European Financial Institutions:
A useful inspiration for developing countries?

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I. Introduction

Since its beginning, European integration has been accompanied by the creation of major financial mechanisms. Such mechanisms and the resulting financial transfers were seen as both an economic and political condition for making economic integration effective and equitable. These mechanisms included both grants (through the Structural Funds) and loans (mainly through the European Investment Bank) and most recently guarantees (European Investment Fund).

As discussed below, these financial mechanisms had two major aims: (1) reducing income differentials within the European Community (and later Union), between countries and regions, particularly those resulting from trade liberalization, and (2) allocating major financial resources to facilitate the functioning of an increasingly integrated market, for example by financing inter connection of national networks in transport and telecommunications. Whilst other aims have later been added, these two have remained central.

It is important to stress that very large - and overall growing - resources have been allocated in Europe consistently for these aims. To an important extent this dynamic has been driven by the relatively poorer countries, which during the negotiations for their joining the Community have put as a pre-condition the creation, or sharp increase of, grants and loans. The first such case was when Italy –before joining the EEC– pressed in the mid 50's for the creation of the European Investment Bank, largely to help fund infrastructure in the poorer Southern Italy. Strong institutions, like the European Commission and the European Investment Bank have contributed also to the sustained dynamic of financial transfers.

Each regional integration process differs, but it seems clear that the broadly very successful European experience of financial mechanisms to support trade (and increasingly broader) integration may have interesting and important lessons for other regional integration processes, particularly those involving developing countries.

This paper focuses mainly on the experience of the European Investment Bank (EIB), a bank that lends far more than the World Bank. Nevertheless, first (section II) we analyze the broader context of fiscal (grants) mechanisms linked to European integration. We outline their historical evolution, describe their rationale and main features and highlight their scale. As we discuss below, fiscal transfers via the structural funds have represented very high proportions of the GDP of poorer countries (between 3% and 4% of GDP for Portugal and Greece during the nineties). Significant resources (both loans and grants) have been transferred recently even during pre-accession periods. Thus, poorer countries of Eastern Europe have had loans from the EIB equal to around 1% of GDP well before they joined the Union. In the 1990's an interesting innovation was introduced, as also significant fiscal transfers were made to East European countries before they joined the EU, via special mechanisms.

Section III is dedicated to the EIB which was created to help achieve the goal of economic convergence. In its early stages, capital markets were incomplete and underdeveloped, so there was a strong case –both theoretically and politically- to deal with such market imperfections through the creation of a public bank that would help channel savings from the more developed parts of the Community to the less developed parts, and that would also help integrate European infrastructure to support trade integration.

Another interesting feature of the EIB's evolution is its relatively low levels of lending in the initial phase (first decade) with very large increases afterwards. The paper (in section III.F) provides an analysis of these trends that had not been previously done. Then in section III.G, it outlines key sectors of operation and provides a more detailed analysis for EIB lending in 2003.

Section III.H concludes by outlining key policy issues at the EIB today, arguing that in today's environment in Europe, the role of a public bank –like the EIB- might be more pertinently seen in assuming risks (e.g. via guarantees, venture capital, etc.). In

developing countries, particularly the relatively poorer ones, where market imperfections still prevail, especially in capital and credit markets for long term finance, the role of regional public banks in integration processes should, however, probably be more similar to that of the EIB in its early stages. That is, explicitly supporting via loans a regionally integrated infrastructure and assistance to poorer regions. Nonetheless, the issue of greater focus on mechanisms such as guarantees and other risk bearing instruments, rather than on pure loans, has also increasing relevance for integration amongst developing countries. Finally, the central lesson from the EIB experience is the importance of a large and dynamic public bank to support integration and convergence processes (for other lessons, see section III).

II. Fiscal Transfers within the EU

A. Introduction

The original broad European aim was to reduce, if not totally eliminate, disparities between regions by providing large scale funding. In the late 1980's, an alternative, narrower, rationale was adopted (Griffith-Jones, et al, 2003). The European Community would not take responsibility for addressing those disparities that were exogenous to the integration process and predated it. But it was necessary that additional disparities that could be created in poorer regions by trade liberalization would be compensated financially. The political dimension, - maintaining support for the integration process in poorer countries and poorer regions, - the latter even in relatively better off countries, - was seen as at least as important as the economic dimension .

The implementation of EU Structural Policy is supported by five major financial instruments: the four Structural Funds, the Cohesion Fund. The European Investment Bank complements EU structural policy. This section of the paper presents an overview of the evolution of EU regional policy and the financing mechanisms created to support regional development and cohesion. It begins by looking at the EU Structural Funds and the Cohesion Fund, as well as mentioning very briefly the activities of the European

Investment Bank (EIB), which are discussed in depth in section III. Then, it gives a brief overview of the EU programmes created to support the accession countries of Central Europe that plan to join in 2004. It concludes by examining the distribution of EU funds to different European countries

European regional policy has developed gradually, influenced by successive periods of EU deepening and widening. The major stages, and the financing mechanisms created, are outlined in Table 1.

Table 1. The Development of EU Regional Policy and the main Financing Mechanisms

Year	*Context*	*Main Events*
1957-75	The preamble of the Treaty of Rome refers to the need "to strengthen the unity of their economies and to ensure their harmonious development by reducing the differences existing between the various regions and the backwardness of the less favoured regions".	1958: The **European Investment Bank** was set up under the Treaty of Rome to provide long-term loans in support of European integration. A key objective of the EIB is to strengthen the economically weaker regions. 1958: The two sector-based Structural Funds, **the European Social Fund** (ESF) and the **European Agricultural Guidance and Guarantee Fund** (EAGGF) were set-up.
1975-85	The northern enlargement of the EU increased regional imbalances. The UK lobbied for an EU Regional Policy in its accession negotiations.	1975: Creation of the **European Regional Development Fund** (ERDF) to redistribute part of the Member States' budget contributions to the poorest regions.
1985-93	The introduction of the Single European Act, together with further enlargement involving three less developed countries – Greece in 1981, and Spain and Portugal in 1986 – provided further impetus for EU regional policy.	1986: The Single European Act lays the basis for a genuine cohesion policy designed to offset the burden of the single market for southern countries and other less favoured regions. 1989-93: **The European Council** in Brussels in February 1988 overhauls the operation of the Structural Funds and **doubles the resources** allocated to them.
1993-2000	The Treaty on European Union, which came into force in 1993, designates cohesion as one of the main objectives of the Union, alongside economic and monetary union and the single market. In 1993, the Copenhagen Council's invites the central European countries to apply for membership of the EU. In 1997, the present enlargement process was launched.	1993: The **Cohesion Fund** is created to support projects in the fields of the environment and transport in the least prosperous member states. Alongside the Structural Funds, a new **Financial Instrument for Fisheries Guidance** (FIFG) is created. In 1994, the **European Investment Fund** was created to provide guarantees for infrastructure and SME investment. The **Phare Programme**, which was set up in 1989 to provide support to the countries of Central Europe during transition, is re-oriented in 1993. From 1997, Phare becomes totally focused on pre-accession assistance – becoming the first of three pre-accession instruments.
2000-2006	The future enlargement of the EU, with 10 Central European countries, will increase the demands on the EU budget for cohesion.	1999: the Structural Funds and the Cohesion Fund are reformed.

	The **Instrument for Structural Policies for Pre-accession** (ISPA) and the Special Accession Programme for Agriculture and Rural Development (SAPARD) complement the PHARE programme to promote the economic and social development of applicant countries in Central Europe. In 2000, the European Investment Fund becomes part of the EIB, focusing on venture capital and guarantees for institutions financing SMEs.

Source: Own elaboration

B. EEC Funds for an Equitable Development

In the preamble of the Treaty of Rome that first created the European Economic Community (EEC) in 1956, the member countries explicitly called for "ensuring harmonious development by reducing the differences existing between the various regions and the backwardness of the less favoured regions." As a result of this clear objective, and of the underlying vision that financial transfers are both a political and economic condition for making economic integration effective and equitable, the European Community created since its beginning, major financial mechanisms, both via loans and grants.

These major institutional mechanisms created in the EEC, responded to widely accepted analysis in economics, that show that trade liberalisation both contributes via economies of scale and other mechanisms to more rapid growth overall, but due to inherent asymmetries also leads to relatively less rapid growth (or even decline) of relatively poorer areas, (See Griffith-Jones et al, 1992). Besides creating mechanisms necessary to reduce potentially growing inequalities between regions and countries, resulting from trade liberalisation, the Community since the beginning allocated major financial resources to inter-connect national networks (in transport, telecommunications, etc) and to facilitate the functioning of an increasingly integrated market. Broader aims, such as educational and cultural exchanges and improvements in the environment are also funded.

