

A US GREEN INVESTMENT BANK FOR ALL:

Democratized Finance for a Just Transition

Thomas Marois and Ali Rıza Güngen



A Green Investment Bank for a Just Transition

In ways unimaginable just a few years ago, public banking and its potential for catalysing transition to a green and just future has been catapulted to the centre of political and economic debate. The reasons for this resurgent interest in public banks are anything but auspicious. The greed-driven excesses of Wall Street and global finance gave rise to the 2008-09 global financial crisis—the most costly financial crisis in the history of humanity. This same drive to accumulate more and more capital has given rise to a second crisis—a global crisis of climate finance.

"

In ways unimaginable just a few years ago, public banking and its potential for catalysing transition to a green and just future has been catapulted to the centre of political and economic debate.

The global financial crisis and global crisis of climate finance are interrelated insofar as they are the product of neoliberal capi-

talism, which is premised on the ideology that competitive, profit-seeking behaviour can resolve all problems, be they economic, political, social, and indeed environmental. Competitive behaviours in the market and in the household have driven rampant consumerism, further

enabled by the levers of finance offering seemingly limitless access to debt in order to consume anything now, be it multiple homes to speculate on or the latest

smartphone.

"

There are 30,000 financial institutions around the world implicated in this social process. Most of these are private, which

combined control 80 per cent of all banking assets. Despite having far greater numbers and assets than public banks, private banks are not pulling their relative weight in climate finance. Of the \$454 billion in climate finance invested in 2016, private investors contributed \$230 billion and the public sector \$224 billion (Oliver et al. 2018, 2). That is, with only 20 per cent of total assets public banks invest nearly as much as all private banks combined. The short-term, return-maximising horizons of private finance have failed, utterly, to drive anything like a green transition. The future of climate finance must look to the public sphere, not the private (cf. Steinfort and Kishimoto 2019).



We must also ensure that the green transition is just. The crises of global finance and climate finance have to date been resolved under capitalism by letting the costs fall disproportionately onto workers, women, racialised communities, and the most marginalised in society—either through the direct bailouts of large corporations and private banks or through the knock-on socioeconomic impacts of austerity. The vast majority of people face stagnating or falling wages, rising job insecurity and anti-labour practices, the retreat of public provisioning of essential services, skyrocketing inequality of wealth and opportunity, and persistent racism and sexism. These injustices prevail as competitive and consumerist human activities feed climate change and global warming. Societies will have to deal with rising sea levels and extreme weather conditions that will foster recurrent waves of mass migration and economic hardship. There will obviously be increased burden on our natural environment, from the coral reefs to the carbon sinks of vast forests and wetlands. The built environment will also come under new and growing threats as we struggle as a society to refurbish existing stocks while maintaining and upgrading public services and infrastructure as we move to a zero-carbon emissions future. All of this will require massive investments and societal change.

Under neoliberal capitalism these challenges will necessarily be faced unequally and unjustly. The most marginalised will bear the brunt of transition by virtue of existing structural barriers and in-built systems of oppression. Faith in market-oriented 'green growth' and entrepreneurial innovation strategies will entrench pre-existing power structures. What is urgently required is strategy and action on a green and just transition for all. Therein, democratized finance will be key. Low-carbon infrastructure needs constructing, local jobs protecting, fossil fuels need to remain in the ground, the planet needs cooling, and social equity needs action.

"

There is no hope of a green and just transition without financial institutions that can be democratically commanded to function in the public interest.

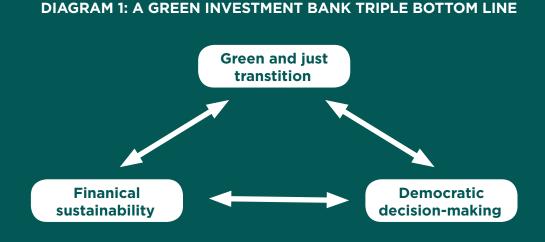
٠,

Yet there is no hope of this type of green and just transition without financial institutions that can be democratically commanded to function in the public



interest. Put otherwise, democratized public finance is a necessary, if by no means sufficient, condition of a green and just transition. It is in the search for such financial alternatives that public banking has once more captured people's imagination.

It is for this reason that we propose the creation of a democratized US Green Investment Bank (GIB). A democratized GIB has the potential to catalyse a transition to a socially just and environmentally sustainable future that is otherwise impossible under the short-term, high-return regime of private financiers (regardless of the extent of their financial resources). The GIB's potential is, of course, only realizable within a grander strategy of socioeconomic transformation, such as is envisioned within the Green New Deal. The proposed design of a new GIB is meant to fit strategically within this evolving framework. Its potential depends on the GIB catalysing structural change in the public interest. To be in the public interest, a new GIB needs to function in accordance with a triple bottom line aimed at (1) a green and just transition; (2) financial sustainability; (3) and democratic decision-making. In the absence of a legally binding triple bottom line in the public interest, any green transition or new deal strategy will be hijacked by private interests, financial capital, and governing elites—all of whom can only promise more concentrated wealth, greater social inequality, and accelerated environmental devastation.





We elaborate on this proposal in four sections: the possibility of creating a GIB in the US; its sustainable design; connecting it to local banks and communities; and democratizing it. This is followed by a brief conclusion. It is worth taking note that each function discussed is drawn from already-existing public banks.

One last thing: It is important when reading this proposal that you see it as the start of a conversation, a debate, over the kind of financial institution that can be geared towards the interests of the many, not the few. Our intention, as such, in preparing this paper is not to conclude but contribute to the discussion over perhaps one of the most important struggles of our time—the struggle to democratize finance for a green and just transition.

I. Creating a US Green Investment Bank for All

Public banks already exist and persist in the USA and around the world. These examples offer important and viable precedents that can inform the creation of a new public Green Investment Bank in the US. The realisation of a new public bank, however, will depend on political will and popular demand. The first steps have already been taken in the Green New Deal's call for public banking support [Section 4(A)].

The concept of a public investment or development bank is hardly novel and by no means isolated. Public banks persist despite 40 years of neoliberal advocates demanding their privatization. According to numbers provided by Orbis/Bankscope, the most comprehensive electronic database of banks, there are 693 banks globally that are majority publicly owned.¹ From Canada to China, Australia to Argentina, public banks have combined assets of \$37.72 trillion. As a percentage of all global bank assets, public and private, this constitutes 20 per cent of the total, a figure that equates to 48 per cent of 2017 global GDP. Moreover, specialized credit institutions (i.e., public investment and development banks) like the proposed GIB make up nearly half of all these public assets (47 per cent). Public banks, that is, have already-existing, geographically disperse, and massive financial resources. In recognition of their



already-existing capacity, the 2015 United Nations Addis Ababa Finance for Development Conference concluded that public development banks should play an increased role in achieving the 2030 Sustainable Development Goals.² Furthermore, a 2018 United Nations Conference on Trade and Development report recommends that public development banks increase their often-conservative lending practices (UNCTAD 2018).

