



# Project Bond Initiative

## Project selection the key to success

September 25, 2013

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The economic and financial crisis in Europe has led to a dwindling of the options for funding infrastructure projects. Traditional funding instruments have become less important in the course of the crisis. Public-sector debt has thus increased, which has severely restricted the volume of tax revenues available for infrastructure funding. In addition, it has become more difficult to obtain funding in the form of bank loans due to more stringent capital adequacy requirements.

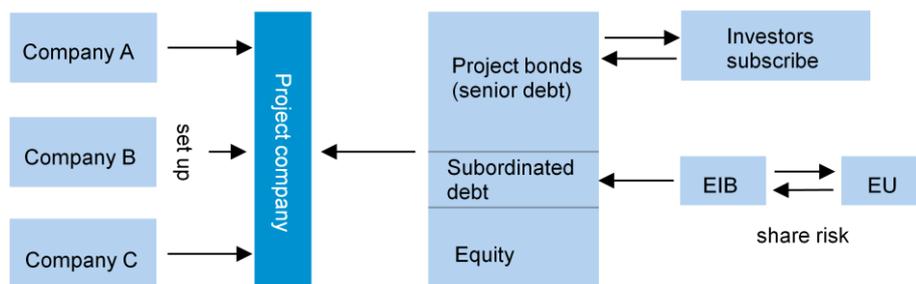
While funding conditions have deteriorated, a huge amount of investment needs to be made in infrastructure. The European Commission estimates that investments of up to EUR 2 tr are required in transport, energy and IT infrastructure in the EU by 2020.

The Project Bond Initiative (PBI) developed by the European Commission and the EIB is an instrument that is intended to help free up the investment logjam. The primary objective of the PBI is to persuade private-sector institutional investors to fund infrastructure projects. In order to achieve this the EIB provides a subordinated debt portion of the project financing. This boosts the credit rating of the project bonds to a level that allows institutional investors to invest.

Only commercially feasible projects that are characterised by a predictable income structure can be considered for the PBI. In the pilot phase up to EUR 4.6 bn of funding is to be mobilised for infrastructure projects. Initially transport projects are likely to dominate.

Involving private-sector investors in infrastructure financing is to be welcomed from a market order point of view. The cyclical effects of the PBI are, by contrast, negligible, as the desired investments are currently too small. The PBI is also likely to be of little help in reducing the economic disparities between the EU's individual regions. After all, in most regions with poor infrastructure the number of commercially feasible infrastructure projects tends to be low.

Project Bond Initiative



Sources: European Commission, EIB, DB Research schematic interpretation



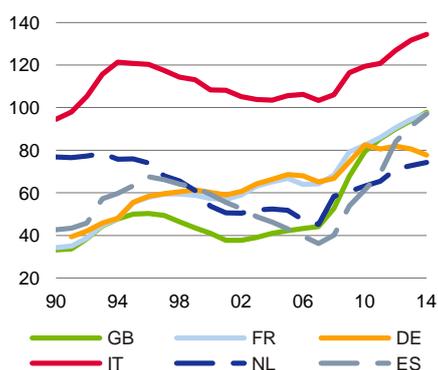
## Traditional infrastructure funding instruments under pressure

The continuing financial, economic and debt crises in the EU are taking their toll in many areas of the European economy. The infrastructure financing segment is also being directly affected, with many of the traditional sources of funding being utilised much less frequently due to the crisis:

### Public-sector debt rising

1

Public debt according to the Maastricht criterion, % of GDP

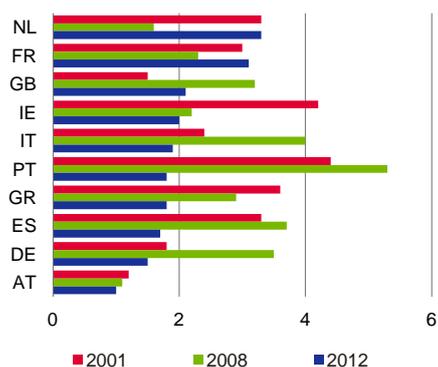


Source: OECD

### Public-sector investment at a low level

2

Gross public investment in fixed assets, % of GDP



Source: Eurostat

- Public expenditure is one of the most important sources of infrastructure funding almost everywhere. Even before the crisis, however, huge debts meant that the public sector was facing a major challenge to reconcile public spending on infrastructure with the rising demand. Public-sector investment has trended downwards in recent years. According to Eurostat, the ratio to GDP of public-sector gross fixed investment, which of course comprises more than the expenditure on commercial infrastructure, was lower in 2012 than in 2001 in most western and southern European countries. In 2008 and 2009 it did peak temporarily in several EU member states on the back of stimulus programmes. Since then, however, gross investment in fixed assets has fallen as a share of GDP in all the countries surveyed here (see chart 2).

The challenge facing the public purse of procuring sufficient funds for infrastructure is confirmed by a recent OECD survey. According to the survey, the share in GDP of (predominantly public-sector) spending on transport in western Europe has fallen since 1995 from more than 1% to 0.85% at last count (2011).<sup>1</sup> In the next few years, too, public-sector austerity measures will probably prevent or at least hinder a lasting increase in transport infrastructure investment.

- Infrastructure financing via private-sector banks was also made more difficult by the financial crisis and stricter regulation of the financial sector. Higher capital requirements for banks to comply with Basel II and Basel III as well as the long-term funding structures of infrastructure projects have played a part in the decisions by numerous banks to curtail or end their exposure to the infrastructure financing business.<sup>2</sup> Of late the bank funding environment has eased slightly. All the same, average funding costs are higher than before the crisis on account of regulation as well as a reassessment of risk by the banks.
- In the past, infrastructure bonds held by institutional investors such as insurance companies or pension funds played an important part in infrastructure funding. The risk of a bond default was frequently underwritten by specialist bond insurers (called monolines especially in the North American market), who received an insurance premium for this. This guarantee boosted the rating of the project bonds, often making it possible for institutional investors to invest in them at all. This type of funding has become much less important in the course of the crisis. Several bond insurers have exited the business after suffering losses during the US real estate market crisis.<sup>3</sup> This type of infrastructure funding played a smaller part in Europe in the past than in North America, though.<sup>4</sup> As such, the

<sup>1</sup> See OECD International Transport Forum (2013). Spending on Transport Infrastructure. Trends, Policies, Data. Paris. In North America the share is only 0.6%.  
<sup>2</sup> See Freshfields Bruckhaus Deringer (2012). From policy to proof of concept, and beyond. Outlook for infrastructure 2012.  
<sup>3</sup> See AFME and Oliver Wyman (2013). Unlocking funding for European investment and growth. An industry survey of obstacles in the European funding markets and potential solutions. Brussels, London.  
<sup>4</sup> See European PPP Expertise Centre (2012). Financing PPPs with project bonds. Issues for public procuring authorities.



European infrastructure market has not been overly affected by the waning of this instrument.

There is certainly an infrastructure market for private investors that has been hit less hard by the crisis: the market for direct investments by strategic investors in individual infrastructure projects; these investors can procure debt capital via a variety of sources. One important precondition for direct investments in which the private sector operates as the sole investor is the rule that the projects yield a profit. In addition, the responsible level of government also has to allow such a participation or not prevent this via regulation. Larger airports and seaports as well as power plants or – in the social infrastructure segment – also hospitals are examples of such investments. In many other investment areas the economic and regulatory prerequisites do not currently exist and often also there is no political will for the direct private participation of companies in infrastructure projects.

