

A New Architecture for Public Investment in Europe

The Eurosystem of Investment Banks and the Fede Fund

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Summary

Some five years after the severe recession of 2009, private sector investment in Europe is still dangerously sluggish. And public sector investment has been cut, reinforcing the downward trend seen over the past thirty years.

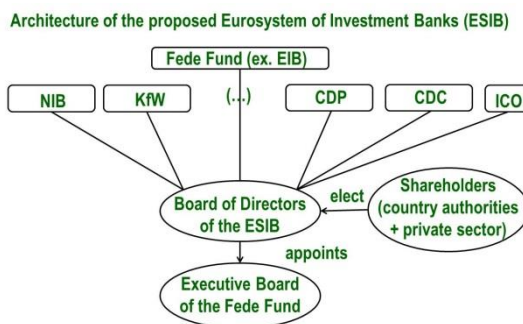
In this paper, we discuss the complementarity between private and public sector investment. Evidence suggests that in the medium term, public investment does not hinder, but fosters, the quantity and efficiency of private investment. Moreover, our fiscal multiplier for public investment (at 1.4, considerably above 'breakeven') is significantly stronger than those for other fiscal instruments. Taken together, these two findings suggest that the public sphere would be well advised to tilt spending towards investment in areas such as infrastructure and human capital, which represent an investment for future generations.

A new European initiative might be needed to get investment back on track and thus protect future growth. To this end we propose establishing, by treaty, a Eurosystem of Investment Banks (ESIB), around a pan-European financial capacity that would coordinate the actions of the national public investment banks of Euro area member states and add to their funding capacity. The ESIB would channel the Euro area's excess savings towards investment in the right places

throughout the continent. To do so in an economically sustainable and financially profitable way, funding would be conditional on firm commitments to growth-enhancing structural reforms and economic policies.

Our proposed Eurosystem of Investment Banks (ESIB) would be structured around a federal centre and national entities. The central node, the Fede Fund, would be created by restructuring the European Investment Bank into a truly federal entity. The Fede Fund would orchestrate the joint work of national investment and development banks with a clear European map in mind.

The mandate of the ESIB, enshrined in the Treaty, would be to promote long-term growth, well-being and employment in Europe. The mandate would, by definition, reflect a political consensus emanating democratically from the people of the Euro area member states.



The ownership and governance of the Fede Fund would be key in ring-fencing the investment process from national political agendas not linked to the promotion of long-term growth. We propose a structure with both public and private Fede shareholders, who would collectively elect the ESIB Board of Directors. The Fede Fund would also issue debt to finance investment at an economically relevant scale (10% of Euro area GDP, so around €1tn).

1. Investment, public and private, is dismal in Europe

1.1 Private sector investment is extremely sluggish

Following the global financial crisis, there was a sharp decline worldwide in the rate of investment. In the US, real private investment per capita declined by 25% from its peak in Q4:2007 to its trough in Q2:2009 (see Figure 1). Although the fall was less spectacular in the Euro area, it also saw a sharp decline over the same period, down 15%. But more worryingly, in Europe, private sector investment continued to tumble for a long time after the trough of the crisis, whereas in the US it has recouped and now overtaken its pre-crisis level. The poor dynamics of European investment in recent years are even more striking when expressed in terms of GDP (see Figure 2). In stark contrast with the US, private investment in Europe fell to below 19% of GDP as at the end of 2012, while in the US it had recovered to around 25% of GDP – 6 percentage points of GDP are a substantial difference and represent hundreds of USD billion per year.

Rebooting private sector investment and channelling investable funds to the right places on the continent is therefore a major challenge for policy makers in the wake of the severe recession of 2009.

Figure 1 - In 2014, per capita private investment down more than 15% from its pre-crisis peak in the Euro area (Q4:2007=100)



Source: Fred, Eurostat. Last data: Q4:2013.

Figure 2 - Private sector investment now less than 20% of Euro area GDP (% GDP)

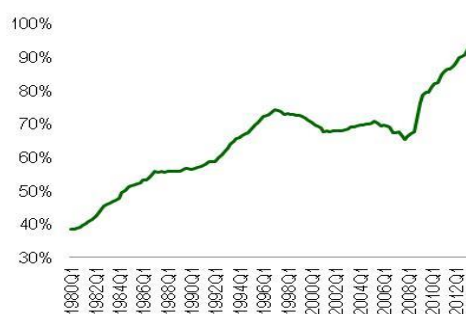


Source: Eurostat, Giannone et al. (2012). Last data: Q4:2013.

1.2 Public sector investment has resumed its secular downward trend

The prolonged cyclical weakness of private sector investment is compounded by adverse secular developments in public sector investment. With the crisis, public finances have been put under strain, as states have had to both offset the contractionary impact of the financial crisis, and spend money on their banking systems to avoid systemic contagion. A steep rise in the stock of public debt ensued (see Figure 3). To contain the dynamic accumulation of public debt, governments embarked on substantial consolidation efforts, leading to further declines in public investment.

Figure 3 - High public debt surely a constraint on public sector capex (% GDP)



Source: Fred, Eurostat. Last data: Q4:2013.

But the reduction in public sector investment is not new. In fact, it dates back to the 1980s (see Figure 4), a time when governments used to spend around 4% of their domestic product to finance investment using public funds. Taking a step back, it appears that the ratio of public investment over GDP has declined in three successive stages over the past 35 years – in the early 1980s, in the mid 1990s, and since the 2008 crisis, that coincided with episodes of strong fiscal consolidation. And over these 35 years, the downward trend has never reversed.

Figure 4 - Euro area public sector investment halved to 2% of GDP in 35 years (% GDP)

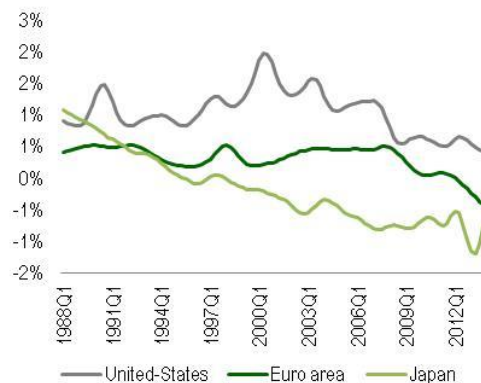


Source: Fred, Eurostat, Paredes et al. (2009), Giannone et al. (2012). Last data: Q4:2013.