It is often assumed that public banks are restricted to the "developing" world. But there are significant examples of public banks within jurisdictions very similar to the United States. In Canada, the province of Alberta created the Alberta Treasury Branch (ATB) in 1938 to assist farmers, and it is a public bank that persists today. As recently as in 2017, the Canadian Federal Government founded the new Canada Infrastructure Bank. There are even more cases of new public banks being formed in Europe (where there is an already long-standing tradition of public banking). In 2013 France created a new investment and infrastructure public bank, the SFIL, to add to its already-existing public banking mix (see Box 1). Since 2000 Germany has created at least nine new public regional and municipal investment banks (VÖB 2014).

It is hardly the case that public banks are simply foreign to the United States.

The history of public banks in the US can be traced back to the late 17th century (Brown 2019, 140). Various colonial governments experimented with public

BOX 1: FRENCH PUBLIC BANKS, OLD AND NEW

Two French public banks, one old (the Caisse des Dépôts, established 1816) and one new, the BPI France (established 2012), are helping to lead France's climate mitigation strategy. Guided by national legislation, the National Low Carbon Strategy (SNBC) and the Multiannual Energy Plan (PPE), these public banks' climate investments include everything from household retrofitting (including in social housing) to large scale renewable energy projects and transportation infrastructure projects. The funding provided is often at concessional rates or through non-repayable grants and transfers. Since 2013, France's public sector, including the central government and its public banks, has provided more than half of the country's total climate mitigation investments (I4CE 2017, 4). In 2018 alone, French public banks offered \$4.9 billion in climate finance (I4CE 2018, 12).



land banks to promote trade and agriculture. They were understood to be vital for a healthy economic structure. Public banks also helped the colonial government meet the expenses of treaties with Native Americans and with financing public buildings in Pennsylvania (Thayer 1953). These early experiences did not prevail. Public banks in the US did not re-emerge until the early 20th century.

The best-known public bank in the US is the Reconstruction Finance Corporation (RFC), which was modelled after the War Finance Corporation. The RFC was formed in 1932, amidst the Great Depression, to help commercial lending recover by injecting fresh liquidity into the banking sector (Nash 1959; Fishback 2007). Despite its initial aim, the bank progressively expanded its operations during the Roosevelt administration and became an essential financial source for many New Deal Programs. Starting up with a capital stock of \$500 million, the RFC mainly used funds it borrowed from the Treasury. "By the mid-1930s, the RFC was making loans to banks, savings banks, building and loan associations, credit unions, railroads, industrial banks, farmers, commercial businesses, federal land banks, production credit associations, farm cooperatives, mortgage loan companies, insurance companies, school districts, and livestock credit corporations" (Olson 1988, 43-44). The bank used its returns from repaid loans to offer new credit. Having disbursed more than \$40 billion, it ended its operations in 1957 (Secretary of the Treasury 1959). The experiences of the US New Deal offer important precedent, and financial insight, into what is possible for the Green New Deal and for a new GIB.

The dissolution of the RFC did not mean the end of public banking in the United States. Originally established to support industrialization and farmers 100 years ago in 1919 (as the Alberta Treasury Branch did to the north), the Bank of North Dakota still supports commerce and industry and remains in partnership with dozens of local financial institutions to make loans to businesses (see Brown 2019, 142). The BND invests deposits back into the state's own economy and contributes to the state budget by paying handsome dividends (see Mother Jones 2009).



There are other examples of contemporary public banks in the USA. For example, the North American Development Bank (NADB) was established in 1994 by the governments of Mexico and the United States to serve the communities north and south of the border. In addition to financing infrastructural projects, the NADB provides technical assistance to the local communities for project planning and design. In addition, the US has had an export-import bank to support American businesses since 1934. Backed by the federal government, the Ex-Im Bank provides financial services to reduce risks of exporting corporations. There is also a strong tradition of community owned banks and hybrid banks. For example, owned mainly by the tribal nations and Alaska native corporations, the Native American Bank (est. 2001) aims to provide financial services to native communities.

A vibrant, community-driven yet nationwide public banking movement, which recognizes the value of public banking, has emerged since the 2008-09 global financial crisis. There are ongoing campaigns at the municipal and state-level to create new publicly owned banks based on their successful track records in North Dakota and elsewhere. Motivations include the fact that public banks can provide cheap credits and stable funding to reinvigorate local and state-level economies. As of 2018, there were 15 bills in the US seeking the foundation of public banks in cities and the states.³

Public banks in the US, throughout their history, have shown variations in both their structure and social content. Be it coping with the financial hurdles in newly founded colonies or providing financial relief by supporting businesses as well as social programs amidst economic depression, the major motives in the creation of a public bank change over time. Public banking capacity, however, will be critical for furthering a socially progressive agenda and public banks are potential strongholds to support the public good. Despite the variation in their creation processes and social priorities, the establishment of all public banks depends on political will for holding up public interest and these banks were critical to overcome economic difficulties.



II. Designing a GIB that is Financially Sustainable

A GIB will need to be financially sustainable. But the meaning of financial sustainability, that is, the way it can reproduce itself over time, is as much political as it is economic. By no means does financial sustainability necessarily mean the maximization of returns on investment. Indeed, financial sustainability can involve loss-making operations and highly subsidized programme lending—so long as the losses generated are covered by other return-generating lending within the bank or by direct government injections. There is no evidence that public banks must prioritise returns to be financially sustainable. Designing the GIB's specific approach to financial sustainability, nevertheless, requires careful consideration of the sources of the GIB's capital and the ways the GIB will lend out capital.

II. A. Financial Sustainability

The design of any GIB must secure its financial sustainability, that is, its ability to reproduce the institution indefinitely in ways that allow the GIB to fulfil its mandate. While this does not mean maximising returns, it does mean securing sufficient and recurrent income to fulfil its mandate. It is important to underscore here that financial sustainability can and *must be* pursued *on par with* the aim of enabling a green and just transition and democratic decision-making (that is, the triple bottom line). This approach to financial stability as but one of three functional pillars contrasts with private banks whose shareholders first and foremost demand a short-term focus on increased returns, whether or not this damages the environment or upholds democratic decision-making.