### Strong demand for investment requires new funding instruments

Investment requirements in the EU estimated at up to EUR 2 tr until 2020

The instruments for funding infrastructure have thus become less effective. At the same time there is a huge need for investment in this area. The European Commission estimates that up to EUR 2 tr needs to be invested in the EU in transport, energy and IT infrastructure by 2020.<sup>5</sup>

The traditional activities of the EU include promoting the expansion of (cross-border) infrastructure in Europe. To this end the EU has in the past adopted a variety of measures and drawn up diverse programmes. For instance, the European Cohesion Fund, the European Fund for Regional Development or the Trans-European Networks (TEN; applies to transport and energy projects) programme serve to expand infrastructure. These measures are, however, based on EU budget funding, which is why they alone cannot solve the problems outlined above pertaining to limited public-sector budgets. The European Investment Bank (EIB) has also long been involved in the financing of infrastructure projects in the EU by providing loans or guarantees.

### The EU Project Bond Initiative: Revitalising the capital market for financing infrastructure projects

Private-sector investors to be won over as a source of infrastructure funding

For all the above-mentioned programmes private equity and debt capital markets are not a major factor. The EU has deemed this a shortcoming. It has therefore attempted to develop an instrument which despite the economic crisis in Europe can persuade private-sector institutional investors to finance infrastructure projects. The basic idea is that, on the one hand, there are sufficient long-term investors who expect moderate returns, while, on the other hand, major investments need to be made and there are sufficient infrastructure projects with easily calculable risk which fail to be implemented mainly because of public-sector budget constraints. The quest was thus for an instrument that could bring both sides together.

The product of these deliberations is the EU Project Bond Initiative. The idea of such an EU Project Bond Initiative (PBI) was first proposed by European Commission President José Manuel Barroso in his speech on the State of the

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<sup>5</sup> See EIB (2012a). An outline guide to Project Bonds Credit Enhancement and the Project Bond Initiative. Luxembourg.



Union in September 2010.<sup>6</sup> Following a series of further negotiations the pilot phase of the PBI was finally commenced in November 2012.<sup>7</sup>

#### How the Project Bond Initiative works

#### Separation of debt capital portion into senior and subordinated tranches

How is the financing of infrastructure projects generally supposed to function within the PBI framework? One or more firms set up a project company, whose purpose is the planning, construction, operation and financing of an infrastructure project (see chart on the cover page). The project company is endowed by the project initiator with capital that can amount to say 20% of the expected project costs. The rest of the project costs are debt financed. This debt capital is divided into a senior tranche and a subordinated tranche.

- The senior tranche is provided by private institutional investors (e.g. pension funds and insurance companies) for whom infrastructure projects with an easily predictable income structure (for example via user fees or availability charges) basically represent an asset class with an attractive risk/return profile.
- The subordinated tranche is provided by the EIB in the form of a Project Bonds Credit Enhancement (PBCE); it may not exceed 20% of the total project value. A basic distinction has to be drawn between two options here: firstly, the EIB can provide a loan from the outset (funded PBCE), which means that less debt capital has to be raised from private investors. Secondly, it is possible for the EIB to provide a contingent credit line for an already fully financed project (unfunded PBCE). This could be drawn upon, for example, if there is an overrun in construction costs or if the income from the infrastructure project is temporarily insufficient to service the subordinated debt of the private investors (interest and repayment; see below).

#### Credit rating of the projects is to be enhanced

#### EIB involvement reduces risk for institutional investors

Both versions of the PBCE provided by the EIB are intended to enhance the risk/return profile of an infrastructure project to such a degree that institutional investors consider themselves able to invest in the project. It is invariably the case that if there are payment difficulties with an infrastructure project it is always the financial claims of the institutional investors that are met first, which reduces their project risk. For investors the PBCE functions like a “first loss piece” that they do not have to cover. With regard to the rating of the project bonds, the European Commission and the EIB are seeking to obtain at least single-A. This is an important threshold for institutional investors whose investment policies often require such a rating for them to be allowed to invest in infrastructure projects (or other assets) at all.<sup>8</sup>

The two forms of EIB involvement – funded and unfunded PBCE – differ in their effect on the character of the projects. With funded PBCE the loan is provided by the EIB from the outset. It is therefore argued that cost overruns during the construction phase that exceed the total capital raised cannot be absorbed as well as they are with unfunded PBCE. This is because with unfunded PBCE if cost overruns occur the contingent credit line can be drawn upon; this means that more funding is available overall.<sup>9</sup> It is important to mention that the credit

<sup>6</sup> See European Commission (2012). The pilot phase of Europe 2020 Project Bond Initiative (reissue). Brussels.

