

Boosting investments in social infrastructure in Europe

Report of the High-Level Task Force on investing in Social Infrastructure in Europe chaired by Romano Prodi and Christian Sautter

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DISCLAIMER

This Report is based on an initiative from European Long-Term Investors Association (ELTI). A High-Level Task Force was established and chaired by Romano Prodi and Co-Chaired by Christian Sautter. Based on the exchanges within this HLTF and their own inputs, the authors wrote this report.

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FOREWORD

by Laurent Zylberberg

President of the European Long-Term Investors association (ELTla)

The European Long-Term Investors association (ELTla) was created in 2013 to advocate a positive financial environment and a new investment framework in Europe. With the support of its 27 members, the association decided to launch a year ago a High Level Task-Force chaired by Romano Prodi and vice-chaired by Christian Sautter regarding Social Infrastructures (SI).

Social infrastructures are exactly one of ELTla's core objectives. In fact, they are critical for the community, although difficult to quantitatively measure, they generate self-evident positive externalities, they resemble all the peculiar characteristics of long-term investments and finally they represent a key field where an efficient and productive interaction between public and private actors is mostly needed.

There is a huge gap between the needs and the actual money mobilized. The report, driven by the High Level Task Force, is very useful by indicating where are bottlenecks and small stones in the shoes. Throttle, brakes and deterrent are clearly determined and, thus, all involved actors know exactly where they can be more efficient.

This report can be considered as a first step in the process of identifying a new asset class for European investors with a concern for the long term – whoever they are: national and European promotional institutions, of course, but also private financial institutions looking for diversification, steady returns and social impact.

By giving us recommendations classified under three categories: political, policies and quick wins, the report is ambitious and pragmatic. This is why we are very proud to have launched this initiative which, I am sure, will be a milestone for long-term investors in Europe.

PROLOGUE

by Romano Prodi*

The long economic crisis and major structural changes due to the increasing pace of globalization have hit hard Europe and its people. As a result, considerable sections of the European population are living under difficult, grievous conditions. To successfully respond to the current situation and future challenges, robust and innovative initiatives must be devised and implemented in the social sphere. While European social policies and models are the pride of our continent and continue to be warmly embraced by our citizens, the enormous pressure exercised by the recent crisis and the new demands of the XXI century imply the necessity to expand and modernize them.

To address some of these issues, especially the existing gap in investments in social infrastructure, the European Long-Term Investors Association (ELTI) decided to create a *High-Level Task Force on Financing Social Infrastructure in Europe* (HLTF). The purpose of the HLTF is twofold: to examine the requirements for boosting investments in social infrastructure in the areas of Education, Health and Social Housing and to offer recommendations and proposals about how to start filling the investment gap existing in these areas.

The demand for social infrastructure is not only a consequence of the economic recession and scarce resources. It is also the result of significant changes at the demographic level. The structure and profile of the EU's population is changing rapidly due to several significant phenomena, such as low birth and fertility rates and increases in life expectancy. This rapidly changing reality implies that the already considerable existing gap in social infrastructure is likely to become tragic in the future. Not only new coherent and flexible institutions and strategy are needed, but, as the Report shows, more investments are required. Thus, the EU, its member states and European financial institutions should all favour an increase in social infrastructure investments.

Now that the European economy is recovering, the time has come to catalyse additional resources for inclusive growth and employment through large-scale investments in social infrastructure. We must and can reverse the trend that has seen investment in human capital, especially in health, education and affordable housing, stall in many regions and countries. Reversing the past trend is also crucial to respond to the rising disaffection towards European governments and institutions, which have been accused of being primarily interested in financial rigor and stability rather than in the wellbeing of people. Reversing such a trend is also facilitated by the fact that political momentum for Social Europe appears to be growing. Indeed, Social Europe is emerging as a priority in the EU policy agenda.

Social infrastructure is far from being the definitive and final solution to present and future challenges, but it is certainly a crucial instrument for creating inclusive growth and for strengthening the social bases of Europe. The goal is to accelerate the creation of jobs, improve the wellbeing, health and skills of people, and improve and make housing accessible, affordable and energy efficient. The final objective is to make Europe more competitive and productive while improving the lives of all, across generations.

The recommendations and proposals discussed in this Report aim to create conditions to mobilise public resources as well as long term sustainable private investments with a special focus on the regions and countries most in need. As the reader can see, the Report is not an abstract

* Former President of the European Commission and former Italian Prime Minister.

study, but rather a detailed, targeted investigation of what is required and what can be done in the areas of Education, Health, and Housing. While social infrastructure is generally built, and maintained at the national, regional, and local levels, the existing gap implies that neither national nor sub-national entities have the necessary financial resources. Although the principle of subsidiarity needs to be respected, as the Report suggests, investing in social infrastructure should have a continental dimension and should be planned with a long-term view. Although the volume of social infrastructure investments required is likely to amount to the greatest investment in the social area ever undertaken in European history, we must not be afraid to endorse this initiative. Indeed, only by catalysing vast financial resources in innovative ways, Europe can maintain its global leadership in welfare. In a time of political disaffection and distrust, new and substantial investments in social infrastructure would also send citizens a strong message that European institutions and governments want to bring their people back to the centre of the Union.

Romano Prodi

Chairperson

EXECUTIVE SUMMARY

The goals of the HLTF

The High-Level Taskforce on investing in Social Infrastructure in Europe was promoted by the European Long-Term Investors Association (ELTI) and established in February 2017, in close consultation with the European Commission. Its purpose was to assess how to boost long-term investment in social infrastructure focusing on the priority areas of education, lifelong learning, health and long-term care as well as affordable, accessible and energy efficient housing and to make recommendations and proposals. The rationale for boosting this long-term investment is that the HLTF is convinced that it could catalyse convergence, help reform social welfare, reduce long-term unemployment, increase productivity, build resilience and spur future oriented growth in the EU. Moreover, investment in social infrastructure would provide a critical contribution to the future upwards convergence and cohesion between the regions and the countries in the European Union.

The infrastructure gap

Investment in social infrastructure, both private and the public, is far from the level required to cater for the current population in the EU nor is the investment always adapted to the changing needs and expectations over the next decades. The present investment in social infrastructure in the EU has been estimated to be currently approximately Euro 170 billion per annum.

The minimum infrastructure gap in social infrastructure investment is estimated at Euro 100-150 billion per annum and represents total gap of over Euro 1.5 trillion for the period of 2018- 2030.

Since the global economic and financial crisis, the EU has been suffering from low levels of investment. Infrastructure investments in 2013 were below the level experienced in 2007 by 15%². Moreover, investment in social infrastructure has lagged even more behind traditional infrastructure investment. Nonetheless, the gap differs widely across regions.

Partially this gap exists also because social infrastructure investment is by in large responsibility of local authorities, which due to asymmetric fiscal consolidation with respect to the Central Government level have sometimes had even tighter budgets constraints.

Regional development levels are not converging and so is investment in social infrastructure. Further reasons for the investment gap are discussed in the report.

The report argues that a major boost is needed in long-term social infrastructure investment. Such needs will have to consider the future transformations of the European social models.

Europe is one of the regions where people live longer and have fewer children. Because of such great demographic changes, Europe will have a much larger

² European Commission, Commission Communication, An investment plan for Europe, 26 November 2014. COM (2014).

number of people aged 80+ and 65+. The share of population aged 65+ in EU28 is projected to increase from 18.9% in 2015 to 29% in 2060³. While ageing of the population is partially a result of improved nutrition and healthcare, in old age, people often become frail and develop multi-morbidity conditions, which creates the need to access affordable integrated chronic health and social care. EU citizens aged 65 could expect less than half of their remaining years to be free from conditions affecting their ability to manage daily living activities independently. This reality requires different ways to organise our communities and cities as well as our health, social and long-term care services and housing.

For some time now, the welfare systems and organization of labour have slowly been adapting to the new risks and realities in people's lives. Although, clearly, they are not going fast enough and progress is made at very different speeds in different regions in Europe. Our social models are to adapt continuously and invest massively in human capital and inclusive resilient communities. In summary reforms are to adapt to: (i) the realities of people living and working longer, confronting the health care systems with the need for more prevention, dealing with people who need to manage chronic diseases and rising co-morbidities while the health systems are still designed for acute diseases; (ii) an increasing number of single women households and higher participation of women in the workforce, creating more need and demand for child care, short-term care and long-term care and; (iii) rapidly changing needs for skills and competencies for the jobs and society of tomorrow and major new efforts in adult and lifelong learning, including the support to the integration of the migrant populations, while education systems already do not keep pace with the innovations needed here now; (iv) additional efforts are also necessary to support populations which are typically underprovided by current social infrastructure and services.

In addition to the ageing population, technology is also harnessing rapid and promising innovations. Moreover, Europe is experiencing high mobility and migration of large groups of populations, and needs to confront climate change through energy efficient and resilient infrastructure for the societies of the future.

All these elements are altering the environment, the economies and the societies in which we all live and work. This has profound implications for our social models, for the investment in social welfare, for social infrastructure and service provision.

The changing nature of social infrastructure must be at the forefront of all investment considerations and investment must be done with foresight.

The imperative of consolidating public finances also adds to the pressure from demographic ageing. Furthermore, while the Social models in Europe continue to be the pride of the Continent, the financing of these models is coming under serious strain because fewer people contribute to the public purse through labour and more people become dependent on social benefits. Going forward, the few who are in employment will have to support the many who are not.

³ European Commission, The 2015 Ageing Report: Economic and budgetary projections for the EU28 Member States (2013-2060).

The political imperative

It is clear to confront the growing inequality and divergence in Europe represents the greatest challenge to overcome, together with the need to relaunch investment in social infrastructure and human capital in Europe.

The overall gap between rich and poor is the largest in 30 years⁴, and this is not only negatively impacting the population of the EU, but also its wellbeing, social cohesion and economic growth. Social concerns become statistically important because they have direct monetary implications.

Long-term social investment is needed, especially in regions at the lower end of the diverging economies, and it should benefit people with lower income so that positive convergence may be achieved. Better social policies and social infrastructure embedded in these policies lead to greater resilience and more long-term convergence, growth and wellbeing.

This can only be done through a real boost in public and private investments, working hand in hand to provide the most appropriate, efficient social infrastructure and services for people. New investment models and partnerships are needed and Europe can lead the way. Such a boost would also provide employment, growth and wellbeing and catalyse societies and economies towards upward convergence and competitiveness.

The report identifies how to shift from the present scenario with a major social investment gap towards one of smart capacitating strategies putting people at the centre of the efforts. In this context, this report illustrates how major bottlenecks could be removed inter alia by improving technical assistance, financing, financial and non-financial regulatory affairs.

Financing Models for Social Infrastructure

Social infrastructure Investment (SII) is very like economic infrastructure investment in many respects but there are also distinctive features to consider.

The proportion of social infrastructure that is publicly financed is around 90% of total on average and varies across sectors. Investment in social infrastructure also differs from economic infrastructure, with the latter often relying on the cash flows they produce. This does not mean that the social infrastructure may not attract private finance. However, we need major changes and new initiatives to increase the size of public/private investment and innovation in those sectors crucial of the well-being and resilience of people and communities.

Social infrastructure projects deliver public infrastructure assets and services in exchange for a revenue stream mostly paid directly by the public sector. Only in some cases, notably in the health sector, in affordable and student housing, or child and elderly care, external cash flows may contribute to the revenue stream needed to repay the initial investment. Therefore, unlike economic infrastructure, such as toll

⁴ OECD (2014). 'Focus on Inequality and Growth – December 2014'.

road, ports, airport or power generation plants, which usually collect revenues from end users⁵, social infrastructure projects often rely on financing by the public sector.

Due to the “public” nature of social infrastructure, public procurement is the most widely used contractual arrangement, in which the public sector is the one dealing with the large majority of risks. It is critical to improve and promote the use of strategic public procurement schemes to respond to societal, environmental and economic objectives. To this end, the European Commission launched (i) a public procurement strategy⁶, which focuses on six strategic policy priorities, and (ii) recently (3rd October 2017), a targeted consultation⁷ on a draft guidance on public procurement of innovation (“PPI”). PPI aims to ‘close the gap’ between cutting-edge technology and processes and the public-sector customers who benefit from them. This initiative aims at exploiting procurement more efficiently and in a sustainable manner, while making full use of digital technologies to simplify and accelerate procedures.

Infrastructure projects in the social sectors are usually relatively small. According to EDHEC-Risk Institute,⁸ roughly 99% of existing social infrastructure projects in Europe entail a total capital investment of less than 1 billion euros, with the great majority of projects below 30 million. Furthermore, the cost of provision and distribution of services is usually much higher than the capital investment needed for the construction and realization of the infrastructure per se.

Social infrastructure, however, offer great opportunities for portfolio diversification, thanks to the small average capital investment. This is clearly in opposition to investments in major economic infrastructure, which entail a great deal of concentration risk. The potential for higher portfolio diversification makes the social infrastructure investment particularly attractive to investors.

Social infrastructure has other attractive features for private/institutional investors, such as: (1) low volatility of returns - availability payments from the public sector are usually agreed ex-ante and tend to be inflation linked. Predictable and steady real returns are desirable for investors; (2) low correlation to other assets. The “public” nature of a social infrastructure investment often makes the latter less exposed to market risk and to systemic risks within capital markets.

However, the small average capital investment size of social infrastructure projects makes direct infrastructure investments unattractive to large long-term investors as

⁵ Not all economic infrastructure is funded from end-user revenues. Currently, the funding of a sizeable number of projects, especially in the transport sector, is based on availability payments.

⁶ European Commission (2017), Communication from the Commission to the Institutions: Making Public Procurement work in and for Europe, 3 October 2017. https://ec.europa.eu/growth/single-market/public-procurement/strategy_en

⁷ European Commission (2017), Consultation document on Guidance on Public Procurement of Innovation, Draft version to be submitted to the targeted consultation.

⁸ EDHEC-Risk Institute, Pension Fund Investment in Social Infrastructure. Insights from the 2012 reform of the private finance initiative in the United Kingdom, February 2012.

they face relatively too high active management costs for such modest levels of investment. Financial intermediaries are therefore key to channel institutional investors' money towards social infrastructure investments. Bundling of projects could also bring a partial solution by lowering the cost for the public sector and the risk-profile for investors.

Institutional investors have the possibility to invest equity through listed infrastructure funds, unlisted intermediary funds or directly at the Special Purpose Vehicles (SPV) level. On the other hand, there is still a lack of more liquid debt instruments. Social bonds are very promising new instruments, but still need to develop in great scale.

