it is publicly-owned and seemingly has a public purpose, in practice its public functions are ambiguous if not downright negative (Chapter 8 by Reis 2020). The Banco del Bienestar was seen as central to Mexico's ambitious project of developing "an alternative to neoliberalism" and creating "a moral state". The mandated purpose is to support "the economy of the people" and it has been used to distribute cash benefits to the elderly, disabled and students providing cash transfers of $12 billion per annum to at least 18 million people. In practice however, the study finds that the public bank is being used to capture a lucrative market – the poor – for private sector financiers. When Covid-19 hit Mexico, more than 12 million people lost their jobs between April and May, 2/3 of whom were in the informal sector and without income support, and another 8 million became under-employed. The Banco del Bienestar expanded programmes that were already existing, in particular relating to social transfers. Pensions were paid four months in advance, existing microcredit programme users were granted deferment of payment for three months, and two million new credits were created without requiring paperwork or a credit history. Typically, this would be positive. However because the bank did not have many branches or outlets, the programmes relied on collaborations with other banks, in particular a private domestic bank tied to a larger retail conglomerate that offered spaces for branches and ATMs in its department stores.The retail conglomerate has a reputation for extremely high interest rates (around 88 per cent) and aggressive debt collection tactics. Egregiously, to receive the government's social benefits, borrowers had to open accounts at this bank if they did not have one already. It seemed that the Banco del Bienestar functioned as a kind of bond between the poor and private global financial markets, that is, in the private interest, opening the door to the 'financial inclusion' programme of the World Bank and acting to cement and increase marginalized communities' debt and dependence.

For public banks in Turkey, the research found that the early Covid-19 responses highlighted both the potential contribution and the limitations of public banks whose historic mandates have been chipped away over the last decade (Chapter 16 by Güngen 2020). When Turkey went into a severe economic slump following lockdown in April and May of 2020, the public banks emerged at the forefront of support to low-income households and MSMEs. Public banks have increasingly followed a profit-maximising stance since the early 2000's but, at the same time, the three largest Turkish public banks stepped up lending significantly and provided low-interest loans with a repayment holiday for the first six months to some seven million people who applied for basic needs credit. They lent also to shops and other businesses. These loans were backstopped by the Turkish Treasury, who assumed part of the counter-risk. While private banks also played a role in credit creation it was the public banks that provided the lion's share. On the back of this, Turkey experienced the biggest credit expansion of its history. Almost 40 per cent of the additional credit came from public banks, while only 17 per cent from private banks and 27 per cent from foreign ones, and their shares would have been even lower were it not for government regulations pushing lending. At the same time, however, the public banks are considered opaque and non-transparent, and overly connected to the big business interests of the ruling party. The Turkish public banks lack transparent and accountable public purpose. Lending to the poorest parts of society is considered miniscule, compared to trends in other countries. Their somewhat contradictory role is raising concerns about what will happen in the future and if the remnants of a social mandate to public banking is further eroded by the ruling government. At present, the Treasury automatically compensates public banks for non-performing loans, or what are called "income losses" each month, and this amount was three times as high as usual for the early months of 2020. While the public banks showed they could respond to the crisis, they have not been able to respond to longer-term issues that are essential to turn around the deteriorating economy and to address social and environmental concerns.

The results of the rapid response research point powerfully in the direction that at times of crisis, notably the outbreak of the Covid-19 pandemic and lockdown, meaningful public purpose can have an impact on how a public bank responds. Weaker public purpose leads to more ambiguous action. The case studies, and the complementary thematic papers in the book, show that public purpose is about more than public ownership. Public purpose is inter-related with the political economy of mandates, institutional history and legacies, sources and scales of finance, and the ways that public banks fit into the broader landscape of the financial system (Chapter 2 by Romero 2020; Chapter 4 by Barrowclough 2020b). When these are well aligned, transparent and accountable, public banks have a more promising chance to play a significant role -- whether in an unexpected crisis, as during the first months of the pandemic covered in this paper, or in future efforts to finance climate change adaptation and mitigation.