<sup>7</sup> See European Commission and EIB (2012). EU-EIB Project Bond Initiative launched with start of pilot phase. Brussels.

<sup>8</sup> See European PPP Expertise Centre (2012). Financing PPPs with project bonds. Issues for public procuring authorities.

<sup>9</sup> See Zunt, Dominik (2013). EU 2020 Project Bonds Update.



line can be drawn upon by the project company as needed on multiple occasions during the entire lifetime of the project, which of course is predicated on repayment being made by the project company in the intervening period.<sup>10</sup>

#### PBI funding still modest in the pilot phase

PBI to mobilise up to EUR 4.6 bn for infrastructure projects in pilot phase

For the pilot phase of the Project Bond Initiative the EIB will be provided with EU funds totalling EUR 230 m from the current Multiannual Financial Framework expiring at the end of 2013 in the form of a capital contribution. For the time being it is thus a matter of existing budget funds and not additional monies. These funds have been reallocated from the unused budget lines of other EU programmes (for example, the TEN programme). The EIB expects that this capital contribution will enable it to provide PBCE funding of around EUR 750 m. This in turn is intended to mobilise up to EUR 4.6 bn of financing from institutional investors. In all – that is the hope of policymakers and the EIB – the EUR 230 m from the EU budget would thus be leveraged by up to 20 times by the PBI. Compared to the above-mentioned investment required in the EU of EUR 2 tr by 2020 this would initially represent nothing more than a drop in the ocean. It should certainly be noted that the PBI is only in its infancy.<sup>11</sup> From 2014 the PBI is to be fully integrated into the EU's next multiannual financial framework (2014-2020). According to more recent information, the projects currently in the pipeline are equivalent to PBCE funding of EUR 1.4 bn.<sup>12</sup>

The pilot phase of the PBI runs – in budgetary terms at least – until the end of 2013. Since many infrastructure projects have long lead times, however, the aim in the pilot phase is to enable funding of those projects that are approved by the EIB Board of Directors by the end of 2014 and for which the funding contracts have been concluded by the end of 2016 at the latest.<sup>13</sup> The European Commission expects that some five to ten infrastructure projects can be PBI financed during the pilot phase.

#### Project quality of huge importance

Projects must be economically and technically feasible

For projects to even be considered for PBI support they must be capable of generating stable and sufficiently high cash flows; they must thus be economically sound and technologically feasible. Projects that do not satisfy these criteria but which are politically desirable must continue to be financed using other instruments.<sup>14</sup> The involvement of the EIB is considered beneficial in this respect because it is very experienced in assessing the economic prospects of diverse infrastructure projects and the quality of the projects is crucial to the success of the PBI.

Ultimately, the demand for economically sound infrastructure projects for the PBI is therefore understandable. After all, private investors cannot be expected to implement politically motivated projects that permanently operate at a loss without receiving government subsidies.<sup>15</sup> The frequently expressed accusation that private companies only "cherry pick" in such Public Private Partnerships

<sup>10</sup> See EIB (2012a) Loc. cit. Information provided here includes more details about the differences between the two options of funded and unfunded PBCE, for instance pertaining to fees and interest costs for the project company that result from the provision of PBCE or the repayment terms.

<sup>11</sup> See EIB (2012a). Loc. cit.

<sup>12</sup> See Zunt, Dominik (2013). EU 2020 Project Bonds Update.

<sup>13</sup> See EIB (2012b). The Europe 2020 Project Bond Initiative.

<sup>14</sup> See European Commission (2012). Loc. cit.

