WIDER Working Paper No. 2013/019

The European Investment Bank

Lessons for developing countries

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March 2013

Abstract

The paper considers the experience of the European Investment Bank and addresses policy lessons for developing countries as they seek finance for development. The paper argues that the key lesson for developing countries is that the traditional role of a development bank in closing market gaps in long-term, low-cost and stable infrastructure lending and in anticyclical financing remains relevant for developing countries but needs to be directed towards new goals. The paper also proposes that an optimal structure is a regionally owned development bank, as this would allow critical advantages of regional ownership, control and responsiveness.

Keywords: development banks, European Investment Bank, infrastructure financing, development financing, environment
JEL classification: E59, F36, F59, G18

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This study has been prepared within the UNU-WIDER project 'ReCom—Research and Communication on Foreign Aid', directed by Tony Addison and Finn Tarp.

UNU-WIDER gratefully acknowledges specific programme contributions from the governments of Denmark (Ministry of Foreign Affairs, Danida) and Sweden (Swedish International Development Cooperation Agency—Sida) for ReCom. UNU-WIDER also gratefully acknowledges core financial support to its work programme from the governments of Denmark, Finland, Sweden, and the United Kingdom.

ISSN 1798-7237 ISBN 978-92-9230-596-3

Acknowledgements

We would like to thank Tony Addison, as well as UNU-WIDER for their encouragement for writing this paper. We would also like to express our thanks for the valuable time given to us by many EIB officials who provided both interesting material and detailed exchange of their views and experience and to Nuria Molina and Jeroen Kwakkenbos of Network on Debt and Development for their valuable insights and commentary. Responsibilities for any mistakes or omissions are our own.

Acronyms

ACP	Asia, Caribbean and Pacific
ALA	Asian and Latin America Countries
CAF	Corporacion Andina de Fomento or Andean Development Corporation
EBRD	European Bank for Reconstruction and Development
EIB	European Investment Bank
EIF	European Investment Fund
EC	European Commission
EU	European Union
GDP	gross domestic product
KfW	Kreditanstalt für Wiederaufbau
MDB	multinational development bank
NGO	non-governmental organization
RDB	regional development bank
R&D	research and development
SME	small and medium-sized enterprise
SWF	sovereign wealth funds
TEN	Trans-European Networks

EU member countries:
Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

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Typescript prepared by Liisa Roponen at UNU-WIDER.

1 Introduction

Since its very beginning, European integration was accompanied by the creation of major financial mechanisms. Such mechanisms, and the resulting loans and budget transfers, were seen as essential instruments to facilitate the policy objectives of the European Community serving, especially in the initial stages of integration, to create the required economic and political conditions to make economic integration both effective and equitable.

In this paper we focus on the main vehicle for these financial mechanisms, the European Investment Bank Group (EIB). We analyse its main features, functions and evolution, and consider possible policy lessons for developing countries as they seek to build similar financial mechanisms including the creation of regionally owned and operative development banks. Indeed we argue that the EIB has been instrumental financially in fulfilling key policy objectives for the European Community and that leveraging such experience into regional development banks within developing economies could be equally critical in achieving policy goals in the twenty-first century.

Also of particular relevance to developing countries in this context is the European Community’s 2020 growth strategy which seeks to meet the challenges of the twenty-first century in terms of a sustainable and more competitive global economy. Similarly to developing countries, Europe is facing development challenges that require major structural transformation to ensure continued growth in a sustainable and equitable way. Though Europe faces severe problems at the time of writing, which escape the scope of this paper, it does have valuable mechanisms to implement its development strategy including the facilitation of low-cost, long-term financing via the EIB which avoids the procyclical patterns of private lending. We argue this is a key lesson for developing countries as the existence of a development bank can provide a valuable instrument to provide stable, low-cost, long-term financing to implement a development strategy, either on its own or jointly with the private sector. As the aims of development strategy and the nature of the economy evolve, the development bank can also evolve, but what should remain constant is its role in serving the particular vision of a development strategy in each of its phases.

We begin the paper with an overview of the historical evolution of the EIB’s role and its inter-connectivity to European policy goals. As we shall discuss, when the Community was created, and as membership was subsequently expanded, the key objective was supporting trade through the financing of infrastructure and convergence between poorer and richer regions.

We then go on to discuss more recent objectives. These have included selected areas in support of the development of policy goals of ‘smart, sustainable and inclusive growth’ and we examine the specifics relevant to developing countries. These include financing of critical infrastructure, such as energy technology and networks, urban environments and transport systems, and lending to small and medium enterprises (SMEs) to support employment creation and innovation. We also discuss the role of the EIB during the recent global financial crisis as an instrument for countercyclical lending and institutional features of the EIB which have facilitated its success.

Finally, we draw on the discussions of the EIB to propose critical policy lessons for developing countries. These include that the traditional role of a development bank in closing such market gaps as in long-term, low-cost and stable infrastructure lending and in anticyclical financing is as relevant today for developing countries as it was historically for Europe. In addition the opportunity to leapfrog traditional infrastructure into a new sustainable economy could be facilitated by development banks. We also propose that an optimal structure is a regionally owned development bank as this would allow critical advantages of regional ownership, control and responsiveness and that the current financial situation (such as very high reserves and sovereign wealth funds) of many developing countries could be used to establish such regional development banks. Overall we will conclude that the creation and support of regional developments could both draw lessons from the successes of the EIB for Europe and provide a critical role in the development and growth of sustainable emerging market economies.