The European Investment Bank, (which is discussed in the next section) was created at the same time as the EEC, to foster the objectives of a harmonious development and compensation of the losers, committed a high proportion of its loans to finance infrastructure in poorer regions and countries. Italy, where there was much poverty in the South, played a key role in pressing for the EIB's creation.

Several Structural Funds were created to provide grants for poorer regions and specific sectors (especially agriculture). The three Structural Funds first created were the European Social Fund, the European Agriculture Guidance and Guarantee Fund (the basis for CAP) and the European Regional Development Fund. Furthermore, an additional large Fund (the Cohesion Fund), was created when Portugal and Spain joined, as a result of pressure from the new members, particularly from Spain.

When in 1989, the Berlin Wall fell and the transition to the market and democracy began in Central and Eastern Europe (CEE), fairly generous mechanisms were created quickly by the then European Community to support the transition to the market of the CEE countries. The main European instrument for providing grants to the transition countries was Phare. The transfer of know-how was seen as equally, if not more important, as the financial assistance provided. The previously existing European Investment Bank (EIB) lent on an important scale to these countries, and a new development bank, the European Bank for Reconstruction and Development (EBRD), was established (with both European and other members - e.g. US, Japan and others - on its Board) which lend to this region and also to the former Soviet Union, in support of the transition. In spite of its name, the EBRD is not solely responding to European interests, and thus is in that way different from the EIB, which was established as – and remains – a European Bank.

In 1997, the European Union's Council officially launched the current round of EU enlargement, with 10 countries from Central and Eastern Europe negotiating accession to the EU. To assist the process of accession, the financial instruments and mechanisms previously used to support transition to the market in those countries were transformed

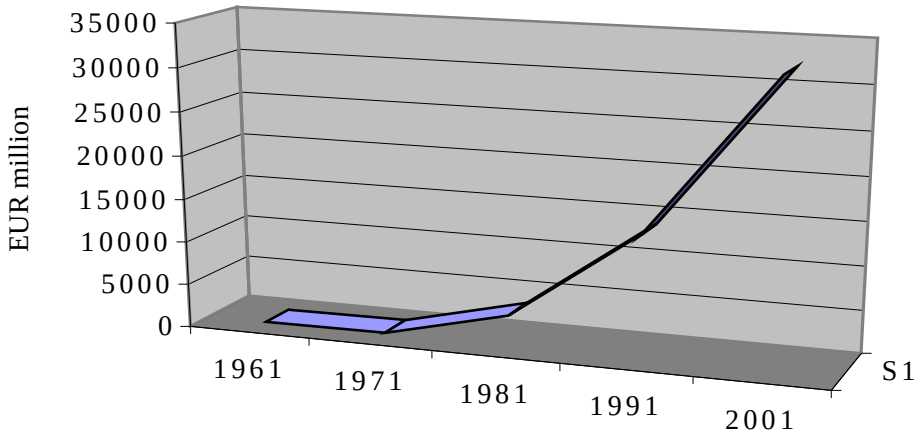
fairly easily and seamlessly into mechanisms for preparing integration of these countries into the European Single Market which is a significantly more advanced stage of trade integration than a free trade area. Moreover pre-accession funding became in the 1990's, far larger than in the past, and its aims became more ambitious, focusing particularly on countries preparing to integrate effectively into the Single Market whilst also providing resources for poorer regions and people, as well as supporting cross-border communications. Post accession funding will become slightly less generous than in the past (especially for agriculture), but will still be massive.

Since their creation, the Structural Funds and the Cohesion Fund have represented the main instruments of social and economic cohesion policy in the European Union. The evolution of EU Structural Policy has led to the creation of four Structural Funds: the European Regional Development Fund (ERDF), the European Social Fund (ESF), the Guidance Section of the agricultural fund (EAGGF), and the Financial Instrument for Fisheries Guidance (FIFG). Through these four funds, the European Union grants financial assistance to resolve structural economic and social problems. The Structural Funds underwent major reform in 1988, and again when the Cohesion Fund was introduced in 1993.

Since the 1988 reforms, EU Structural Policy has become even more significant in financial terms. By 1999, the Structural Funds and the Cohesion Fund together accounted for around one-third of the budget for EU policies and amounted to some 0.5 per cent of EU GDP. As we discuss below, (see Table 2) it represented very high proportions of the GDP of the poorer countries (almost 4% for Portugal and Greece).

To put this in perspective, the Marshall Plan for the reconstruction of post-war Europe was equivalent to around 1 per cent of annual US GDP and contributed an average of 2 per cent of the European annual GDP, over the 1948 – 1951 period. EU structural intervention is lower per year, at around 0.5 per cent of EU GDP, but is far higher in cumulative terms, as it has represented a long-term commitment for a large number of years.

Graph 1. EU Structural Funds, 1961-2001



Source: European Commission

Note: the figures represented in Graph 1 are not inflation adjusted for inflation. However, even in real terms the scale of structural funds increased significantly.

Graph 1 shows the dramatic increase in the level of funding available through the Structural Funds over the last 40 years. In 1961, some EUR 8.6 million was allocated through the Structural Funds. This figure rose to EUR 11.8 million by 1971. Total EU expenditure on the Structural Funds reached nearly EUR 14 billion by 1991 and some EUR 32 billion by 2001.[2]

In terms of the distribution of funds, Table 2 shows that between 1989 and 1993 the five recipients of the largest share of Structural Fund financing were Spain (21%), Italy (17%), Portugal (13%), Greece (12%) and Germany (9%). In the later 1994-99 period, which includes the Cohesion Fund, the major recipients were again Spain (23%), Italy (14%), Germany (14%), Portugal (10%) and Greece (10%). Table 2 also indicates the importance of these funds to the economies of the recipient countries by showing the annualised funding received as a proportion of their GDP. In both periods, EU structural

[2] European Commission, 2000.

funding represented a significant proportion of GDP for Portugal, Greece, Ireland, and Spain. In 1994-99 Structural Funds represented 4.0% of Portugal's GDP, 3.7% of Greece's GDP, 2.8% of Ireland's GDP and 1.7% of Greece's GDP.

Table 2. EU Structural Funds 1989-93 and the Structural Funds and Cohesion Funds 1994-99, in ECUm (and as a percentage of EU total) and as percentage of GDP

	1989-93 Ecu millions (% of EU12)	**1989-93 % GDP[1]**	**1994-99 Ecu millions (% of EU15)**	**1994-99 % of GDP[2]**
Belgium	740 (1.2)	0.11	1808 (1.3)	0.18
Denmark	402 (0.6)	0.08	741 (0.5)	0.11
Germany	6015 (9.5)	0.13	19519 (14.1)	0.21
Greece	7528 (11.9)	2.65	13980 (10.1)	3.67
Spain	13100 (20.8)	0.75	31668 (22.9)	1.74
France	5907 (9.4)	0.14	13334 (9.6)	0.22
Ireland	4460 (7.1)	2.66	5620 (4.1)	2.82
Italy	10753 (17.1)	0.27	19752 (14.3)	0.42
Luxembourg	55 (0.1)	0.17	83 (0.1)	0.15
Netherlands	725 (1.1)	0.07	2194 (1.6)	0.15
Portugal	8450 (13.4)	3.07	13980 (10.1)	3.98
UK	4816 (7.6)	0.13	11409 (8.2)	0.25
EUR12	62951 (100)	0.29		
Austria			1432 (1.0)	0.19
Finland			1503 (1.1)	0.40
Sweden			1178 (0.8)	0.37
EUR15			138201 (100)	0.51

[1] based on annual average structural fund totals, and on average GDP 1989-93
[2] based on annual average structural fund totals, and on GDP in 1994
Source: European Commission

In the case of poorer countries like Portugal and Spain, where time allows for more precise measurement of outcomes, the impact of post-accession EU funds has been broadly positive especially in contributing to significant convergence with average European income per capita; it can also be clearly seen in physical developments, such as the increase in new road and rail links, particularly those connecting with other European states. This has greatly facilitated trade, as well as broader, integration.

There does remain some debate about the exact contribution played by the structural funds themselves as opposed to the overall process of integration. Recent studies have shown a positive tendency towards convergence between richer and poorer states of the EU (unlike other regions in the world, Milanovic, 2002) and there can be little doubt that the integration process has played a significant part (Ben-David 1996 and 2000). First Italy, then the poorest states in the EU-15 (Spain, Greece, Portugal and Ireland) all saw a process of catching up. Ireland came from behind to an above average position in income per head.