FROM COVID-19 TO BUILDING FORWARD BETTER FOR PEOPLE AND PLANET

The promising lessons of how public banks responded with public purpose to the global pandemic crisis can help inform debate of how to finance responses to the climate crisis in ways aiming to build forward better for people and planet. What we know from public banks' Covid-19 responses is that public purpose can be a powerful force setting directionality for public banks – when credibly backed by society and public policy. Where public banks have eschewed public purpose for profit mandates or have been made to function predominantly in private interests, then the public banks show more muted responses to the Covid-19 crisis. To build forward better for people and planet in response to the global climate crisis, our conclusion is that transparent and accountable public purpose must play a causal role in how and what public banks do. Therein it is vital not to see public banks as essentially better or worse than private banks by virtue of being 'public', but rather as contested and dynamic institutions made and remade by social forces in capitalist society. This is significant given the already existing institutional numbers and combined assets worldwide. Be they public or private, banks uniquely command "a power to make available time" (Konings 2018, p. 79). However, only through the public sphere can public banks command time and money according to (contested) public purpose.

It is here that public banks offer the most viable pathway for urgent financing of a green and just global transition to a low-carbon future. There is widespread agreement around the failure of private banks to respond to the financing needs for mitigating global warming, making room for the potentially catalytic role of public banks to respond in new and innovative ways (Campiglio et al. 2017; Carney 2015; Scott et al. 2017; UNCTAD 2019, pp. 143-172). Empirical evidence suggests that public investors are a main reason that renewable energy finance grew at all in the years following the global financial crisis (Mazzucato and Semieniuk 2018). Sustainability criteria for public banking has passed from niche debate to increasingly mainstream action across the globe, in low-income countries just as much as in wealthy ones (UNCTAD 2019; Barrowclough forthcoming). Case study evidence points to public banks as existing financial institutions that can combine effective decarbonisation financing with democratic governance structures capable of integrating just transition criteria (Marois 2021b).

To suggest that public banks should lead efforts to build forward better for people and the planet is not, however, to naively assert that a bank is necessarily better by virtue of being publicly owned. There is no innate purpose or essential policy orientation that is common to all public banks. This is because public banks are contested institutions and pulled between contending public and private interests. Some of our case-study findings find that even public interests can be competing – for example, where regional banks have to reconcile differing interests and priorities of multiple stakeholders, including the IADB and CDC banks (Carreras and Griffith-Jones 2020, 246) compared to the more solidarity-driven Islamic Development Bank (IsDB) and New Development Bank (NDB) and the foreign reserve fund Fondo Latinoamericano de Reservas FLAR (Barrowclough 2020a, pp. 361-375). They too are but one element within the landscape of all financial institutions, nested within a global financial market characterised by an unequal hierarchy of national and international economic and political forces.

Yet the Covid-19 crisis has shown a light into the financial vulnerabilities and inequalities of today's hyper-globalised, just-in-time, and hyper-financialised economy. So too it has shone a light on otherwise hidden public bank coordination networks and collaborative practices – and above all the importance of public purpose in public banking. This lesson needs to be better understood and expanded upon, with knowledge sharing, policy innovation, and capacity building being critical to a more sustainable and financially powerful global public banking network capable of catalysing a global green and just transition for people and planet.

As the first study of public bank responses to Covid-19, our research project raises as many questions as it answers, highlighting the need for further case study and empirical work. We conclude by setting out six research areas in need of further study.

- What have been the medium-term economic, social, and environmental impacts of public banks' initial Covid-19 responses? This research should look at impacts both on local authorities and communities that received support and at the impacts on public banks' own operations and sustainability.

- What 'publics' and communities have been represented in the public banks' Covid-19 responses? This cuts to questions of social equity, representative decision-making, transparency, accountability, and governance, not to mention the democratisation or not of finance in the face of crisis-related responses.

- What have been the main challenges limiting public banks' Covid-19 crisis responses? How do banks resolve the tension between remaining financially viable and supporting lending at low, no or negative return?