General recommendations

Recommendations and proposals contained in this Report can be regrouped and summarised as follows:

Political Recommendations	Policy Recommendations	“Quick Wins”
<ul style="list-style-type: none"> - Shift from an underinvestment scenario towards a smart capacitating investment framework with ongoing monitoring of the progress; - Establish a stable and more investment friendly environment for social infrastructure; - Enhance evidence-based standard settings for impact investing; - Fiscal consolidation should not weight too much on the resources for social investment in infrastructure of the sub-national Governments; - More data collection, on infrastructure risk in general and social infrastructure in particular, should be put in place to help regulators in their effort to combine proper risk valuation and financial stability; - Enhance the role of European national and regional promotional 	<ul style="list-style-type: none"> - Foster social infrastructure finance, focussing on the regions with the highest needs; - During the annual European Semester exercises, consider assessing member states investment in social infrastructure; - Increase and enhance the pipeline of viable projects for social infrastructure; - Carefully craft the ex-ante and ex-post conditionalities beyond 2020; - Promote favourable taxation and incentive schemes supporting social investments; - Promote labelling and certification that would facilitate the take-up of social investments; - Favour the development of new financial instruments especially dedicated to social infrastructure (such as social bonds); 	<ul style="list-style-type: none"> - In the next MFF, create a specific policy window for social investments including social infrastructure investments; - During the annual European Semester exercises, make country specific recommendations for investment in social infrastructure; - Strengthen the focus of cohesion policy on social investments and infrastructures and facilitate further blending of financial resources; - Pilot the launch of some thematic and/or geographic investment platforms to bundle projects and boosting initiatives for social sector investments; - Strengthen the strategic role in Technical Assistance of the EIAH by means of the creation of a strong network with NPBI and other national or regional agencies;

banks and institutions (NPBIs) in their cooperation with public authorities and European entities.	<ul style="list-style-type: none"> - Favour the development of an extensive and a far-reaching system of Technical Assistance (TA) at local, national and EU level; - Launch of a European Social Infrastructure Agenda; - Creation in the medium-term of a public-private Fund dedicated to social investments in the EU. 	<ul style="list-style-type: none"> - Enhance the use of strategic public procurement schemes and lead to cost synergies through efficient cooperation with possible CPBs; - Build up the capacity of service provider organisations and local authorities; - Promoting the issuance of Social Bonds by relevant actors; - Learn from schemes paying for results and further develop social impact schemes; - Enhance data collection for social infrastructure investments in Europe; - Develop standard settings for impact investing.
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The Report supports an approach towards upwards convergence based on regions (like cohesion policies) rather than only at central government level. This approach will be important to allow more resources to be efficiently allocated where most needed.

Social infrastructures play a critical role in moving towards upwards convergence. Considering the great investment gap in social infrastructure in Europe, the Report proposes some solutions and recommends some innovations in financing social infrastructure in Europe.

The Report proposes that the greatest attention should be given to:

- Shift from an underinvestment scenario towards a smart capacitating investment framework with ongoing monitoring of the progress at a national level;
- Foster social infrastructure finance, focussing on the regions with the highest needs;
- Establish a stable and more investment friendly environment;
- Increase and enhance the pipeline of viable projects for social infrastructure;
- Enhance the role of European national and regional promotional banks and institutions (NPBIs) in their cooperation with public authorities and European entities.

Enabling conditions are identified in a wide range of areas:

- Fiscal consolidation, while respecting the framework of the Stability and Growth Pact (SGP), should not weigh too much on the resources for social investment in infrastructure of the sub-national Governments, considering that these carry out two-third of total government investment on average in the EU;
- Carefully craft the ex-ante and ex-post conditionalities adopted for the use of the cohesion funds and the blending of financial resources beyond 2020 not to unduly make regions pay for the fiscal consolidation of the Member States at central level;
- Promote favourable taxation and incentive schemes supporting social investments;
- Promote labelling and certification that would facilitate the take-up of social investments;
- Favour the development of new financial instruments especially dedicated to social infrastructure (such as social bonds);
- Favour the development of an extensive and a far-reaching system of Technical Assistance (TA) at local, national and EU level.

Early deliverables towards a long-term strategy in boosting social infrastructure investment and financing in the EU.

Short-Term – Inaugural & Early Stage (2018-2020)

1. In the framework of the next MFF we take note that the Commission is reflecting on a single investment scheme, in that context we strongly recommend creating a specific policy window for social investments including social infrastructure investments. Furthermore, the cohesion policy should strengthen its focus on social investments and infrastructures and facilitate further blending of financial resources.
2. During the annual European Semester exercises, consider assessing member states investment in social infrastructure and make country specific recommendations in this area.
3. Pilot the launch of some thematic and/or geographic investment platforms to bundle projects and boosting initiatives for social sector investments. Projects' bundling on a thematic and/or geographic investment platforms can enhance the use of strategic public procurement schemes and lead to cost synergies through efficient cooperation with possible Central Purchasing Bodies (CPBs)⁹.
4. Build up the capacity of service provider organisations and local authorities and strengthen the strategic role in Technical Assistance of the European Investment Advisory Hub ("EIAH") by means of the creation of a strong network with European national and regional promotional banks and institutions ("NPBIs") and other national or regional agencies.

⁹ European Commission (2017), Communication from the Commission to the Institutions: Making Public Procurement work in and for Europe, 3 October 2017.

5. Given their characteristics, social infrastructure assets are particularly well-suited for blending. Therefore, the platforms should mix grants, subsidies, guarantees and financial instruments to attract private capital and participation in the sector.
6. Promoting the issuance of Social Bonds by relevant actors.
7. Learn from schemes paying for results and further develop social impact schemes.
8. Enhance data collection for social infrastructure investments in Europe;
9. Develop standard settings for impact investing.

Medium-Term - Phasing-in Stage (2020-2022)

1. Investment platforms continue to finance social infrastructure projects according to the new scheme;
2. Prepare a possible Social Infrastructure Agenda;
3. Comprehensive assessment of the functioning of pilot investment platforms including an evaluation of the underlying portfolio of projects;
4. Building on the assessment, the creation of a public-private Fund dedicated to social investments can be explored by opening the equity capital structure to long-term investors.

Long-Term – Fully Operational Stage (> 2022)

1. The Fund becomes one the main European instruments for financing social investments and infrastructures.
2. A completely new model in the financing of EU social infrastructure becomes fully operational.

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INTRODUCTION

Social infrastructure is a subset of the infrastructure sector that broadly can be defined as long-term physical assets in the social sectors (in this report related to education and lifelong learning, health and long-term care and affordable, accessible energy efficient housing) and that enable the provision of goods and services.

Investment in social infrastructure is not at the level required to meet the needs of current and future EU population

A High-Level Task Force has been created to raise political attention to the critical role of social infrastructure, with the aim of enhancing public and private investments in this sector. Long-term, flexible and efficient investment in education, health and affordable housing is essential for economic growth, for the well-being of people and to move towards upward convergence in the EU.

High quality social infrastructure provides benefits to individuals and communities and improves social cohesion. An appropriate access to social infrastructure generates more “hired, housed, healthy and happy” people with positive spillovers on society (white economy) as well as on economic activities, also by reducing transaction costs and facilitating knowledge and innovation diffusion. It can boost community resilience and regeneration while enhancing reputation and attracting trade/business and tourism. On the contrary, low quality social infrastructure may limit social and economic opportunities, cause markets to work less efficiently and marginalize some groups. It can reinforce inequalities and, other things being equal, may lead to less growth in the level of living standards.

The challenges that Europe will have to face in the next decades are daunting. Burdened by the public debt overhang and the growing demands on- and costs of - the Welfare State, public resources for investment are being squeezed, or at best stagnant. This is largely due to demographics, in-work and out-of-work poverty, growing polarization and inequality, and the scourge of a generation of young people who have difficulties to get a foothold in the labour market.

In this context, the challenges of bridging the infrastructure and investment gaps in Europe appears formidable. Unless we create a new model to finance social infrastructure, based on innovation, new skills and advanced technical tools, the most pressing and urgent requirements long-term investment is not going to be met.

To this end, we need to develop a model capable of attracting the great stock of global long-term savings, which seek a long-term investment with the right risk/yield profile. A new “asset class” for infrastructure should materialize in financial markets at the global level, and Europe should be ready to harvest a large enough quota of private savings to channel towards the financing of its fixed and social infrastructure needs. It is a great and ambitious challenge that will be met only if policymakers and industry, both in the financial sector and the so-called “real economy”, work together to create a pipeline of sound and meaningful projects, a regulatory framework friendlier to long-term finance and a set of practical long-term financial instruments.

1. THE MAIN DRIVERS FOR CHANGE

The world is becoming smaller, older, more urbanized and more polarized. Europe is one of the regions where people live longer and have fewer children and have more youth. In addition to those trends, technology is harnessing rapid innovations in high mobility and migration of large groups of populations, and the need to confront climate change. All these elements are altering the environment, the economies and the societies in which we all live and work. This also has profound implications for our social models, the investment in social welfare, social infrastructure and service provision. For some time now, the welfare systems and organization of labour have slowly been adapting to the new risks and realities in people's lives but clearly, they are not going fast enough and progress is made at very different speed in different regions in Europe.

The recent financial and economic crisis (2007-2009), surprisingly still has a profound effect on Europe, in people's lives, confronting them with insecurities, high unemployment and lack of hope in the future for themselves and their children. People are more and more questioning whether institutions have the right capabilities to come up with solutions that answer the imposed threats to stability, security and wellbeing. Growth plays an important role, and as recognized, it should go beyond macroeconomic policies, to generate more and better jobs, achieve structural changes that produce more security, greater equality and social inclusion. Making the economy and financial systems serve people and society becomes the new mantra for managing the economy. Along these lines, the G20 summit declared recently that *"the central challenges now, in fact, is that the market economy has not produced the social outcomes that are politically sustainable. Tackling this won't be easy and governments cannot do it alone. Business and private sector have the greatest stake in maintaining public confidence in the market economy. Effective transformation requires business with long-term strategic plans to reach forward to the future. Sustainability is good business."*¹⁰

1.1. LIVING LONGER IN MORE DIVERSE, MOBILE SOCIETIES

The EU28 populations are projected to increase to a peak of 528.6 million around 2050 and thereafter gradually decline to 518.8 million by 2080 (Europop data, 2017), demographic data collection also shows that the EU population is ageing, while concerns about youth populations unemployed and children living in poverty, remaining high.

The impact of demographic changes, according to the latest Eurostat Population Projections, will be an increased number of people aged 80+, and their population share, for all EU countries until 2060, though the increase will be especially

¹⁰ G20 Summit (2017). Investing in Resilient, Future-oriented Growth. B20 Taskforce Financing Growth & Infrastructure.

pronounced from 2030 to 2050. For those aged 65+, the highest increase is expected from 2020 to 2030 (table 1).

Table 1: Projected changes in the number of people aged 65+ and 80+ in the EU27, 2015-2060, million

EU-28	2016	2020	2030	2040	2050	2060
65+	96	105	125	142	150	152
Of which 80+	27	30	37	48	58	63

Source: Eurostat

In old age, people often become frail and develop multi-morbidity conditions, which creates the need to access affordable integrated chronic medical and social care while our hospitals and health systems oftentimes are still geared towards treatment of acute illnesses. In 2015, taking men and women together, EU citizens aged 65 could expect less than half of their remaining years to be free from conditions affecting their ability to manage daily living activities (see table below). This reality requires different ways to organise our communities and cities as well as our health and social care services and housing.

Table 2: Life expectancy and healthy life expectancy at 65 in the EU-27 in 2015, by gender

	Total years life expectancy at 65, men	Healthy years life expectancy at 65, men	Percentage of healthy life years life expectancy at 65, men	Total years life expectancy at 65, women	Healthy years life expectancy at 65, women	Percentage of healthy life years' life expectancy at 65, women
EU27	17.9	9.4	53%	21.2	9.4	44%

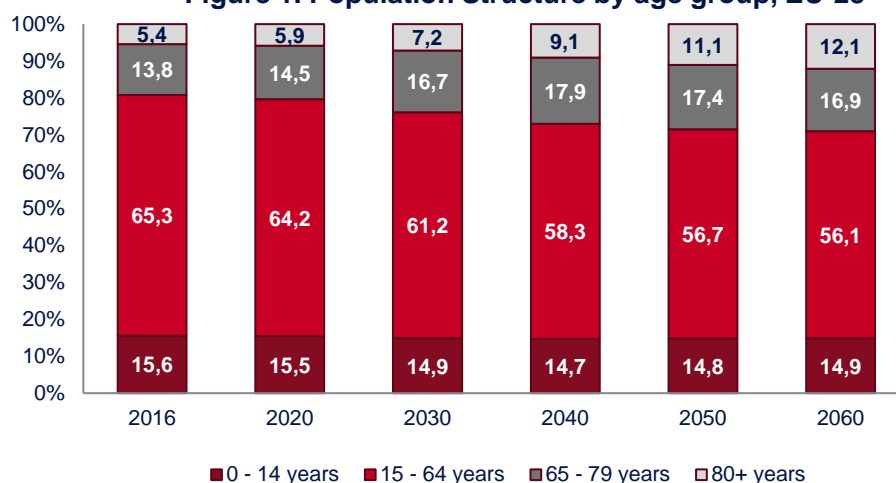
Source: Eurostat

While many children and older or disabled people are being taken care of by family and informal carers for the moment, we should also consider that the share of population aged 65+ in EU28 is projected to increase from 18.9% in 2015 to 29% in 2060. Ageing leads to an increase in the old age dependency ratio projected to increase from 27.8% in 2014 to 50.1% in 2060¹¹. In other words, there will be just two people aged 15 to 64 for every person aged 65 or more in 2060, compared with four in 2010. Therefore, the active population between 15 and 64 (otherwise known as

¹¹ European Commission, The 2015 Ageing Report: Economic and budgetary projections for the EU28 Member States (2013-2060).

the sandwich generation) will need further support to be able to be (re)productive and care for those in need of support.