This downward adjustment in public investment gave rise to much debate in the 1990s with a plethora of literature on the subject. By then, the marked decline in the ratio of public investment over GDP had become (already) a stylized fact for many industrialised economies, and economists started to look for systematic evidence on the relationship between public sector investment and economic growth (Aschauer (1989a,b), Gramlich (1994), Otto and Voss (1998)). But for some reason, the interest of macroeconomists was diverted and it is only now, with the risk of the “Secular Stagnation”

(Summers (2013)), that public investment has returned to the front of the stage. And it might become even more acute given the adverse demographic developments already taking place in the Euro area (see Figure 5).

Figure 5 – Demographic developments have become adverse also in the Euro area



Source: Fred, Eurostat. Working age population 15-64 years old, smoothed. Last data: Q4:2013.

1.3 Risks to the capital stock and potential growth in Europe

The decline in investment raises concerns that capital stocks, both public and private, could depreciate without proper replacement, fall to sub-optimal levels and possibly impair the potential rate of economic growth. There are well-known reasons behind this concern. First, the outstanding stock of private productive capital decays over time. If it is not properly replaced, production capacities shrink, inducing a suboptimal combination of production inputs (ie, capital versus labour versus technology). Second, with technological progress, capital stock becomes obsolete. If it is not updated, as the new technology becomes entrenched, relative productivity falls.

1.4 Complementarity of private and public investments boosts case for public investment

But the consequences of underinvestment go beyond the intuitive implications spelled out above. In particular, the *interaction* between the public and private provision of investment matters too. First, public and private sector investments might be more complements than substitutes – that is, an increase in public sector investment could boost, and not crowd out, private sector investment. Such might be the case if, for example, public investment in infrastructure or networks (energy, digital), improves the efficiency and allocation of private investment for specific firms, sectors, or projects. Second, the public sector might also invest in profitable areas where the private sector fails to channel funds because of market failures. Third, public investment could serve as a financial trigger for private sector financiers to engage in projects they would not have engaged in on their own, for example because of the projects' large size. Over its history, the European Investment Bank (EIB) has provided many concrete examples of such interactions.

The complementarity between public and private investment seems crucial to us, for if they are complementary and not substitutes, the case for boosting public sector investment would be even more compelling. So we found it worthwhile to check the idea.

The framework we use to assess this complementarity between public and private sector investment is a neo-Keynesian model with nominal and real rigidities that have been identified as empirically important, such as sticky prices and wages, habit persistence in consumption and adjustment costs in investment. A fraction of households is assumed to be excluded from financial markets (they can't borrow or save). This model is based on the New Area Wide Model developed by the ECB (2008),¹

¹ The NAWM is an open economy DSGE developed at the ECB. It is specified in an open economy setting, incorporating frictions such as local-currency pricing (giving rise to imperfect exchange

to which we add public capital as an input for the production of domestic intermediate goods.²

We find that, on the basis of Euro area data:

- The quantitative effect of public investment expenditure on output is of first order magnitude. The fiscal multiplier for public investment, ie the induced impact of an increase in government investment spending on real GDP growth – is 1.42 (see Table 1). That is, an increase in public investment worth 1% of GDP boosts GDP growth by 1.42% initially. The fiscal multiplier gains momentum

over the subsequent two years, and remains at 1.46 five years on. This is significantly more than the multipliers applicable to other fiscal instruments, as shown in Table 1: 1.38 for government consumption, 0.92 for social transfers, 0.55 for VAT cuts, and only 0.37 for employees' social contributions. Our findings suggest that governments might be well advised to be aware of the short- and longer-term implications of cutting investment, were they tempted to cut investment expenditure instead of adjusting other budget items for short-term consolidation purposes.

Public investment (...) leads to a persistent increase in output (...) and the capital stock of the economy

Conducting a sensitivity analysis on the elasticity of substitution between public and private capital, we find that in the medium term even

at the low end of the elasticity range, ie with a low complementarity between both types of capital, public capital has a crowding-in, and not a crowding-out effect on private investment. With an elasticity of substitution of 0.8 (a parameter of 0 corresponds to the case where public and private capital stocks are perfect complements,

rate pass-through in the short-run), and cost of adjusting trade flows.

² More precisely, physical capital in the economy is a Constant Elasticity of Substitution (CES) aggregate of public and private capital stocks. This physical capital is then combined with labour input and technology in a Cobb-Douglas production function.

and a parameter going to infinity corresponds to the case where they are perfect substitutes)³, the response of private investment to an increase in public investment is positive at the end of the 3rd year.

- Increased public investment always leads to a persistent increase in the output and in the total capital stock of the economy. This increase is more pronounced when the share of public capital in the overall capital stock of the economy is high to start with (ie, the dotted lines, as opposed to the plain lines).

Figures 6 to 8 – Response of output, private investment and total capital to a public investment impulse

Figure 6 - Positive output effects of increased public investment are persistent

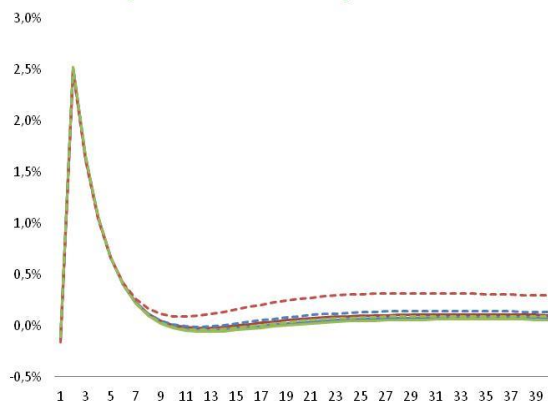


Figure 7 - Complementarity between private and public investment limit crowding-out in the short term