- How has success been measured and has Covid-19 moved forward the long-standing calls for new public purpose indicators beyond conventional financial measures and cost-benefit analysis? What metrics can effectively capture (and valorise) these public purpose collaborations?

- What lessons can be learned from further public bank case study and historical research into the impact of public purpose mandates amidst crisis responses, particularly among lesser-known and smaller public financial institutions?

- Finally, and this is perhaps the most pressing question, can the promising practices (and pitfalls) of public banks' Covid-19 responses be translated into urgent and effective responses to the global climate crisis for people and planet? Are there instances where Covid-19 responses supported green transitions? Research will also need to identify where the money came from that enabled public banks to respond rapidly and at scale and if different sources of finance differentially affected how public banks could respond to the Covid-19 crisis.

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REFERENCES

Barrowclough, D. Forthcoming. 'South-South Financial Integration – New Directions in the Global Economy.' In *The New Palgrave Dictionary of Economics*, edited by M. Vernengo, E. Perez Caldentey and B. Rosser, London: Palgrave MacMillan Ltd.

Barrowclough, D. 2020a. 'South-South Public Finance: A Rapid Review of Co-operation and Resilience to Face Covid-19.' In *Public Banks and Covid-19, Combatting the Pandemic with Public Finance*, edited by D. McDonald, T. Marois, and D. Barrowclough, 361-375. Municipal Services programme, Eurodad and UNCTAD. Available online at: https://publicbankscovid19.org/index.php/publications. Accessed 06 October 2021.

Barrowclough, D. 2020b. 'Coronavirus and the Evolving Roles of Central banks: Avoiding a Climate Minsky Moment.' In *Public Banks and Covid-19, Combatting the Pandemic with Public Finance*, edited by D. McDonald, T. Marois, and D. Barrowclough, 85-113. Municipal Services programme, Eurodad and UNCTAD. Available online at: https://publicbankscovid19.org/index.php/publications. Accessed 06 October 2021.

Barrowclough, D. and R. Gottschalk. 2018. 'Solidarity and the South: Supporting the new landscape of long-term development finance.' *UNCTAD Research Paper*, No. 24 UNCTAD/SER.RP/2018/6.

Barrowclough, D., T. Marois and D. McDonald. 2020. 'Public Banks Matter at a Time of Covid-19.' In *Public Banks and Covid-19, Combatting the Pandemic with Public Finance*, edited by D. McDonald, T. Marois, and D. Barrowclough, 1-26. Municipal Services programme, Eurodad and UNCTAD. Available online at: https://publicbankscovid19.org/index.php/publications. Accessed 06 October 2021.

Barth, J. R., G. Caprio, and R. Levine. 2006. *Rethinking Bank Regulation: Till Angels Govern*. Cambridge University Press.

Brown E. 2020. 'Covid-19 and Public Banks in the United States; a Moment of Opportunity.' In *Public Banks and Covid-19, Combatting the Pandemic with Public Finance*, edited by D. McDonald, T. Marois, and D. Barrowclough, 353-361. Municipal Services programme, Eurodad and UNCTAD. Available online at: https://publicbankscovid19.org/index.php/publications. Accessed 06 October 2021.

Butzbach, O., G. Rotondo and T. Desiato. 2018. 'Can banks be owned?' *Accounting, Economics, and Law: A Convivium* 10 (1): 1-21.

Campiglio, E., A. Godwin, E. Kemp-Benedict. and S. Matikainen. 2017. 'The tightening links between financial systems and the low-carbon transition.' In *Economic Policies Since the Global Financial Crisis,* edited by P. Arestis and M. Sawyer, 313-356. Basingstoke, UK: Palgrave Macmillan.

Carney, M. 2015. 'Breaking the tragedy of the horizon – climate change and financial stability.' Speech by the Governor of the Bank of England and Chairman of the Financial Stability Board, London, 29 September 2015.