There is a little more debate about the specific contribution made by the structural funds themselves. Work by the European Commission on country convergence (EU 2004) and by several academics (see for example Solanes, 2001) supported the view that the structural funds have played an important role in this. It is certainly the case that for smaller poorer countries the receipt of up to 4% of GNP in financial transfers can make a substantial difference. In the Irish case it is widely believed that these funds were well used and contributed to the emergence of Ireland as a high tech economy. There is a consensus that the boom in receipts of structural funds coincided with the development of a soundly managed system of public finances and the coming to fruition of a long period of up grading of the education system, especially higher education which made Ireland fertile soil for the use of EU R&D funds. Ireland has proved something of an exception to the observation that the convergence that has occurred within the EU has been a convergence of national levels of income *per head*, whilst within countries there has been something if a divergence between richer and poorer regions in relative terms. In Spain, Greece and Portugal it is the richer regions that have caught up fastest with the rest of the

EU. There is some evidence that in the new CEEC member countries the catch up process which is indeed occurring is also concentrated in the already more prosperous regions. Of course this does not mean absolute decline of other regions, and it is of course notable that the non-acceding countries catch up is far less evident.

The conclusion of analysts *at the country level* is broadly that EU funds seem to have had a positive effect, the results at the regional level are more nuanced. (see Funck and Pizzati 2003) Analysts have been unable to demonstrate a clear link between regional growth and receipt of EU funds. This is of course not surprising since economists cannot in general be very specific about the actual quantification of the basic determinants of economic growth. The evidence is consistent with the view that EU funds have made a positive impact on growth where the policy environment is favourable. The extreme example of this has been of course Ireland, while the Greek experience to some extent indicates the limitations of transfers when absorptive capacity is insufficiently in place (see also EIB paper, 2000).

Middlefahrt-Knarvik and Overman (2002) argue that the spending by the EU on R&D funds has indeed attracted investment in high tech to poorer regions but that with the exception of Ireland it is not clear that these regions have a comparative advantage in such activities that leads to enhanced growth. It is of course the hope of the Community that R&D funding will eventually modify initial comparative advantage.

The European Commission meanwhile in its latest (2004) Cohesion report finds evidence that since 1988 the so-called "Objective 1 regions" ie those entitled to maximum EU regional support have been growing faster. A simple regression of growth by region against receipt of EU funds does indeed show a positive correlation but the association is weak, implying that other factors need to be interacted with the funds themselves.

The statistical studies are also open to question because the nature of EU funding has evolved over the years. The CEU has been sensitive to the issue of the need to use

structural funds to promote efficiency as well as engaging in pure redistribution and this has been reflected in project design.

We can conclude that there is evidence that structural funds have had a positive impact on the growth of poorer countries. The nature of the link is complex. It would seem that assistance tied to particular projects in regions may not be the most effective, but should be linked to broader upgrading of policy and infrastructure there. It also remains true that when major structural responses are needed to cope with integration, willingness to share the burden collectively can provide political legitimation for regional groupings in developing countries. Therefore, a lesson from European integration seems clearly to be that fiscal transfers to poorer countries contributes to convergence in income levels.

C. Lessons learned for Other Regional Integration Experiences

1. <u>Financial Mechanisms for Accession can Contribute towards Convergence between the Rich and Poor Countries and Regions if they are Effective and Provided in Adequate Levels</u>

The scale and broad coverage of financing mechanisms utilised by the European Union countries to aid countries pre- and post- accession has been extensive. European Union grant financing and EIB loans have together represented a meaningful proportion of each country's GDP and total investment. Added to this, the budget figures for EU Structural Funds do not immediately convey their significance for the economically weaker areas of the Union. As resource transfers are very heavily concentrated on the poorer areas of the EU, where economic activity is relatively low, they are of a considerable size. Also, as Structural Fund allocations are based on the principle of co-financing, with individual member states contributing resources to supplement EU funding, they can act as a catalyst for higher levels of resource transfers to poorer regions.

Naturally the scale of resources made available via grants in the European case was linked to the ability and willingness of the richer countries in the Union – and particularly

Germany in the initial phases – to make such resources available. In North-South regional arrangements (such as a possible FREE TRADE of the AMERICAS), significant transfers would be feasible, if there was political will in the US and sufficient pressure from Latin American countries. In the case of regional integration amongst relatively poor developing countries, the feasibility and willingness for large transfers would be more limited than in Europe. Nevertheless, even there, some fiscal transfers could be made, to relatively poorer countries and regions, and technical assistance could be very relevant. Northern donors could also support regional integration in those cases. Therefore the European experience would still be applicable though tailored to other regions circumstances.

Policies designed to improve economic and social cohesion among member states are also very important in political terms. First, they help to unite member countries around a common goal. In the European context, for example, there has always been a strong sense of a European model of society, comprising elements such as a social market economy, free trade, democratic systems and social cohesion. The financial mechanisms to support regional integration in the EU are very much based in upholding this model of society. Second, cohesion policies are important in order to maintain the support of poorer and weaker states and regions for the trade integration project. Indeed, countries like Portugal and Spain have been amongst the most steadfast supporters of the European integration process. Though the level of integration ambition may be somewhat smaller at present in regional groupings in developing countries, or in the Free Trade of the Americas, even free trade areas require sustained political support.

As regards effectiveness of different pre-accession instruments, unfortunately there is as yet no formal evaluation carried out by the European Commission or the authorities from the countries which received it. Our analysis, interviews and experience lead us to suggest the following elements: a) A structural programme like that given to Eastern Europe of pre-accession financing is far superior to the more ad-hoc and sufficiently lower pre-accession financing provided to Portugal. (Spain had no pre-accession grants, though it had pre-accession EIB loans). b) However, the effort necessary for achieving

successful integration into Europe was also smaller for Spain and Portugal than it was for Central and Eastern European (CEE) countries. This was because European integration had progressed significantly further, when CEE countries joined them when Spain and Portugal joined, especially due to the creation in 1992 of the Single European Market. The accession funding for countries like Portugal and Spain was focused mainly on the original aims of EU funding: (i) redistribute to facilitate convergence and (ii) supporting investment, especially in infrastructure, to help European integration. However, a fairly dominant additional aim of pre-accession funding to the CEE countries was linked to the vast effort of harmonization of regulations and standards to meet EU norms, (broadly called the Acquis Communitaire), so as to join a well-advanced single market. A lesson for other regional integration experiences seems to be that financial and technical assistance must be higher the deeper integration linked to regulatory and standards harmonization is. The European integration experience shows that regional harmonization of rules is both very complicated and costly, but also important to promote trade integration.

c) Given their larger scale and their greater flexibility, EIB loans are an extremely valuable part of the pre-accession package in areas such as infrastructure, SMEs, etc. Both in Spain and Portugal, as well as in CEE, EIB loans were disbursed more easily and in a more agile way than grants.

A general lesson from early and later entrants seems to be that financial assistance operates better the more decentralised the decisions are. Decentralised decisions (both in countries and in regions) not only are more efficient, makes the best use of local knowledge and experience, but also can play an important role in fostering institutional development. In fact, greater effectiveness and agility is also supported by the EIB, opening offices in member countries and by the EC country offices having greater autonomy to approve programmes, rather than involving Brussels.

d) Though the European experience shows it is valuable to support a number of dimensions, the experience in different countries, from Portugal to the Czech Republic,

suggests effectiveness improves with focus on a fairly limited number of programmes linked to the priorities defined in the trade integration programme. As Devlin et al (2002) clearly points out, limited number of programs – together with other factors such as clearly identified objectives, and work programs – help make cooperation programmes successful. Problems of absorptive capacity, especially in smaller countries can more easily be overcome, if assistance is focussed on a fairly limited and relatively specified programme, as this facilitates provision of sufficient finance and technical assistance that can help overcome problems of implementation.

2. Countries joining the European Union have been able to influence the terms of their Accession

Historically, countries joining the European Union have had, sometimes substantial, leverage in influencing the terms of their accession. Italy, a relatively poor country at the time, pushed for the creation of the European Investment Bank (EIB), especially to lend to the poorer Southern regions, when the European Community was established. Pre-accession negotiations between the UK and the EC led to the creation of the European Regional Development Fund (ERDF), and negotiations with Spain resulted in the setting up of the Cohesion Fund to assist the poorer countries of the Union in adjusting to the Single Market. In the ongoing negotiations with the ten countries of Central and Eastern Europe, Poland has managed to achieve concessions for its accession to the Union. In other regional integration efforts, the poorer countries should conduct negotiations on a trade integration bargaining strongly for financial mechanisms, with the knowledge that they are bringing something valuable to the table. Equally, the richer countries can learn from the European experience that assistance to poorer countries and regions will result in a better functioning trade integration, and a more prosperous region. Furthermore, poorer regions in rich countries (eg with "senile industries) can also benefit from fiscal transfers (eg steel and coal producing regions in the UK, Germany and Luxembourg).