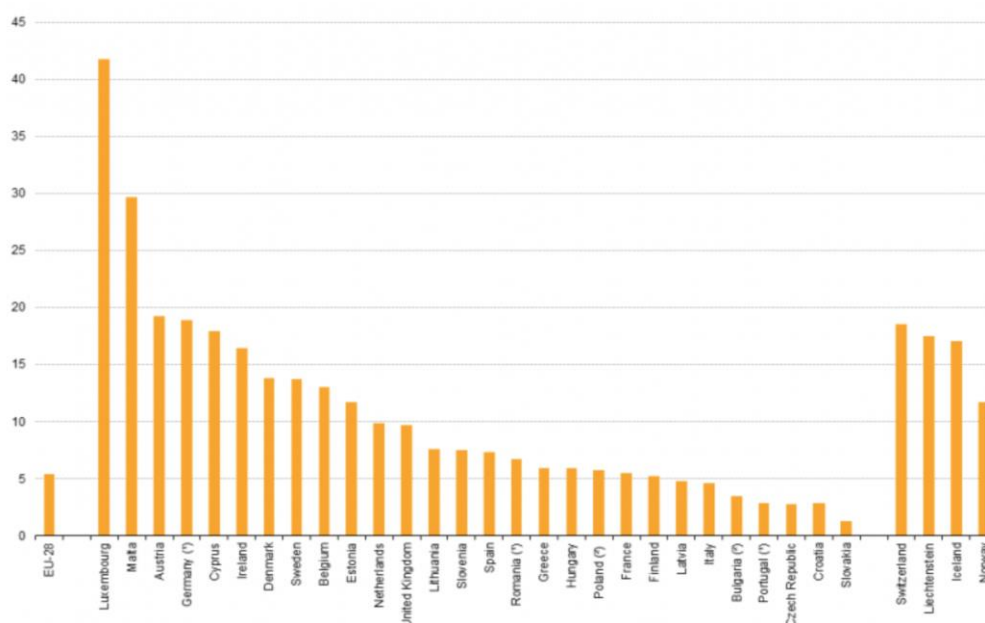
Figure 1. Population Structure by age group, EU-28



Source: Eurostat

In addition to the ageing populations in the EU, there is also an increased mobility (intra EU) and migration (outside of the EU), which will continue in the coming decades and Europe will become even more diverse. A total of 4.7 million people immigrated to one of the EU-28 Member States during 2015, while at least 2.8 million emigrants were reported to have left an EU Member State.

Figure 2: Immigrants, 2015 (per 1,000 inhabitants)



Source: Eurostat ¹²

¹² Eurostat. Migration and migrant population statistics. Data extracted September 2017. [http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Immigrants,_2015_\(per_1_000_inhabitants\).png](http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Immigrants,_2015_(per_1_000_inhabitants).png)

Among 4.7 million immigrants during 2015, there is an estimation of 2.4 million citizens of non-member countries, 1.4 million people with citizenship of a different EU Member State from the one they immigrated, around 860 thousand people who migrated to an EU Member State of which they had the citizenship (for example, returning nationals or nationals born abroad), and some 19 thousand stateless people. Germany reported the largest total number of immigrants (1543.8 thousand) in 2015, followed by the United Kingdom (631.5 thousand), France (363.9 thousand), Spain (342.1 thousand) and Italy (280.1 thousand). Germany reported the highest number of emigrants in 2015 (347.2 thousand), followed by Spain (343.9 thousand), the United Kingdom (299.2 thousand), France (298 thousand) and Poland (258.8 thousand).

1.2. INNOVATION, DIGITALIZATION AND TRANSFORMATION

Societies are also transforming rapidly, thanks to innovation and digitalisation, which could also contribute to improve people's lives in the EU and positively change the way we educate, care, cure diseases, connect and provide energy, collect data and generate new knowledge. This change can even be disruptive and is anyhow difficult to predict in the longer term. The decrease in available jobs for low-skilled workers, with machines that take over repetitive, mechanical tasks is worrying for those concerned. However, the jobs of the future will not necessarily be less but different and quickly changing. In addition to technological changes of economies and societies, we also should confront the major impacts of climate change and invest in robust infrastructure using appropriate energy technologies which are critical for the long-term planning of investment of social infrastructure. The reductions in greenhouse gas emissions required by 40% (domestic) in 2030 (against 1990 levels) and a binding EU target for renewable energies of at least 27% in 2030¹³. This will require major and alternative investment. Energy efficiency and confronting energy poverty are therefore one of the relevant aspects within the remit of this report.

Investors will not only contribute to the transformation and innovation of social infrastructure, but must also adapt to it. Investing in a transforming social infrastructure is investing in the key drivers for individual and community empowerment, sharing of knowledge and ideas, learning from and managing complex data, transforming people to people connections, facilitating services, and revolutionising learning, health and living.

An efficient healthcare system of the future, for example, should empower health professionals, carers and citizens alike. The system should increasingly be able to detect early warning signs that may indicate illness or behaviour that is likely to lead to poor health. Enduring in this direction, investors are increasingly using big data, artificial intelligence to inform investment decisions and want to quantify ESG data and metrics, which requires much closer monitoring and evaluation through specific

¹³ European Commission (2013) Green Paper - A 2030 framework for climate and energy policies. COM/2013/0169 final */

and standardised or interoperable data which should become available also in the social and social infrastructure fields.

1.3. CONFRONTING DIVERGENCE AND INEQUALITY TO ENSURE LONG TERM GROWTH AND UPWARD SOCIAL CONVERGENCE IN THE EU

BOX 1. Defining real convergence: moving towards high living standards and similar income levels is key to achieving EU objectives, which include economic and social cohesion alongside balanced growth, price stability and full employment.

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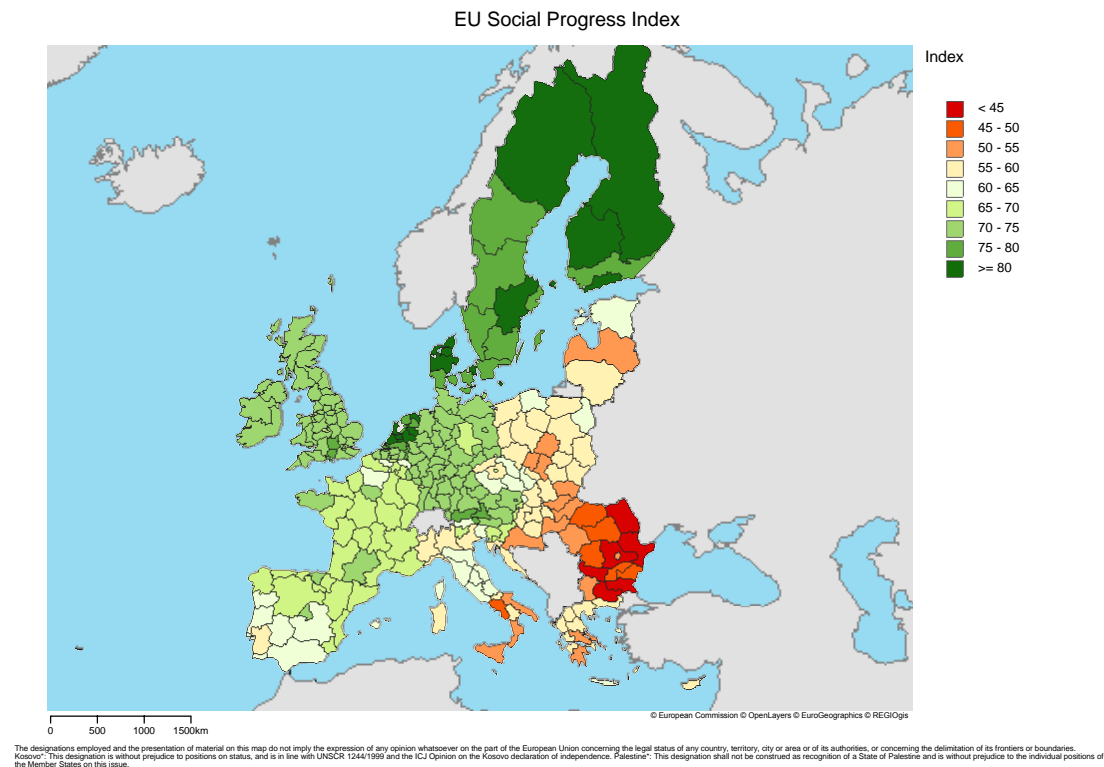
The dispersion of GDP per head since 1995 in Europe has been stable, with some strong convergence within EU-13 (reflecting the catching-up process) and some slightly divergent trends in EU-15. This overall stability in EU-28 reflected a pre-crisis decline in between- zones dispersion, which came to a halt when the 2008 crisis hit and reversed in relative term. In EU-15, developments of GDP pc have been more heterogeneous, with EU-15 South losing ground mainly since around 2005 (and to a lesser extent since the early 2000s). EU-15 Centre GDP pc levels remained broadly stable in comparison to EU-28 (and gained some ground in recent years) and EU-15 North GDP pc remained broadly stable.

Unemployment rates diverged significantly between 2009 and 2013, which was partially a product of the 2008 crisis. Unemployment, poverty and income inequality increased throughout the EU and became particularly high in Southern and Eastern European Member States. Despite a recent positive convergence in employment rate (since 2013), there was a divergence between the decline of the poverty rate in older people (-1.9%), and an increase in young people (0.8%). Working aged people suffered more than people aged 65+, and young people saw their relative income decline (refer ESDE Report 2015). Despite the overall growing level of employment, youth unemployment remains almost double of the overall rate, contributing to large inequalities in the EU. Inequality is not only rife within different age groups, but also embedded in geography, furthering the divergence between EU citizens. One-sixth of the EU population lives in regions with income level less than half of the EU average,¹⁶ and most of these regions are found within southern and eastern Europe.

¹⁴ European Commission (May 2017) Reflection Paper on the Deepening of the Economic and Monetary Union. COM (2017) 291

¹⁵ Here we refer to EU's newer entrants (the 13 countries which have joined since 2004—Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovakia, and Slovenia) vs old EU-15.

¹⁶ European Commission Directorate-General for Regional and Urban Policy (September 2017). My Region, My Europe, Our Future – Seventh report on economic, social and territorial cohesion. Luxembourg: Publications Office of the European Union.



Source: European Commission¹⁷

Divergence doesn't only exist between countries but also among regions within the EU as demonstrated in the figure above¹⁸. The EU Regional Social Progress Index measures social progress for each of the 272 regions of the 28 member states of the European Union and complements traditional measures of economic progress such as GDP, income or employment. As it is intended to complement such measures, it purposely leaves these indicators out of the index. Defining Social Progress was based on three main areas: Basic Human Needs, Foundations of Well-Being and Opportunity. Aggregated results from sub-categories of each region ranges from 0. Regional divergences in performance are not explained by wealth, in terms of GDP per capita solely. Instead the study identifies regions with similar economic measures but extensively different social outcomes. An example, is the highest performing

¹⁷ European Commission Directorate-General for Regional and Urban Policy (September 2017). *My Region, My Europe, Our Future – Seventh report on economic, social and territorial cohesion*. Luxembourg: Publications Office of the European Union.

¹⁸ European Commission Directorate-General for Regional and Urban Policy (DG Regio), Orkestra Basque Institute of Competitiveness, and Social Progress Imperative (2016). *European Union Regional Social Progress Index*. [Data file]. Retrieved from <http://www.socialprogressimperative.org/custom-indexes/european-union/> - Of 50 indicators, 25 are official statistics provided by EUROSTAT and other EU institutions, and 25 are survey data from EU-SILC, Quality of Institutions Index, Gallup, and Eurobarometer.

region, Upper Norrland, has the same GDP per capita as Bucharest, Romania, however the first scores more than 30 points higher on social progress.¹⁹

The study identifies regions with very similar levels of economic strength but vastly different social outcomes. The highest performing region, Upper Norrland, is not among the richest. It has the same GDP per capita as Bucharest, Romania but scores more than 30 points higher on social progress.

The overall gap between rich and poor is the largest in 30 years²⁰, and this is not only negatively impacting the population of the EU, but also its wellbeing, social cohesion and economic growth. Social concerns become statistically important because they have direct economic implications. There has been an estimate of a possible 8.5% decrease in GDP over the course of the next 25 years. if this inequality is not addressed. To confront this, long-term social investment is needed, especially in regions at the lower end of the diverging economies, and it should benefit people with lower income so that positive convergence may be achieved. Better social policies and social infrastructure embedded in these policies lead to greater resilience and more long-term convergence, growth and wellbeing.

The Commission, the Council and European Parliament adopted on 23 October 2017 the European Pillar of Social Rights to deliver new and more effective rights for citizens. The pillar is built on 20 key principles and accompanied with a social scoreboard.²¹²² Some of the benchmarks and targets as defined in the scoreboard of the Pillar of Social Rights could also be used to monitor the progress on the investment in social infrastructure.

In conclusion, long-term investors in economic societies need to consider the main drivers of change as described earlier. This will require a reform of current social models and of the European welfare states as well as financing of services, benefits and infrastructures. Society and technology are in rapid transformation, which requires flexible innovative approaches to tackle inequalities and move towards upwards convergence in EU.

¹⁹ Ibid.

²⁰ OECD (2014). 'Focus on Inequality and Growth – December 2014'

²¹ Council of the European Union (2017), Interinstitutional proclamation on the Pillar of Social Rights, Council (EPSCO), 23 October 2017

²² European Commission (2017) Social Scoreboard 2017 Luxembourg: Publications Office of the European Union.

2. REFORMING SOCIAL MODELS AND THE EUROPEAN WELFARE STATE

The drivers of change described in the previous chapter are critical for the transformation of social models in Europe. Focusing on human capital and decreasing inequalities within and across generations demonstrates how appropriate investments in the three main areas Health and Long-Term care, Education and Lifelong Learning and Affordable and Energy Efficient Housing can improve growth and well-being, when fiscal space and financing of the social provisions are adapted. Also, sufficient attention must be dedicated to the critical role of local governments in social infrastructure investment and multilevel governance often involved.

2.1. INVESTING IN HUMAN CAPITAL AND SOCIAL INFRASTRUCTURE CONTRIBUTE TO LONG TERM GROWTH

Social policies focussing on human capital have returns on employment, well-being, productivity and growth and decrease expenditures on social protection²³. The key elements for boosting GDP, namely productivity, employment and active age population are all impacted by social infrastructure investment. In an ageing economy with widening inequalities, raising the quality and quantity of human capital is imperative to sustain generous and effective welfare states, beginning in early childhood. One period of education at the beginning of one's life is no longer a good enough basis for a successful career. In economics, the case for human capital enhancement goes back to endogenous growth theory of the 1980s, suggesting that long-term growth is determined more by human capital investment decision than by external shocks and demographic change²⁴. As empirical evidence shows that (gendered) employment opportunities are key to effective poverty mitigation in post-industrial economies, social investment welfare states are pressed to mobilizing citizens' productive potential. As such, employment (quantity), employability (quality), and gender equity are important objectives behind the overarching aim of poverty mitigation²⁵.