There is evidence that public development banks around the world function sustainably without having to earn high returns (see Table 1). German development banks earn less than a third of a percent ROA (return on assets), France's SFIL less than one tenth of a per cent ROA, and the Nordic Investment Bank (NIB; also see Box 2) over a half a percent ROA. Public investment banks in China and Mexico earn around a half to three quarters of a percent ROA. These are each successful and well-regarded public banks.

BOX 2: THE NORDIC INVESTMENT BANK: CREDIBLE AND GREEN

The Nordic Investment Bank (NIB, established 1975) is a development policy-oriented public bank that is not owned and controlled by a single government, but by eight—Denmark, Finland, Iceland, Norway, Sweden, Estonia, Latvia, and Lithuania.

The NIB is guided by a vision for 'a prosperous and sustainable Nordic-Baltic region', operationalised via its mandate to support projects that improve resource efficiency; the development of a competitive low carbon economy; protection of the environment and its ecosystem; and the development of clean technology. In the words of the NIB, the bank needs to be 'financially strong' in order to fulfil its mandate effectively while at the same time generating sufficient returns on operations to provide its public owners a 'reasonable return' (NIB 2017, 57). To this end, the NIB funds both private and public projects, but reports that the largest portion of lending goes to municipal infrastructure (schools, healthcare facilities, water and wastewater systems). Much of this infrastructure lending crosscuts with the NIB's environmental mandate.

The NIB was not founded with a 'green' mandate, however, it was a relatively early mover when it started targeting environmental lending in 1988. By 1997 the NIB had established a new environmental loan facility and then, in 2001, it joined the Northern Dimension Environmental Partnership (NDEP), which is meant to overcome barriers to transboundary environmental issues. The NIB has signed the Declaration on the European Principles for the Environment (EPE), which addresses environmental management in the financing of projects and reports to the Global Reporting Initiative (which tracks environmental impacts). In performing these functions, the bank is seen as a socially credible institution. In a 2015 independent survey of 12 stakeholders (customers, investors, and public authorities), respondents strongly perceived the bank as ethical, transparent, and effective particularly with regard to sustainability issues (NIB 2017, 10).

That said, existing public banks in the USA tend to earn higher returns. The NADB earns over one percent ROA and the BND over two percent ROA, both of which are levels comparable or better than private commercial banks like Wells Fargo, HSBC, or Citibank. The point is that public banks can function sustainably with either very low or high returns. There is no universal limit one way or another. The more important political question is what a public bank does to function sustainably at low rates of returns, or what it does with returns generated at a higher rate.



Table 1: Development Bank Return on Assets, Annual, 2017 and 2018

| | KfW | NRW | SFIL | NIB | CDB | NAFIN | BPDC | NADB | BND |
|------|-----------|-----------|----------|-----------------|---------|----------|------|--------------|------|
| | (Germany) | (Germany) | (France) | (Nordic region) | (China) | (Mexico) | | (USA/Mexico) | |
| 2017 | 0.29 | 0.01 | 0.07 | 0.70 | 0.81 | 0.30 | 1.1 | 1.48 | 2.03 |
| 2018 | 0.34 | 0.01 | 0.09 | 0.56 | 0.75 | 0.46 | 0.61 | 1.03 | 2.26 |

Source: Orbis/Bankscope 2019 (accessed 11 June 2019).

What a public bank does with its returns will depend on its legal mandate. In cases like Germany's KfW, all returns go back into the bank's capital reserves to enable further lending. By contrast, the Bank of North Dakota distributes its returns by either sending them to the State of North Dakota Legislature's General Fund, using them for mandated loan programs, or adding to the BND's capital. In yet another example, the Banco Popular y de Desarrollo Comunal (BPDC) of Costa Rica uses higher-return activities to cross-subsidise the bank's loss-making social activities. Any one of these strategies can be financially sustainable, and if mandated to do so, can be consistent with a triple bottom line.

To be sure, it is also the case that public development banks can generate annual losses in the fulfilment of their mandated activities and/or for extending counter-cyclical lending at times of financial crisis (although cases of public banks with annual losses are now the exception than the rule) (see De Luna-Martinez et al. 2018, 33). In such cases, the responsible government covers the losses incurred due to such mandated lending activities. When performed in line with mandated activities, this too is a form of financial sustainability. The bank can reproduce itself indefinitely. Importantly given the scale and timeline of investments envisioned as part of the Green New Deal, it is likely that the US Government will need to subsidise GIB activities in this way in order to accomplish the proposed transformation. As with the original New Deal, so too with the Green New Deal—the financial sustainability of a GIB will depend on political will and popular demand.

The point is that financial sustainability means having sufficient annual income—be it from its own earnings or from government transfers—to cover



annual expenses, including any losses—nothing more, nothing less. When public banks generate returns, these can be used to bolster the bank's capital reserves, paid to its government owners, or some combination therein. When they generate losses, either internal or external sources must cover them for the institution to persist.

The key political economic decision to be made in deciding on the design of financial sustainability is the balance between *concessionary* lending (that is, not-for-profit and loss-making operations) and *non-concessionary* lending (that is, for-profit) (cf. Cochran et al. 2015). Moreover, who and what benefits, or not, from such concessionary lending? There are no natural answers; they must follow from the bank's public interest mandate and triple bottom line. As discussed below, these too will need to be democratically determined to be green and just.

This proposed approach to financial stability breaks from conventional economic thinking. For example, international institutions like the World Bank, World Economic Forum, and the OECD want public banks to socialize the investment risks of private finance in order to drive green transformation (WEF 2006; World Bank 2012; OECD 2017). Therein, public banks should only fund so-called "bankable" projects, that is, ones expected to generate

positive returns for the bank. This mainstream strategy would

both further empower private financial capital (and undermine public capacity to drive forward with a Green New deal) and eliminate funding possibilities for the many necessary climate mitigation and protection strategies due to profitability (bankability) constraints. Moreover, current mainstream strategies are unable to account for a triple bottom line as they by design elevate maximising returns above all other considerations.

"

Current mainstream strategies are unable to account for a triple bottom line as they by design elevate maximising returns above all other considerations.

"



II. B. Sourcing Finance Capital for a Green and Just Transition

The design of a GIB for a green and just transition in the public interest must consider carefully its sources of finance capital. Two matters need considering: (a) its initial capitalization and (b) future recurrent sources.

Initial capitalization

The initial capitalization of the GIB, or how much capital will need to be injected into the new bank to get it up and running, must be decided in relation to the scope of activities planned for the bank. The initial injection should neither be too small that the GIB cannot achieve its short to medium-term targets or too large that money sits idle and ineffective, ultimately undermining the financial sustainability and societal credibility of the GIB.