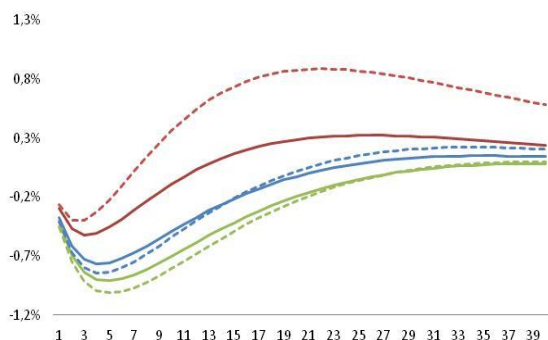
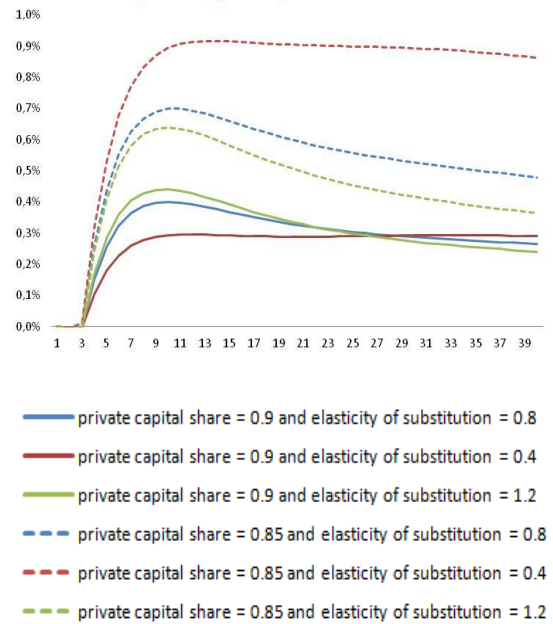


Figure 8 - An increase in public investment always yields higher capital stock levels



Source: Authors' calculations. The x-axis displays quarters after a one standard deviation shock to public investment.

Fiscal multipliers on public investment vary in the empirical literature. There is also growing evidence that the multiplier varies along the economic cycle, and becomes higher in recessions. Christiano et al (2011) even show that the fiscal multiplier can be above 2 in such circumstances. Combined with the longer-term arguments developed above, this reinforces the policy case to boost public investment. That case goes well beyond a short-term, purely Keynesian, growth impact. It also pertains to the long-term growth performance of the economy.

³ This figure is retained by Coenen, G., Straub, R. and Trabandt, M. (2012) but we have to note a particularly wide confidence interval of [0.2;1.6].

Table 1 – Fiscal multipliers by specific instrument for the Euro area

	Immediate	One year later	Two years later	Five years later
Government investment	1.42	1.53	1.57	1.46
Government consumption	1.38	1.4	1.41	1.38
Targeted social transfers	0.92	1	1.03	0.89
Taxes on consumption	0.55	0.8	0.87	0.71
Social contributions of employees	0.37	0.45	0.46	0.25

Source: Authors' calculations.

Note: The numbers shown in the table represent cumulative, net present value multipliers, ie, the sum of output variations up to the indicated year, divided by the sum of fiscal variations up to the indicated year, both discounted at the risk-free short-term interest rate in the neo-Keynesian model described in the text.

2. Private investment faces financial head- and tailwinds in the Euro area

2.1 Private investment is facing headwinds...

Investment financing is currently facing two headwinds: first, financial fragmentation, which still prevails in both the wholesale and retail markets. Second, the drastic reduction in bank lending, which is leaving a black hole in the way Europe finances growth. If these persist for too long, financial fragmentation and deleveraging-induced bank retrenchment will inhibit any pick-up in investment, and eventually lower potential economic growth.

2.2 ...but there are enough savings in the area...

Although vulnerable, investment in the Euro area is not a lost cause. In fact, the financial fundamentals are sound: the region has savings in excess (and a significant current account surplus), its aggregate fiscal capacity is sound, and many potential investors would put money on the table if they were given the tools and rules to operate optimally at a pan-European scale.

2.3 ...and the cost of financing is historically low

There are also opportunistic arguments in favour of raising public investment in the current environment. A very compelling one is the cost of funding, which is extremely low. The apparent interest rate on sovereign debt, computed for the Euro area, is hovering at around 3-4% (see Figure 9). For comparison, sovereigns had an apparent annual interest rate of 7-9% all through the 1980s. Five percentage points do make a difference. To finance 1% of Euro area GDP is around €50bn cheaper in 2014, in terms of saved annual interest repayment costs, than if we were facing the same financial conditions as back then.

Figure 9 - Euro area sovereign financing costs at historical lows (interest rate, %)



Source: Eurostat, Paredes et al. (2009). Apparent debt cost, defined as the ratio between interest payments and the outstanding stock of public debt.

3. Reshaping the landscape of public investors in the Euro area

From a political perspective, the economic and financial circumstances described above could be seen as a good opportunity for policymakers to take action to restart investment. A natural starting point to see how this could work is to look at the institutions currently in charge of channelling public funds towards investment, and see how they interact.

3.1 The national investment banks – history, investment coverage, governance and funding

There are many national development banks in Europe. Some are sizeable. All are well established and widely respected institutions. Some might own magnificent collections of art pieces, be located in prestigious historical buildings in their country's capitals, and have financial stakes in the "jewels" of national industries. Their senior staff might belong to the national elite, and their scope of activity be often associated with the economic and strategic interest of the nation they serve.

In the three largest economies in the Euro area, France, Germany and Italy, the institutions in charge of public investment share a common history in that they were all set up to fund expenditures related to a war (or to its aftermath). But each has developed along different lines in terms of style, structure, and resources.

In Germany, the Kreditanstalt für Wiederaufbau (KfW) was formed as part of the Marshall Plan in 1947, with the original mission of rebuilding Germany – but its role gradually evolved to a much broader agenda of capital market activities (mostly, but not exclusively, debt issuance), bank refinancing, project co-financing, the promotion of German Small and Medium Enterprises (SMEs), housing, export and municipal infrastructures. It is mostly domestically oriented, but also engages at the margin in the emerging world and in southern Europe. In terms of governance, the KfW Group

is 100% publicly owned by the German Federal State (80%) and German Länder (20%). The bulk of its financing activities is funded through debt issuance, for which it benefits from explicit government guarantees.