Carreras, M. and S. Griffith-Jones. 2020. 'National and Multilateral Banks during the 2020 Pandemic: The Role of IADB and CDC During the First Phase of Covid-19.' In *Public Banks and Covid-19, Combatting the Pandemic with Public Finance*, edited by D. McDonald, T. Marois, and D. Barrowclough, 221-249. Municipal Services programme, Eurodad and UNCTAD. Available online at: https://publicbankscovid19.org/index.php/publications. Accessed 06 October 2021.

Chandrasekhar, C.P. 2020. 'Public Banks and India's Ineffective Covid-19 Crisis Response.' In *Public Banks and Covid-19, Combatting the Pandemic with Public Finance*, edited by D. McDonald, T. Marois, and D. Barrowclough, 193-211. Municipal Services programme, Eurodad and UNCTAD. Available online at: https://publicbankscovid19.org/index.php/publications. Accessed 06 October 2021.

Clifton J., D. Diaz-Fuentes, D. Howarth and H. Kavvadia. 2020. 'The Role of the European Investment Bank in Times of Covid-19.' In *Public Banks and Covid-19, Combatting the Pandemic with Public Finance*, edited by D. McDonald, T. Marois, and D. Barrowclough, 135-148. Municipal Services programme, Eurodad and UNCTAD. Available online at: https://publicbankscovid19.org/index.php/publications. Accessed 06 October 2021.

De Luna-Martínez, J. and C.L. Vicente. 2012. *Global Survey of Development Banks*. Washington: World Bank Group.

Demirgüç-Kunt, A. and L. Servén. 2010. 'Are All the Sacred Cows Dead? Implications of the Financial Crisis for Macro- and Financial Policies.' *The World Bank Research Observer* 25 (1): 91-124.

de Oliveira, A. 2020. 'The Role of Public Credit Programmes in Mitigating the Economic Effects of the Covid-19 Pandemic: Brazil's Experience.' In *Public Banks and Covid-19, Combatting the Pandemic with Public Finance*, edited by D. McDonald, T. Marois, and D. Barrowclough, 249-

283. Municipal Services programme, Eurodad and UNCTAD. Available online at: https://publicbankscovid19.org/index.php/publications. Accessed 06 October 2021.

ECLAC 2021. *Financing for development in the era of COVID-19 and beyond.* Santiago: United Nations. Economic Commission for Latin America and the Caribbean. Available online at: https://www.cepal.org/en/publications/46711-financing-development-era-covid-19-and-beyond. Accessed 16 October 2021.

Epstein, G. and E.N. Uğurlu. 2020. 'Are Bankers Essential Workers?' *Catalyst* 4 (2): 33-81.

FiC 2020. *Finance in Common: The first global summit of Public Development Banks*. Conference Booklet. Available online at: https://financeincommon.org/. Accessed July 24, 2020.

Gallagher K. and G. Chin. 2019. 'Coordinated Credit Spaces: The Globalization of Chinese Development Finance.' *Development and Change* 50 (1): 245-274.

Griffith-Jones, S. and J.A. Ocampo. (eds.) 2018. *The Future of National Development Banks*. Oxford: Oxford University Press.

Güngen, A.R. 2020. 'Turkey's Public Banks Amid the Covid-19 Pandemic.' In *Public Banks and Covid-19, Combatting the Pandemic with Public Finance*, edited by D. McDonald, T. Marois, and D. Barrowclough, 333-352. Municipal Services programme, Eurodad and UNCTAD. Available online at: https://publicbankscovid19.org/index.php/publications. Accessed 06 October 2021.

Hudson, M. 2018. *… and forgive them their debts: Lending, Foreclosure, and Redemption from Bronze Age to the Jubilee Year*. Dresden, Germany: ILSET-Verlag.

IPCC 2021. *Climate Change 2021: The Physical Science Basis*. Available online at: https://www.ipcc.ch/report/ar6/wg1/#FullReport. Accessed 04 October 2021.

IMF 2020. *Fiscal Monitor: Policies to Support People During the COVID-19 Pandemic*. Washington: International Monetary Fund.