There are two common strategies for the initial capitalization of equity capital. First, the GIB could issue a start-up equity tranche for a specific amount (say, for example, \$50 billion) that would be bought by the US government (hence, injecting capital directly into the GIB). Or second, the GIB could mirror strategies adopted in Europe and with the new multilateral development banks (the AIIB and New Development Bank) where public banks have a mix of paid-in capital (actual cash in hand) and "callable" capital. Here the government's actual cash injection is a fraction (anywhere from 10 to 50 per cent) of the total subscribed capital (say, again for illustration purposes, a total of \$50 billion). That is, the government would inject \$5 billion to \$25 billion and guarantee as "callable" by the Board of Directors the remaining \$25 billion to \$45 billion as and when needed. The advantage of the second approach is that the GIB can kick off operations while drawing less from government resources. For example, the NADB is capitalized in equal parts by the governments of the United States and Mexico. The NADB has \$6 billion in total capital subscribed equally by the United States and Mexico. Contributions to date total \$415 million in paid-in capital and \$2.35 billion in callable capital.4



Much like the other public banks, the GIB can mobilize various other financial sources and use loans paid back for extending new credit. There are no inherent barriers to a GIB being both financially sustainable and serving the purpose of a green and just transition.

Recurrent sources of finance capital

Once initially capitalised, a GIB, like all public banks, will require constant flows of incoming capital in order to fund its mandated projects and activities. The potential sources of this incoming capital can have different impacts on a public bank's ability to fulfil its mandate and pursue a triple bottom line.

As a principle of design, a GIB must ensure, whatever its source of recurrent capital, that incoming capital resources enable, rather than undermine, the bank's ability to fulfil its green and just transition mandate in the public interest. One strategy is to ensure that the bank's primary source of finance capital is public in origin (Romero 2017). Recurrent public sources can include **direct government allocations**, types of **permanent capitalization** from public institutions and workers, and **foreign public borrowing** (See Box 3).

In terms of permanent capitalization, we need to think creatively about potential public sources of capital that need not involve borrowing at all (cf. OECD 2017, 4). For example, non-borrowed sources of public capital can come from transfers linked to a dedicated percentage of tax revenues received by various levels of government (local; state; national); official grants; and injections from other public sector entities. Some less conventional but innovative "green" sources include carbon levies and taxes; emissions trading revenues; and utility bill or energy efficiency surcharges. These can all contribute to the cumulative build-up of a GIB's financial capacity in ways that support its pursuit of a triple bottom line.

While never eliminating potential conflicts, public sources of capital can better enable long-term horizons and reduce short-term demands for higher returns. Indeed, it is precisely this failed neoliberal model that has helped regenerate interest in public banks. A recent European Commission report acknowledges



that private investment is driven first and foremost by expected returns on investment, and thus favour investments with high return, short-term opportunities that neither support carbon-efficient technologies nor help to realise sustainability objectives (EPSC 2017, 12). Public banks that retain access to public money to generate stable, low-cost, and long-term forms of finance in the public interest can significantly reduce or eliminate these market pressures to maximizing profit over mandated priorities. With this in mind, publicly owned funding agencies in Nordic countries, such as Kommuninvest (Sweden), Kommunalbanken (Norway), Kommunekredit (Denmark), and MuniFin (Finland) have emerged as innovative pioneers of green lending and vital supporters of local development and infrastructure projects based on renewable energy, sustainable buildings, waste management, and environmental management. Despite lower ratios of return on assets, their ways of pooling finance and distributing to local communities are exemplary and sustainable. Such a push

BOX 3: RECURRENT SOURCES OF FINANCE CAPITAL

Direct government allocations: Various government funds for public banks; includes initial capital allocations; annual allocations from the government budget. Special government funds for development priorities (e.g., SMEs; farmers; trades; 'green' transformation) that are managed and administered by the bank; promotional and discounted facilities for targeted bank loans supported by the government; government guarantees for programme lending; quasi-equity capital, involving long-term government loans that are highly subsidized (e.g., at zero or low rates of interest) and whose repayment may involve grace periods.

Permanent public capitalisation: State, municipal, local authority contributions; 'green' contributions from essential services and infrastructure (water; electricity; energy; transportation); worker contributions.

Foreign public borrowing: Sources include the international financial agencies (World Bank Group; regional development banks); foreign governments; foreign development agencies.

Private borrowing: Domestic and international capital markets; bond markets; green bonds; private institutional investors.



for green lending is no longer specific to Nordic public banks. As of 2018, 80 per cent of the members of the European Association of Public Banks provided finance to green projects (EAPB, 2018). The curtailing of private financial profit-maximising imperatives is a vital element of any long-term green transformational strategy conceived of in the public interest.

Moreover, public-public collaborations can assist the GIB in protecting a public interest mandate, in helping to develop a broader public ethos in society, and in reclaiming public sector expertise and capacity—that is, public collaborations can help to generate a new breed of effective and democratically responsive pubic service providers (see Hanna 2018 and McDonald 2018). In line with the triple bottom line, public sources of finance capital have the right to participate in how the bank operates. That is, no public monetary contribution without meaningful representation. As elaborated below, this democratic structure coincides with the demands made within Green New Deal legislation.

Private borrowing can also provide an important source of recurrent finance capital. This will mean tapping into global financial markets, which can provide near limitless access to capital. The sovereign state guarantee given to a GIB will mean the bank can access capital at the most favourable rates and terms. The GIB can issue green bonds and resort to global financial markets, not relying solely on private financial capital to fund projects of public good. This is already underway. The volume of the bond market aligned with climate change reached \$1.45 trillion in 2018 and green bonds are estimated to have reached the volume of \$389 billion (Climate Bonds, 2018). The United States takes its place among the countries dominating the issuance of climate-aligned bonds (Weber and Saravade 2019).

Global growth of green finance will continue and the GIB can benefit from opportunities to borrow cheap in the international financial markets. As a principle of design, however, it must be enshrined in the bank's operations that any sourcing of private capital does not undermine the bank's mandate, public ethos, or triple bottom line. Rather than "financializing" the GIB balance sheet (that is, intensifying short-term accumulation imperatives), the GIB must structure private



borrowing in ways that "definancializes" the capital borrowed (that is, sanitizes and eliminates private interest imperatives) (see Tricarico 2015).