The French model shares a few similarities. In France, the Caisse des Dépôts et Consignations (CDC) was created in 1816 at a time of high public debt (when the French state was constrained to borrow at a high interest rate, a consequence of the Napoleonic wars). The legend goes that Louis XVIII set up the CDC in misfaith of the Banque de France, itself freshly created at the time, because he needed a bank to buy public debt instruments. But it is more likely that there was a need for an independent institution to protect public savings. The 1816 CDC founding law – still quoted on the CDC website today – provided CDC with a statute and governance that was meant to shield it from political cycles (thanks to a "Parliament's supervision and guarantee"). The Law was updated in the mid 2000s, but the spirit remained the same. Over time, CDC (and its banking arm for SMEs created in 2012, the Banque Publique d'Investissement (BPI France)), has become a major long term investor. It is involved in housing finance (a long tradition), infrastructure, regional finance, equity and loans financing. In terms of ownership structure, the CDC has close links with the French State. In turn, both the State and the CDC equally own BPI France. Its main sources of funding are postal and regulated retail savings products.

Italy's Cassa Depositi e Prestiti (CDP) was set up in 1850 by the Kingdom of Sardinia, before the unification of the country (again, the legend goes: as a follow-up to the costly 1849 war against Austria). Throughout its history, CDP has been through various forms of corporate structure and governance – having been successively a bank, a Directorate General at the Treasury, and, since 2003, a joint stock company (its current status). In terms of ownership, about 80% of capital is owned by the Ministry of Economy and Finance, 18.5% by banks, and 1.5% in preferred shares.

CDP's activities cover the financing of public investment and other public entities, infrastructure investment and the financing of public companies, as well as works, plants, networks and equipment intended for the supply of public services. It also controls the Fondo Strategico Italiano (FSI), which acquires stakes in firms of "significant national interest". Its main sources of funding are postal savings. CDP also issues bonds that are not guaranteed by the state.

Spain's Instituto de Crédito Oficial (ICO) is more recent. Its Articles of Incorporation were approved in 1999. It is a state-owned credit institution attached to the Ministry of Economic Affairs, with an independent management team. It finances itself on the national and international capital markets by issuing bonds that are guaranteed by the Spanish State (explicitly, irrevocably, and unconditionally). ICO Group also includes a venture capital entity.

3.2 A heterogeneous bunch

The brief descriptive summaries above show how national investment banks can differ in their investment profiles, governance, and funding structures. Additional stylized facts are summarized in Table 2 below, suggesting that:

- Public investment banks are already large relative to their countries' GDP. This is particularly the case in Italy (the size of CDP measured in total assets, €328bn, was worth around 20% of Italian GDP in 2012) and Germany (€512bn, 19% of German GDP).
- They are also significant lenders compared to the aggregate amount of loans issued by banks.
- They have grown at a steep pace since the start of the crisis in 2008, with their balance sheet size up by 30-90% between 2008 and 2012.

Table 2 - Public investors differ in size, scope to grow more for some

EUR bn (2012)	KfW	CDC	BPI France Financement	Cassa Depositi e Prestiti	ICO	European Investment Bank	Total
Balance sheet total (Total Assets, 2012)	497,5	393,7	29,9	305,4	115,2	508,1	1 850,0
Total loans	118,5	155,6	15,6	100,5	88,8	293,4	772,3
Country	Germany	France		Italy	Spain	European Union 1/	
Long-term credit rating	AAA/Aaa/AAA	AA/AA1/AA+		BBB/Baa2/BBB+	BBB/Baa2/BBB+	AAA/Aaa/AAA	
Memo							
Nominal GDP (2012)	€ 2 666	€ 2 032		€ 1 567	€ 1 029	€ 12 960	
MFI Loans to NFC	€ 909	€ 876		€ 875	€ 729	€ 4 674	
Balance sheet/GDP	19%	21%		19%	11%	4%	14%
Total loans/GDP	4%	8%		6%	9%	2%	6%
Total loans/MFI Loans to NFC	13%	20%		11%	12%	6%	17%

Source: Bloomberg, Annual Reports, Authors' calculations. ICO: Instituto de Crédito Oficial. MFI: Monetary and Financial Institutions.

NFC: Non-Financial Corporations. Note 1: Except MFI Loans to NFC, for which the aggregate field is the Euro area. Note that in the case of CDP, total loans include loans to banks.

Note 1: Except MFI Loans to NFC, for which the aggregate field is the Euro area.

3.3 The European Investment Bank (EIB)

The idea of pooling resources to foster investment in Europe is not new. It has been built into the European institutional framework for a long time, starting with the creation of the EIB in 1957 with the Rome Treaty. The EIB is somewhat similar to the German KfW in terms of its capital ownership and specialisation. The EIB belongs to the 28 Member States of the European Union, each of which holds EIB capital. The EIB is an important bond issuer. Financial resources raised in the markets are used to finance projects mostly in Europe in the fields of SMEs, innovation and skills, strategic infrastructures, and climate change. Outstanding EIB loans increased by 70% between 2008 and 2012, but its balance sheet remains smaller than that of the national banks, at least when measured in relation to Euro area GDP (it is worth 4% of EU domestic product - around €560bn).

There are fundamental differences that make it hard to compare the EIB with its national peers:

- The EIB is by conception an investment bank. Most of the national development banks were conceived as the funding arms of governments. They might have become closer in spirit to an investment banking model, sometimes through the creation of specific financing entities, but their original purpose remains prominent.
- The EIB was born with Europe in mind. It is “the European Union’s bank” established by Treaty.⁴ Its main tasks are to “promote EU goals” by providing funds, guarantees and advice to finance long-term projects. By contrast, national investment banks have been shaped in reference to national territories. And even though the EIB is

The ground might now be ready for a more profound institutional change to the public investment banking constellation

owned by EU Member States and represents their interests, its ultimate objective is linked to furthering EU policy goals. So the EIB is expected to be immune from national political cycles.