2 A historical overview of the EIB's role

The 1957 Treaty of Rome, which created the European Economic Community, had as its goal

> establishing a common market and ... to promote ...a harmonious development of economic activities, a continuous and balanced expansion, an increase in stability, an accelerated raising of the standard of living and closer relations between the States (Article 2).

The economic rationale which lay behind these goals was widely accepted analysis that showed that trade liberalization and economic integration contribute to more rapid combined growth for a region via economies of scale and other mechanisms. However, due to inherent asymmetries, such integration also leads to relatively less rapid growth, or even decline, of relatively poorer areas within such regions (Griffith-Jones, Steinherr and Fuzzo de Lima 2006). Furthermore, economic analysis and experience showed that private financial markets were, and are, incomplete including one of the most critical market failures from a development perspective, the financing of large-scale infrastructure projects. Such infrastructure projects typically take a long time to build up revenues and become profitable, and these periods are often longer than capital or banking markets want to commit for, as they perceive risk to increase through time because infrastructure projects imply such political risks, broadly defined, as changes in the pricing or regulatory regime. Such issues made a clear case, both theoretically and politically, to deal with such market imperfections through the creation of a very large public bank. As we discuss in the final section of this paper, this case is as strong, or even stronger, today for many developing countries.

As a response to these issues, the Treaty included articles to create the EIB

> to contribute, by having recourse to the capital market and utilising its own resources, to balanced and steady development ... (and) facilitate the financing of ... (a) projects for developing less developed regions; (b) projects for modernising or converting undertakings or for developing fresh activities called for by the progressive establishment of the common market, where these projects are of such a size or nature that they cannot be entirely financed by the various means available in the individual Member States; and (c) projects of common interest to several Member States which are of such a size or nature that they cannot be entirely financed by the various means available in the Individual Member States (Articles 130).

Thus two major goals were established for the EIB. First, convergence, implied reducing, if not eliminating, income differentials within the European Community (and later Union) between countries and regions, particularly those resulting from trade liberalization. And, second, allocation of major financial resources beyond the ability of individual states or private markets facilitated the functioning of an increasingly integrated market. This need continued as much of the existing infrastructure—both when the EEC was created and as new countries joined—was geared to meeting domestic needs but the trade integration process led to major new cross-border requirements. Whilst other aims have later been added, the aims of convergence and of financing cross border infrastructure remain central to the EIB.

Since this initial creation of the EIB, these core aims have been maintained and driven by the relatively poorer countries, for which a pre-condition to joining the Community was the creation or sharp increase of grants and loans. The first such case was when Italy, before joining the EEC, pressed in the mid-1950s for the creation of the European Investment Bank as part of the Treaty of Rome, largely to help fund infrastructure in the poorer regions of southern Italy. As the European Community expanded from the original six countries to the current 27, the role of the EIB grew significantly to help integrate the new countries into the common market and to foster economic convergence. This happened, for example, when Greece, Portugal, Ireland and Spain joined the European Union. A further major impulse to EIB lending was given by the transition to the market by the countries of Central and Eastern Europe, and the later accession of many of them into the European Union.

As well as the EIB as an institution providing loans, the European mechanisms created to support the integration process included both grants through the structural funds, and guarantees to catalyse lending by the private sector. The latter in particular has been prevalent in more recent decades. Grants given by the European Commission are also often combined with loans. For example, in areas like lending to SMEs, or more recently lending for building a sustainable economy, EIB loans are complemented by grants. This policy has been accelerated in recent years, as blending is also seen as an effective way of leveraging the impact of budget transfers.

In relation to grants, these are typically made where there are market failures or externalities, implying in the latter case that the commercial rate of return does not reflect the social rate of return. Indeed, one of the EIBs guiding principles is that for a project to be financed by the EIB, it has to be both financially and economically sound, but that it also aims to have a high social return. The latter is to take account of important policy externalities such as job creation or environmental impact. However, the EIB also has to balance maintaining its creditworthiness to keep its AAA rating, and hence has facilitated lower financing costs to its borrowers, and acting as a development bank with a mandate relating to broader European objectives including such externalities.

More recently, new objectives have been added to the EIB, and in general to regional public development banks. First, in the light of the global financial crisis a crucial countercyclical role was performed by the EIB, in common with other public development banks, by providing official lending when private lending were experiencing highly constrained liquidity. The global financial crisis has driven a much greater recognition (even amongst mainstream economists and conservative politicians) of the importance and value of large public banks to provide such anticyclical financing including through the capacity to expand their lending significantly in times of crisis. This is in contrast with earlier recent periods when orthodox economists and conservative politicians supported, incorrectly, a decreasing role for public national and regional development banks. In this sense, the EIB was an exception as it continued to grow strongly since the mid-1950s. Similarly, in Brazil, BNDES resisted the wave of neoliberalism and remained strong, which was very valuable in general, but particularly so during the crisis (Ocampo et al. 2012).

In the wake of the global financial crisis, the European finance ministers defined the priority as addressing the economic and social structural challenges of Europe. New needs include combating climate change through adaptation and mitigation and creating a new high-value, high-employment economy. Addressing market failures or incomplete markets for funding these activities, and their importance in employment generation and mitigating and adapting to climate change are central to these issues. The latter has important externalities which imply that private lenders and investors do not channel sufficient resources to high priority activities from an environmental perspective. Furthermore, many actions necessary to combat or adapt to climate change can best be tackled at a regional level, where a regional development bank can play a valuable role. The next section of the paper discusses these policies which are directed at action to tackle such structural challenges in more depth.