This is important because if a public bank is largely dependent on short-term, return-maximising, and volatile private sources of capital this dynamic could undermine the ability and autonomy of the public bank to pursue its public interest mandate, especially if private interests conflict with a triple bottom line. Private finance can engage in "capital strikes" (withholding new capital or calling in existing loan commitments) and are structurally pro-cyclical in their lending behaviour. The effect would be to drastically reduce the GIB's capacity to fulfil its mandate, or to bend its green mandate so that it is more aligned with or subordinated to private interests and capital accumulation. By contrast, a good foundation of public capital and a sovereign backing, guaranteeing support should it be required to fulfil its mandate and triple bottom line, places a public bank firmly within a public interest framework and enables democratic accountability.

The point here is not that public banks must avoid sourcing capital from private financial markets. Not at all. There are very good reasons for public banks to help definancialise contemporary financial markets by channelling capital into public interest projects. It is rather that a public GIB must be strategic in sourcing capital so that the bank's public interest mandate and

triple bottom line are protected.

Lending for a Green and Just Transition

The design of a GIB must also consider carefully how it will lend for a green and just transition. Financial institutions, public and private, lend money for a price, which is the cost of borrowing. The cost or price of borrowing for clients involves several factors. How much interest does the bank itself have to pay to access sources of loanable capital? What are the operating costs of the bank (staff, IT, real estate)? The price of borrowing will be

"

A public GIB must be strategic in sourcing capital so that the bank's public interest mandate and triple bottom line are protected.

"



reflected in the interest rate, as well as in any fees or commissions charged by the bank. Yet, as discussed above, what a bank actually demands in return for providing a loan or financial support can be concessional or non-concessional. The price of lending may or may not fully reflect the cost of providing it.

It follows that no lending or investment strategy is socially neutral but is instead deeply political in its economic and social implications. Whereas private and corporatized financial institutions lend only to so-called "bankable" projects (that is, projects expected to earn enough money in the future to repay their debts plus the full costs of borrowing that include profit imperatives) and thus have a single "bottom-line" based on returns, a public interest public bank will have more options. Projects may or may not be "bankable". Returns may form but one of several bottom-lines. It is a matter of design and political (not simply economic) imperatives.

In designing a GIB with a triple bottom line, there is a wide range of appropriate financial instruments that can be used to invest and allocate its financial resources. These include everything from offering a variety of repayable loans to facilitating directed funds from third parties (official donors or green investors), to offering targeted grants, to even taking a direct ownership stake (equity investment), or to providing technical assistance and engaging in public-public sector collaborations (*cf.* I4CE 2018, 13). Subject to oversight and scrutiny, these ways of lending and channelling money can be consistent with a triple bottom line, thus facilitating, rather than undermining, a green and just transformation.

There are, however, a number of lending instruments that are clearly inconsistent with a triple-bottom-line design. For example, any financial strategy that involves project risk sharing agreements where the public bank *guarantees* private investor profitability (which is the strategy advocated by the World Bank's Billions to Trillions SDG agenda, see World Bank/IMF 2015) is inconsistent with a triple bottom line and the public interest. That is, it is a dead end to begin a just transition by first socialising the risks of investment by ensuring the privatisation of profits. A second closely related and inconsistent strategy involves the promotion of public-private partnerships. Here public authorities facilitate



infrastructure and essential service provisioning by the private sector. Public banks do so by taking on investment risks and helping to guarantee profitable returns for corporations. Yet these PPPs are fraught with problems, typically driving up infrastructure costs to the public sector while eroding any sense of democratic decision-making and accountability (Eurodad 2018). Lending for a green and just transformation must, and can, do better.

BOX 4: WAYS OF LENDING FOR GREEN AND JUST TRANSITION

Standard loans:

Must be repaid by the borrower, at concessional or non-concessional rates.

Development loans:

Often are concessional and repayable, but may blend sources of government or donor funds.

Official donors:

Provide directed funding that is channelled through the GIB as an intermediary.

Grants, transfers, and subsidies:

Do not need to be repaid, and may be tied to government or donor programming.

Equity:

Involves the GIB taking a direct ownership stake in a project or company.

Public-public collaborations:

Involves public-sector collaborations in undertaking public works where ownership and debt risks are shared within the public sector.

Technical assistance:

Involves agreements to provide supportive expertise and assistance at little or no cost to the recipient.

Green bonds:

Involves the GIB providing financial instruments for investors who want to specifically channel their funds directly into certified sustainable development projects.



III. Connecting a GIB to local public banks and communities

A founding commitment of the Green New Deal is that it "must be developed through transparent and inclusive consultation, collaboration, and partnership with frontline and vulnerable communities, labour unions, worker cooperatives, civil society groups, academia, and businesses." [see Section (3)]. So too with any new GIB, which must institutionalise ways of functioning and co-existing collaboratively with regional and local public banks and their communities. The connection can be made according to a principle of "subsidiarity", wherein socioeconomic decisions are "handed to the smallest political unit capable of discharging them" (see Basu 2019). The structure of this hub-and-spoke system need not be complex, but it does need to meaningfully enable, not undermine, the fulfilment of a triple bottom line (see Diagram 2).

DIAGRAM 2: ENVISIONING A HUB/SPOKE GIB SYSTEM





Quite simply, the GIB should sit at the hub of a national system of regional public development banks that in turn work collaboratively with communities and their local public and cooperative banks. In this way, the funding of a green and just transition can benefit from working within and across different scales while benefiting from (and respecting) local knowledge and socio-economic priorities. There are significant functional benefits to this hub/spoke system. The GIB can access large amounts of cheaper finance capital at national and international levels, in turn supplying regional banks with stable and affordable loanable capital. This in turn is passed on to local banks and communities.

As the national hub, moreover, the GIB can tackle the largest investment projects that are beyond the capacity of the smaller regional banks. The GIB would take responsibility for being the central hub of expertise, capacity-building, and training around the vast complexities of a green and just transition. This would include organising internal capacity-building and advancement opportunities for staff as well as coordinating external higher education staff training programmes. The national hub would also be the place to locate a public banking association designed to represent and defend the public interest benefits of public banks to government and society.

Regional development banks will work within a smaller geographically defined region, drawing on national GIB financial and technical resources to fulfil regional investment priorities. Being closer to the projects on the ground, the regional banks will facilitate respect for the full spectrum of the triple bottom line. As the middle-level bank, the regional banks can enable dialogue and decision-making between local banks and communities and the national GIB.

In turn, local public and cooperative banks will be responsible for everyday financial services and for rolling out green transition programmes at the community and household scales. As retail banks, these banks will specialise in understanding the needs of the community and then representing these needs to the regional and national levels. Importantly, as deposit-taking institutions, people and communities can decide to hold their savings here knowing that



these sources of capital will support a green and just transition in the public interest as opposed to highly concentrated individual wealth accumulation.