3.4 Joint initiatives are many, but still sporadic

The formidable rise in recent years of the EIB mirrors that of the national entities. And in parallel, a number of key initiatives have been launched to “think jointly” about long-term investment in Europe. Bassanini and Reviglio (2014) provide a very nice narrative of the progressive steps that led to the creation of key initiatives. The Long Term Investors’ Club (LTIC) was created back in 2009. In 2010, the experimental “Project Bond Initiative” was set up. And more recently, initiatives by Think Tanks such as Eurofi and Confrontations Europe around public, long-term investment, have been geared up. Political initiatives have also flourished over the past couple of years.

The European Commission itself has been quite proactive, with the commission of key reports – a Green Paper on the long-term financing of the European economy (2013), and a “Finance for Growth” report (2014).⁵ The 2020 European Fund for Energy, Climate Change and Infrastructure (“Marguerite”) was established to make capital-intensive infrastructure investments. And in 2013, the Commission proposed to launch a long-term investment fund (ELTIF). But these proposals fall short of creating a coherent and coordinated system across all actors.

4. A new architecture: the Eurosystem of Investment Banks (ESIB) and the Fede Fund

⁴ The Statute of the EIB was first established by the Treaty on European Union and the Treaty on the Functioning of the European Union (Articles 308 and 309 and Protocols N. 6, 7 and 28 annexed to these Treaties). Under Article 16.5: “The amount of loans and guarantees granted by the Bank shall not exceed 250% of its subscribed capital”.

⁵ A High Level Expert Group (HLEG) was set up in May 2013 by the Economic and Financial Committee (EFC). It published a report in December that year.

The development of public investment banks and the intensification of joint initiatives over the past few years suggest that the ground might now be ready for a more profound institutional change to the public investment banking constellation. The many long-standing public investors in the Euro area could become collectively more effective by working as a “system” together, to improve failing levels of investment. But conceiving a “system” that preserves the strengths of each national model, while delivering efficient outcomes at the continental level, is challenging.

Despite these challenges, we thought it worth the attempt and propose the creation by treaty of a Eurosystem of Investment Banks (we suggest ESIB as an acronym, by analogy to the ESCB, the system created by national central banks and the ECB within EMU). The ESIB would enshrine cooperation between those institutions in European Law. It would also statutorily bring public development banks and private sector investors together.

The ESIB would consist of a central entity and the national investment banks (NIBs) of the EU countries that have joined EMU. For the system to work, the first conditions to fulfil are to:

- Define the central entity. Subject to statutory and treaty changes (and these changes might need to be substantial – see the current treaty articles setting up the EIB in Box 1), a rechristened European Investment Bank (EIB) could play that role. But the EIB would need to acquire a truly federal structure, and act as an investment fund (hence we propose the new name “Fede Fund”).
- Define the “common denominators” that each member state’s NIB would need to meet. As a

starting point, an NIB must actually exist which is not currently the case everywhere in EMU.

4.1 The political and institutional merits of a Eurosystem of Investment Banks (ESIB)

An ESIB around a Fede Fund would mark a clear political commitment to European integration. And now, given the post-crisis era, could be a good political opportunity to push for this. It would pool financial resources across Euro area member states without involving national budgetary processes. Instead of looking at countercyclical spending, it would finance structural, long-term, growth-enhancing, and stability-promoting public and private investment. As such, it would resonate with recent recommendations made by the IMF and the 2014 Australian G20 presidency (warning against the generalised decline in investment ratios in the aftermath of the crisis - IMF (2014); and arguing for a revival of public-private investment to support global growth - G20 (2014)).

The ESIB would display a specific mix of characteristics: a truly European scope and risk diversification (assets and liabilities); the ability to encompass a diversified ecosystem of investment cultures; balanced incentives between economic/financial returns and environmental/social standards; and independence from national politics. Within the ESIB, the Fede Fund could effectively facilitate the cross-border operation (and co-operation) of NIBs while preserving leeway in their statutes and prerogatives.

Looked at in the context of the post crisis environment, an ESIB would be able to foster progress in a whole range of areas, as suggested in Table 3.

Table 3 - An ESIB would help addressing various issues

	ESIB / Fede Fund	ECB / Monetary Policy	ESM	European Policies	National Policies	Market Initiatives
Address financial market fragmentation	**	***		*		*
Create a benchmark euro area yield curve	***		**	**		**
Reduce information asymmetry and the cost of due diligence for investment	***			***	**	**
Encourage the passporting, cross-border acquirability of assets	**			***	**	***
Reduction of barriers for cross-border investment (tax, regulation, legislation)				***	***	*
Effective take-off of bond market for infrastructure projects	***	**	**	**	**	**
Support SME financing	**	***		**	**	
Foster good, benchmark securitisation	*	***		**	**	**
Offset the effect of bank/insurance regulations and accounting standards on the availability of financing	*	***	*			*
Offload banks balance sheets to preserve their role in financing	*	***	**			
Encourage long-term investment by insurance companies	***			***	*	
Foster the development of pan-european retail savings products	**			***		***

Source: Authors. One star means "could help a little". Three stars means "could help a lot".

5. New mandate, new governance for public investment in Europe

5.1 Mandate

Enshrined in the Treaty, the ESIB mandate could simply be to promote growth, well-being and employment in Europe. That mandate would be, by definition, a political choice emanating democratically from the people of the Euro area member states.

5.2 Conditionality

What would be the common purpose of the ESIB? As stated above, its primary aim would be to mobilise public and private funding towards financing jobs and growth in Europe. To do so in an economically sustainable and financially profitable way, it would need to grant access to its funding subject to certain conditions. Specifically, the financing of

activities in the public sphere would, where necessary, be made conditional on firm commitments to implementing growth-enhancing structural reforms and economic policies. Any investments (co-)made by the ESIB would also generally integrate high environmental and social standards, as well as strong and politically independent governance.