3 The EIB role today: supporting the new economy

As Europe seemed to emerge from the most acute phase of the global financial crisis of 2008 and 2009, it was clear that the steady economic gains of the preceding decade had been damaged with expectations of slower long-term growth and structural problems of high unemployment and high private and public debt. Further, fundamental economic and social weaknesses and problems, which had been obscured by the economic growth of the past decade, were exposed. At the time of writing, the acuteness of the European sovereign debt crisis and the risks it poses to future growth make these problems far more severe.

Those major structural issues include problems specific to developed countries, such as declining long-term growth rates, high structural unemployment and an aging population. Other issues included those common to both developed and developing countries, such as how to create a high-value, high-wage economy in the face of intensifying global competition from countries such as India, China and Brazil; also how to tackle the issue of the fundamental restructuring to a more sustainable economy in order to face the changes required as the world economy moves from an era of global resource surplus to one of resource constraint, with the increasingly urgent need to address and balance climate and environmental problems with economic growth and stability. The latter includes the continued dependence upon fossil fuels and the inefficiency of resource use which exposes economies to sources of economic insecurity, such as resource access and price shocks, and environmental risk, including severe climate change and continued degradation and loss of the natural environment.

After major consultations and consensus-building on the need to take a collective approach to both recovery and long-term structural problems by the European Union, both within the Union and in its role as a global leader, in 2010 the European Commission issued ‘Europe 2020: A Strategy for Smart, Sustainable and Inclusive Growth’ which set out a broad strategy for tackling these issues. Although the strategy document lacks detailed planning and execution, and major issues are required to be solved to bring such a vision to fruition, positive in the strategy is the vision of a new economy for Europe, and for the EIB, in addition to continuing to fulfil traditional roles. The latter continues to include providing long-term, low-cost financing, especially for infrastructure, and addressing missing markets or market gaps and crowding-in the private sector.

The agenda of ‘smart’ and ‘inclusive’ growth focuses on building a high-value, high-employment economy with innovation in multiple fields leading to new commercial activity and employment.

One critical component of such growth is the small and medium sized enterprise (SME) sector where innovation is often the source of new and growing enterprises and where expansion of existing enterprises provides new employment. This is relevant to developing countries today where in both middle- and low-income countries, development and expansion of the SME sector are seen as critical to building economic growth that will also provide inclusiveness in the form of high levels of employment and sustainable income within the formal economy. IFIs have focused on the need to develop the sector, and policies to date have focused on technical advice and financing. The World Bank Group, having highlighted financing as a critical barrier for SMEs (Beck et al. 2008), for example, has created a dedicated department that combines World Bank expertise and IFC financing, commenting that ‘Small and medium enterprises (SMEs) play a central role in developing countries, socially as well as economically’ (World Bank 2000).

In both developed and developing countries, SMEs face financing constraints. Such constraints are related to the perceived risk of lending to SMEs by the banking sector and can lead to incomplete or missing markets in normal conditions, as well as in crisis circumstances. Internal data at the EIB, for example, estimate a European market demand of €500 billion to €1 trillion which is only partially met.[1] In addition, SMEs face constraints due to limits on capacity such as management expertise or business connectivity for trade and marketing.

Financing issues were particularly highlighted during the global financial crisis when liquidity was very constricted for SME lending. The EIB provides funding through intermediaries to SMEs and, more typically for larger enterprises, direct funding. They also emphasize lending to high technology SMEs including those involved in the full cycle of research and development, For example, in 2010 the EIB provided financing in the high-tech sector for renewable energy, advanced chemical and electrical engineering projects (such as advanced polymer or semiconductor development and in bio-technology development). Other projects include finance for universities.

‘Sustainable’ growth makes environment issues central to the development bank’s role. For the EIB this has included financing in the area of clean energy in particular. For example, the EIB supports the development of pan-European energy grids that facilitate transmission of renewable energy, large- and small-scale wind and solar power projects and multiple energy efficiency projects such as thermal rehabilitation projects for buildings or solar panels integral to buildings.

This builds on the traditional role of a development bank in providing long-term, large-scale financing for infrastructure projects that would otherwise struggle in private markets to find the scale and term of financing needed. This is particularly true of new technologies in two areas. First, technologies need significant financing for research and development (R&D)

[1] Interviews with EIB staff, June 2011.

where investment is high risk due to factors such as failure of some projects as part of the search for successful solutions and lengthy project timeframes with limited interim financial returns. These factors constrain private investment in these areas. Second, as new technologies become increasingly operational and implementation of them gathers speed and scale, financing is needed for large-scale and long-term investment. In this area the EIB is involved in financing the required large-scale infrastructure that has important positive externalities for the European Community as they will enable full-scale execution of these types of clean energy projects which are less attractive to the private sector due to their scale or time length, and because social benefits may outweigh private benefits.

Complementary to the development of clean energy, another critical area for innovation has been the development of 'sustainable cities'. Again, this issue is particularly relevant to developing countries with their rapidly urbanizing populations and their need to develop infrastructure that will both enable further economic growth and provide a healthy and sustainable environment. In many cities today within developing countries, the urban environment suffers from significant problems such as pollution, poor transport systems and lack of sanitation and standards in water, sewage and housing. In Europe, with its more established urban population and advanced infrastructure this issue is also important because current infrastructure is often carbon-dependent, especially in transport and energy, and overall the aging and crowded urban environments are strained and inefficient. In 2010 the EIB lent €14.7 billion to build sustainable cities including in transport and urban renewals.[2]

In addition to these 'visionary' aspirations, however, the EIB has recently been providing significant responsive financing in its countercyclical role due to the global financial crisis and during 2008 and 2009 the EIB sought additional capital and expanded lending significantly (Griffith-Jones and Tyson 2010). This response was important in preventing a more acute impact of the crisis during this period. In addition during 2010 and 2011, in selected countries and regions hit hardest by economic and financial crisis, it remains an important role for the EIB. To the extent that the EIB lending is financing investment consistent with long-term strategic aims (for example, increased investment in renewable energy), such lending can have both a countercyclical as well as strategic role. Flexibility and sufficient capital to allow countercyclical responsiveness to short-term problems, such as economic and financial crisis, remain a critical role of a development bank.