3. Institutional Innovation will be Important

The European Union has a strong institutional base in the European Commission, as well as other institutions such as the European Parliament, EIB etc. These institutions not just support but help drive the integration process. These are located in cities that are not the major centres of economic power in Europe – eg. in Brussels, Strasbourg and Luxembourg, rather that London, Paris or Frankfurt.

4. Financing mechanisms should be varied and flexible over time.

Flexibility in using financial mechanisms is important. In the EU, there is a mix of grants (European Commission), loans (EIB), and guarantees (EIF) that work well to respond to different funding needs, and can work together. Indeed, EIB lending can play an important catalytic role in helping to attract other funding sources to projects, even if the EIB lending is not particularly large (e.g. Volkswagen in Czech Republic). EU financial mechanisms have also needed to be flexible over time, responding to new stages in the European project (such as the Cohesion Fund for Spain, Portugal, Greece and Ireland, to adjust to the Single Market and the introduction of Pre-Accession funding strategies for the Central European countries).

5. Funds can be either universal or targeted

EU Structural Funds were initially universal, but heavily concentrated on poorer nations and regions (including poorer regions in richer countries). Later, a targeted fund – the Cohesion Fund – was created for financing environment and infrastructure projects in the poorer countries only.

6. Strong focus on Infrastructure : other areas also funded

Infrastructure integration has received a great deal of priority and funding. However, other areas (such as vast education, exchanges, research, integration, cultural exchanges,

improvements of the environment have also been funded, as European integration is seen as broader than purely trade and even just economic integration.

III. The EIB

A. The Creation of EIB and its Central Role for Convergence

> As mentioned in the previous section, the EIB was created in 1956 with the Treaty of Rome along with the European Economic Community. There were several provisions in the Treaty for the creation of instruments which could contribute towards this "harmonious development" and the reduction of regional disparities. The European Investment Bank (EIB), the most powerful instrument in the Treaty, was established in order "to contribute to the balanced and smooth development of the Common Market in the interest of the Community" (Treaty of Rome, Article 130). The EIB was intended as a source of relatively cheap interest loans and guarantees which would facilitate the financing of:
>
> "(a) projects for developing less developed regions; (b) projects for modernizing or converting undertakings or for developing fresh activities called for by the progressive establishment of the common market; (c) projects of common interest to several member states, which are of such size or nature that they cannot be entirely financed by the various means available in the individual member states" (Treaty of Rome, Article 130).

The EIB was therefore created especially as a Bank to support the European integration process. Its three objectives, outlined in the paragraph above, reflected three major concerns, expressed during the negotiation of the Treaty of Rome. The first was to help reduce the gulf between relatively prosperous and relatively poorer regions. It was also based on the fear that, if not compensated for, European integration could increase imbalances. In the negotiations of the Treaty of Rome, the Italian government pressed

very strongly for the creation of the EIB, with this purpose; according to some sources, it even put the creation of the EIB and its concentration on lending to Southern Italy as a pre-condition for Italy to join the EEC. The second major concern was to help "senile industries", and/or areas where such industries were dominant, which could not, on their own, face competition, but required support for modernization, conversion or development of new activities. The third concern was for the need to finance investment which helped integrate the European economies, and which related to several member states or to the Community as a whole. This refers in particular to the area of cross-frontier communications (and especially transport). This concern was related to the fact that much of existing infrastructure at the time was geared to meeting domestic needs; the creation of the EEC lead to a new dimension and new cross-border needs. It is noteworthy that these three aspects (possibly in somewhat different proportions) could also be central as supportive measures to other integration processes.

To summarize, the common goal of economic success spread over the entire Community was defined as a prime political objective. As currencies in the mid-fifties were still not fully convertible and capital markets underdeveloped there was a strong case, both theoretically and politically, to deal with these market imperfections through the creation of a public bank. The main mission of this Bank was to assist in channeling savings from the more developed parts of the Community to the less developed parts (regional development). At the same time it was recognized that a customs union needed to complete and transform its essentially juxtaposed national infrastructure into an integrated European infrastructure (European integration).

The European Commission was given the job to make available funds on a grant basis to assist lagging regions (see above). As grant money is in limited availability and as it was felt that for many projects the problem was not lack of returns but the financial constraint it made sense to complement grant facilities with loans. This was the job given to the EIB.

Suggestion 1:

The European experience demonstrates the need for financial instruments to support regional trade integration. A public Regional Development Bank (RDB) can be a judicious choice to a) help funding investments to support regional trade integration, particularly in sectors such as cross-frontier infrastructure; and b) contribute to convergence between more prosperous and poorer countries or regions. This should contribute to greater economic success of trade integration, as well as enhancing political support for the integration process.

B. The institutional set up

The EIB is an international non-profit organization with its headquarters in Luxemburg. Its shareholders are the member countries of the European Union. The Bank is designed as the "Hausbank" of the European Union. As such it receives its strategic lending missions (for which type of lending, in which parts of the outside world) from its Board of Governors after discussion in the Ecofin Council. It follows the policies set by the European Commission and ensures that the projects it finances respect European guidelines, for example, European environmental guidelines. The EIB respects a division of labor with the Commission (for example on economic forecasts) and with other international organizations such as the World Bank and the IMF. Its own policy analysis is therefore very limited. The EIB does not systematically make sectoral (a World Bank or Commission job) or macro policy (an IMF or Commission job) analyses, and therefore abstains from policy recommendations.

As a result, the EIB has a very lean staff (some 1,200 in 2004) and low expenses in relation to loan volume. Its activity is focused on the European Union (close to 90 % of outstanding loans) although over time it has increasingly been asked to operate also outside the Union.

Each Member State's share in the Bank's capital is calculated in accordance with its economic weight within the European Union (expressed in GDP) at the time of its accession. After the enlargement of 2004, the Bank's subscribed capital was increased from €150 billion to €163.6 billion, in line with the economic weight of the 10 new member countries.

***Suggestion 2**:*

A RDB should be endowed with a small and first-class professional staff. Management executes its mission as set down in its statutes and by its board of governors (the finance ministers of member states). To maximize social acceptance and optimize the economic effects of its interventions, an advisory board composed of non-government experts could establish an opinion on all lending projects for which the social rate of return is below a set benchmark. Alternatively, all loans would have to present a social rate of return at or above the benchmark.

C. The definition of its role

Lending for what?

The EIB's lending has been limited to financing projects. Recent developments (see below) create more flexibility. The focus on project lending excludes trade financing[3] or program financing such as balance of payments support, poverty reduction, sector reforms and the like. In general, the Bank only lends up to 50% of the project cost. This implies that the multiplier effect on recipient economies is considerable. At times, this limit is increased to 75 % to speed up financial support during downturns of the business cycle or to fulfill other priorities. This introduces an interesting explicit element of counter-cyclicality in the lending operations of the EIB that should help support economic activity –and especially investment- in periods of economic down turn.

***Suggestion 3**:*
Co-financing is advisable, as it implies that multiplier effects on recipient economies is considerable. A variable share limit of RDB lending in the total project costs (increasing for example during downturns of the business cycle) can introduce an explicit element of counter-cyclicality in RDB lending and help support investment in periods of slowdown. This seems particularly relevant for developing economies, where cycles are often greater. Trade financing may be an important mechanism in regional integration, where it is scarce or dries up occasionally.

For a project to receive EIB financial support it must first be eligible. This means it must fall into one of the categories of projects to which the Bank lends. For example, for a long time public housing has not been eligible. Then the project must satisfy the Bank's exacting borrower quality standards. Not enough, the borrower if not a government must provide adequate guarantees. In addition to the quality conditions to be satisfied by the borrower, the project must be financially and economically sound. As the main objective

[3] Member states dispose of national vehicles for guaranteeing and of commercial banks ready to carry out trade financing. In less developed areas this may not be the case. For example, the main financial mission of the Black Sea Trade and Development Bank (BSTDB) is trade financing.

of the Bank is to contribute to the Community's economic performance (regional development, European infrastructure, high environmental standards, European competitivity, energy security) the project must be financially sound and must have a high social return. This social return (the internal rate of return augmented by externalities such as employment creation, knock-on effects) is always difficult to assess and hence leaving scope for political desiderata. The Board of Directors is the arbitration court for such matters.

To assess the social return of a project and the conformity to EU policies (international competitive bidding, environmental standards, etc), it is evaluated by a team comprised of lending officers, economists and engineers. With less sophisticated borrowers this evaluation can lead to project modification and improvement. The scope for such gains is obviously limited with projects of sophisticated corporations. The technical and economic evaluation of projects of reputed corporations in the EU is therefore much more limited and in certain cases unnecessary.