The design of this hub and spoke institutional structure, which is not dissimilar to that employed in the German model of public banking, must be forcefully representative, accountable, and democratic across and through all three scales. More is said on this below. What needs to be emphasised here, however, is that finance in this structure can be a force for societal integration and the public interest, rather than a source of community disintegration and driver of grotesque private fortunes—as is the case under neoliberal financialization. Research shows that public banks, like other public institutions, can practice non-competitive cooperation as a matter of mandate and good practice in ways that promote common efficiencies and the public interest over private accumulation (see Butzbach 2016; Périlleux and Nyssens 2017; Kishimoto and Petitjean 2017; Marois 2013 and 2017; Steinfort and Kishimoto 2019). The proposal made here can enable the efficiencies and resources available at the national scale to appropriately support "community-defined projects and strategies" in ways consistent with a Green New Deal.

IV. Democratizing a GIB for a Just Transition

For a new GIB to be anything other than just another financial institution captured by wealthy financial elites and private interests, it must move beyond corporatized "governance" models to being meaningfully democratized. Only through purposively designed democratization can a GIB fulfil a green and just transition for all in ways that stop current, prevent future, and repair historic oppressions and systemic injustices, as called for in the New Green Deal.

Democratization means internalising and acknowledging the already-existing connections (and disparities) between society, politics, and economics in institutional decision-making such that they are transparent and accountable to the affected community. In the case of a new GIB, the democratization challenge is to strategize how to align national operations with regional and local



representatives within national and local development plans (see Romero 2017, 15). We recommend applying the principle of subsidiarity by attempting to devolve decisions while also designing means of multi-scalar representation across the hub/spoke model. Therein, democratic forces must be able to protect against public banks being abused by powerful public and private sector elites for their own interests. In this, neoliberal market-based governance models have not proven effective, as efficiency and profitability imperatives have served as trojan horses for subordinating the public to the private interest. Meaningful democratization, therefore, is the only viable strategy able to armour a GIB against undue and undemocratic abuse and capture for private interests.

The design need not be overly complex, but it must be well-crafted and robust. Drawing from existing public banking practices, we suggest crafting a democratization structure that combines both inclusive and representative elements in its institutional structure (we will here discuss this in terms of a national GIB, but the ideas and principles should extend to the regional and local public banks as well).

The GIB should be designed with a two-level but hierarchical democratization structure formally composed of a People's Assembly and a National Board of

Permanent Commissions (e.g., Women's; Tribal Nations) Page 1 National Board of Directors



Directors. The People's Assembly forms the highest decision-making body and the institution's most inclusive forum. While its precise responsibilities must be debated, and spelled out in public law, it is meant to provide the overall vision for the GIB and guarantee democratic oversight and accountability of the bank's overall operations with respect to its mandate. The People's Assembly would, for example, review and approve annual reports, but it would not involve itself in more technical and managerial operational decisions—unless requested to do so by the National Board of Directors. Designed more in the form of annual meetings, the Assembly is not geared towards intervening in the day-to-day business of the bank.

There is no pre-set specific number of Assembly representatives required, as this must be determined in the make-up of the GIB. However, as a matter of principle and to enable broad-based representation of the people, Assembly numbers should presumably be more than one hundred. All members would be elected by designated constituencies and social sectors representing, for example, trade unions, teachers and educators, environmentalists, SMEs and cooperatives, public services, and anchor institutions. To enable bottom-up representation and dialogue across the hub/spoke scales, the Assembly would also include representatives from the regional and local public banks.

The People's Assembly would be the location designated for **Permanent Commissions** to reside. Permanent commissions are specialist bodies responsible for ensuring that GIB operations are consistent with social equity priorities, such as women's equality and Indigenous rights. Commissions would be responsible for reviewing core decisions and mandates. The Commissions' decisions must have a meaningful impact on the decisions of the Assembly and the Board. Specific examples of possible Commission may include a Women's and/or Tribal Commission.

A real-world precedent for the proposed People's Assembly and Permanent Commissions democratic structure is the Banco Popular y de Desarrollo Comunal (Bank of the People and of Community Development) in Costa Rica (established in 1969). While initially founded around a traditional 'Board'-led



decision-making model, the Banco Popular legally established a new "Workers' Assembly" as the bank's highest decision-making body in 1986. In 2002 the Banco Popular re-affirmed this decision and further specified the purpose and democratic ethos of the Workers' Assembly in its new "Democratization Law" (the Ley de Democratización de las Instancias del Decisión del BPDC y de Desarrollo Comunal). By law, the Banco Popular's Workers' Assembly is made up of 290 representatives drawn from ten social and economic sectors in Costa Rica (artisanal; communal; cooperative; self-managed; independent; teachers; professional; as well as the confederated, non-confederated, and solidarity syndicates). For observers of Costa Rican society, the Workers' Assembly is the foundation of the bank's contribution to the democratization of Costa Rica's economy, development, and financial system (Cortés 2014, 62). The Democratization Law further specifies that the BPDC have a Permanent Commission for Women and that the Worker's Assembly must act on the Commission's requests. Local branches of the Banco Popular also have local representatives holding the branch to account for its activities. Consequently, the Banco Popular is, in our opinion, the most democratic bank in the world—and there is much to learn from this ambitious and evolving project.

The GIB's second highest decision-making body, subordinated in structure to the People's Assembly, is the **National Board of Directors**. Unlike the People's Assembly, the National Board will be tasked with managing and coordinating GIB operations and with implementing the vision of the People's Assembly. It is more likely to require monthly meetings. As with the People's Assembly, there is no pre-set number of board members, but as a matter of principle it should be in the dozens to ensure substantive representation and to guard against institutional capture by any particular grouping. Here one could look to the promising example of the large German public development bank, the KfW. Its Supervisory Board is chaired by the elected Federal Minister of Finance and Federal Minister for Economic Affairs and Energy in alternation and it includes an additional 37 representatives from across several social and economic sectors.⁵

National Board membership should follow a tripartite model, including government- and parliament-assigned delegates (national; state; and municipal);



People's Assembly delegates representative of social sectors; and regional and local public bank delegates. This Board-level form of representative democratization should translate into public ownership offering effective popular democratic control over the managerial, strategic, and operational direction of the public bank, while remaining subordinate to the People's Assembly's vision and direction.

We recommend combining the representative and inclusive forms of representation within the GIB in order to provide substantive democratized oversight and accountability, which can then enable the bank to function credibly in the public interest. The design of democratization here is *not* meant to 'depoliticize' the bank's decision-making processes (as per neoliberal governance models) but rather to insulate the GIB from individual political and corporate capture by opening bank processes up to broad-based democratic deliberation.