4 Political and organizational context of the EIB

As an institution the EIB provides an interesting model for a development bank in the design of its organization and in its execution methods which optimize its effectiveness. In terms of its organizational structure, the EIBs shareholders are the European Union members and these members provide capital and funding. The EIB receives its strategic lending mission (such as direction on type of lending or to which sectors) from its Board of Governors after discussion with Ecofin, the Finance Ministers of the European Union and follows the policies set by the European Commission, with which it actively coordinates.

This includes channelling European Commission budget transfers given for certain sectors or regions which are then blended with loans. Historically grants are largely sourced from the

[2] 2009 and 2008 comparable figures are not available from the EIB under this definition.

European Commission and member countries and include, for example, structural funds. Specific purpose funds managed by the EIB or EIF have been created for some dedicated grants. The EIB president comments (EIB Group Activity Report 2010: 5): 'The EIB intends to continue setting up joint financing instruments with the Commission ... such instruments leverage the EU budget whilst at the same time alleviating the EIBs capital constraints'. More recently new private sector partnerships have also been formed to blend loans and grants with, for example, the Bill and Melinda Gates Foundation.[3]

As discussed, an important part of the EIB's mandate is to provide long-dated, low-cost funds and this is facilitated by its AAA credit rating which is underpinned by a strong capital base. In order to retain the solid capital ratios, capital calls and subscriptions have been made. This included, for example, during the global financial crisis when subscribed capital was increased from €164 billion to €232 billion in 2009. This strong capital base and AAA credit rating mean that private sector funding, such as through debt capital markets where the EIB is a major bonds issuer, can be raised at low rates and passed through to clients. This was true until now even during difficult market conditions such as the global financial crisis when, in fact, the EIB was easily able to obtain liquidity due to being a beneficiary of the 'flight to quality' from risk aversion by investors (EIB Annual Report 2009).

In another interesting facet of the EIBs strategy, the EIB has developed new instruments that assist in its mandated goals. For example, the EIB has issued €1.4 billion in 'climate awareness bonds' which are ring-fenced funds for lending in renewable energy and energy efficiency. This is particularly attractive for certain investor classes seeking to invest funds into environmental projects. The EIB has also promoted a number of carbon trading funds to help support and develop markets in carbon trading under the Kyoto Protocol including in partnership with the World Bank and bilateral agencies. However, carbon trading markets are restricted.

A final important aspect of the EIB approach that is of particular relevance to developing countries is cooperation between them and other stakeholders. The EIB president (EIB Group Activity Report 2010: 5) comments:

> The EIBs contribution to the 2020 Europe strategy will be all the more effective if it based on pragmatic (not bureaucratic) cooperation with the European Commission and other financial institutions.

This is not just rhetoric as the EIB has set up formal mandates in a number of areas with other political and development bodies. For example, under the 'Cohesion Policy Joint Initiative' the EIB has partnered with bodies on specific policy areas related to convergence of candidate countries, including with the German KfW, the ERBD and the Council of Europe Development Bank. The EIB cooperates in some instances with development banks in developing countries. It would seem desirable if such collaboration were increased, as the EIB could benefit from the greater local knowledge and smaller asymmetries of information of national development banks.

[3] Interview material with EIB staff, May 2011.

5 The EIB and developing countries

The EIB lends mainly within the European Union. However, around 10 per cent of its lending is outside the EU borders, mainly to developing countries. Lending in the EU is concentrated in the near-neighbourhood, that is, European and Mediterranean countries accounting for 75 per cent of non-EU lending, with the remaining 25 per cent of lending to Africa, the Caribbean and Pacific, (in the context of ACP), Asia and Latin America. Table 1 gives further details of lending by region illustrating this concentration.

Table 1: EIB lending to developing countries by region and country, 2007 to 2010

Euro billions	2007	2008	2009	2010
European countries[(a]	3.2	3.5	4.6	3.9
Mediterranean countries[(b]	1.4	1.3	1.6	2.6
Africa, Caribbean & Pacific	0.8	0.8	1.1	0.9
Latin America & Asia	0.9	0.5	1.3	1.2
Total	6.4	6.1	8.6	8.6
As a % of total EIB lending	13	10	10	11

Notes: (a Defined as Turkey, Serbia, Croatia, Bosnia & Herzegovinian, FYROM, Albania, Montenegro, Russian Federation, Moldova, Georgia, Ukraine and Armenia.

(b Defined as Egypt, Algeria, Tunisia, Morocco, Syria, Lebanon and Gaza-West Bank.

Source: EIB Annual Report's 'Financial Report' for relevant years.

In 2010 the European Commission undertook a review of its developing country lending. This review was conducted both as a developing country-specific review of the Cotonou Agreement which provides the framework for the EIB's ACP operations, and as part of the broader mid-term review of its overall operations, which was discussed in the prior section. Both reviews accepted that specific objectives were appropriate for each region but also that climate change was a predominant goal. Indeed additional resources have been allocated for this purpose. Financing under this mandate has included projects in the energy, transport and infrastructure sectors.