<sup>15</sup> It is of course possible to also include private companies in the operation of lossmaking projects. In the process, for example, the desired specifications for a project and/or its operation are defined. After a tendering phase the company awarded the contract could then be the one that meets the desired specifications with the lowest requirement for a subsidy (including a return component).



(PPP) is not justified from a market order perspective. In a market economy and a competition-based system economically feasible projects are invariably in good hands with private-sector firms. The job of the state is to provide those products and services with a public good character or that cannot yield a profit for other reasons, but for which there is political backing.

### Transport projects (will) dominate

Most funding in pilot phase to come from TEN transport programme and will probably be allocated mainly to transport projects

The PBI is specifically intended for the implementation of transport, energy and IT infrastructure projects. In the pilot phase transport projects will probably be dominant. Of the EUR 230 m of EU budget funds provided, EUR 200 m alone will come from the TEN transport programme and should therefore find its way into trans-European transport projects. EUR 10 m is earmarked for energy projects (or will come from the TEN energy budget). EUR 20 m is to be spent on IT infrastructure (broadband networks). In this case there will be a reallocation of unused funds from the EU Competitiveness and Innovation Framework Programme (CIP).<sup>16</sup>

Pragmatic and economic reasons are likely to be crucial in the expected dominance of transport projects. The EIB already has a lot of experience with PPP projects in the transport infrastructure segment. Also, given the long history of the TEN programme there are several economically sound projects that are at a relatively advanced stage of the planning process and are therefore early candidates for the pilot phase of the PBI. Motorway projects are likely to dominate, because it is a great deal easier to generate sufficiently strong cashflow to cover the investment costs with them than with railway lines or inland waterways. The funding contracts for the first PBI project were concluded recently, and interestingly it is a gas storage project in Spain.<sup>17</sup>

### Rating of the projects dependent on many factors

One key justification for the structuring of the PBI (with the involvement of the EIB) is to enhance the credit quality and thus the credit rating of the projects via PBCE. The objective – as already mentioned – is a single-A rating, which is intended to enable institutional investors to invest in the projects. Rating agencies have already commented on the issue of the influence of PBI on the credit rating of potential projects and confirmed its positive effect on the credit rating. So it is fundamentally regarded as possible or not ruled out that infrastructure projects receive an A-rating. Nevertheless, the agencies also say that an A-rating is not guaranteed, as the credit rating of each individual project is dependent on a variety of factors. These include specific project risks (e.g. bigger risks with greenfield projects, differing credit ratings of the companies involved in the project company). Furthermore, there is country risk, political and regulatory risk (e.g. treatment of infrastructure bonds as an asset class in the framework of financial market regulation). Alone the fact that the bond financing of infrastructure in Europe is still a fledgling market influences the rating of the asset class, according to the reports.<sup>18</sup>

<sup>16</sup> See European Commission (2012). Loc. cit.

<sup>17</sup> See EIB (2013). European Investment Bank welcomes first successful use of project bond credit enhancement and provides EUR 500 m for Castor energy storage in Spain. Luxembourg. The press release also mentions that to date nine projects have been deemed eligible for PBI funding by the EIB Board of Directors. They include motorway projects in Belgium, Germany, the UK and Slovakia as well as other energy projects.

<sup>18</sup> See Moody's (2011). Europe 2020 Project Bond Initiative. London. Standard & Poor's (2012). How Europe's New Credit Enhancements For Project Finance Bonds Could Affect Ratings. London, Madrid. Fitch Ratings (2013). European Project Bonds Making Slow Start. New York.