5.3 Investment criteria

Choosing the investment criteria is a fundamental, strategic choice that needs to be robust through time. If the ESIB is to fulfil the mandate of promoting long-term growth, well-being and employment in Europe, then its investments would need to accord with one or several of the following criteria, but not in a mutually exclusive way:

Enshrined in the Treaty, the ESIB mandate could simply be to promote growth, well-being and employment in Europe

- Be long-term
- Have a strategic dimension
- Foster European integration
- Serve as an anchor for non-investment grade countries
- Structurally help countries with impaired socio-economic environments

5.4 Investment areas

It goes beyond the scope of this paper to argue on the specific areas conducive to sustaining long-term potential growth, well-being and employment in Europe. But in light of current debates, it seems that the top four areas could be:

- Energy and climate change
- Human capital and innovation
- Infrastructure
- Digital

Obviously, strategic investment areas are very likely to change over the coming decades. We only have to look at how the form taken by public investment has diversified over the last thirty years, from being almost exclusively geared towards road and railway infrastructure, to see this. It is therefore important to draft ESIB statutes and its mandate so that it is not restricted in the areas it covers and that it can redefine periodically its priorities, while keeping in line with its longer term objectives of potential growth, well-being and employment.

5.5 Financing and the role of the private sector

An appropriate structure is needed for the ESIB to fulfil its mandate while remaining economically and financially profitable.

As a core principle, all Euro area member states would be expected to become ESIB members, as would all EU institutions, with all the related rights and obligations this entails. They would irrevocably and unconditionally provide a predetermined contribution to the Fund's equity,

possibly set in accordance to their GDP weight in the Euro area. The equity thus raised would be handled as an endowment by the Fund.

But additional entities could, and in fact should, also be associated with the Fede Fund. As a central entity to the ESIB, The Fede Fund would seek partnerships with the broadest possible range of investors, not just institutional investors and pension funds, but also loan funds, debt funds, venture capital, private equity, with even explicit clauses to incentivise investor classes that tend to be under-represented (such as business angels or corporates).

The private sector could be involved in three ways: with an equity stake, as debt holder, or as co-investor. None should be *a priori* excluded:

Private shareholders would (...) counterbalance the political influence that comes with public sector ownership

Fede equity shareholders. Private shareholders would be necessary to ring-fence investment decisions from political influences. Of course, sovereign members and public entities of the Euro area could be, but would not necessarily

be, the majority shareholders in the Fund. But private shareholders would serve to counterbalance the political influence that comes with public sector ownership. To that end, we would not exclude the share of private shareholders stake as being close to or above 50%.

- Fede bond holders. As the central entity of the ESIB, the Fede Fund would be entitled to issue debt. As holder of that debt, the private sector – ie, potentially the global investors community – would thus be involved in financing ESIB investments. After all, the spending capacity of European states is likely to remain fairly constrained for the foreseeable future, so leveraging on private funding would be necessary to fund investment at an economically relevant scale.

As a large multilateral borrower, with substantial sovereign ownership and guarantees, the Fund would be likely to display high credit ratings allowing it to raise funds at advantageous rates, as is currently the case with EIB issues. The

Fund should therefore be able to raise significant resources on international capital markets through bond issues.

Bearing in mind the size of the investment needs discussed in the first part of the paper, and taking as benchmarks the current balance sheet sizes of the NIBs, a reasonable target for the Fede Fund balance sheet would be 10% of the Euro area GDP (around €1tn as of 2013). This order of magnitude would be consistent with a return of public investment to 4% of Euro area GDP (from around 2% as it currently stands). This 2% increase would finance 50% of the Fede Fund capital. The remaining 50% would come from private sector shareholders. The resulting Fede Fund capital would amount to 4% of Euro area GDP. Assuming a leverage of 2.5 yields a balance sheet size of 10% of Euro area GDP. This leverage ratio is even in line with the Statute of the EIB (as quoted above).

- ESIB co-investors. We do not see any reason to spell-out *ex ante* limits on the modalities of co-
Figure 10 - The ESIB governance: immune to political hold-ups

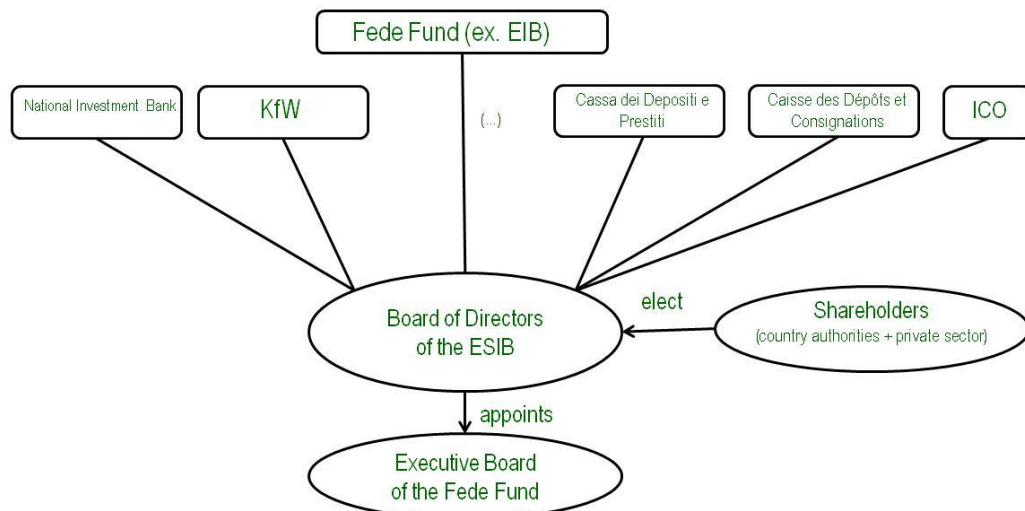
investment schemes between the ESIB and private investors. The very diversified range of instruments and co-investments already implemented by the EIB and NIBs suggests that biodiversity should be sought not fought.

So to sum-up: Fede Fund public shareholders would come from the Euro area, investment areas would be spread over the EU 28 region, and debt holders would be the global investment community.

5.6 Ownership and governance

On that basis, a possible architecture for the ESIB is depicted in Figure 10.

Architecture of the proposed Eurosystem of Investment Banks (ESIB)



Source: Authors.

Given its mandate, the ESIB would be structured around a Board of Directors, elected by its shareholders, ie, sovereign members, public entities and private sector entities (see Figure 9).

Voting rights would be set in line with the capital key of the Fede Fund's shareholders. Subject to these weights, a number of directors might, but need not be heads of National Investment Banks

or Ministers of Finance. But other directors would also be elected purely by the private Fede shareholders.