Our social models are therefore adapting continuously in particular to:

²³ European Commission (2016) Directorate-General for Employment, Social Affairs and Inclusion: Assessing Social Investment Synergies (ASIS) Luxembourg: Publications Office of the European Union, 2016.

²⁴ Burroni, L., Keune, M. and Meardi, G. (2012). Economy and society in Europe. Cheltenham: Edward Elgar, p.53.

²⁵ Esping-Andersen, G., D. Gallie, A. Hemerijck, and Myles, J., (2002) Why We Need a New Welfare State, Oxford University Press: Oxford.

- (i) the realities of people living and working longer, confronting the health care systems with the need for more prevention, dealing with people who need to manage chronic diseases and rising co-morbidities while the health systems are still designed for acute diseases;
- (ii) an increasing number of single women households as well as a higher participation of women in the workforce, creating more need and demand for child care, social care and long-term care and;
- (iii) rapidly changing needs for skills and competencies for the jobs and society of tomorrow while education systems do not keep pace with the innovations already here now.

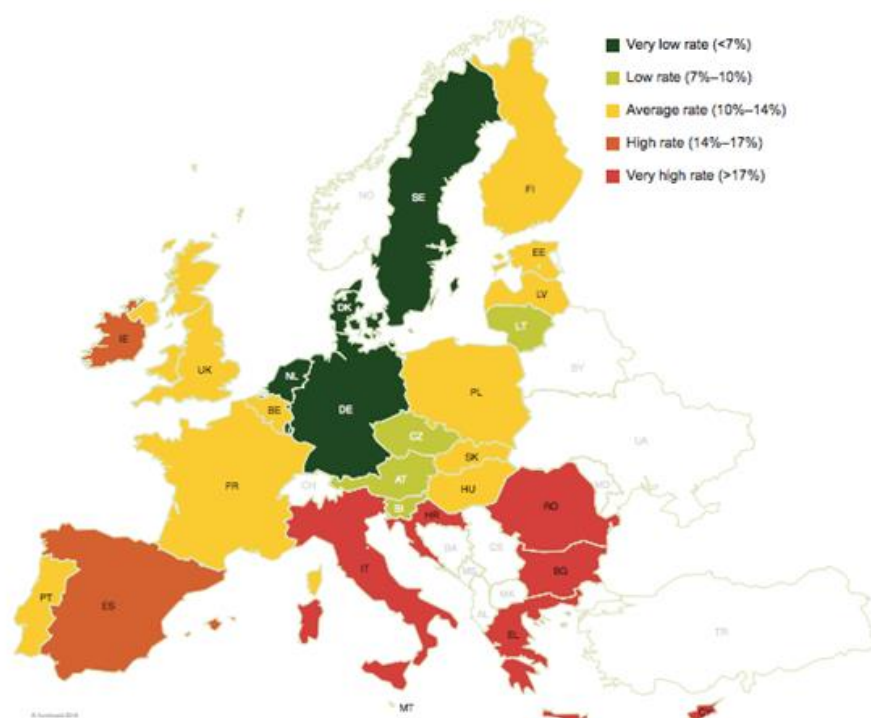
Additional efforts are necessary to provide for populations which are typically underprovided by current social infrastructure and services. For example, more quality child care for low-income women and migrant populations. With social exclusion comes exclusion from employment, productivity, safe housing, education in future generations as well as a less cohesive and efficient society. Healthcare, education and social housing are closely connected to social support systems, to cater for the complex and evolving needs of everyone over their life course.

2.2. CURBING INEQUALITIES ACROSS GENERATIONS

The overriding objective of social investment policies is to break the intergenerational transmission of poverty, through social reforms that help ‘prepare’ individuals, families and societies to respond to the changing nature of social risks in advanced economies. This can be achieved through investing in human capabilities from early childhood through old age while improving (gendered) work-life balance provision for working families, rather than merely pursuing policies that ‘repair’ social misfortune after moments of economic or personal crisis. ²⁶

Figure 3. NEET rate, 15-24 years, EU28 2015 (%)

²⁶ Hemerijck, A. (2017). ‘The uses of Social Investment’. Oxford Press



Source: Eurostat²⁷

As underlined in a 2014 report of the Special Task Force (Member States, Commission, EIB) on investment in the EU, **investments in human capital (e.g. education and health care) and deprived urban areas are key drivers for sustained productivity growth and social inclusion**, representing the more effective way to cut the intergenerational transmission of poverty and social exclusion.²⁸

A key demographic element that must be considered when assessing the generational aspect of poverty is the NEET group (a young person who is Not in Education, Employment or Training).

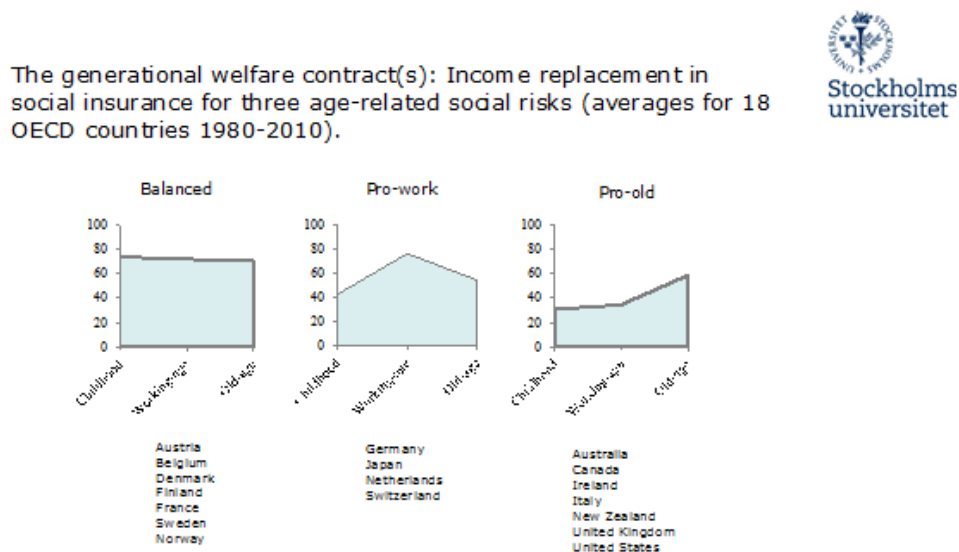
Without an adequate education, it is becoming increasingly difficult for young people to be employed, and become productive members of society. The growth of a better educated, housed and healthier working age demographic is essential to contribute to the functioning of our society and is directly correlated with improvement in social infrastructure.

In addition to the imbalance between younger and older populations regarding employment, poverty and well-being, recent work by Nelson (see Figure 4) also brings evidence how long-term investment balanced between different generations has an impact on the efficiency of social welfare systems and on employment and productivity (therefore growth and this should be relevant when deciding how to prioritise public investments and debt

²⁷ Eurofound (2016). Exploring the diversity of NEETs. Luxembourg: Publications Office of the European Union.

²⁸ Special Task Force (Member States, Commission, EIB) on investment in the EU, Dec. 2014

Figure 4: Impact of long-term investment on efficacy of social welfare systems, employment and productivity



Source: Birnbaum, et al. (2017)²⁹

2.3. MULTI-LEVEL GOVERNANCE AND THE KEY ROLE OF LOCAL GOVERNMENTS IN SOCIAL INFRASTRUCTURE INVESTMENT

In Europe, infrastructure investments in 2013 were below the level experienced in 2007 by 15%. Although an obvious priority, recent EIB evidence on what has been happening with infrastructure investment EU-wide suggests the negative impact of the economic downturn has been even more severe than initially estimated. Since 2009, infrastructure investment spending has fallen from 2.3% to 1.7% of GDP, a decline of around 25%, with the spending level achieved in 2015 still well below the level attained a decade earlier³⁰.

These averages also hide marked regional differences. By mid-2016, the EIB estimates that although infrastructure investment in the Core member states had returned to its pre-crisis levels, the experience of the Cohesion and Periphery countries is much less positive, languishing badly, down 9% and 27% respectively from pre-crisis levels³¹.

²⁹ Birnbaum, S., Ferrarini, T., Nelson, K., Palme, J. 2017. The Generational Welfare Contracts: Justice, Institutions and Outcomes. Edward Elgar (in press).

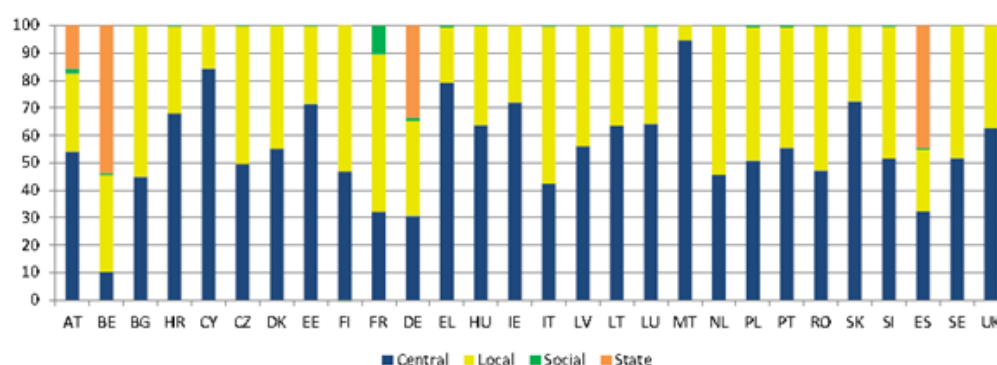
³⁰ European Commission, Commission Communication, *An investment plan for Europe*, 26 November 2014. COM (2014).

³¹ Dr Lieve Fransen (2016) 'Why and how to grow the EU's social infrastructure financial and delivery capacity'. In publication.

While all levels of government saw, public investment decline below pre-crisis peaks in 2015, local government levels were noticeably lower (down 12%) than those of central government (down 8.1%)³². This is likely to depress growth rates over the medium-term³³.

Fiscal consolidation during the crisis have, in fact, strongly reduced fiscal space for public investments in some regions. For so-called economic infrastructure (transport, energy and TLC) which are mostly done at the central level, and for those done by the corporate sector and by local utilities (which are mostly outside the perimeter of the public sector) the reduction has been less pronounced. Some member countries where investments in small and medium public works in social infrastructure are made at sub-national level has seen a dramatic decrease. Because sub-national Governments carry out two-thirds of total public-sector investments on average in the EU (see Figure 5 below) and these investments are of small and medium size we have a major challenge here that is different from general infrastructure investments.

Figure 5: Share of the four subsectors of the general government in total investment (average 2013-2014)



Source: Eurostat³⁴

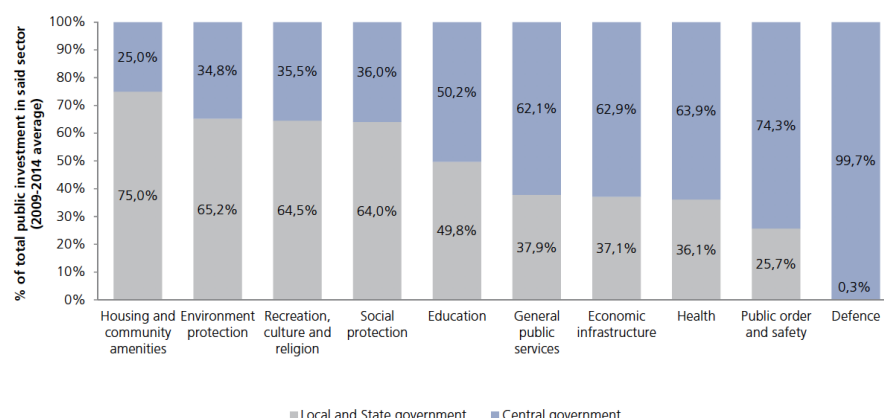
Local governments tend to invest more than central governments in housing and social amenities, environmental protection, recreation, culture and religion, and social protection. Local and central governments tend to be relatively equal in educational infrastructure investment but central government tends to invest more in health except where authority for decision making has been devolved to the regional level e.g. in Belgium, Spain and Italy (see Figure).

³² CEB (2017) Investing in Public Infrastructure in Europe: A local economy perspective. Council of Europe Development Bank.

³³ European Commission (2014), Investment for jobs and growth – Promoting development and good governance in EU regions and cities, Sixth report on economic, cohesion and territorial cohesion, EC: Luxembourg ISBN 978-92-79-39425-6.

³⁴ Ibid.

Figure 6: Local and state share of social infrastructure investment in the EU



Source: CEB 2017 p12 – Eurostat and CEB staff calculations³⁵

Of course, the degree of decentralisation (the power of local governments to make infrastructure investment decisions) is highly diverse in Europe – reflected by the fact that in some countries, local governments heavily depend on central government transfers, which often has a bearing on local investment priorities³⁶. Specifically, it seems that local authorities and public services have tended to protect current expenditure on existing services at the cost of capital accumulation^{37,38}.

It is also mostly at the local level that citizens perceive the presence of national (and European) governments in providing good quality infrastructure. Moreover, it is largely at the local level that the construction industry contributes to economic growth and employment. Such strong cuts in investment at the local level has then serious political and economic negative effects.

³⁵ CEB - Council of Europe Development Bank on Social Inclusion Bond Framework (2017). p12

³⁶ CEB - Council of Europe Development Bank on Social Inclusion Bond Framework (2017). p11-13.

³⁷ Davey K (Ed.) (2012) Local government in critical times: Policies for Crisis, Recovery and a Sustainable Future, Council of Europe texts 2011.

³⁸ CCRE/CEMR (2012). Further decline in European subnational investments in 2011. Council of European Municipalities and Regions/Dexia Crédit Local. Press Release, Brussels and Paris, 18 September 2012

3. DEFINING AND ASSESSING INVESTMENT IN SOCIAL INFRASTRUCTURE

3.1. DEFINITIONS AND TYPOLOGY

Social Infrastructure is a subset of the infrastructure sector and can broadly be defined as long-term physical assets in the social sectors (in this report related to education and lifelong learning, health and long term care and affordable, accessible energy efficient housing) and that enable the provision of goods and services.

This definition is the one used for this High-Level Task Force Report with the tangible and intangible components as defined in the following table (see table 3 below). We also strongly recommend for clear international guidance and harmonization of social infrastructure typology to facilitate standardization and development of an asset class soon.