BOX 5: GERMANY'S KFW: DEMOCRACY AS A CAUSAL FORCE OF GREEN TRANSITION

The democratic structure of the KfW has enabled the linking of German society's green aspirations to KfW lending operations. Germany's "Energiewende" (energy transition) initiative, which has "strong roots within civil society based on energy cooperatives, private investors, farmers, and a broad consensus on the advantages of a renewable-energy regime" (Haas and Sander 2016, 125), was formalised in a series of laws since 2000. These include the *Renewable Energy Act* (2000); the *Integrated Energy and Climate Programme* (2007); the *Climate Initiative* (2008); and the *Energy Initiative* (2010).

The KfW's public ownership structure and democratic Board membership then translated these initiatives into a new environmental mandate for the KfW. This triggered changes in the bank's lending practices. Presently, "green" lending, which leads to a reduction in greenhouse gas emissions and to increased energy efficiency, accounts for 40 to 45 per cent of all KfW lending (KfW 2017, 2; KfW 2019, 3). Since 2014 the KfW has become active in issuing green bonds. While having some way to go, the KfW is moving in a promising direction.



Three additional principles must complement the bank's democratization structure: the right to collective action, transparency, and accountability. As a matter of human rights and dignity, the GIB must institutionally uphold a worker's right to self-organize into unions and to take **collective action** (that is, to strike). Presently the right to strike for bank workers is not guaranteed by all banks, public or private, around the world. Yet any institution's public interest mandate is fatally undermined if its own employees cannot exercise their basic human rights, articulate their own collective interests, or hold management to account for violations to the bank's mandate.

Democratization, moreover, must be backed by robust transparency and accountability mechanisms that guarantee open communication, feedback, and inclusive decision-making processes. This means directly challenging existing international financial practices that accept bank secrecy and impunity. What a bank does must be openly held to account. **Transparency**, in this case, means having the legal and substantive right to access information held by public banks and by public authorities on public banks (Romero 2017, 23). As best practice, public banks must be required to disclose all key documentation, to detail their clients, sub-clients, and end-users, and to provide accessible and verifiable annual reports. To be meaningful, transparency needs to be written into contractual funding agreements. Burdensome administrative processes for accessing such documents must be eliminated by making key documents openly available online to all.

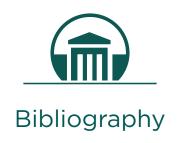
At the same time, affected communities must have regular access to open decision-making forums to be able to hold all decision-makers **accountable**. Internally, public banking institutions require a user-friendly and independent complaints procedure that protects complainants and whistle-blowers. To meaningfully link transparency and accountability, public banks have to formally allocate annual resources for regular and independent evaluations of the banks' operations. The bank's green mandate must be included in these mechanisms, for example, by reporting externally to organisations like the GRI (Global Reporting Initiative⁶), which highlights sustainability criteria.



People make history if never in the conditions of their own choosing. Collectively we must face climate change and the disasters it is bringing as a result of human activity, exacerbated by the exploitative, productivist, and consumption-driven nature of capitalism. People have a chance to change the future. Finance will be at the forefront of this change, for better or for worse. It is a choice society must make. The current trajectory will see finance subordinate the climate agenda to ensuring a greater concentration of wealth in fewer hands. A different but democratized trajectory can result in finance being oriented towards a green and just future.

Our analysis underlines that it is not only possible but vital to have a green public investment bank in the US, to democratize finance, and to support the public good. Green transition can be achieved sustainably and justly without the burden falling disproportionately upon the working and the poor in society. A GIB can make use of alternative sources of finance, channel resources effectively, learn from successful green lending projects, and itself be a model for collaborative initiatives to green the economy. In order to do so, the GIB must be connected to local banks and communities and work with them accountably and transparently. By democratizing the GIB, it is possible to have a green and just financial institution that is both commanded by and working for the public good.

Neither words nor critique alone can realise this alternative trajectory. Workers, women, the poor, the marginalised, and the 99 per cent must build actually existing institutional financial capacity and subordinate these public financial institutions to the public interest and to democratic decision-making. No doubt this means charting new territory and breaking with neoliberalism. The path is not without historical precedent or future necessity. But as we confront the structures of global financial capital, the struggle for something better must be ambitious, bold, and creative.



Basu, Laura (2019). "The 'Washington Consensus' is dead. But what should replace it?" openDemocracy, 13 April 2019, available at: www.opendemocracy.net, accessed 13 June 2019.

Brown, E. (2019) *Banking on the People: Democratizing Money in the Digital Age*, Washington D.C.: Democracy Collaborative.

Butzbach, O.K.E. (2016) "The Evolution of Organizational Diversity in Banking: Savings Banks' Consolidation and Sector Coordination in France and Italy, 1980–2012." *Organization Studies*, 37(4): 565–89.

Climate Bonds Initiative (2018) *Bonds and Climate Change: The State of the Market 2018*, September 2018, https://www.climatebonds.net/files/reports/cbi_sotm_2018_final_01k-web.pdf, accessed 7 June 2019.

Cochran, I., C. Eschalier, and M. Deheza (2015) *Mainstreaming Low-Carbon Climate-Resilient Growth Pathways into Investment Decision-Making: Lessons from development financial institutions on approaches and tools.* Background Paper prepared for IDFC Climate Finance Forum, available at: https://www.i4ce.org, accessed 18 June 2019.

Cortés, C. (2014) *Conquistas Sociales en Costa Rica*, San José, Costa Rica: Grupo Nacional.

De Luna-Martinez, Jose; Vicente, Carlos Leonardo; Arshad, Ashraf Bin; Tatucu, Radu; Song, Jiyoung (2018) *2017 Survey of National development banks* (English). Washington, D.C.: World Bank Group.

EAPB (2018) Annual Report 2018, European Association of Public Banks, available at: https://www.eapb.eu/our-work/publications.html, accessed 1 July 2019.



EPSC (2017) "Financing Sustainability: Triggering Investments for the Clean Economy," *EPSC Strategic Notes*, Issue 25, 8 June, European Political Strategy Centre, European Commission, Brussels. Available at: https://ec.europa.eu/epsc/sites/epsc/files/strategic_note_issue_25.pdf, accessed 1 July 2019.

Eurodad et al. (2018) *History RePPPeated: How Public Private Partnerships are failing*. Brussels: EURODAD in cooperation with Heinrich-Böll-Stiftung.