## Project Bond Initiative

Project bonds gradually gaining importance as a funding instrument

Although a single-A rating for individual projects is regarded as possible in principle, a Fitch assessment published in early 2013 did not regard it as probable that a large, fully functioning and liquid market for A-rated project bonds would develop. In the same paper, however, the rating agency is convinced that project bonds will become an increasingly important funding instrument in Europe over the medium term. Fitch also expects that outside the PBI there is a potentially strong demand for project bonds that “only” have a BBB-rating.<sup>19</sup>

### Economic assessment is mixed

If the Project Bond Initiative is to be assessed from an economic point of view, there are three ways of doing so:

Greater private-sector involvement in infrastructure funding to be welcomed

— From a *market order* point of view the basic idea of the PBI is to be welcomed; private-sector institutional investors with a long-term investment horizon are to play a bigger role in the funding of infrastructure projects that make economic sense and are politically desired. In this connection the question that can of course be asked is whether a mechanism like the PBI – that appears at first glance at least to be complicated – is actually needed to achieve this objective. Leaving aside the PBI, there is also the question of why the public sector (or the EIB) should even assume the risk for the implementation of commercially feasible projects. Evidently this approach was chosen because of the uncertainties and the unanswered questions that are associated with infrastructure projects – especially greenfield projects – and that make it more difficult to achieve a (politically desired) higher credit rating. And since all infrastructure projects are basically different, new answers have to be found repeatedly to questions about the optimum funding structure, the best risk allocation between the state and the private sector, the participation of the public and other aspects. An appropriate assumption of risk by the public sector for such projects can help. It therefore makes sense for practical reasons and is consistent with market principles. In any case the state always plays an important part in the regulatory framework pertaining to the infrastructure in question. The financial risk for the EU arising from the PBI (on paper at least) is limited to the capital contribution of the EIB. After all, the hoped-for higher credit rating for project bonds (and based on this the participation of institutional investors) is a key justification for the EIB's involvement.

If in the medium term the PBI enables the successful establishment of a platform or a new asset class that allows the above-mentioned involvement of private investors to occur efficiently, this would be a major plus for the European infrastructure market. Parallel to this a larger market could gradually develop for project bonds that do not require the PBI. The pilot phase of the PBI will also be used to gather experience with this instrument and to rectify shortcomings for the period from 2014 onwards.

PBI provides negligible economic stimulus

— From a *cyclical point of view* the effect of the PBI will be small. The expected volume of investment is too small and will occur too late to make a significant contribution to ending the economic crisis in the EU. The expectations of all those involved regarding the potential degree of economic stimulus from the PBI were, however, set realistically low from the very beginning.

— From a *structural and regional policy* point of view the PBI can make a major contribution. Infrastructure expansion has amongst its objectives increasing the productivity of economic agents, boosting the competitiveness of the respective region and finally enhancing an

<sup>19</sup> See Fitch Ratings (2013). Loc. cit.



More appropriate instruments for promoting disadvantaged regions than the PBI

- economy's growth potential. And the PBI ideally enables important projects to be implemented faster than when this instrument does not exist. Two qualifications are to be made, however: firstly, the volume of the PBI as a share of total investment required is – as already mentioned – still too small. Assuming positive experience and the corresponding political will, the funds provided could, however, turn out to be larger in future. Secondly, there is limited scope to use the PBI to significantly reduce the structural and economic differences between the EU's regions. After all, in disadvantaged regions there are simply fewer economically feasible infrastructure projects, and in the past many transport projects have already been co-financed by the EU. Such projects will probably require recourse to be made to other funding options (e.g. with an explicit regional policy focus) in future, too. This could reduce the willingness to increase the financial resources of the PBI in those countries where few PBI-funded projects are likely to be implemented.

We have outlined above why transport projects will (apparently) dominate in the pilot phase. In order to facilitate the EU's further development into a "knowledge-based economy" and to improve the commercial use of internet-based services, the expansion of high-performance broadband networks would be at least as important. Also, the creation of a European energy market requires the corresponding grid infrastructure.

The market for project bonds to finance infrastructure is only in its infancy in Europe. The PBI is not a panacea that could close the infrastructure divide within the EU, which of course no-one was expecting. It may, however, develop into an important "piece of the jigsaw" in the funding of infrastructure in Europe and strengthen the awareness that project bonds can fundamentally play a more important role in infrastructure financing. The project quality will be key to the commercial success and the political acceptance of the instrument.

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