Table 3. Social infrastructure typology in the 3 HLTF priority sectors

Sector	Direct tangible	Direct intangible	Excluded
Education	Kindergartens	Facility maintenance	Salaries
Life-long learning	Childcare	Energy efficiency/low carbon	Utilities
	Schools		Materials
	Vocational colleges	Student lending	
	Universities		
	Laboratories	R&D programmes	
	ICT equipment & Related infrastructure	Education software development	
	Cloud infrastructure		
	Student accommodation		
	Adjacent supporting infrastructure		
Health	Hospitals	Facility maintenance	Salaries
Long-term care	Clinics	Energy efficiency/low carbon programmes	Utilities
Social Care	Inc. community		Materials
	Diagnostic facilities	Health programmes	Pharmaceuticals
	Imaging facilities	Public sector R&D and Cloud	and devises

	Medical equipment	Infrastructure ³⁹
	ICT equipment	Private sector R&D (pharma, med equipment)
	Private & Public research labs	
	Long-term care facilities	Health software development
	Short-term care facilities	Education & training programmes
	Nursing accommodation	
	Adjacent supporting infrastructure	

Affordable housing	Residential buildings in keeping with Housing Continuum ⁴⁰	Energy efficiency/low carbon programmes	Salaries Utilities
	Semi-residential buildings	Programmes for housing refurbishment/ renovation)	
	Adjacent supporting infrastructure	Provision of care & support services for social housing residents	
	Premises dedicated to community/ local services		

³⁹ National Institute of Standards and Technology <http://nvlpubs.nist.gov/nistpubs/Legacy/SP/nistspecialpublication800-145.pdf> Cloud Infrastructure as a Service (IaaS). The capability provided to the consumer is to provision processing, storage, networks, and other fundamental computing resources where the consumer can deploy and run arbitrary software, which can include operating systems and applications. The consumer does not manage or control the underlying cloud infrastructure but has control over operating systems, storage, and deployed applications; and possibly limited control of select networking components (e.g. host firewalls).

⁴⁰ Dr Orna Rosenfeld & European Commission EUUA Housing Partnership, Paris social infrastructure conference 2017.

3.2 ASSESSING CURRENT INVESTMENT IN SOCIAL INFRASTRUCTURE

This section looks at current investment in social infrastructure from three perspectives: assessing investment in education and lifelong learning, health and long-term care and affordable and energy efficient housing. Drawing on Eurostat data⁴¹ and based on wide consultations with experts in different fields we come to the following overview of current investment in Social Infrastructure.

Public investment rates in advanced economies remain at a historic low and has partially been responsible for lagged economic growth⁴². In this context, social infrastructure investment represents a relatively small part of the public resources allocated with estimated at 3% to 5% of total expenditure, per sector. Although it is hard to gauge about the precise figure, especially if trends in capital stock need to account for direct tangibles and intangibles as listed in Table 3 (see above).

Overview of current investment in social infrastructure:

- +/- € 65 billion annually for education & lifelong learning.
= 0.43% of GDP and 90% are public resources.
- +/- € 75 billion annually for health and long-term care.
= 0.5% of GDP.
- +/- € 28 billion annually for affordable housing⁴³.
= 0.4% of GDP.
- Grand total = +/- € 168 Billion

Additionally, available evidence is provided within background literature.⁴⁴ Available evidence also needs to consider a few caveats such as for example: the distinction between public and private investment is not always clear in practice.

Education and Lifelong learning

Capital expenditure for education was in the range of 65 billion euro in 2015 in EU (national accounts data from Eurostat), with the UK, Germany, France and the Netherlands accounting for around two-thirds of the total. This points to a major

⁴¹ Eurostat (2017) Government expenditure on health. Data extracted February 2017

⁴² IMF (2015) Making public investment more efficient. Staff Report, June 2015.

⁴³ Housing Europe, (GF061), COFOG Database, Eurostat Government Finance Statistics

⁴⁴ Available evidence shows the percentage of GDP invested in social infrastructure in the EU ranges from 0.8% (Georg Inderst paper for WG2 based on PWC analysis), 1% (Wagenvoort et al) and up to 1.5% (Revoltella et al.). However, both Wagenvoort and Revoltella's analyses have excluded several EU Member States (7 and 5) because there is a substantial lack of data.

underinvestment in some of the other countries where the need is even higher. Even in countries with relatively high values, there is sometimes a fragmentation of investment plans. For instance, in France universities depend on national competences whereas schools and colleges fall under several levels of territorial competence. This points towards potential inefficiencies if they are not coordinated well. The values of investment in this sector vary widely across countries, i.e.: ES, IT, AT, DE, IE, SK invest 0.3% of GDP or less; CZ, LV, LT, EE, FI, NL, 0.8% or more; per pupil, ES spends € 183 and NL € 1,283. Whereas, public investment stagnated from 2010 to 2015 on average in the EU; it dropped in DE, FR, IT, ES, PT and rose in UK, BE, SE.

Education & Lifelong Learning

Total estimated in the range of +/- €65 billion

- **Infrastructure spending by the public sector as a % of GDP** – public investment in education infrastructure in the EU28 was € 65 billion in 2015 (including gross capital formation and capital transfers). This equals to: 0.43% of GDP; € 580 per student (from € 382 at primary level to € 723 at tertiary).
- **Infrastructure spending by the private sector as a % of GDP** – Private investment in education is more difficult to gauge. OECD says that private *expenditure* represents 15% of the total. Almost all of it is households' outlays for tuition + other current costs; private *investment* likely to be a small fraction.

Health and long- term care

The Capital Spending in EU is 0.5% of its GDP in the health sector (that is, only ~5% of the recurrent spending). While capital spending grew strongly in the EU as a whole prior to the crisis – overall capital spending rose by 20% between 2005 and 2007 in real terms – it fell by more than 10% over the next six years (up to 2013) to bring spending almost back to pre- crisis levels. In effect, it went up in Austria, Sweden, Belgium but badly down in Greece, Italy, Portugal and Spain.

Eight Member States have a health expenditure-to-GDP ratio equal to or above the weighted EU average in 2013 (7.8% of GDP): DK, FR, NL, DE, AT, BE, SE and the UK. The Member States with the lowest share of health expenditure were CY and LV (3.5% of GDP), EE, HU BG, PL, RO, and LT (below 5% of GDP).

Assessment of resources allocated does of course not say much about the efficiency or effectiveness of the use of those resources. In the health sector for example, the focus is usually on hospitals, while it is increasingly recognised that some countries – such as Germany, France, Belgium and Hungary - have an excess of capacities in hospitals (Germany has 8,2 beds per 1000 inhabitants and has the highest number in the OECD countries) this points towards the need for disinvestment. Efficiency could be increased by spatial and functional concentration and through increased use of connectivity and home services. This could also lead to decreasing costs in

health. The level of resources invested in health care infrastructure, equipment and ICT also seems to fluctuate more with the economic cycles than recurrent spending. The OECD (2016) argues that this is because such investment decisions are more discrete and can more easily be postponed or brought forward.

In the long-term care sector, most infrastructure investment continues to go towards the construction of institutionalised forms of care; which force users (children, persons with disabilities, elderly people, homeless people and migrants) to live in segregating settings, often for long periods of time. However slow, there are also positive examples throughout Europe where community-based care and support services are being developed which better fit the evolving and complex needs of users. The lack of fiscal space of the past decade have limited these developments; with a negative impact on the social inclusion and wellbeing of disadvantaged populations.

Health & Long-Term Care

Total estimated in the range of +/- €75 billion

- **Infrastructure spending by the public sector as a % of GDP**- public investment in health and long term-care infrastructure in the EU28 ⁴⁵ was €75billion in 2015. This equals to 0,5% of GDP.
- **Long-Term Care** - Public spending on long-term care ranges from more than 4% of GDP in the Netherlands to less than half a percent of GDP in countries such as Latvia and Poland. That said, within long-term care, expenditure on care for the elderly was less than 0.1 % of GDP in Bulgaria, Germany, Cyprus, Luxembourg and Romania. This variation across the EU28 – a factor of ten – is much greater than is seen for health spending. It reflects large differences in the balance between formal provision and informal care (usually provided by families) and the share of costs that people are expected to pay out of pocket.

Affordable Housing

While the scale and organisational structures differ widely across European countries the current demographics of social housing tenants are very similar. Generally, it is the old, the young and the migrant populations who live in social housing (Table 5 below). The retired and single-parent families are worryingly overrepresented in the 12 countries assessed by Scanlon et al.⁴⁶

⁴⁵ Eurostat (2017) Government expenditure on health. Data extracted February 2017

⁴⁶ Scanlon K, Fernández Arrigoitia M and Whitehead C (2015). Social housing in Europe. European Policy Analysis (17): p5.

- **Public Financing** for Affordable Housing funded from Social Protection envleops mainly relates to payments to households to help with the cost of housing as well as the operation of social housing schemes. The highest spend is in IE, DK, FR and UK. The lowest reported spend is in AT, CZ, LV, LT, PL⁴⁷.
- **Social housing as a proportion of overall housing stock** – Over 20% in NL, AU, Scotland; Just under 20% in DK, SE, FR and England; Less than 10% in IE, CZ; including 6% in BE and 4% in DE⁴⁸ and 3% in HU⁴⁹.

	% of total housing stock
Netherlands	34.1
Austria	26.2
Denmark	22.2
France	18.7
United Kingdom	17.6
Finland	12.8
Ireland	8.7
Poland	8.3
Slovenia	6.4
Korea	6.4
New Zealand	5.8
Malta	5.5
Australia	4.9
Norway	4.6
United States	4.3
Canada	4.1
Hungary	4.0
Germany	3.9
Japan	3.8
Portugal	2.0
Luxemburg	1.6
Estonia	1.4
Czech Republic	0.5
Latvia	0.2

Source: oecd.org/social/affordable-housing-database⁵⁰

- **Building permits** - Compared to 2007, in 2014 the number of building permits per 1,000 inhabitants contracted in all countries, excluding Germany. It decreased by less than half in BE, CZ, FR, PL and SE, whereas the contraction exceeded this threshold in DE, HU, IE, PT and ES.
- **Construction costs** - High construction costs have an impact on the capacity to supply affordable housing in several countries. Comparative price levels for

⁴⁷ Eurostat (2017) Government expenditure on social protection. Data extracted February 2017.

⁴⁸ Scanlon K, Fernández Arrigoitia M and Whitehead C (2015). Social housing in Europe. European Policy Analysis (17): pp 1-12.

⁴⁹ OECD Social Rental Housing

⁵⁰ OECD Affordable Housing Database. oecd.org/social/affordable-housing-database

investment (Eurostat) found that, in 2016, the highest price level for investment among the EU Member States was observed in Sweden at 35 % above the EU average, while in the least expensive EU Member State, Romania, the price level was 36 % below the EU average⁵¹.

- **Residential loans** - The average EU 27 total outstanding residential loans to GDP ratio has continued increasing since the information became available: from 43.7% in 2005 to 47.1% in 2016. Note that the peak was in 2010 but this has since declined slightly.⁵²
- **Tenures** - Data from EU SILC shows that indeed the distribution of population across tenures saw an increase in tenants and a decrease in owner-occupiers since 2007 in the EU 15. On the contrary, overall the share of owner occupiers continued to increase in the EU13 with a parallel decrease in the share of people renting
- **Lack of affordable housing** - According to data provided by member organizations of Housing Europe, new social housing production decreased in most countries between 2009 and 2012, including the UK, NL, AT, IT, DK, IE and ES. The most significant exception was France, that produced 116 000 new HLM (social housing) units in 2012 compared to 98 000 in 2009. BE and LU have maintained or even increased production but this started from very low levels. DE decreased social housing production consistently in recent years but there was new public investment in 2014-2015 and output increased. In addition, production by housing associations has increased in the UK since 2012 but there has been a switch towards 'affordable rent' (up to 80% of market rent) instead of social rent (typically about half of market rent level).
- **Severe housing deprivation** - Across the EU-28 4.9 % of the population suffered from severe housing deprivation in 2015. There were four EU Member States where more than 1 in 10 of the population faced severe housing deprivation in 2015: BG, HU, LV and RO. Also, in 2015, an 11.3 % share of the EU-28 population lived in households that spent 40% or more of their equalised disposable income on housing⁵³.
- Another marker of poverty and of severe housing deprivation is **fuel/energy poverty**. Fuel poverty indicators across Europe show that Bulgaria and Lithuania are the countries with the highest rates of people who are not able to keep their homes adequately warm or cool. These countries are followed by Cyprus, Portugal and Greece, all of which are Mediterranean countries with mild winters. On the contrary, in colder Northern European countries (Sweden, Finland, the Netherlands and Denmark), only a low percentage of the total population is unable to have an adequately warm home. Particularly, vulnerable consumers

⁵¹ Eurostat - Price level indices for construction, 2016, EU-28
http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Price_level_indices_for_construction,_2016,_EU-28%3D100.png

⁵² European Mortgage Federation (2017) - Hypostat A Review of Europe's Mortgage and Housing Markets.

⁵³ Eurostat (2017) Housing statistics. Data extracted February 2017.

(e.g. elderly people or single parent with low income) are more likely to be unable to keep their home adequately warm.

Affordable housing

Total estimated in the range of +/- €28 Billion

- **Infrastructure spending by the public sector as a % of GDP** – public investment in affordable housing infrastructure in the EU was 28 billion euro in 2015. This equals to 0.2 per cent of GDP. This does not include investment in energy efficiency of affordable housing nor community amenities.

Public investment relevant to affordable housing is identified by Eurostat in two functions of government:

1 Housing and community amenities (under the code GF 06), out of which you can identify different expenditures such as purely housing development or several other community development services;

2 Housing (GF 1006) under the general social protection function (GF 10). As you say this includes mainly social protection payments to households and in some cases the cost for running some (limited) social housing programmes⁵⁴.

. Of total government expenditure under housing only euro 28 billion was for housing development and euro 32 billion for community development with highest spend in FR, CZ and DE. The latter relates mainly to social protection payments to households to help with the cost of housing as well as the operation of social housing schemes and does not infrastructure.

The highest spend is in IE, DK, FR and UK. The lowest reported spend is in AT, CZ, LV, LT, PL⁵⁵.

Regional development levels are not converging and the gap in investment in social infrastructure also differs widely per region. In GDP terms, the **gap between the most advanced regions and those lagging is of 14 to 1**⁵⁶. (Reference 10 EESC (2016), *New measures for development-oriented governance and implementation – evaluation of the European Structural and Investment Funds and ensuing recommendations*, ECO/400).

⁵⁴ Eurostat (2017) Government finance statistics database. <http://ec.europa.eu/eurostat/web/government-finance-statistics/data/database>
Data extracted February 2017.