In conjunction with the concentration by scale as noted above, these policy goals have been most strongly executed in non-low-income countries. For example, there has been financing of the extension of the trans-European network to candidate and potential candidate members in Eastern Europe. SME financing via intermediaries has also been a significant part of this lending. Some examples of 2010 projects are given in Table 2 to illustrate these points under the new mandates.

In less developed countries (defined as middle- and low-income countries outside Europe), financing has been both smaller in scale and less focused on the new policy goals with both development and environmental goals being targeted. In addition there has been somewhat less innovation in instruments and vehicles.[4] Positive examples, however, have been, for instance, significant financing of loans to SMEs and large-scale productive infrastructure. In terms of instruments, the EIB has introduced, and helped thus create a market, for local

[4] Source: Interview material.

Table 2: 2010 Projects in non-LIC partner countries (over €250m)

Country	€ millions	Sector	Project
Turkey	300	R&D	R&D capability building
Croatia	250	SME	SME financing via intermediaries
Russian Federation	250	Energy	Gas electricity generators
Algeria	500	Energy	European gas pipeline
Egypt	260	Energy	Power transmission
Egypt	300	Energy	Power plant
Egypt	346	Energy	Clean oil-refinery

Source: EIB Annual Report's 'Financial Report' for 2010.

Table 3: 2010 Projects in Asia, ACP and Latin America (over €100m)

Country	€ millions	Sector	Project
ACP	162	SME	SME financing via intermediaries
Kenya	119	Energy	Power plant
Tanzania	100	Energy	Power line
Lesotho	149	Water	Dam and water treatment plant
Brazil	200	Energy	Gas distribution networks
Brazil	130	Industry	Production facilities
China	500	Climate	Climate change mitigation
Vietnam	150	Transport	Metro

Source: EIB Annual Report's 'Financial Report' for 2010.

currency bonds in several developing countries. Technical advice remains an important aspect of EIB activities and a non-capital intensive but effective method of assisting developing countries though the building of long-term institutional capacity and human capital.

In terms of assessing impact, especially in infrastructure, internal EIB assessments have focused on the implementation of projects such as achieving the stated purpose (such as infrastructure completion) and meeting budgets and timing plans. According to internal EIB reports prepared for the mid-term review, assessment at the project level was generally positive with good delivery of project goals. However, criticisms have included a lack of funds for maintenance of infrastructure and need for greater technical assistance in some areas.[5]

However, internal assessments have not typically included assessing contribution to broader development goals. An internal assessment report comments: 'Most EIB projects had no objectives set beyond their direct implementation, even when in some cases broader ambitions were set out in appraisal documentation' (internal EIB reports). Making such assessments of individual projects is hard to define and measure, and the EIB does not do programme lending. Issues contributing to this include the fact that impacts are over long time-frames relative to individual projects and are cumulative rather than related to individual projects. However development goals are the most important. For example, funding of SMEs assumes impacts on employment and economic growth or infrastructure projects assume

[5] Based on internal EIB reports and interview with EIB staff.

environmental benefits or externalities for economic growth. Such formal assessments of broader development goals may be desirable in the future, especially as development has now become a more explicit goal for all EIB lending to developing economies.

However, in the absence of formal development assessments, it can be commented that the impact of the EIBs financing and technical assistance to developing countries is limited by a number of issues.

First, as noted, it is simply too small in terms of its scale for practically all developing countries it lends to, both in relation to total EIB lending, and as a proportion of total multinational development bank (MDB) and regional development bank (RBB) lending to those countries. This has also resulted in a lack of substantial academic or NGO impact assessments for both overall EIB lending and individual projects because they are not material to broader development progress. In a recent study for the European Parliament on the EIB (Griffith-Jones and Tyson 2010), we argue that EIB lending to developing countries should be increased, especially to Asia and Latin America where the EIB's role is very small in proportion to GDP. However given the severe funding and fiscal constraints within the European Union today, and the great needs of increased lending within Europe, the political and economic reality of expansion of financing may be limited, at least in the short term.

Second, the EIB should work more closely with regional and national development banks in those regions as well as in low-income countries. This will allow the EIB to tap better into far more detailed local and regional expertise, reducing information symmetries, as well as being more closely aligned with national and regional development priorities. It could also help strengthen national and regional development banks in developing countries and regions by transferring best practice in technology, for example in renewable energy, where the EIB has applied innovative technology in Europe (interview material), and financing techniques, such as the issuance of climate awareness bonds. Similarly, EIB lending techniques for SMEs in Europe, as we discuss above, also have innovative elements, such as trying to ensure additional lending, that it would be valuable to incorporate into lending to SMEs in developing countries.

Third, it may be desirable for there to be some direct developing country representation in the process of allocation of loans. Given the fact that the EIB was originally designed to be a European lending institution, its Board is made up basically of European member governments, appropriate for lending to European countries. However, EIB lending to developing countries would benefit from involvement of developing country borrowers in the process at a senior level. This would be made easier if, as was discussed in the mid-term review, there were greater autonomy for the EIB lending to developing countries. Ideally this would be facilitated through a dedicated subsidiary with developing countries board representation. However, less extensive involvement of borrowers, particularly on broad priorities and in large loan decisions, would be desirable even if such a subsidiary was not created.