Borrowers outside the EU benefit from an EU guarantee as the EIB is carrying out lending outside the EU on the basis of an EU mandate. Therefore the EIB does not charge a risk premium and borrowers receive de facto a subsidy provided by the EU.

Suggestion 4:

The activity of a RDB should be focused. For project lending a list of eligible projects might prove useful. This list should recognize the importance of education and health for human capital formation. There should be no a priori restriction to either private or public sector counterparts.

Why is a public bank needed?

A public sector bank finds the justification for its existence in market imperfections.[4] When the Bank was created the major market imperfections resided in capital controls, a little developed and segmented capital market and an uneven development of the banking sector across the Community. Indeed, it could be argued that markets were incomplete or even missing for longer term funding in the relatively poorer countries of the European Community –first the South of Italy, then later members like Greece, Portugal or Ireland, and more recently the new accession countries, in Central and Eastern Europe. What are the justifications today?

Except for borrowers evaluated by rating agencies the market is still characterized by pronounced market imperfections arising from information asymmetries. Asymmetric information arises because one party to the contract (the borrower) has more and better information than the other party (the lender or investor). Asymmetric information leads to two problems in the financial system: adverse selection and moral hazard.

One solution to the problem of asymmetric information is that a *public* bank incurs the cost of information collection.[5] The EIB does that and acts as a "delegated monitor"

[4] For more discussion see Stiglitz (1998)

[5] In general, a solution to the asymmetric information problem is for a lender to collect the necessary information to screen and monitor investments. This is what banks usually do when they establish a long-lasting and ideally exclusive (from the banks' point of view) relationship with a near-by customer. But, in general, there are two barriers to information collection. The first is its cost, particularly when more than one lender are potentially or actively involved. The second problem is the free-rider problem. It is a problem because investors who do not spend resources on collecting information can still take advantage of information that other institutions have collected. If Bank A lends to a firm it gives a signal to other potential lenders that it has collected information and finds it satisfactory. The value of this signal that disseminates information to the market is positively correlated with the reputation of Bank A and becomes a "public good". This provides the incentives to free riding.

(Leland and Pyle, 1977). It carries out a very detailed evaluation of projects going beyond the typical analysis of a commercial bank and monitors the loan carefully. Having established a high reputation as a careful evaluator and as a conservative bank with an excellent track record (only very few loans of the Bank experienced difficulties) the value of the signal of a Bank loan is high. The Bank only finances part of any project so that its participation is a signal for free-riding banks to finance the remainder of the capital needs.

The project focus of EIB lending diminishes the moral hazard somewhat. Monitoring is easier than with a general loan to a company, as diversion of funds to other uses with higher risk is more limited. A large part of Bank lending is carried out with repeat borrowers that value access to EIB funding.

However, there are also features that mitigate, but certainly do not eliminate the value of the Bank's signaling. First, the Bank only lends to large, solid borrowers for which information symmetries are less pronounced. Second, the Bank usually but not always enjoys high seniority and guarantees. So it is not exposed to the same risk as other borrowers. Third, the Bank lends either to projects for which there may be a rated promoter or there may be no rating and no track record. In the first case, say, a utility plant of a large electricity concern, the evaluation of the project has less value to other potential lenders which are only concerned about the electricity concern's capacity to service the loan. But in the second case the Bank's signaling is of great value. Consider a project such as an airport financed and operated under a private-public-partnership scheme in which several banks may be involved. It would not be optimal for every bank involved to collect all of the complex information. The Bank's evaluation and participation is then a signal with great value as a public good and the Bank's participation may be the key to successful completion of the financing arrangement.

It could be argued that the role of the EIB could be further strengthened, if it lent more to risky borrowers. In the future, the EIB might be induced by market forces to shift a larger part of its operations from providing funds without assuming the risks (as it

currently requests guarantees, which implies the guarantors bear these risks) to those where the EIB assumes the risks.

It is important to underscore that the EIB has already started making this shift by the creation of the European Investment Fund - of which the EIB is the largest shareholder. The EIF provides guarantees, takes equity participation and supports venture capital funds – taking on this new role of assuming risk. Interesting lessons may exist here for regional banks' lending to developing economies.

Suggestion 5:

Asymmetric information is everywhere a problem, even more so in markets with less developed financial markets. An important role of the RDB is therefore investment in project information and signaling to potential co-financiers. To achieve this target, the RDB needs first to establish an impeccable reputation. It also must assume some of the risks to make its signaling credible.

Use of a well endowed public bank as a special refinancing vehicle with a triple-A standing may be useful in many circumstances. This goal is already successfully pursued by institutions like the African Development Bank which, thanks to its triple-A rating, can borrow on international markets at much better conditions than African States can.

Even on internal markets borrowings by a well recognized regional bank with a triple-A rating may make significant contributions to the development of internal bond markets in local currency. The EIB played a significant role in this respect during the 1990s in the capital markets of Greece, Portugal and Spain and later in the emerging markets of Central Europe.

On account of its impeccable reputation the EIB is able to mobilize huge sums (as are typically required in large infrastructure projects) and offer maturities up to 30 years and longer. Equipped with lower funding costs (the coordination gain) and with investment in

superior project information it can have a catalytic effect on mobilizing other funding sources.

Complementary to, and not competing with, other providers of funds?

In its lending activity the Bank needs to observe *subsidiarity*. This means, in principle that the Bank only lends to projects when there are no other means available. This is a sound theoretical principle but difficult to make operational. At some price other funds tend to become available to solid borrowers which are the ones to which the Bank currently tends to lend. But if subsidiarity has to be assessed on the basis of the alternative financing cost what is the cut-off spread? Therefore, in current practice borrowers make the decision. If the Bank's offer in terms of cost is more favorable than alternatives, the borrowers will request a Bank loan and the Bank's more favorable offer contributes to the success of the project. Possibly, it could be more efficient if the EIB were to define a benchmark (that could naturally be adjusted over time), that would indicate the cut-off minimum spread over alternative funding for which the EIB would lend.

The EIB lends to the *public* and *private* sectors. During the first decades of its operations lending was heavily concentrated on the public sector, at that time in many countries nearly exclusively responsible for infrastructure projects. Such projects are highly capital-intensive and require long periods of financing. However, the Bank was designed as a long-term lending institution because market imperfections have been most pronounced in that segment. Since its creation the Bank has made loans with maturities up to 30 years according to the project needs. Over time as the capital markets developed and the expertise to finance infrastructure evolved and spread, the private sector gained importance.

Suggestion 6:

Subsidiarity (that is, the risk that RDB loans take business away from private banks or capital markets) is most likely not an issue in emerging market. To gain professional independence in carrying out its tasks as defined by the Board of Governors, and in ensuring a maximal economic impact of its financial interventions, a minimum social rate of return (that is, the financial rate of return plus the positive or negative value of externalities) could be defined as an absolute condition for loan acceptance.

Completing the market: long-term funding

The Bank lends in all convertible currencies on demand of customers. It lends at fixed rates for the life of a loan, at variable rates, or with options at resetting of lending conditions. An interesting and positive side-product of the EIB's borrowing in different currencies, e.g. those of Central and Eastern European countries, is that it has quite significantly contributed to the development of local currency markets in those countries.

As few banks lend for long maturities at fixed rates, the Bank has acquired a unique reputation for fixed-rate long-term lending.[6] The social value of fixed rate lending is however debatable. Simulations carried out by Bank staff suggest that for long maturities, the normally positively sloped yield curves always yield *ex-post* lower total financing costs. This means that for all loans examined (for different periods, and for different currencies- prior to the creation of the Euro), it would have been *ex-post* cheaper to have borrowed at variable interest rates from the EIB than at fixed rates. Fixed interest rates do have the advantage of providing; however, this certainty relates to nominal interest rates, whereas variable interest rates tend to be more closely correlated with inflation, implying that variable interest rates may actually be more stable in real terms.

EIB loans benefit from a grace period for gradual repayment of normally 3 years or more if the project profile makes a longer grace period desirable. Beyond the grace period loans are serviced by interest and loan repayment.

[6] Before introduction of the Euro long-term loans even at variable interest rates were not generally available in many countries of today's Euroland.

For loan origination shareholders provide an important input. Over time the growing reputation of the Bank and repeated operations with satisfied customers as well as the Bank's marketing have sustained lending growth.

Suggestion 7:

Borrowing and lending in local currencies of the RDB should receive priority with the double aim of avoiding foreign exchange risk for the borrower and to assist the development of regional capital markets. The price to pay is that this tends to absorb regional savings. Therefore borrowing in foreign currencies should not be excluded. Loans should be made available for long maturities on a variable rate basis. This facilitates shorter-term borrowing by the RDB for longer-term loans, minimizes the risk for the borrower in real terms and, as suggested by experience, reduces the long-term cost of borrowing.