⁵⁵ Eurostat (2017) Government expenditure on social protection. Data extracted February 2017

⁵⁶ EESC (2016), *New measures for development-oriented governance and implementation – evaluation of the European Structural and Investment Funds and ensuing recommendations*, ECO/400.

3.3 THE QUALITY AND ACCESSIBILITY OF DATA AND GROWTH OF FIXED CAPITAL FORMATION (OR GFCF) GROWTH RATE

This section discusses the quality and accessibility of data and growth of fixed capital formation or GFCF growth rate and social infrastructure investment at different levels of governments.⁵⁷

To put this in a wider perspective it is important to recognize that though investment in social infrastructure has a growing role, there is surprisingly a lack of statistical data or research in this market.

Assessment by the Council of Europe Development Bank (CEB) of the level of social infrastructure shows that figures provided at an aggregate level disguise variations in the growth of gross fixed capital formation (GFCF) at both central and local levels of government across the EU. In the EU, GFCF levels are 5.6% below pre-crisis levels but the decline in public GFCF is not universal and an uplift is unlikely soon⁵⁸. Assessing the evidence and the need to boost public and private investment in social infrastructure also needs to account for different levels of decentralisation in the EU. CEB analysis has identified five distinct clusters with specific characteristics when accounting for respective GFCF growth rates, GDP recovery and government deficit levels⁵⁹

It is strongly recommended therefore to work with Eurostat and others to develop a more standardised and interoperable methodology to monitor the investment levels for the different sectors and improve transparency at the regional or subnational and municipal levels .

⁵⁷ Wagenvoort R, de Nicola C and Kappeler A (2010), Infrastructure finance in Europe: Composition, evolution and crisis impact in Public and private financing of infrastructure Evolution and economics of private infrastructure finance EIB Papers Volume 15 No.1.

⁵⁸ CEB (2017) Investing in Public Infrastructure in Europe: A local economy perspective. Council of Europe Development Bank, February p14.

⁵⁹ Ibidem.

4. THE INVESTMENT GAP FOR SOCIAL INFRASTRUCTURE

This chapter presents a first assessment of the need for SII based on literature reviews and consultations with experts and with relevant institutions and discusses the need to move from an underinvestment trap scenario towards smart capacitating long term SII investment.

4.1. ASSESSING THE NEED FOR SOCIAL INFRASTRUCTURE INVESTMENT

According to the European Commission, Europe needs €2 trillion of investment in infrastructure by 2020. Meanwhile, the European Investment Bank (EIB) estimates that the region needs to invest 3.6% of GDP, including into social infrastructure, if Europe's economy is to continue to recover and be set on a path of sustained growth.⁶⁰

The EU is experiencing a chronic lack of investment in social infrastructure, which predates the 2007-2009 financial crisis and since the last financial and economic crisis, we see a further underinvestment in social services, benefits and in social infrastructure in many countries, regions and municipalities. Net public investment in the Eurozone periphery, with its critical need for catch up in infrastructure, has decreased from 2% of GDP to a negative - 0,6% – the net public capital stock is therefore shrinking and this is to the detriment of the young generation.

In the absence of precise data and based on the existing literature and consultations with a wide range of experts in the different fields, we highlight the following elements considered to assess the need and the gap in investments in the sectors concerned.

Education and Lifelong Learning

Public investment in education has stagnated, losing 0.2 points of GDP between 2002 and 2015.⁶¹ Lack of investment in this field has led to further inequalities in educational attainment, as poorer areas are not being provided with the same quality of education as richer areas, thus furthering inequalities. Innovation in the education sector is being neglected, and has not undergone the same transformation as in other sectors. The technological needs of schools and universities are urgent, and far less catered to than in private workplaces. We should thus enhance investment in the infrastructure most important to young people, and migrant populations.

Capital Investment Needed

⁶⁰ ECB Economic Bulletin, Issue 2/2016 – Articles.

⁶¹ Eurostat. Government expenditure on education. Data extracted in February 2017.

To reduce both inequality in education outcomes and skill shortages on the labour market, Europe should aim at providing relevant skills and competences to an increasing proportion of pupils/students-migrants among the population.

Solution

Building more educational facilities – or renovating the decrepit ones – with modern criteria, including IT facilities, accessibility, energy efficient that generate adult learning;

Creating Advantage

Investment in traditional education infrastructure, ultimately funded by public budgets, can be done through two channels: public procurement and PPPs , including Energy Performance Contracting (EPC). Both can have innovative features. Advantage could be created by bundling together facilities with similar features and linking the building/renovation phase with the maintenance phase, including energy bills for heating, electricity.

Unique Value Proposition

Payments to the investor can be based on availability and can also include a share of the savings on energy bills, for a few years, creating incentives for the environmental quality of the building. The public budget still needs to fund part of the overall investment.

Health and Long-term care

Health infrastructure investments are often delayed, producing a knock-on effect for many people and institutions. Furthermore, the investment that the health sector is currently receiving continues to be hospital-centric and fails to foster a more flexible approach to healthcare, as needed and expected in the present, by neglecting community/local facilities and short-term care. Current healthcare also is often inefficient, with large legacy stock in EU13, contributing to bed oversupply. Innovation is not only needed in terms of physical accessibility and flexibility and energy efficiency, but also in terms of technological innovation; investment is needed in digital platforms, data gathering and interoperability.

Capital Investment Needed

Healthcare: If assumed that infrastructure is an average of 5% of total annual health expenditure and that for 2014 €1.4 trillion was the total EU healthcare expenditure (Eurostat 2017) around €70 billion was spent on infrastructure. In estimating future capital needs, the challenges for the EU15 and EU13 are different but the solutions depend on whether health reform transitions away from a hospital-centric approach to a more pluralistic closer to home model with regional specialist centres supporting a stronger primary care resource blending with social care. The EU13 has a large legacy stock and a tendency to continue to prioritize investment in hospitals and specialist centres without reducing the oversupply of beds. At the same time, a

considerably faster growth in demand for healthcare is expected in the coming decades in the EU13 when compared to the EU15 (2015 Ageing Report).

Social care: Additional needs for people with disabilities, migrants and childcare aren't account in these estimates.

Long-term care (LTC): As estimated in table 4 we can assess an additional gap of 50billion p.a. The shift of informal to formal care and a convergence process in terms of coverage and costs of LTC for those countries, which are below EU average levels of care in this respect, imply a substantial fiscal risk (2015 Ageing Report).

Solution

- Community or proximity-based, i.e. Social & Health care will be more community based and integrated into regional or local service networks and communities
- Shifting from patients to empowered individuals with a stronger focus on prevention & home care
- Financial/ payment schemes based on incentives for performance, coordination, prevention, cost-effectiveness (preventing duplication)
- Fiscally sustainable (using cost-assessment methods e.g. HTA- Health Technology Assessment – and HSPA – Health Systems Performance Assessment)
- Sufficient and strategic investment (virtuous triangle: small-to-big scale adapted infrastructures, technologies and services (workforce and good governance)
- Upgrading skills, salaries, working conditions and career paths of staff

Creating Advantage

For integrated care, successful cases showing returns (economic and social) have been so far small-scale (regional level at most), focused on chronic-disease management, requiring: health professional and patient commitment, both bottom-up involvement and top-down involvement (or enabling), and time to mature/show benefits. To facilitate scaling-up attention is needed to:

- Aligning Social Investment with national reform and regional programs
- Stakeholder engagement (co-design and governance)
- Accountability for decision making
- Effective & efficient services
- Other business cases

Unique Value Proposition

Health, Long-term care and social care are a safe investment because it taps into a secure and steady publicly-backed source of income (insurance) and into an ever increasing and invaluable personal need for health and well-being. The Social Protection Committee Working Group on Ageing (SPC-WG-AGE) advise that it is possible to contain the growth in needs, make care more efficient and ensure dignity in care if action is taken based on good evidence.

Affordable Housing

Existing affordable housing stock is decreasing across Europe (except for France), and homelessness is increasing. As such measures must be taken to ensure enough affordable, accessible and energy efficient housing to meet the demands. Public funding is also decreasing (especially in EU15) while demands increase. The social pressures created by this climate increased inequality and migration, leading, in part, to an overburden rate of 11.3%, and an overcrowding rate of 16.7%.

Not only is affordable, energy efficient and accessible housing itself in high demand, but an efficient and sustainable infrastructure for these homes has become a priority due to climate change concerns and the desire to save money on running energy costs for the households involved and for public finances who often subsidized energy costs for poor households. Fuel poverty indicators are becoming increasingly alarming in BG, LT, CY, EL and PT. And yet, the potential savings in public spending are very large when assessing the expenses in subsidies made by countries and regions, to minimize the energy disconnections of vulnerable consumers

Capital investment needed

According to Housing Europe, approximately 450-500 thousand new homes are needed and 800 thousand homes require renovation.

Solution

- Vast supply of affordable housing: The solution would mainly consist of building more homes, although in some cases an increase in supply can also be achieved for instance by buying privately owned dwellings to be used as social housing and/or transforming existing publicly owned buildings for residential use.
- Increase investment in renovation and refurbishment of existing homes: according to our estimates, if 4% of stock is refurbished annually, backed up with a sustained change in residents' behaviour, this can help deliver 30% reduction in energy consumption by 2020. This would amount to 800.000 dwellings upgraded to the highest standards each year
- Enable housing organizations to provide the necessary integrated services such as social/care services: the effectiveness of the solution would depend on several different factors including setting up partnerships with service providers, in some cases giving more flexibility through changes in regulation and appropriate funding

Creating Advantage/ Unique value proposition

(i) Increasing affordable housing supply would provide homes for all sorts of people including these who cannot find suitable and affordable accommodation on the

market, helping tackling market failures (ii) investing in renovating of social housing can have a significant impact on health and well-being of residents. It can also help breaking poverty transmission across generations (iii) There is increasingly agreement among stakeholders involved in social/affordable housing provision that integrated services or “Housing +” approach is the best way to deal especially with residents from vulnerable populations.

Based on the above it is roughly estimated that the investment needed for each of the priority sectors can be calculated as an uplift of 25% of the current percentage of GDP identified for each sector in the previous chapter.

It is deplorable that data limitations do not currently allow more precise calculations but those estimates are recognized to be at the lower end of the real need in social infrastructure investments.

In conclusion, an investment gap of €142 billion p.a. is identified. The total minimum estimate for the next 12 years (2030) represents an investment gap of around 1.5 trillion Euro, See table 4.

Beyond ramping up finance, there is also a large potential in making infrastructure spending more effective. Accelerating productivity growth in the construction industry, which has flat lined for decades, can play a large role in this effort. Additionally, research showed, improving project selection, delivery, and management of existing assets could translate into 40 percent savings. Even the most advanced economies have significant room to learn from each other and to build stronger capabilities and learning institutions with the best oversight. A rigorous assessment that benchmarks each aspect of infrastructure development against global best practices can identify the areas where a well-targeted transformation could yield substantial results.

We therefore strongly recommend to rapidly boost long-term quality investment in social infrastructure and to learn from case studies, improve interoperability and information on projects and build up capacities to increase and enhance the pipeline of projects.

Table 4. Minimum estimate of the gap in SII

Sector	Current annual investment in €billion p.a.	Minimum gap per sector in €billion p.a. (uplift of 25 per cent of the current percentage of GDP)	Additional items in €billion p.a.	Annual Investment GAP in €billion p.a.

Education & Lifelong Learning (0.43% of GDP)	65	15		15
Health & Long-Term Care (0.5% of GDP)	75	20	€50 billion pa for long-term care Unknown amount for disability and migrants	70 (20+50)
Affordable housing (0.4% of GDP)	28	7	€50 billion pa to address energy poverty	57
Totals	168	42	100	142

Source: Experts

and Authors

4.2. SMART CAPACITATING, FUTURE ORIENTED SII INVESTMENT

The previous chapters demonstrate that while the population in Europe becomes more unequal, diversified and older and social services and benefits are changing to adapt to the new realities, many countries are hard-pressed to meet the needs and expectations of their populations, investments gaps in social infrastructure are not keeping pace with the above, while such investment could be a powerful catalyst for more wellbeing, inclusive growth, resilience and upwards convergence across the EU.

Turning towards adequate investments will therefore require a policy mix, considering the changing realities of the sectors and economy and creating the new financing models and investment conditions to draw in long-term investments.

The HLTF considered extensively how to get from an underinvestment trap we are in for the moment towards a smart capacitating future oriented investment,

People's needs are evolving and they expect the services and infrastructure provided to become more people-centered, accessible, energy efficient and affordable. Long-term planning, better partnership and cooperation is expected between separate sectors such as education, health & social care and affordable housing.

For regions, countries, cities to move towards a smart capacitating investment scenario, social infrastructure should include a mix of: fixed infrastructure for learning, affordable housing and specialist regional healthcare hospitals and flexible infrastructure allowing the space provided to be used by different populations e.g. emergency housing and social enterprise incubators.

Several preconditions for smart capacitating investment are identified:

1. Development of performant digital platforms facilitating telecare, tele-support, distance learning etc.
2. Interconnecting infrastructure – reinforce the availability of ITC/data networks and assistive technologies,
3. Energy efficiency, sustainability of the infrastructure is essential
4. Most buildings are only used during a (small) part of the day. Multipurpose buildings are needed in the future. Coordination capacity and institutional capacity to plan multipurpose use should be developed. A 'one stop shop' model can help.
5. Other forms of flexible solutions: More and more actors don't buy or build their own infrastructure. They lease or rent what is needed. Contractual flexibility. Renting or leasing might trigger a different effect on the infrastructure market.
6. Stewardship of public authorities: it is their responsibility to steer, contract and present partners
7. People/workforces – people/workforces need changing skills and competences and investment in flexible social infrastructure needs to take the human capacitation into account
8. Localisation and integrated approach; Energy efficient and safe housing are for instance made available in environments where people want to live and socio-economic opportunities are (made) available.
9. Accessibility: all facilities need to be accessible to all persons with disabilities or any other physical or learning difficulty.

Specific sector issues identified:

Education & Lifelong Learning – This scenario broadens the concept of education infrastructure, to encompass a range of more flexible facilities allowing to perform traditional teaching to 'regular' pupils but also other training activities (e.g. of adults, migrants, etc.) as well as extra-curricular activities outside normal school hours. The school would become the learning center of a local community, providing physical resources (space, connectivity, library) and attracting both teachers/trainers (incl. from NGOs) and learners (incl. e.g. family members).