Fourth, the EIB has lacked the innovation of instruments and financing structures in lending to developing countries that it has had in Europe. Given the recent problems with complex financial instruments in developed country markets, complexity per se cannot be considered a virtue especially in the context of the relative lack of depth in some developing country financial systems. However, it would be appropriate for the extension of well-considered innovations. As noted the development of local currency bonds is a good example as it assists reducing developing countries currency mismatches and adds liquidity to local capital markets. Indeed, the EIB has, for example, played an important role in developing the rand local currency bond market; EIB rand loans reportedly represent 20 per cent of the rand market. Additional examples could be drawn from European financing such as the extension of partnerships with national private financial intermediaries for lending to SMEs, which could be implemented through local or regional commercial and governmental bodies.

Lastly, in some developing country regions, like Asia and Latin America (called ALA by EIB), the EIB has had a mandate to lend only for investment by European companies, as the EIB mandate was focussed on mutual interest although this hopefully is changing, as greater priority to development is planned as a main aim for all future EIB lending to developing countries. It would also be hoped that lending by the EIB to SMEs could also be allowed as part of the new mandate of the EIB for the ALA countries (which it has reportedly not been till now; this was unfortunate, as it did not allow the valuable experience of EIB lending to SMEs in Europe to be transferred to the ALA countries). In EIB lending to ACP countries, lending to national companies is allowed, but it seems to be rather limited (interview material). This is unfortunate, as one of the aims of a development bank like the EIB should be to encourage local entrepreneurship particularly through financial support, as the EIB has done so successfully in Europe. The possibility of introducing some target for increased lending by the EIB for national companies in ACP countries may be desirable and deserves further study.

Finally the policy of EIB lending by sector lacks the clear focus of European countries with only a moderate shift under the new policy. Although developing countries have very different needs from developed ones, there is nevertheless a lack of a full integration between the twin goals of development, especially, for example, in energy and transport, and climate and environmental policies.

In the context of these remarks, we now discuss the lessons for developing countries including the possibility of creating new developing regional and national development banks and/or expanding existing ones.

6 Lessons for developing countries

As the global economy enters the twenty-first century the challenges for development strategy are large, multiple and complex. In addition to the conventional agenda of macroeconomic stability, poverty alleviation and infrastructure provision, new and historically unique challenges present themselves. These include aligning trade and export policies with rapidly changing global opportunities and competition, renewed emphasis on regional and national markets in the face of declining reliability on international trade as a source of dynamism and developing policy to address the need for rapid climate change adaptation and mitigation.

In terms of enabling factors to tackle these issues the 2008 ‘Commission on Growth and Development’ identified three critical factors. These were a stable macroeconomic environment, ‘capable, credible and committed’ government and high domestic savings to finance investment. In relation to the need for financing of investment, the Commission pointed to both domestic and foreign private sources, but with both having limitations. These included the structural changes required to mobilize domestic savings and the adverse effects of international private capital flows, including the volatile and often procyclical nature of these flows. In addition, many developing countries continue to have shallow and weak financial systems with low savings mobilization and missing and incomplete capital markets. Both constrain the provision of capital for investment at low cost and for long periods.

It is in the context of these formidable development challenges that the need for public development banks in developing countries and consideration of policy lessons from the EIB must be set. We now examine specific policy lessons to be considered.

6.1 The role of a development bank

The continued importance of the traditional role

The European Union's approach to development banking, and especially the EIB, shows that the traditional core rationale for public development banks—of providing low-cost, large-scale financing in areas with missing markets—remains highly relevant. As noted many developing countries have significant gaps in private markets in critical areas. This includes the traditional areas of basic infrastructure, which needs to be built to enable modernization of agriculture, development of industrial capabilities and facilitation of export markets, as well as social provisions, including health and education. The need to finance, for example, basic transport networks and urban infrastructure (such as energy, water and sewage systems, especially for low-income households) is high, and requires large-scale and long-term financing that is unlikely to be sourced from private banks or capital markets.

All these requirements are classic traditional functions of public development banks and remain highly relevant in the context of today's developing countries.

Evolution of the role in the sustainable economy

However, the traditional role of the development bank in financing the building of infrastructure needs to be adapted to the context of a more sustainable economy. The approach needs to incorporate environmental externalities and to facilitate the use of required technology through both technology transfer and R&D. Of particular relevance to developing economies, in relation to externalities, is the opportunity to 'leapfrog' by immediate adoption of low-carbon technologies. Not only will this contribute to adaption and mitigation of climate change globally, but will also avoid the transition costs that are being incurred by developed nations today and that would be required to be incurred in instances where carbon-based technologies are adopted first instead. However given the high component of social benefit, rather than private benefit, in such immediate adoption, a public development bank can play a critical role in adoption of post-carbon technologies.

Examples of how this can be done can be drawn, in several instances directly from the EIB. In the instance of direct financing, the approach of large-scale financing of technology development and adoption, including private and public investment in regional level infrastructure, could be replicated. A key example would be the planned pan-European clean energy grids or train networks being financed by the EIB. In addition, the EIB approach of co-partnering with the private sector could be adopted to optimize crowding-in of private sector capital. Relevant examples from the EIB include co-financing with and via intermediaries and providing guarantees for bank lending, as well as equity and mezzanine financing to venture capital companies and investment funds. It should be noted, though, that co-partnering should be adapted to the developing country context. For example, institutional capacity and integrity of co-partners are important and the EIB approach, with a focus on partnerships with parties with whom they have established relationships, (especially in their European lending) might be an appropriate lesson. It would also be possible to adopt the EIB approach of indirectly supporting private market development such as the issuance of climate awareness bonds, for example, which has provided additional funding for this type of investment. However, given the critical mass required globally for deepening financial markets in these instruments, we are somewhat more cautious in this area.