D. Financial Solidity of the Bank

The authors of the Bank's statutes had a clear vision of the mission of the Bank and the means to accomplish this mission. These views obviously reflected the financial knowledge and market conditions of the 1950s and are increasingly required to be interpreted flexibly.

One compelling argument was to make the Bank financially as strong as possible. This was rightly seen to have two advantages. First, a low likelihood of recourse to shareholder money. Second, a low cost of funding from capital markets for the benefit of the projects funded by the Bank. As less than triple-A rated banks realize benefits from creating triple-A rated special vehicles, less than triple-A rated governments can do the same. In the terminology of economics, this is a *coordination gain*.

The first step to financial solidity is a generous endowment with own funds. The Bank has a gearing ratio between outstanding loans and *subscribed* capital of 250 %. The World Bank, in comparison, has 100 %. However, the conservative nature of the EIB's gearing ratio becomes apparent from the second quality feature: 5 % of the signed capital has to be paid in and the unpaid 95 % are a contingent capital guarantee of shareholders. Moreover, should a shareholder be unable to pay up then all others are solidarily liable. This is a very strong capital backing.

The EIB was set up in 1958 with a subscribed capital of € 1 billion. After its last capital increase and before enlargement on 1 May 2004 its *subscribed capital* stood at € 150 billion and its paid-in capital at € 7.5 billion. Reserves stood at € 18,5 billion to bring own funds up to € 25,9 billion. The very prudent management of the Bank is also evidenced by the high level of provisions in relation to modest past loan losses.
The third qualitative feature is on the assets side. All loans need to be adequately guaranteed by a first-class third party. For a long time, guarantees were mainly provided by governments. This was the case when EIB lending was mainly concentrated on the public sector. Over time, the share of lending to the private sector steadily increased. Third-party guarantees were mainly provided by first-class banks (meaning banks with at least a single-A rating).

A test of the contribution of the asset quality to the Bank's solidity is provided by a computation of the Basle I capital adequacy ratio. Although the Bank is not subject to the Basle framework, such a computation is suggestive. Until the early 1990s, more than half of the outstanding loans enjoyed a government guarantee and hence a zero risk weighting. The remainder of the loan book was supported by bank guarantees with a 20 % risk weighting. It comes therefore as no surprise that the Bank's capital adequacy ratio exceeded 100 %, far in excess of the minimum requirement of international commercial banks of 8 %. Over time, with a rising share of lending to the private sector, the capital adequacy ratio declined gradually, but is still very comfortable at over 30% in 2003.

The need for third-party guarantees became increasingly recognized as problematic and overly conservative. Problematic, because the Bank in line with a growing role of the private sector sought to lend increasingly to the private sector, but to maintain very high quality. Focussing on top borrowers and insisting on third-party guarantees turned out to be both contradictory and not market conform. The commercial cost of a third-party guarantee, added to the Bank's lending rate made the package unattractive for borrowers with a top standing and hence access to the capital market.

To make its loans more attractive to prime lenders the Bank introduced "single signature" loans, that is, loans without a third-party guarantee. This is unlike loans with a third-party guarantee which are priced on the basis of the Bank's "opportunity" refinancing cost[7] (that is, what the Bank would pay if it had to refinance on capital markets on the day of fixing the lending rate for a loan). With the hedging techniques available, this "opportunity" rate corresponds, on average, to the Bank's actual cost of refinancing plus a mark-up to cover administrative costs (see below), a risk premium is added to single signature loans. This risk premium is computed by the Bank using advanced financial models and as input external ratings. Additional securities such as mortgages or revenue pledges are accepted by the Bank and reflected in the size of the risk premium.

As a result of the very prudent and conservative approach of the Bank to lending, it has not lent to weaker economic actors without strong securities or third-party guarantees. Loan performance therefore has been exceptionally good and the Bank lost little money from its lending activity. As only few loans have been non performing over its existence of 46 years also the Bank's recourse to guarantors has been modest. The reverse side of the coin is that borrowers of excellent credit standing and equipped with high-quality guarantees also could find money elsewhere.

[7] Until the late 1980s lending rates were set on the basis of actual borrowing costs. The change to "opportunity" cost was a response to market developments.

***Suggestion 8*:**

A RDB should be endowed with a confortable capital base. As public coffers are not plentiful in emerging countries, it might be useful to complement the paid-in capital with subscribed but not paid-in capital for possible contingencies. The RDB should be allowed to retain any surpluses to build up reserves. With strong risk management and a high-quality loan portfolio the RDB can obtain an international credit rating above those of member countries. The goal should be triple-A, where feasible. This is achievable with strong management, a good loan portfolio, cost and risk-covering prices and a solid capital base. This would allow the economies in the region to have access to better borrowing conditions. Weak ratings of member countries are only a disadvantage for the value of the contingent capital. With respect to paid-in capital it remains true that "pecunia non olet".

The EIB is a non-profit organization. It invests its own funds and the returns generate a surplus, as all projects funded with borrowed resources must be cost-covering. This surplus (technically not a profit because it only remunerates the factor of production capital) is added to the Bank's reserves and allows augmenting capital by converting reserves into paid-in capital without cash payments by existing shareholders. For example, if the average return on loans outstanding and on financial investments is x percent, then own funds of the Bank will grow at x percent p.a. as the EIB pays no dividend and retains all earnings. Operations could then grow at x percent and keep the ratio outstanding loans/own funds constant. Of course, the gearing ratio of the EIB is defined in terms of signed capital. But as 5 % of signed capital must be paid-in, there is an implicit relation with paid-in capital. The Bank then can satisfy this constraint by transferring inside of own funds from reserves to paid-in capital.

Since 1991 all capital increases of the EIB were in this way self-financed. This makes it obviously easier to increase capital. Had the EIB been obliged to pay out dividends and then call on shareholders for fresh capital it might have been more difficult to sustain lending growth with capital increases.

The return to convertibility of member countries in preparation of EMU eased the access of the Bank to national capital markets.[8] A big jump was achieved with EMU representing for the Bank a significant ease in funding through large issues in just one currency, the Euro. Moreover, progressing financial sophistication made the management of the Bank's asset liability position and its currency risk easier. Today it has become standard to borrow in currencies for which the Bank has no direct use but for which funding costs are interesting and to swap the proceeds into Euros. At present, the Bank has virtually no compelling, immediate financial constraint for expansion.

The choice of the EIB to minimize the risk on its balance-sheet and to transfer lending risk to other parties, creates a very limited risk diversification in its lending pool. This, in combination with the cost-covering setting of lending rates, makes it impossible to securitize without loss parts of the loan portfolio: any investor in an EIB unsecuritized bond would have more security and the same interest rate. For that reason, in an environment of growing lending volumes, the EIB carries a large historic loan book that needs to be supported by ever more subscribed capital.

Suggestion 9:

Over time, as the RDB's growing balance sheet would need additional capital for respecting its gearing-ratio certain loans could be securitized. This would avoid capital increases in a region where governments may find fresh capital support unappealing. It would also focus the role of the RDB on loan originating, which is in all likelihood its most important job.

E. Pricing

The EIB is not for profit and therefore prices its loans with the aim to cover costs. Given its very high financial solidity it enjoys triple-A rating and, if quadruple-A existed, it

[8] It needs to be recognized, however, that the EIB had always received a preferential treatment from national authorities that provided considerable advantages for reducing funding costs.

would have it. It therefore borrows at the finest terms, with only a slight spread over triple-A rated government debt. To this cost of funding a mark-up is added reflecting administrative costs. Given the high lending volume per employee (personnel costs account for 80 % of total administrative costs) the total administrative costs are small. Over time and in line with increased outstanding loans per employee, the cost covering mark-up declined to 15 basis points in the early 1990s.

The mark-up calculation was then changed to reflect more directly costs incurred per project. A major problem is that the administrative cost is concentrated on origination and therefore not related to loan maturity. It would therefore be best to compute a unique up-front fee. For a variety of reasons a mark-up embodied in the interest rate is preferred and therefore a modulation of the mark-up for very long maturities was introduced. In addition, the administrative cost of a € 1 billion loan is not hundred times the administrative cost of a € 10 million loan. Repeat loans also generate lower costs of assessing the creditworthiness of the borrower. Modulation now generates mark-ups in the range of 5 to 15 basis points. The combination of a low financial cost with a very low administrative mark up means that the Bank's lending conditions are extremely attractive for borrowers, even when compared to other international financial institutions like the World Bank or the EBRD.