In turn, within the ESIB, the Board of Directors would appoint the Executive Board of the Fede Fund, to which most powers would be delegated. The Board of Directors would also lay down the principles for the investment and credit policy of

the ESIB (discussed above as “investment areas”). It would delegate decisions related to the granting of funds and raising of loans to the Fede Fund’s Executive Board.

Box 1 - Articles of the Treaty (TFEU) relevant to the EIB

Article 308 (ex Article 266 TEC)

The European Investment Bank shall have legal personality.

The members of the European Investment Bank shall be the Member States.

The Statute of the European Investment Bank is laid down in a Protocol annexed to the Treaties. The Council acting unanimously in accordance with a special legislative procedure, at the request of the European Investment Bank and after consulting the European Parliament and the Commission, or on a proposal from the Commission and after consulting the European Parliament and the European Investment Bank, may amend the Statute of the Bank.

Article 309 (ex Article 267 TEC)

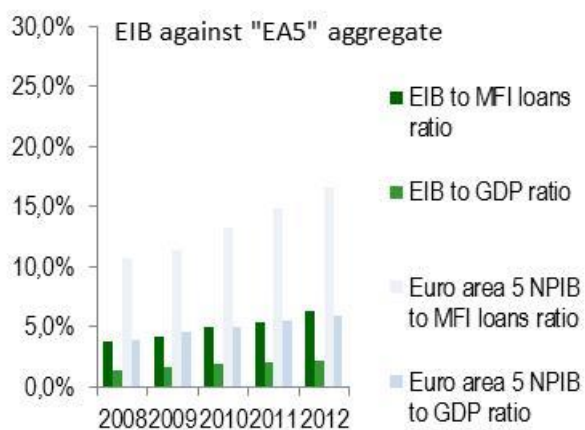
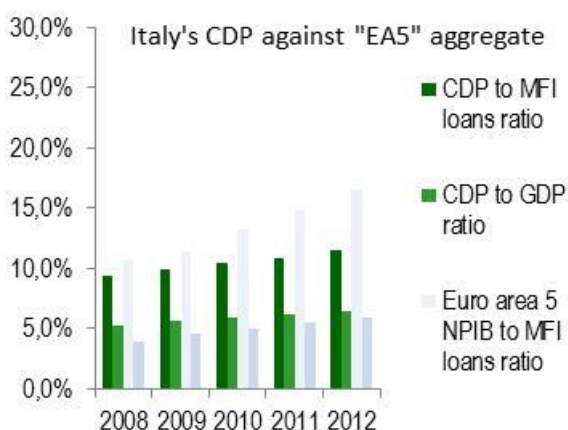
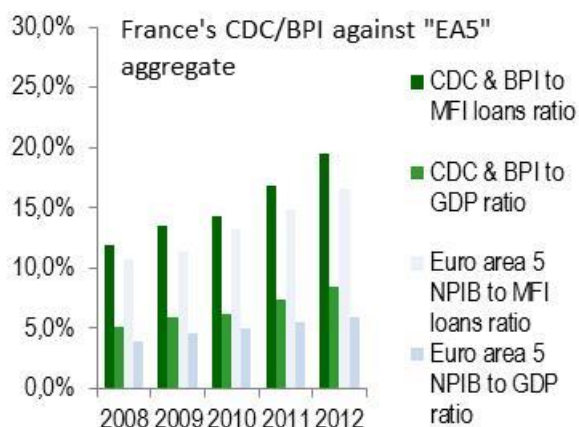
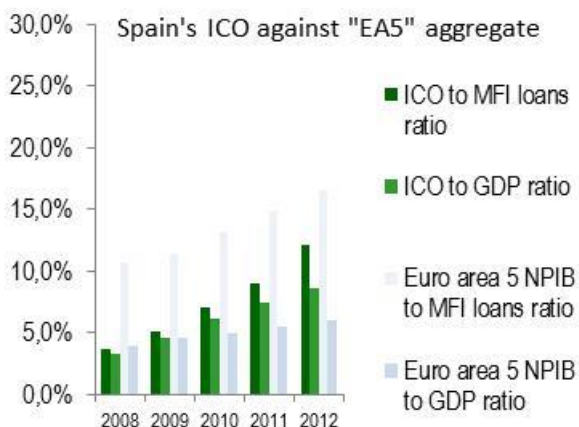
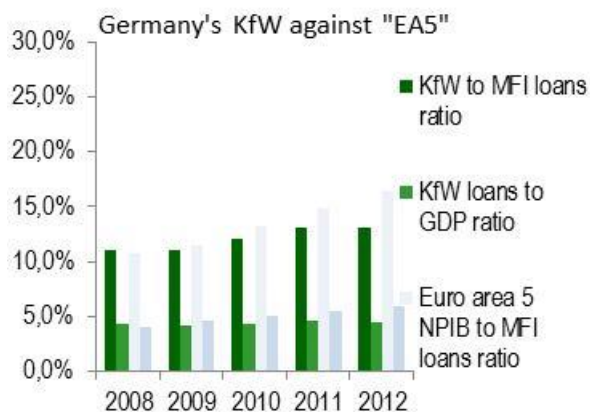
The task of the European Investment Bank shall be to contribute, by having recourse to the capital market and utilising its own resources, to the balanced and steady development of the internal market in the interest of the Union. For this purpose the Bank shall, operating on a non-profit-making basis, grant loans and give guarantees which facilitate the financing of the following projects in all sectors of the economy:

- (a) projects for developing less-developed regions;
- (b) projects for modernising or converting undertakings or for developing fresh activities called for by the establishment or functioning of the internal 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;
- (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.

In carrying out its task, the Bank shall facilitate the financing of investment programmes in conjunction with assistance from the Structural Funds and other Union Financial Instruments.