Fishback, P. (2007) "The New Deal," Fiscback, P. (ed.) *Government and the American Economy: A New History*, Chicago: University of Chicago, 384-431.

Haas, T. and H. Sander (2016) "Shortcomings and Perspectives of the German Energiewende," *Socialism and Democracy*, 30 (2): 121-143.

Hanna, T. M. (2018) "The Next Economic Settlement: The Return of Public Ownership," *Renewal: A Journal of Labour Politics*, 26: 17-32.

Institute for Climate Economics I4CE (2017) "Landscape of Climate Finance in France," available at: https://www.i4ce.org/wp-core/wp-content/up-loads/2017/12/1212-I4CE2772-Decideurs-VA-web.pdf, accessed 1 July 2019.

KfW (2017) *KfW at a Glance: Facts and Figures*. Updated March 2017. Frankfurt, Germany: KfW Group, available at http://www.kfw.de, accessed 02 February 2018.

——— (2019) KfW at a Glance Facts and Figures. Updated April 2019. Frankfurt, Germany: KfW Group, available at http://www.kfw.de, accessed 03 May 2019.



Kishimoto S., and O. Petitjean (eds.) (2017) *Reclaiming Public Services: How cities and citizens are turning back privatisation*. Amsterdam: Transnational Institute-TNI.

Marois, T. (2017) How Public Banks Can Help Finance a Green and Just Energy Transformation. Public Alternatives Issue Brief. Amsterdam: TNI, https://www.tni.org/files/publication-downloads/how_public_banks_can_help_finance_a_green_and_just_energy_transformation.pdf, accessed 14 June 2019.

McDonald, D.A. (2018) "Innovation and new public water," *Journal of Economic Policy Reform*, DOI: 10.1080/17487870.2018.1541411.

Mother Jones (2009) "How the Nation's Only State-Owned Bank Became the Envy of Wall Street," interview by J. Harkinson, March 27, 2009, available at www.motherjones.com, accessed 2 June 2019.

Nash, G. D. (1959) "Herbert Hoover and the Origins of the Reconstruction Finance Corporation," *The Mississippi Valley Historical Review*, 46 (3): 455-468.

NIB (2017) Annual Report 2016. Helsinki, Finland. Nordic Investment Bank.

OECD (2017) Green Investment Banks: Innovative Public Financial Institutions Scaling up Private, Low-carbon Investment, OECD Environment Policy Paper No.6. January. Paris, France: OECD.

Oliver, P., A. Clark, C. Meattle and B. Buchner (2018) *Global Climate Finance: An Updated View*, Climate Policy Initiative, available at: www.climatepolicyinitia-tive.org, accessed 01 July 2019.



Olson, J. (1988) Saving Capitalism: The Reconstruction Finance Corporation and the New Deal, 1933-1940, Princeton: Princeton University.

Périlleux, A., and M. Nyssens (2017) "Understanding Cooperative Finance as a New Common." *Annals of Public and Cooperative Economics*, 88(2): 155–177.

Romero, M. J. (2017) "Public development banks: towards a better model." Brussels. Available at: http://www.eurodad.org/Public-Development-Banks-to-wards-a-better-model, accessed 11 June 2019.

Secretary of Treasury (1959) *Final Report of the Reconstruction Finance Corpo*ration, United States Government: Washington D.C.

Steinfort, L. and S. Kishimoto (eds.) (2019) *Public Finance for the Future We Want*. Amsterdam: Transnational Institute, available at: https://www.tni.org/en/publicfinance, accessed 2 June 2019.

Thayer, T. (1953) "The Land-Bank System in the American Colonies", *The Journal of Economic History*, 13 (2): 145-159.

Tricarico, A. (2015) *Reclaiming Public Banks: A thought provoking exercise*. Brussels: Counter Balance. available at: http://www.eurodad.org/files/pd-f/1546411-reclaiming-public-banks-a-thought-provoking-exercise.pdf, accessed 18 June 2019.

UNCTAD (2018) Scaling up Finance for the Sustainable Development Goals. Geneva: United Nations.

VÖB (2014) *Promotional Banks in Germany: Acting in the Public Interest.* Berlin, Germany: Association of German Public Banks (Bundesverband Öffentlicher Banken Deutschlands, VÖB).



Weber, O. and V. Saravade (2019) "Green Bonds: Current Development and Their Future", Centre for International Governance Innovation Papers no. 210, January 2019.

WEF (World Economic Forum) (2006) *Building on the Monterrey Consensus: The Untapped Potential of Development Finance Institutions to Catalyse Private Investment*. Geneva: WEF Financing for Development Initiative, available at: https://sustainabledevelopment.un.org/getWSDoc.php?id=3030, accessed 28 May 2019.

World Bank (2012) Global Financial Development Report 2013: Rethinking the Role of State in Finance, Washington, D.C.: The World Bank.

World Bank/IMF (2015) From Billions to Trillions: Transforming Development Finance Post-2015 Financing for Development: Multilateral Development Finance, Development Committee, Joint Ministerial Committee of the Boards of Governors of the Bank and the Fund on the Transfer of Real Resources to Developing Countries. DC2015-0002 April 2, 2015.

Endnotes

- Orbis. Bureau van Dijk. [Online]. Available at: https://www.bvdinfo.com/ (Accessed: 10 May 2018). This figure refers to national and sub-national banks and a level of 50.01 per cent plus public ownership (including governments, state authorities, other public enterprises, and so on). The data excludes central banks and multilateral banks.
- See https://www.un.org/esa/ffd/wp-content/up-loads/2015/08/AAAA_Outcome.pdf. Accessed
 June 2019.
- The Public Banking Institute provides current updates on public banking legislation in the US (see https://www.publicbankinginstitute.org/).
- 4 See NADB: https://www.nadb.org/about/capital-ization; Accessed 06 June 2019.
- 5 For the specific composition of the KfW Board, see https://www.kfw.de/KfW-Group/About-KfW/Berichtsportal-2018/Gesch%C3%A4ftsbericht-2018/Corporate-Governance-Report/.
- 6 See https://www.globalreporting.org/Pages/default.aspx.





.

.

.

.

Thomas Marois is a senior lecturer of development studies at the SOAS University of London. His focus is in the fields of political economy and finance for development, including public banks and financing the just energy transition.

Ali Rıza Güngen is a political scientist and distance fellow at Carnegie Mellon University working on debt management, financialization, and financial inclusion.

The Next System Project explores system solutions to systemic crisis, as part of The Democracy Collaborative, a research and development lab for the democratic economy.

Learn more at thenextsystem.org and democracycollaborative.org.