Kentikelenis, A., D. Gabor, I. Ortiz, T. Stubbs, M. McKee, and D. Stuckler. 2020. 'Softening the blow of the pandemic: will the International Monetary Fund and World Bank make things worse?' *The Lancet Global Health*. 8. https://www.thelancet.com/journals/langlo/article/PIIS2214-109X(20)30135-2/fulltext. .

Konings, M. 2018. *Capital and Time: For a New Critique of Neoliberal Reason*. Stanford: Stanford University Press.

La Porta, R., F. Lopez-de-Silanes, and A. Shleifer. 2002. 'Government ownership of banks.' *The Journal of Finance* 57 (1): 265-301.

Levy Yeyati, E., A. Micco, and U. Panizza. 2007. 'A Reappraisal of State-Owned Banks.' *Economia* 7 (2): 209-47.

Marcelin, I. and I. Mathur. 2015. 'Privatization, financial development, property rights and growth.' *Journal of Banking & Finance* (50): 528-46.

Marois, T. and A. R. Güngen. 2016. 'Credibility and Class in the Evolution of Public Banks: The Case of Turkey.' *Journal of Peasant Studies* 43 (6): 1285-309.

Marois, T. 2021a. 'A Dynamic Theory of Public Banks (and Why it Matters).' *Review of Political Economy*. DOI: 10.1080/09538259.2021.1898110.

Marois. T. 2021b. *Public Banks: Decarbonisation, Definancialisation, and Democratisation*. Cambridge: Cambridge University Press.

Marois T. 2020. 'The KfW and Covid-19: Coordinating Public Finance Responses at Home and Abroad.' In *Public Banks and Covid-19, Combatting the Pandemic with Public Finance*, edited by D. McDonald, T. Marois, and D. Barrowclough, 149-171. Municipal Services programme, Eurodad and UNCTAD. Available online at: https://publicbankscovid19.org/index.php/publications. Accessed 06 October 2021.

Marshall, W.C. 2010. 'Banco del Sur and the Need for Downstream Linkages: The Role of National Publicly Owned Banks.' *International Journal of Political Economy* 39 (3): 81-99.

Marshall, W.C. and L.P. Rochon. 2019. 'Public Banking and Post-Keynesian Economic Theory.' *International Journal of Political Economy* 48 (1): 60-75.

Mazzucato, M. and G. Semieniuk. 2018. 'Financing renewable energy: Who is financing what and why it matters.' *Technological Forecasting & Social Change* (127): 8-22.

McDonald D., T. Marois, and D. Barrowclough. 2020. *Public Banks and covid-19, Combatting the Pandemic with Public Finance*. Municipal Services programme, Eurodad and UNCTAD. Available online at: https://publicbankscovid19.org/index.php/publications. Accessed 06 October 2021.

McLeay, M., A. Radia, and R. Thomas. 2014. 'Money in the modern economy: an introduction.' *Bank of England Quarterly Bulletin* 54 (Q1): 4-13.

OMFIF. 2017. *Global Public Investor 2017*. London: Official Monetary and Financial Institutions Forum.

Pettifor, A. 2016. *The production of Money: How to Break the Power of Bankers*. Verso. London.

Reis N. 2020. 'The "Bank of Welfare" and Mexico's Moral Economy.' In *Public Banks and Covid-19, Combatting the Pandemic with Public Finance*, edited by D. McDonald, T. Marois, and D. Barrowclough, 171-193. Municipal Services programme, Eurodad and UNCTAD. Available online at: https://publicbankscovid19.org/index.php/publications. Accessed 06 October 2021.

Reyes O. 2020. 'The Council of Europe Development Bank and Covid-19.' In *Public Banks and Covid-19, Combatting the Pandemic with Public Finance*, edited by D. McDonald, T. Marois, and D. Barrowclough, 113-135. Municipal Services programme, Eurodad and UNCTAD. Available online at: https://publicbankscovid19.org/index.php/publications. Accessed 06 October 2021.