Finally, specific EIB execution techniques should be considered. For example, an approach similar to the EIBs policy of assessing environmental impacts of all projects, and including a higher than market price for carbon, should be the standard aspired to by all development banks.

The importance of a countercyclical role

As noted, a critical role for development banks is closing incomplete and missing markets in financing. This is particularly important during financial crises which, driven by excessive growth, globalization and liberalization of private financial markets, are highly procyclical and increasingly lead to boom and busts (Rogoff and Reinhart 2009). Such cycles of boom and crisis have made financial markets highly dysfunctional in meeting the needs of development financing. This was starkly illustrated in the global financial crisis when there was a sharp contraction in private capital inflows to developing countries and contraction of national private bank lending within developing countries in 2008 and 2009 (Ocampo et al. 2012). Despite the current proposals for improving regulation of the financial sector nationally and globally, as well as introducing capital controls in particular, it is likely that private finance will continue to be procyclical.

In this context, the public development banks globally responded with countercyclical lending and their role in mitigating the impact of the crisis and in stabilizing developing economies is now widely recognized. The approach of the EIB, and other efficient public development banks in general, is to rapidly increase broad lending when private lending falls (Ocampo et al. 2012). Furthermore, as many previous crises—and the recent global financial crisis—show, it is not just important to provide additional liquidity during crises, but also to provide significant official long-term finance when private finance dries up during and after crises. This is important in order to maintain funding of existing and important new investment projects, both in the productive and social sectors, and is crucial for long-term development.

The EIB specifically increased both its overall lending and lending in specific areas. An example of the latter was its co-financing to SMEs via private banks intermediaries which was increased as private lending fell and is a useful precedent for developing countries. As noted earlier, this was facilitated by the large scale of the EIB's capital and by increases in it during crisis periods.

In the context of developing countries there is a role for development banks to both replicate the EIB's and other development banks anticyclical provision of financing. Indeed there is evidence that those developing countries with large public development banks (as a proportion of the total credit market), like Brazil with BNDES, benefited from the fact that development banks were able to increase their lending significantly when private bank lending was falling sharply, and that this contributed significantly to maintaining short-term growth in those countries.

One key point to note from the experience of the global financial crisis is that multilateral and regional development banks (including the EIB) were slower to disburse loans than to commit them, which reduced their effectiveness in maintaining credit and growth in critical times. A policy recommendation for developing country development banks therefore is also to prepare emergency lending facilities prior to a crisis, as well as to have sufficient scale of capital available, so as to be able to respond and lend rapidly when a crisis hits (see also Ocampo et al. 2012).

6.2 Ownership and financing of development banks for developing countries

The desirability of regionally-owned development banks

The prior section discussed the broad rationale and role that public development banks can play in developing and emerging economies leveraging in specific instances from the EIB. However, also critical to the successes of the EIB have been its control and policy-making structures. In particular the close political and economic coordination with the regional political body, the European Commission, has been key in setting the high-level strategy and mandate for the EIB. In addition the EIB has been an organization that has been owned and controlled by the regional political body and hence has been both autonomous and dedicated to serving the regional interests. In examining the precedent of the EIB, which contributed so much in the past—and continues to contribute—to the goals of European growth and integration, this paper argues that these factors have been critical to both its successes in execution and in its ability to evolve and coordinate closely with regional policy making.

When considering the lessons to be drawn from the EIB experience we would propose that a key one is that regional control and ownership allow a number of key advantages which can facilitate the success of a development bank. In particular, we see five key advantages.

First, developing country regional public banks allow a strong voice to developing country borrowers, as well as a greater sense of regional ownership and control. This is illustrated, not only by the EIB but also by existing developing country development banks such as the Corporacion Andina de Fomento (CAF) or Andean Development Corporation, where developing countries are both clients and dominant shareholders.

Second, regional and subregional development banks seem more able to rely on informal peer pressure rather than imposing conditionality. This permits disbursements of resources to be more timely and flexible. Also, conditionality reflects more the experience of successful developing countries, rather than preferences of developed countries.

Third, regional or subregional development banks are particularly valuable for small and medium sized countries, with very limited power to negotiate with large global institutions. Their voice can be far better heard and their needs better met by regional or subregional development banks. Furthermore, competition between two or more kinds of organizations such as, for example, subregional, regional and global organizations, for the provision of development bank services seems to be the best modality, as it provides small- and medium-sized countries with alternatives to finance development (Ocampo 2006).

Fourth, information asymmetries may be far smaller at the regional level, given proximity as well as close economic links. Regional development banks, especially developing country ones, may better share successful developing country experiences.

Finally, regional public institutions may be better placed to respond to regional needs and demands, as well as potentially be more effective in providing regional public goods, especially those requiring large initial investments and regional coordination mechanisms. Important examples include financing of regional cross-border infrastructure and coordinating financing of regional-wide projects in areas such as technological innovation or university education.[6]

Overall we see regional ownership and control as being central to the potential success of a development bank in the current economic environment, allowing control and coordination, flexibility and responsiveness to political and economic goals set by the regional institutional bodies.

Addressing the challenges of regionally-owned development banks

However one important point is that the success of the EIB has also been based not only on its formal ownership and control structures but by the overall political and economic strength of related institutions, particularly the European Commission and national governments within the European Union. These institutions have driven the integration process forward. In terms of financing, this has included making available budgetary resources for transfers that can be combined with loans. This has contributed to the sustained dynamic of financial transfers. The existence of large financial transfers in Europe facilitates the granting of subsidies for certain activities, even though the EIB loans are based on commercial principles. There is an important difference here with most developing countries, where regional institutions may not be as strong as those within the European Commission or where resources to make grants may be limited.