As this description of EIB pricing makes clear there is no explicit subsidy in EIB lending. Rather, the strong financial backing of the Bank minimizes the cost of resources to the Bank, an advantage passed on to customers. There is, however, an implicit subsidy. All members of the EU are treated as equal. Therefore the lending to governments is priced equally without a risk premium and independently of country ratings. These ratings vary in the EU from triple-B to triple-A.

Suggestion 10:

Pricing of loans should cover the financial cost, the risks taken and administrative costs. A small profit could be added to strengthen the capital base. With a triple-A rating and a

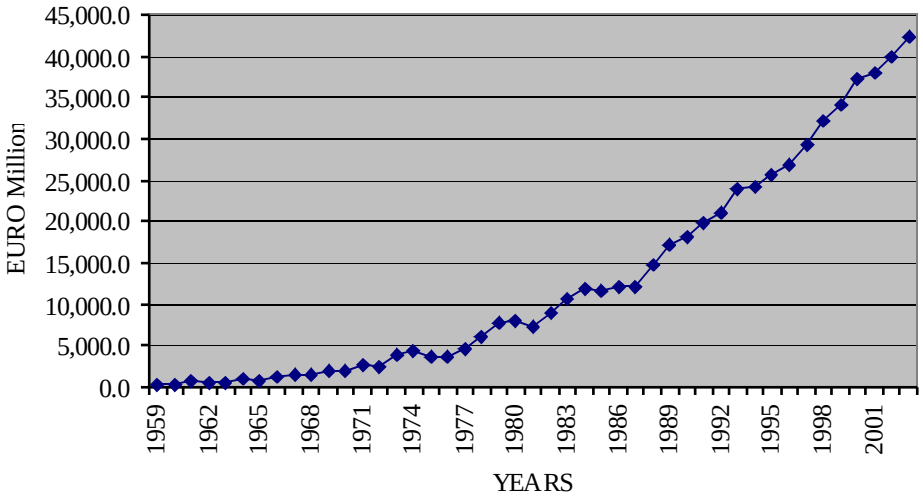
lean staff, lending rates can be hundreds of basis points lower than rates of private banks or of local governments' financing costs.

F. Historical Evolution of Lending

Exponential lending growth

Activity of the EIB was fairly slow to develop (see Graph 2 for details)[9]. During the first ten years of operations, the total of loans granted amounted to only € 7,983 million, compared to € 42,332 million in 2003 alone, both expressed in 2003 Euros (see Table 5).

Graph 2 – EIB Lending Growth



Source: Authors' own elaboration, based on EIB data.

Table 5. Total EIB Lending (in 2003Euro Millions)

Decade	Amount in 2003 Euro Million
1959-1968	7,983
1969-1978	35,019
1979-1988	105,151

[9] See Appendix 1 for more details.

1989-1998	238,349
1999-2003	191,396
Total	577,899

Source: Authors' own elaboration, based on EIB data.

Agriculture never received much support and global loans[10] were modest during the first two decades (see Table 6). The public sector was the predominant borrower to finance infrastructure, energy and capital-intensive state industry (airlines, electricity generation and distribution, telephone systems etc).

Table 6. Total EIB Lending by Sector (Euro Millions of each year)*

	Agriculture, fisheries, forestry	Energy	Global loans; grouped loans	Health, education	Industry	Infrastructure	Services	Total
1959-1968	1	177	10	0	440	509	0	1,137
1969-1978	14	2,914	760	2	2,163	3,689	26	9,568
1979-1988	375	17,173	14,493	102	6,206	21,441	258	60,048
1989-1998	458	30,486	48,921	1,346	20,178	94,210	1,916	197,515
1999-2003	235	16,394	59,193	9,540	14,395	82,168	3,978	185,904
Total	1,083	67,144	123,377	10,990	43,382	202,017	6,178	454,172

* All the data is in nominal terms
Source: Authors' own elaboration, based on EIB data.

During the next decade from 1969 to 1978 the total lending volume increased to € 35,019 million, (in 2003 Euros), which was four times higher than during the first decade. This increase was due to more lending in the Community of six and to an expansion of the Community. Whilst Italy remained by far the largest borrower, the United Kingdom became the EIB's second largest borrower. Lending outside of Europe amounted to less than 10 % of total. As a result of the first oil shock lending to the energy sector came close to 30% of total lending. And global loans became modestly significant and reached 8 % of total lending.

[10] Global loans are credit lines that the EIB grants to a financial intermediary, which deploys the proceeds to support SMEs. Although the effectiveness of this instrument is debatable, in the absence of a retail network, the co-operation with retail banks is the only way the EIB can channel resources to SMEs.

During 1979-1988 the EIB became a bank with a recognized role in Europe. Total lending for the decade increased to € 105,151million, in 2003 Euros (three times as much as the previous decade). Global loans continued their march to greater significance reaching over 20% of total lending. Countries outside of Europe received a regressive 7 % of total.

The total for the next decade 1989-1998 is € 238,349 million, in 2003 Euros. Unified Germany and former socialist countries became major borrowers. Two sectors dominated: infrastructures accounted for nearly 50% of total lending and global loans for 25%. Remarkable is that global loans accounted for nearly 50 % of lending to France and Germany, two countries which are not generally considered underrepresented in retail banking and whose numerous savings banks have exactly the task to lend to SMEs.

During the five years 1999-2004 the lending volume was € 191,396 million in 2003 Euros and the Bank became a global name. For the first time since 1958 Italy lost its top borrower position to Germany and Spain nearly caught up. As accession countries were treated as if they had already joined the Community, the lending outside the Community exceeded 19 % of total. As to the sectoral distribution, energy declined strongly, global loans exceeded 30 %, health and education took off.

This very slow evolution of the Bank's lending during the first 20 years (and especially during the first decade, see again Graph 2 and Table 5) and the continued rather rapid expansion of activity during the last 20 years are all the more remarkable, as the very reason for the creation of the EIB, namely capital controls and an underdeveloped capital market, disappeared with the reforms of the late 1980s/early 1990s in preparation of EMU. To put it more provocatively, the EIB only started to flourish when its original raison d'être vanished. Why?

Reasons for sustained growth: inflation, EU expansion and widening of eligibility

There are no convincing reasons for the slow start taking decades. Surely, it was wise to build up operations slowly, to gain experience on the terrain, and to focus on economically promising projects within a narrow range. As a new bank the EIB had to

establish first a solid reputation. In addition, the underdeveloped, split-up European capital market put constraints on the refinancing capability of the Bank, a constraint that has disappeared with the development of the European capital market. Most of the lending took place in European currencies as borrowers preferred not to take an exchange risk. Financial markets in Europe were still national markets and not yet sufficiently developed to allow borrowing in the more mature US market and swap the proceeds into European currencies.

Inflation

The data on the evolution of the Bank's lending in nominal terms (Table 6) exaggerate growth of lending in real terms (see Table 5) and Graph 2 as inflation in most European countries was still quite high until the creation of European Monetary Union. Using the EU GDP deflator (see Table 5), we show however that EIB lending even in real terms has grown significantly. In terms of growth of lending adjusted for price increases the highest growth rates were achieved between 1965-1973 with an annual growth rate of 20 % (neglecting the set-up period during which growth rates are meaningless). During 1974-1985 the average annual real growth rate declined to 15 %, and since 1985 it has been around 8 %. Even during the last years, between 1995 and 2003 the growth rate was maintained at 7%. This is still a very high growth rate, much higher than real GDP growth in the EU.

EU expansion

The successive enlargement of the EC automatically expanded the lending volume. To gain a quantification of the impact of Community expansion let us conduct the following *Gedankenexperiment*. Out of the total of lending of € 198,325 million during 1999-2003, € 86,530 million were granted to countries of the EU-6. If we further assume that Germany had maintained its borrowing at the level of France (before unification Germany always borrowed less than France), then lending in the EU-6 would have been € 74,363 million. Therefore, EU expansion accounted for over 60 % of activity.

Widening of eligibility criteria

Among the most significant recent decisions by the EIB figures the decision to increase lending in health and education in recognition of the importance of such investments for economic growth. During 1999-2003 health and education accounted for 5.14 % of total lending. Remarkable is the volume of global loans accounting for 31.85 %, and the very low share of industry with 7.75%. If global loans, services, health and education were subtracted from the adjusted EU-6 lending of € 74,363 above, then lending in the EU-6 would have dropped to some € 45,000 million or only 23% of the total. Hence, new lending activities outside of the initial EU-6 and in sectors that initially played no or only a modest role accounted for 78 % of the expansion of EIB lending.