The community learning center (former school) would focus on including all potential learners – i.e. putting more effort on pupils with socio-economic disadvantage and/or special learning needs, equipping them with adequate skills and hence improving their chances in finding rewarding work and leading autonomous lives. The social returns of investing in these centers would then encompass the saving on welfare outlays and social assistance, on top of the usual economic returns. Community learning centers could become the anchor of broader social investment in e.g. affordable housing and social assistance.

Similarly, a university becomes the hub for advanced learning, research & innovation of a larger area, interconnected with local business, public bodies and other research

institutes, attracting private capital to develop innovative technologies, incubate new business ideas, and spur start-ups.

Social returns to investment in advanced learning hubs (universities) would need to include the wider economic benefits of innovation on productivity and competitiveness. Current expenditure may not need to increase significantly, but rather be reallocated consistently with the new delivery approach. A considerable redistribution across the territory may also become necessary, as needs are likely to be very heterogeneous and efforts should focus on the most disadvantaged areas.

Drivers for education and future developments:

- Demography: although fertility has fallen across the EU, immigration flows are likely to offset the drop-in number of native children. Urbanization also creates challenges to education provision in crowded and rural areas alike.
- Upskilling: enrolment at tertiary level is on a rising trend. Giving equal opportunity to all young people to get adequate skills and competencies implies to ensure access from early age to disadvantaged children (migrants, minorities, special needs, low-income, ...) and support their completion.

Health and Long-Term Care – Flexible mechanisms and approaches will be needed to cater for the transformative developments in health and care sectors .

A 'one-stop shop' approach or 'care broker' model could prevent fragmentation and empower people to steer or co-steer their care. More flexible infrastructure should lead to an approach that puts people at the center of wellbeing, prevention of disease, support or care, and as the owner of all data collected on them.

Overcapacity in hospital 'beds' and institutional provisions triggers the need for more flexible infrastructure and investment in new forms of health and social care provision closer to where people live. This should be complemented by increased investment in prevention. That would lead to a decreasing need for high cost interventions and allow further flexibility of the infrastructure.

Affordable housing - A starting point for challenges is to recognize the differences between urban/growing and rural/shrinking areas in terms of potential and needs.

When creating more affordable housing in urban areas/ high demand: we must be careful to avoid social and spatial segregation (learn from the past and do not create the new '*banlieues*'). This means mixing people, thinking of the right use of space for instance leaving also some freedom for residents to use parts of the buildings/common areas, making sure to have on the premises supermarkets, small businesses, places for people to meet... Housing complexes should be well connected to schools and facilities, including through easy access to transports.

At the same time, we should think of the potential of rural/shrinking regions. If housing is cheaper there, can certain areas of our economy move there? Can new technologies help this by Incentivizing for instance teleworking/ people working at home? In this case homes should be adapted to be a place where to work as well. Furthermore, there's a case for creating working hubs including for the disabled. In

general, rural areas need services, to make sure quality of life doesn't drop there (because of businesses closing, etc.).

Finally, it is important to acknowledge that although poorer regions require more attention and development overall, poorer areas of richer regions should not be forgotten. Segregation within cities and towns must be avoided, and thus equal effort must be put into ensuring that disparity is tackled on a smaller scale, as well as at a national level – paying attention to social need and not simply geographical location.

5. FINANCING SOCIAL INFRASTRUCTURE INVESTMENT

In what follows we will concentrate on the general framework for financing infrastructure in the EU with a special focus on social infrastructure. We will discuss the emergence of a new model for infrastructure financing after the crisis; the obstacles, challenges and required policy actions; the financial features of investments in social infrastructure; actual and new financial schemes and instruments; the role of long-term investors; the prudential and accounting framework for infrastructure financing; and the need for Technical Assistance.

5.1. THE EMERGENCE OF A NEW MODEL OF FINANCING INFRASTRUCTURE INVESTMENT

In Europe, we should finance infrastructure while putting less pressure on public finances. Long-term institutional investors are seeking for low risk inflation-linked long-term financial instruments to match their long-term liabilities. The EIB and national promotional banks and institutions, after the crisis, have reinforced their role, stepping in supporting projects by providing guarantees, after the collapse on the mono-line industry, and co-investing with commercial banks providing longer duration and lower costs. This has partly allowed crowding in of private finance, which would have been otherwise not in the economic position to participate in infrastructure projects. The banking system, in fact, since the outburst of the crisis, have been under pressure to repair balance sheets and has been restricted in its capacity to finance and invest in infrastructure, as consequence also of low profits and of unintended consequences of the new accounting regulations on long-term investment.⁶²

Economic infrastructures (energy, transport, and TLC,) can largely repay their costs with the cash flow they produce. In the utility sector, independent regulatory authorities guarantee stable returns and moderate risks. Social infrastructure, which needs almost full payment by the public sector, are characterized by predictable and steady real returns which are usually desirable for investors. Economic and social infrastructure have therefore similar features, although they differ in some relevant characteristics, offering diversification opportunities to investors.

After a decade of discussion at the global and the European level on the need for the emergence of infrastructure as a new asset class and an expected larger participation of long-term institutional investors to infrastructure investment the new scenario has not materialized as planned.

Why? Mostly because we do not have yet all the right conditions required to make it operative. Such actions need political will, as well as time. There is a blatant asynchronicity between the willingness of the financial industry to have infrastructure

⁶² See Section 6.3.1. below.

financing as a fully-fledged “asset class” to invest in and the time needed to build all the missing parts of the underlying framework. Since we are under pressure to recover the pre-crisis or even higher level of investments, this time a-synchronicity weights on our future and puts at risk a successful execution of the new model. The report will argue that action should be taken on two major levels: (1) re-calibrate prudential and accounting standards to make infrastructure investment more attractive to long-term investors and to banks, according to a reliable analysis of the risks and (2) resolve the so-called “Infrastructure Bottleneck”. We will discuss both these issues at length respectively in Section 8.2.

BOX - FIRMS OR MARKETS IN INFRASTRUCTURE FINANCING

The purpose of this section is to argue that it would make economic sense to analyse the possible creation of a large European public-private fund for financing social infrastructure. A large fund is from an economic perspective like a Firm and as such, it could have a long-term stabilizing role within the European financial market for infrastructure financing. We will make the point using a well-known debate in economic theory started with Ronald Coase paper on “The nature of the firm”.

Equity for project financing at the global level is worth over 350 billion US dollars⁶³. The total value of projects financing worldwide is short of 2,000 billion US dollars. A small market today, which will experience, according to most experts, great growth rates in next decades. When and how fast is, this going to happen is difficult to predict. Usually, when the financial industry is moving with such a strong determination, as it has been doing in the last few years, then it may become a game changer. Policymakers and regulators are pressed to move fast to create the right conditions for the expansion of these markets. It is difficult to predict how the process will unfold. One of the main goals of the HLTF is to give public and private stakeholders ideas and recommendations to favor an orderly evolution, with a priority given to social infrastructure.

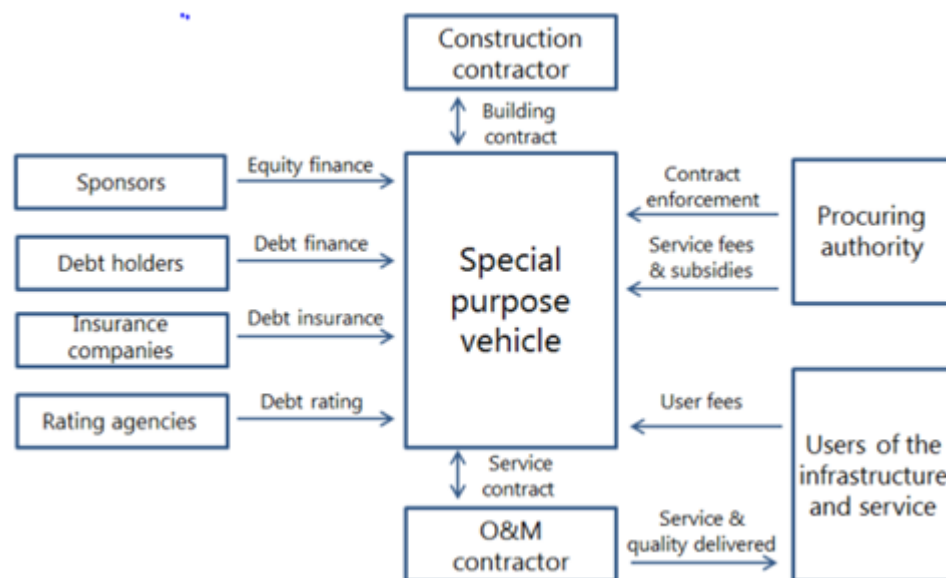
We will try to understand the main determinants of this paradigm shift. When we talk about public-private initiatives, we mean a variety of schemes. We may envisage a project finance market composed of single projects, which have a life of their own. A highway or a wind offshore plant may rely mostly on the cash flows it produces. A project finance initiative, which involves many actors for a very long time (up to fifty years), is made of a “bundle or web of external contracts” (see Figure 7). The necessary involvement of such a wide range of parties in infrastructure projects – construction companies, operators, government authorities, private investors, insurer and the citizens most directly affected – make it a complex but essential task to design an efficient set of contracts. The nature of contingencies and the proper sharing of risks among the different agents is pivotal. The quality of institutions and the rule of law are often determining factors in the supply of infrastructure finance,

⁶³ See reference in Inderst, G., (2017), Social infrastructure investment: financing sources and investor perspective, HLTF SI, Draft for discussion, June 15, 2017.

even when a project by itself appears to be financially viable.

Special Purpose Vehicles (SPV) engage external firms to project, construct, and manage the infrastructure. If the projects are smaller – as in most social infrastructure sectors – the contracts are standardized and numerous projects bundled together to increase the size of the financial instruments issued for private investors. Such arrangements are doomed to face the typical complexities of the “principal-agent theory of contracts”.

Figure 7. Web of Contracts of an SPV



Source: Engel et al. (2010)

As we have already pointed out, project-financing initiatives cover less than 10% of total infrastructure building. The remaining part weighs directly on taxpayer money (59%) or on corporates (36%). This may imply: (1) that project financing (a part of which is composed by PPPs) market is still underdeveloped, but it will grow and become a more dominant model (but as we have discussed, the process will need several years) or (2) that firms should be preferred to markets in building and financing infrastructure. If that is the case, then, we should consider giving them special incentives and support them to operate at their best. In economic theory, this is a question, which goes back to Ronald Coase paper on “The nature of the firm” where he tries to explain why some activities are directed by market forces and other by firms. The answer, at the time, was that firms are a response to the high cost of using markets. It is often cheaper to direct tasks by fiat than to negotiate and enforce separate contracts for every transaction. This is easier and cheaper within the firm itself. For example, I switch an employee from one function to another without having to go through negotiations or new contracts. For many business arrangements, it is difficult to set down all that is required of each party in all circumstances. Therefore, a formal contract is by necessity “incomplete” and sustained largely on trust. Coase defined a firm as “a nexus of contracts”. Most of these contracts, we have argued, are internal to the firm; this means that the firm has more power to change them if needed; it also means that they have lower transaction costs than external contracts.

This is a competitive advantage of firms versus markets. Moreover, the firm has usually a large balance sheet, so it may get better financing conditions, as well as more risk-absorbing capacity. The firm is also a long-term community. Employees and their skills tend to remain within the firm increasing the long-term human capital base. Finally, a firm has lower general costs because of its scale.

So, while we concentrate on the emergence of a new “asset class” we should not forget the role of firms (including funds) in infrastructure building (including social infrastructure). Good examples are the European Investment Bank (EIB), The European Bank for Development and Reconstruction (EBRD), the Council of Europe Development Bank (CEB) and the large European national promotional banks. What makes institutions such a successful case? They are the typical feature of a well-run firm, such as:

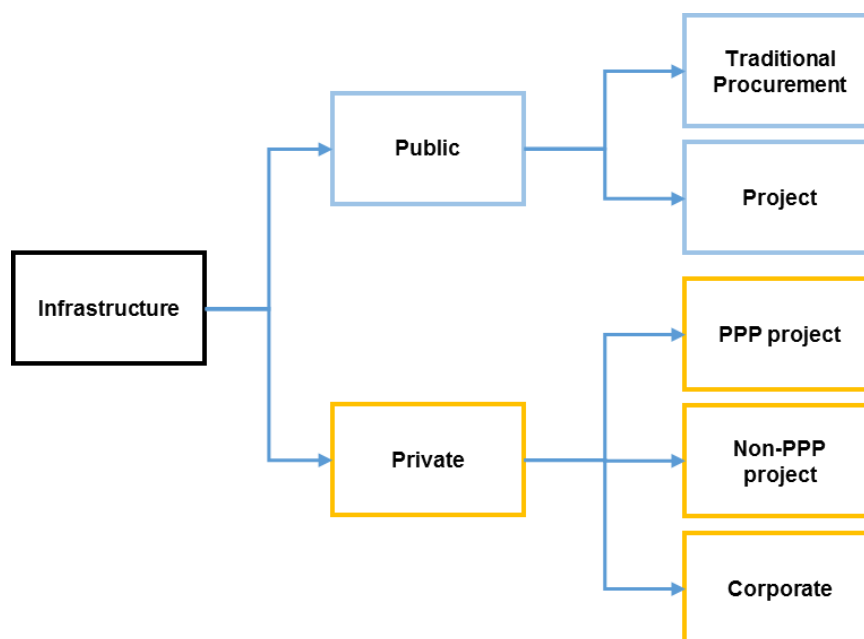
- highly skilled personnel and management who share a common mission and has long-term internal contracts with the Bank;
- a large and well-capitalized balance sheet which permits low funding costs; strong capacities to manage risks and to operate in rather different sovereign risk environments;
- the capacity to reduce the cost of its co-financing by offering pricing and duration which are lower and longer than commercial banks, thus favoring the “crowding in” of private money and, by doing so, the European process of economic and social convergence.

Similar considerations maybe apply to other sectors of the European infrastructure market. Infrastructure funds, which are comparable to firms, are another good example. In addition, utilities, that engage in several economic and public utilities infrastructures. They could also concentrate on social infrastructure. Economies of scale; building up and preserving high-level skills; large balance sheets to manage multiple projects; a higher potential in attracting shareholders. These are issues that may be worth analyzing before choosing whether to set up a European Fund with national branches to finance EU social infrastructure, as well as whether to incentivize the consolidation and/or creation of large construction and management corporations (public, private, public-private) specialized in building social infrastructure.

5.2. FINANCING SOCIAL INFRASTRUCTURE

Traditionally, infrastructure financing can rely on the public sector, the private sector, or both. Social Infrastructures, entailing a major public component, mainly rely on public financing.