Ribeiro de Mendonça, A.R. and S. Deos, S. 2017. 'Beyond the market failure argument: Public banks as stability anchors.' In *Public Banks in the Age of Financialization,* edited by C. Scherrer. Cheltenham, 13-28. UK: Edward Elgar Publishing.

Romero, M.J. 2017. *Public development banks: towards a better model*. April 2017. European Brussels: Network on Debt and Development. Available online at: https://www.eurodad.org/public_development_banks_towards_a_better_model. Accessed 10 October 2021.

Romero. M.J. 2020. 'Reclaiming Public Development Banks to Finance a Sustainable and Equitable Recovery Post Covid-19.' In *Public Banks and Covid-19, Combatting the Pandemic with Public Finance*, edited by D. McDonald, T. Marois, and D. Barrowclough, 27-51. Municipal Services programme, Eurodad and UNCTAD. Available online at: https://publicbankscovid19.org/index.php/publications. Accessed 06 October 2021.

S&P Global. 2017. *Key considerations for supranationals' lending capacity and their current capital endowment*. 18 May. Available online at: https://www. standardandpoors.com/en_US/web/guest/article/-/view/sourceId/10098975. Accessed 10 October 2021.

Scherrer, C. (ed.) 2017. *Public Banks in the Age of Financialization: A Comparative Perspective*. Cheltenham, UK: Edward Elgar Publishing.

Schclarek Curutchet A. 2020. 'Argentina's Countercyclical Credit Policy Response: Macroprudential Regulation and Public Bank Credit During Covid-19.' In *Public Banks and Covid-19, Combatting the Pandemic with Public Finance*, edited by D. McDonald, T. Marois, and D. Barrowclough, 211-221. Municipal Services programme, Eurodad and UNCTAD. Available online at: https://publicbankscovid19.org/index.php/publications. Accessed 06 October 2021.

Scott, M., J. van Huizen, and C. Jung. 2017. 'The Bank of England's response to climate change.' *Quarterly Bulletin* (Q2): 98-109.

Spratt, S. 2009. *Development Finance: Debates, dogmas, and new directions*. London: Routledge.

Tooze, A. 2018. *Crashed: How a Decade of Financial Crises Changed the World*. New York: Viking.

UNCTAD. 2020. *From Global Pandemic to Prosperity for All; Avoiding Another Lost Decade. Trade and Development Report 2020*. Geneva and New York: United Nations.

UNCTAD. 2019. *Financing a Global Green New Deal. Trade and Development Report 2019*. Geneva and New York: United Nations.

UNCTAD 2017. *Beyond Austerity, towards a Global New Deal. Trade and Development Report 2017.* Geneva and New York: United Nations.

UN IATF. 2019. *Financing for Sustainable Development Report*. New York: United Nations Inter-Agency Task Force on Financing for Development.

Vandone D., M. Frigerio, C. Zatti and D. Bakry. 2020. 'Covid-19 and Measures to Support Enterprise and Local Authorities in Italy: The Role of Cassa Depositi E Prestiti.' In *Public Banks and Covid-19, Combatting the Pandemic with Public Finance*, edited by D. McDonald, T. Marois, and D. Barrowclough, 295-311. Municipal Services programme, Eurodad and UNCTAD.

Available online at: https://publicbankscovid19.org/index.php/publications. Accessed 06 October 2021.

von Mettenheim, K. 2010. *Federal banking in Brazil*. London: Pickering and Chatto.

Xu, J., X. Ren, and X. Wu. 2019. 'Mapping development finance institutions worldwide: Definitions, rationales and varieties.' *Research Report No. 1*. Institute of New Structural Economics. Peking University.

Yeung, G. 2020. 'The Public Banks and Peoples Bank of China: Confronting Covid-19 (If Not Without Controversy).' In *Public Banks and Covid-19, Combatting the Pandemic with Public Finance*, edited by D. McDonald, T. Marois, and D. Barrowclough, 283-295. Municipal Services programme, Eurodad and UNCTAD. Available online at: https://publicbankscovid19.org/index.php/publications. Accessed 06 October 2021.