Lending outside the EU

In addition to these three fundamental factors, a growing mandate to support the political objectives of the EU beyond its borders sustained the growth of EU lending. The first lending mission outside the EC concerned projects in ACP countries. In the early 1990s Latin America and poorer countries in Asia became eligible. Of course, the biggest impact on EIB lending outside of the EU came from the opening up of former socialist countries in Eastern Europe, where the EIB is by far the largest lender. In 2003 the EIB lent in Eastern Europe more than € 4 billion or about the amount of its total lending in 1985. Also lending to Mediterranean countries picked up for geo-political symmetry.

Until the turn of the century the Bank limited its lending outside the EU to 10 % of its overall lending. In 2003, lending outside the EU represented 19.26 %. Of that lending, 10.85% went to Acceding and Accession Countries and 8.41% to countries in the rest of the world. A large part of that lending has become internal with the expansion of the EU on 1 May 2004 so that lending outside of the EU is again close to 10 % of total.

Given that the capital adequacy ratio of the EIB is so large, and its' expertise so valuable, it may be worthwhile to consider whether it should increase its' lending to the developing world.

G. Key areas of operation

The following description allows an overview not just of the scale, but also of the diversity of EIB lending and other activities, including some very innovative aspects, where interesting lessons can be drawn for developing economies.

a) Regional development

In 2003, the Bank granted individual loans totaling nearly 16.3 billion Euro in the 15-member Union for projects to assist regions lagging behind in their economic development or grappling with structural difficulties. This amount makes up some 70% of aggregate individual loans. The main beneficiaries were the Cohesion Countries Spain, Portugal, Ireland and Greece (7.1 billion Euro), Italy's Mezzogiorno (3.2 billion Euro) and Germany's eastern Länder (2.7 billion Euro).[11]

A project is considered to fall into the category regional development if it is located in an Objective 1 area as poorer areas defined by the Community Structural Funds measures, or in Objectives 2 and 5 (b) areas (areas in need of industrial conversion or rural development) or Objective 6 (Arctic areas). Needless to say, such a bureaucratic criterion has shortcomings.

One is in terms of target definition. For example, Ireland is an Objective 1 area. New policies and Community financial support, including sustained strong financing from the EIB have transformed one of Europe's classic poverty houses into one of the most prosperous and dynamic countries of the EU. But certain areas along the Northern and Western border have remained less developed. To continue qualifying for the EU's

[11] Cohesion countries, a concept created by the Maastricht Treaty in 1993, are those poor countries that had adjustment difficulties to the single market.

regional support a new region was created, the BMW region (Border, Midlands, West), which still will qualify for Objective 1 treatment.

Another difficulty is the economics of regional development. Location is the key criterion and not whether there is employment creation, positive or negative knock-on effects, agglomeration effects and the like. For example, a motorway or fast train connecting, say, Berlin with Warsaw is considered a regional development project. Whether this project will create or destroy jobs in Eastern Germany or Western Poland is an open question.

b) Financing Trans-European Networks

Efficient communications, energy transfer and information networks will be a vital factor in the economic integration of the Member States of the enlarged European Union.

S Networks (TENs) in the Union, and more recently in the new Member States, the Bank has vastly scaled up its TENs lending.

The catalytic effect of the Bank's input is especially illustrated by the growing number of public-private partnerships (PPPs) supported by the EIB, which combine the inherent advantages of both sectors in the creation of such infrastructure. In 2003, the Bank approved loans totaling Euro 2.8 billion for PPP projects.

Under the *European Action for Growth* approved by the European Council in December 2003, the EIB will increase its contribution to TENs financing, notably by introducing a priority lending facility endowed with Euro 50 billion up to 2010.

Furthermore, the Bank will improve the range of its financial instruments with a view to boosting the proportion of private-sector investment in TENs financing. In particular, it will offer loans with very long maturities (up to 35 years) and appropriate grace periods which in certain cases may cover up to 75% of the investment cost; provide guarantees for investment-grade projects during their construction phase; and create securitisation

funds.

c) EIB Group support for SMEs[12]

The EIB Group is able to provide both medium and long-term financing via its global loans and equity through venture capital financing. This covers the spectrum of resources necessary for the development of SMEs in a changing economy.

Over the past five years, the EIB Group's support for SMEs in the enlarged 25-member Union has been distributed as follows:

- Almost half of the Euro 56.2 billion signed in global loans to over 200 partner banks;
- Euro 2.5 billion in equity participations in 189 operations;
- Euro 6.4 billion in portfolio guarantees set up through 120 specialised banks.

e) Cooperation with the Commission

Synergies between EIB loans and EU grant financing are crucial for an effective and efficient transfer of funds. The Bank and the European Commission are operational partners in the environmental sector, combining their funds particularly in the new Member States of the Union, the Mediterranean Partner Countries and the ACP Countries. The Bank also acts as an adviser to the Commission in the appraisal of Cohesion Fund and ISPA (Instrument for Structural Policies for Pre-Accession) projects. Over time, the EIB has lent to target groups defined by policy initiatives of the

[12] The EIB Group contains the EIB and the EIF. The EIF, in which the Bank is lead shareholder (almost 60%) alongside the Commission (30%) and a cluster of banks and financial institutions, specializes in venture capital financing and SME guarantees. Total venture capital and guarantee operations amount to Euro 2.5 billion and Euro 6.4 billion respectively (end-2003).

Commission of the EU with an interest subsidy provided by EU budgets. Examples were initiatives in support of SMEs, cohesion countries or specific projects in ACP countries.

Recent policy initiatives include the 2000 Initiative and the Euro-Mediterranean financial partnership (FEMIP). The Innovation 2000 Initiative (i2i) was set up by the EIB Group to underpin the "Lisbon Strategy", as charted by the European Council, for building a European economy based on knowledge and innovation. In 2003, i2i was renewed, confirming the priority accorded by the EIB Group to financing innovation up to 2010.
I2i provides medium and long-term EIB financing and EIF participations in venture capital funds. The target sectors are Research and Development, technology networks and entrepreneurship.

b) The Euro-Mediterranean financial partnership (FEMIP)

In 2003, the first full year of activity since the launch of FEMIP, lending in the 10 Mediterranean Partner Countries (MPC) reached Euro 2.1 billion, confirming the Bank's position as a major player in fostering the region's economic development and stability. The focus of FEMIP is on private sector development and infrastructure.

I. Policy issues

The EIB was created at a time when large market imperfections gave a strong backing for a public bank. Market imperfections still prevail in developing countries and provide justifications for the creation of regional public banks. Also the creation of integrated economic spaces such as *Mercosur* and other regional groupings justifies a regional public bank with the mission to support an integrated infrastructure and assistance to poorer regions and countries. This is perhaps the main lesson from the EIB.

However, a remarkable feature of the evolution of EIB activity is that when market imperfections prevailed lending of the Bank was relatively small and rising fairly slowly.

When a well performing capital market developed activities of the Bank grew more rapidly (of course, at the same time the EU enlarged, eligibility was widened, and external mandates multiplied). The question therefore is what would be the optimal mandate of the Bank in a performing financial market environment? Or, otherwise said, what are remaining market imperfections?

For the classic reasons of asymmetric information problems, the risk market is still tainted with major imperfections, particularly for non-rated companies for which credit derivatives are still underdeveloped. Commercial banks are charged with a capital cost when taking risk under the Basle capital requirements. It could therefore be argued that in such an environment the role for a public bank might more pertinently be seen in assuming risk rather than the flow of funds.

The actual situation is broadly the opposite. The EIB provides funds but usually without assuming the risks which are borne by the guarantors of a loan. If a commercial bank provides the guarantee it has to back it up with the same amount of capital as when it makes the loan. As the EIB is very capital rich, the present role distribution should be put on its head: banks provide funds and the EIB assumes the risk. This could also be a more useful role for public sector banks in regional groupings of developing countries, though a more traditional public bank role may be desirable, where there are large financial market imperfections or missing financial markets eg for financing infrastructure.

Of course, the EIB has taken important steps to recognize the changes in the financial environment. It assumes already the risk in single signature loans. It also is examining ways to securitise parts of its loan book. Above all it has promoted the creation of the European Investment Fund, of which it is the major shareholder. The EIF's role is precisely to assume risk rather than make loans, by providing guarantees, taking equity participations, and supporting venture capital funds.

An unresolved issue is subsidiarity. This is less of a problem in financially constrained economies where even for perfectly sound projects funding may not be available at any

cost. When funding is available at some cost it may be useful to define benchmarks to settle the subsidiarity applicability.

We have highlighted above (in our suggestions) possible lessons from the EIB for other regions, for example, an important lesson from the EIB seems to be its significant role in borrowing and lending in local currencies, which helps develop local and regional capital markets and reduces foreign currency mismatches for borrowers.

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