Box 2 - Financing capacity of the largest public investment banks in the Euro area

EUR bn	NPIB loans outstanding	Country public loans to Country MFI loans Ratio	Country public loans to Country GDP	Country MFI Loans to NFC	Country GDP
	KfW	KfW to MFI loans ratio	KfW loans to GDP ratio	Germany	
2008	104	11,0%	4,2%	947	2 474
2009	99	11,0%	4,2%	902	2 374
2010	108	12,1%	4,3%	894	2 495
2011	118	13,0%	4,5%	907	2 610
2012	118	13,0%	4,4%	909	2 666
	CDC & BPI	CDC & BPI to MFI loans ratio	CDC & BPI to GDP ratio	France	
2008	100	11,9%	5,2%	846	1 933
2009	111	13,5%	5,9%	828	1 886
2010	120	14,4%	6,2%	839	1 937
2011	148	16,8%	7,4%	878	2 001
2012	171	19,5%	8,4%	876	2 032
	CDP	CDP to MFI loans ratio	CDP to GDP ratio	Italy	
2008	82	9,3%	5,2%	880	1 575
2009	85	9,9%	5,6%	861	1 520
2010	92	10,5%	5,9%	879	1 552
2011	99	10,9%	6,2%	905	1 580
2012	101	11,5%	6,4%	875	1 567
	ICO	ICO to MFI loans ratio	ICO to GDP ratio	Spain	
2008	36	3,7%	3,3%	969	1 088
2009	47	5,1%	4,5%	933	1 047
2010	65	7,1%	6,2%	915	1 046
2011	78	9,0%	7,4%	861	1 046
2012	89	12,2%	8,6%	729	1 029
	EIB	EIB to MFI loans ratio	EIB to GDP ratio	Euro area	
2008	176	3,8%	1,4%	4 673	12 549
2009	203	4,2%	1,7%	4 790	11 816
2010	233	5,0%	1,9%	4 682	12 337
2011	258	5,5%	2,0%	4 727	12 711
2012	293	6,3%	2,3%	4 674	12 960
	Euro area 5 NPIB	Euro area 5 NPIB to MFI loans ratio	Euro area 5 NPIB to GDP ratio	Euro area	
2008	499	10,7%	4,0%	4 673	12 549
2009	546	11,4%	4,6%	4 790	11 816
2010	618	13,2%	5,0%	4 682	12 337
2011	700	14,8%	5,5%	4 727	12 711
2012	772	16,5%	6,0%	4 674	12 960



Source: Bloomberg, national reports, authors' calculations. "EA5" represents the sum of the KfW, ICO, CDC, FE, BPI, CDP, EIB capacities in relation to Euro area GDP.

References

- Aschauer, D. (1989a), Is public expenditure productive? *Journal of Monetary Economics*, vol.23, pp.177-200.
- Aschauer, D. (1989b), Does public capital crowd out private capital? *Journal of Monetary Economics*, vol.24, pp.171-188.
- Barbiero, F. and Z. Darvas (2014), In sickness and in health: protecting and supporting public investment in Europe, *Bruegel Policy Contribution* 2014/02.
- Bassanini, F. and E. Reviglio (2014), Long-term investment in Europe: the origin of the subject and future prospects, *Mimeo prepared for the Italian Embassy Conference on 16 May*.
- Bayik, N. (2014), L'investissement public : définition et mesures. *CDC conjoncture n°44, Mai 2014*.
- Coenen, G., Straub, R. and Trabandt, M. (2012), Fiscal policy and the Great Recession in the Euro area *American Economic Review*, vol.102, pp.71-76.
- Christiano, L., Eichenbaum, M. and Rebelo, S. (2011). When Is the Government Spending Multiplier Large? *Journal of Political Economy*, vol.119, pp.78-121.
- Christoffel, K., Coenen, G. and Warne A. (2008), The New Area-Wide Model of the Euro area : A micro-founded open-economy model for forecasting and policy analysis, *ECB Working Paper n°944*.
- Eurofi (2014), Documents prepared for the Athens Eurofi Seminar under the Greek EU Presidency on 31/3-1/4/2014.
- European Investment Bank (2013), Investment and investment finance in Europe, report edited by Atanas Kolev, Tanja Tanayama and Rien Wagenvoort.
- European Commission (2013), Proposal for a European long-term investment fund.
- European Commission (2013), Green Paper on the long term financing of the European economy.
- Giannone, D., Henry, J., Lalik, M. and Modugno, M. (2012), An area-wide real-time database for the Euro area, *Review of Economics and Statistics*, vol.94, pp.1000-1013.
- Giovannini and Moran (2013), Finance For Growth, *Report of the High Level Expert Group on SME and Infrastructure Financing*.
- G20 (2014), A G20 agenda for growth and resilience in 2014, *Australian Presidency*.
- Gramlich, E. M. (1994), Infrastructure investment: a review essay, *Journal of Economic Literature*, vol.32 (2) pp.1176-1196.
- Herzog, P. (2014), *Europe, réveille-toi!*, Editions Le Manuscrit
- IMF (2014), Recovery Strengthens, Remains Uneven, *World Economic Outlook*, April.

Otto, G. D. and Voss, G. M. (1998), Is public capital provision efficient? *Journal of Monetary Economics*, vol.42, pp.47-66.

Summers L. (2013), Speech at the IMF Economic Forum, 8th November.

Uhlig, H. (2010), Some fiscal calculus, *American Economic Review*, vol.100, pp.30-34.

Note

Natacha Valla and Thomas Brand are both affiliated with CEPII. Sébastien Doisy is affiliated with Fonds de Réserve pour les Retraites (FRR). This Policy Brief should not be reported as representing the views of the FRR. This version is final, but its formatting might be harmonised with previous issues of the Policy Brief series in due course. Corresponding author: Natacha Valla, natacha.valla@cepii.fr, natacha.valla@eui.eu. We wish to thank José Abad, Michel Aglietta, Philippe Altuzarra, Pierre-Olivier Beffy, Thomas Friedberger, Alberto Gallo, Philippe Herzog, Jay Nirsimloo, Sébastien Jean, Christian Kopf, Isabelle Laudier, Francesco Leone, Arnaud Marès, Stefano Micossi, Ashok Mody, Francesco Papadia, Thomas Philippon, Jean Pisani-Ferry, Richard Portes, Edoardo Reviglio, Benjamin Richard, Ludger Schuknecht, Thomas Steinberger, Shahin Vallee, Thomas Westphal, for very useful discussions or comments on the original “Fede Fund” idea, circulated as a concept note on 8 April 2014.

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