However, the structure and power balances of the world economy have changed significantly, especially in the last decade. In particular there has been significant rebalancing with the relative economic and political power of developed nations declining and those of developing countries, particularly large middle-income countries, increasing. This rebalancing has, arguably, been accelerated by the global financial crisis.

This has major implications for creating development banks wholly-owned by developing countries. In the past a key advantage of including developed countries in the membership of regional development banks was their ability to contribute very significant resources that helped capitalize these banks and gave access to global capital markets. However following the global financial crisis, developed countries have more limited resources and it is unclear to which extent developed country governments will have sufficient resources, at least in the short to medium term, to increase their funding for development and for multilateral and regional banks in particular.

On the other hand, developing countries now have quite significant resources to establish purely developing country-owned regional development banks or to significantly expand

[6] See also Griffith-Jones, Griffith-Jones and Hertova (2008) for a more detailed discussion of this and the above points).

existing ones. In particular a new feature of the international financial system is that developing and emerging countries have a very large proportion of the world's savings and foreign exchange reserves. They can therefore afford to create their own financial institutions, which will help support their own vision of development, rather than relying mostly or only on developed country dominated institutions. Developing and emerging countries' foreign exchange reserves, according to IMF data, went up from less than US$1 trillion in December 2001 to US$6.1 trillion in December 2010. Furthermore, these countries have an additional US$3.5 trillion in assets, in their sovereign wealth funds, which are destined for long-term investment (Griffith-Jones, Tyson and Calice 2011). These comments relating to surplus resources are particularly true for Asia, and for specific countries within the region, notably China, but are also increasingly true for Latin America as well. In Latin America, there are already several established subregional development banks, with the most successful one being the CAF, the Andean Development Corporation. However, for example, MERCOSUR does not have its own regional development bank, even though this may be highly desirable. Furthermore, for 'sustainable investment' there will be some grants from global funds, especially for lower-income countries that could be channelled for example in part through development banks' concessional loans. Such resources make the possibility of creating and financing regional development banks much more feasible.

This can be illustrated by some preliminary calculations which show the feasibility of a significant expansion of developing country-owned RDBs funded by a very small proportion of total developing and emerging countries' sovereign wealth funds (SWFs). For example, one per cent of developing and emerging country SWF assets is equal to US$35 billion and if this small percentage was allocated to paid-in capital to expand or create new developing country regional development banks, this could be leveraged into the equivalent of US$84 billion loans annually.[7] This annual created lending capacity would be higher than the combined total lending disbursements by the World Bank, the Asian Development Bank, the Inter-American Development Bank, the African Development Bank, and the external lending of EIB to developing economies even in the peak year of their lending, 2009, which totalled only US$64 billion (see Ocampo et al. 2012). Therefore if a developing country regional public bank or banks had existed in 2009, it/they could have lent more than all existing MDB and RDBs put together! In normal years, the South-South RDB lending capacity would actually be significantly larger than total current MDB/RDBs lending.

7 Concluding remarks

The paper presents an overall positive view of the role and functioning of the EIB, both as a key tool for policy execution in the early stages of the development and integration of the European Communities and today in the context of the needs to restructure the economy in relation to the 'smart, sustainable and inclusive' economy and structural changes in the global political and economic landscape. Although there are some points of criticism, for example, a less conservative approach to risk and innovation could have been taken and a more proactive leadership role in economic change adopted in relation to the sustainable economy or a faster

[7] If it is assumed that the ratio between paid-in capital and level of annual loans would be approximately 2.4, similar to the ratio of CAF. This ratio is calculated by dividing CAF annual loans by the level of paid-in capital. This is a conservative estimate to take account of relatively lower ratings of developing countries than those of developed countries. It is thus far lower than the same ratio for the EIB, as the Bank has just developed country-members, which until the time of writing have higher ratings, though this may change.

response to disbursement in the acute phase of the global financial crisis, these do not detract significantly from that positive view.

Critical enablers of the EIBs success have been numerous. They include its AAA ratings and how this has facilitated the long-dated, low-cost and large-scale financing critical to a development bank's traditional role, as well as its approach to partnering with the private sector and its flexibility in adapting its core role to new circumstances such as the sustainable economy or the global financial crisis. All of these approaches can be directly leveraged into policy making for developing countries as they consider development banks.

However, equally critical in terms of that policy making, has been the political relationship and structure of the EIB. Here its structure with a strong origin and on-going relationship to the European Commission that included high-level strategy and control that have ensured the operations of the EIB are closely aligned and dedicated to European integration and development, as well as capital support by member states and the European Commission's facilitation of grants and similar, have underpinned its success.

These points are also critical for policymakers to consider as we would strongly recommend consideration of the creation and development of regional development banks for developing countries. As noted, given the evolving economic power and resources of developing countries, such developing country-owned development banks become increasingly feasible to create if supported by political will.

In conclusion we would comment that the rationale for developing banking is strong and remains rooted in their traditional role of addressing important market gaps and failures, including and especially long-dated, low-cost and large-scale financing. This role remains because of the continued need for such financing in infrastructure and the low carbon economy, as well as for SMEs, and given the current weakness of private financial sectors in many developing countries. We also comment that an optimal structure would be regionally owned and financed development banks which would ensure relevance to the broader regional development agenda and control by developing countries. The establishment of such institutions could be a significant contribution to executing economic development in the coming decades.

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