Figure 8. Financing Social Infrastructure



Source: Wagenvoort, et al.(2010)⁶⁴

Traditional public procurement, namely the process by which public authorities purchase the concrete infrastructure or the delivery of services from companies, is the most widely used contractual arrangement. Examples in the social infrastructure sector include the building of a state school or of a public university. In case of public procurement, the public authority is the one dealing with the large majority of risks by paying an agreed price to the private company. It is critical to improve and promote the use of strategic public procurement schemes to respond to societal, environmental and economic objectives. To this end, the European Commission launched (i) a public procurement strategy⁶⁵, which focuses on six strategic policy priorities, and (ii) recently (3rd October 2017), a targeted consultation⁶⁶ on a draft guidance on public procurement of innovation (“PPI”). PPI aims to ‘close the gap’ between cutting-edge technology and processes and the public sector customers or users who can benefit from them. This initiative aims at exploiting procurement more efficiently and in a sustainable manner, while making full use of digital technologies to simplify and accelerate procedures.

5.2.1. PPP: DEFINITION AND DIFFUSION

Although still quite marginal, Public-Private-Partnership arrangements (PPP) represent an alternative for public procurement. Public-private partnerships (PPPs) are cooperation agreements between a public entity and private-sector entities under which the parties’ respective skills are pooled to build public works or carry out projects of public interest for the management of the related services. PPP contracts

⁶⁴ Wagenvoort, R., De Nicola, C and Kappeler, A, (2010), Infrastructure Finance in Europe: Composition, Evolution and Crisis Impact (May 3, 2011). EIB Papers, Vol. 15, No. 1.

⁶⁵ https://ec.europa.eu/growth/single-market/public-procurement/strategy_en

⁶⁶ http://ec.europa.eu/growth/content/targeted-consultation-draft-guidance-public-procurement-innovation_en.

involve the transfer of certain risks to the private sector and specify performance outputs, rather than inputs. It should be clear that in PPP projects the public entity not only act as the principal but also as the project manager. This requires that the public entity acquires a range of capabilities, such as the ability to evaluate the efficiency and cost-effectiveness of the project, to structure the operations, and to negotiate the most appropriate solutions with the private sector actors.

According to the Eurostat Manual on Government Deficit and Debt⁶⁷ definitions, it is opportune to further split “concessions” and “PPPs”. The main difference between the two concepts is that:

- **concessions** typically involve the building, operating and maintenance of the equipment of infrastructure and therefore are predominantly remunerated by final users (households, corporations, etc.);
- **PPPs** typically involve the building, operating and maintenance of the equipment of other types of infrastructure and therefore are predominantly remunerated by the public authority.

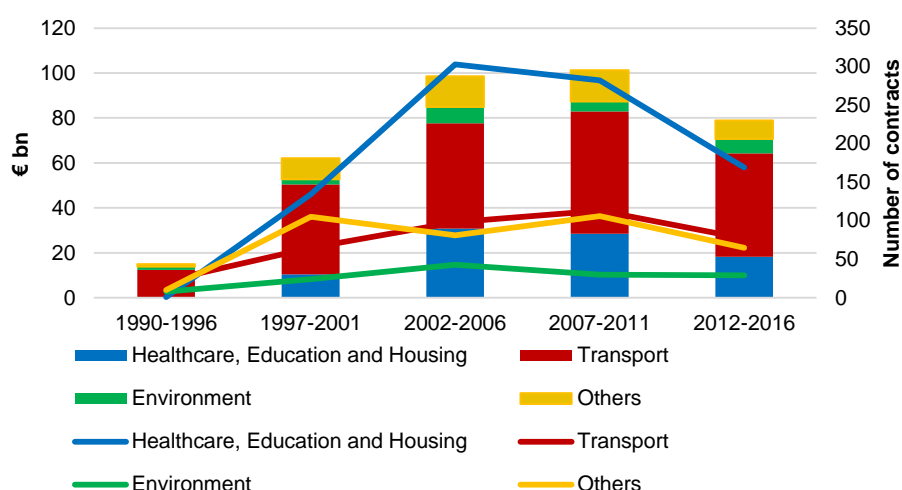
Concession contracts are used by public authorities to deliver services or construct infrastructure. Concessions involve a contractual arrangement between a public authority and an economic operator (the concession holder). The latter provides services or carries out works and is remunerated by being permitted to exploit the work or service.

Concessions are a particularly attractive way of carrying out projects in the public interest when state or local authorities need to mobilise private capital and know-how to supplement scarce public resources. They underpin a significant share of EU economic activity and are especially common in network industries and for the delivery of services of general economic interest. Concessions holders may, for example, build and manage hospitals, provide airport services, or operate water distribution networks.

When properly structured and well controlled, PPP can bring benefits both to the public authority and to the private party with positive spillovers to the final beneficiary of the infrastructure or of the service. However, the recourse to PPP is still quite uncommon in continental Europe and it is relatively marginal also in the UK, which represents the largest PPP market in Europe.

⁶⁷ Eurostat Manual on Government Deficit and Debt – Implementation of ESA 2010, 2016 edition, p. 309.

Figure 9. PPP projects by sector



Source: Elaborations from the authors on EPEC 2017 data

In the period 1990-2016, 1765 PPP contracts have been closed in the area constituted by the EU28, Turkey and the Western Balkans. The largest number of PPP deals took place in the UK (58%), followed by France (10%), Spain (9%) and Germany (7%). The 1765 PPP contracts represented a total value of € 356 billion, of which 44% of total is concentrated in the UK, 10% in France and in Spain, 6% in Portugal, and 2-5% each in Belgium, Germany, Greece, Hungary, Ireland, Italy and the Netherlands.

As far as the sectorial composition is concerned, most PPP contracts (number of contracts) took place in the education sector (24%), followed by healthcare (22%) and transport (21%). Housing and community services represented just 5% of total number of deals. However, if total value of the projects is considered, rather than the number of contracts, the picture substantially change as PPP in the transport sector, clearly with an higher average deal size, reached 56% of total value, while healthcare and education respectively 13% and 10%. In the UK, the situation is somehow more balanced as 34% of the value was in transport, while 19% and 17% in healthcare and education. The share of Social Infrastructure within the healthcare and the education sectors is still quite marginal.

5.2.2. PPP: ALLOCATION OF RISKS

The allocation of risks is essential to the success of a PPP. The main types of risk to which infrastructure projects are exposed to can be grouped into the following five categories:

- Construction risk: it covers events related to the construction and completion of the PPP assets, such as late delivery, non-compliance with specified standards, significant additional costs, technical deficiency and external

negative effects (including environmental risk) which trigger compensation payments to third parties.

- Availability risk: it covers situations where, during the PPP operational phase, an underperformance linked to the state of the PPP assets results in services being partially or wholly unavailable, or where these services fail to meet the quality standards specified in the PPP contract.
- Demand risk: it relates to the variability of demand (higher or lower than expected when the PPP contract was signed), irrespective of the performance of the PPP Company. Such a change in demand should be the consequence of factors such as the business cycle, new market trends, a change in final users' preferences or technological obsolescence. It is part of the usual economic risk borne by private businesses in a market economy.
- Financial risk;
- Context (political, country, etc.) risks.

Often, the public entity bears context risks, the bank involved bears the financial risk and the private sector bears the construction risk and the availability risk. Finally, demand risk is often the most complex to allocate between the public and private sectors.

5.2.3. EUROSTAT TREATMENT OF PPP INVESTMENTS ⁶⁸

Table 7. Forms of Public Sector Participation

Characteristics	Forms of Public Sector Participation					
	Service contract (outsourcing)	Management contract	Lease/ Affermage	BOT and variants	Concession	Divestures (privatisation)
What PPPs encompass						
Scope (discrete piece or network)	Discrete existing assets and network	Discrete existing assets	Discrete existing assets	Discrete new assets or refurbishment	Existing networks and existing point infrastructure	Existing network and point infrastructure (e.g. sea/airports)
Contract duration	1 – 3 years	2 – 5 years	10 –20 years	25 – 30 years	25 – 30 years	Perpetual/subject to license
Commercial risk for the private party	None	None	Yes	Both options	Both options	Both options
Money at risk ex ante	No	No	No	Yes	Yes	Yes

Source: OECD (2017)

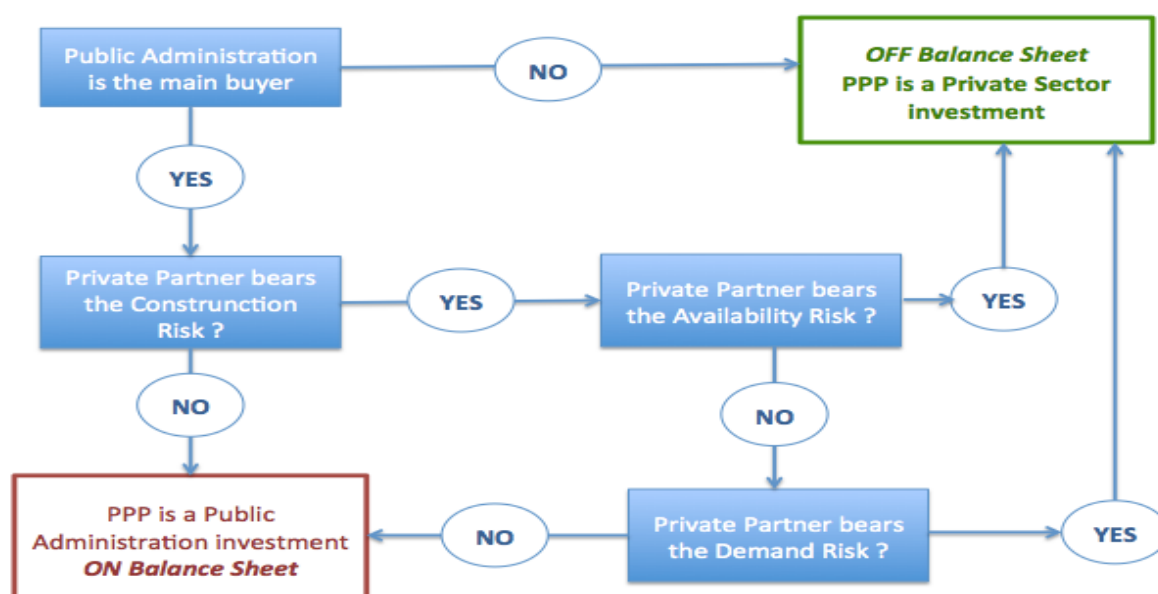
⁶⁸ See, EPEC, *A Guide to Statistical Treatment of PPP*, April 2016.

Investment projects financed under PPP contracts can generate liabilities or debt for a government. The financing may be on or off government balance sheet that means, either with or without a direct impact on government deficit and debt.

The economic convergence criteria set in the Stability and Growth Pact, as well as the Excessive Deficit Procedure (defined by the Maastricht Treaty, Art. 104) require that the debt and deficit treatment of PPPs follow the European System of Accounts ("ESA"). ESA 2010 is the latest internationally compatible EU accounting framework for a systematic and detailed description of an economy. ESA 2010 requires national statisticians to look at the risk/reward balance in the underlying PPP arrangement. To this extent, the allocation between the Authority and the Private Partner of construction, availability and demand risks is considered:

On a general level, statistical and accounting criteria define whether the financing of a specific project is on the government's balance sheet. In broad terms, these criteria state that if the government bears the construction risk, then the PPP should be on the government's balance sheet regardless the allocation of the demand and availability risks. Contrarily, if the private partner is the institution bearing the construction risk, then the financing should be classified off the government's balance sheet unless the government bears both demand and availability risks.

Figure 14. Statistical Treatment of PPP contracts. A brief summary



Source: Authors

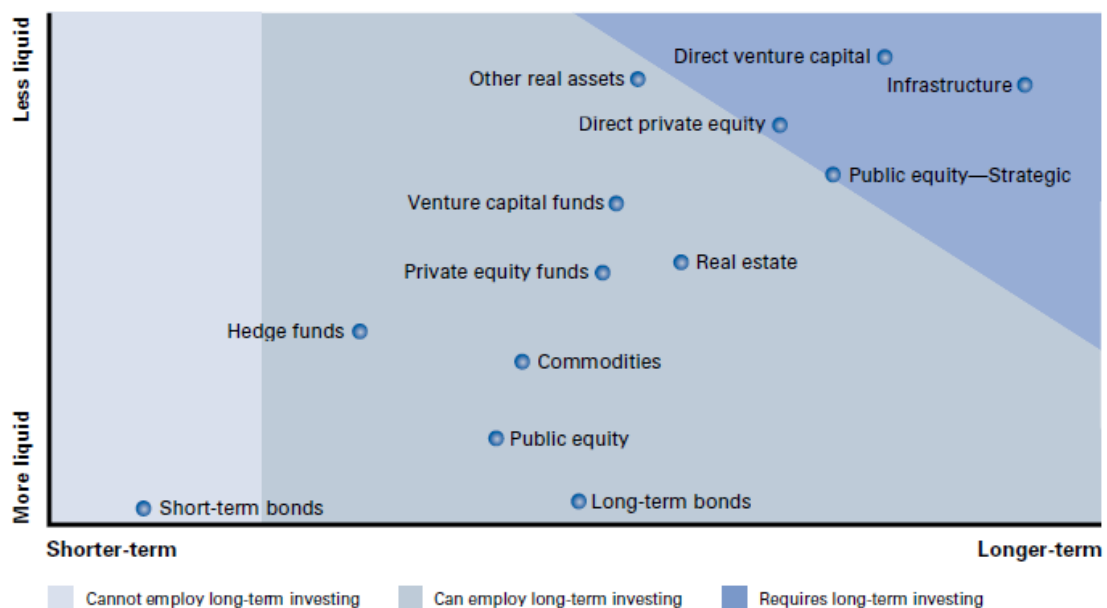
Despite the reasoning above might seem rather straightforward, some critical issues exist in practice. The process of classification of a PPP usually implies a very long time and the classification itself is often subject to change during the lifetime of the PPP contract, thus increasing uncertainties. These uncertainties are likely to increase the burden on the public authorities. The process of classification of risks is now based on 16 key-themes and about 70 sub-categories. A simplification of the whole process, to reduce uncertainties, is highly recommended.

6. MOBILIZING PRIVATE CAPITAL

6.1. FINANCIAL FEATURES OF INVESTMENTS IN SOCIAL INFRASTRUCTURE

Social infrastructure investment has some distinctive features. However, they share the characteristics of infrastructure investment in general, such as:

Figure 15. Liquidity and temporal horizons of different asset classes



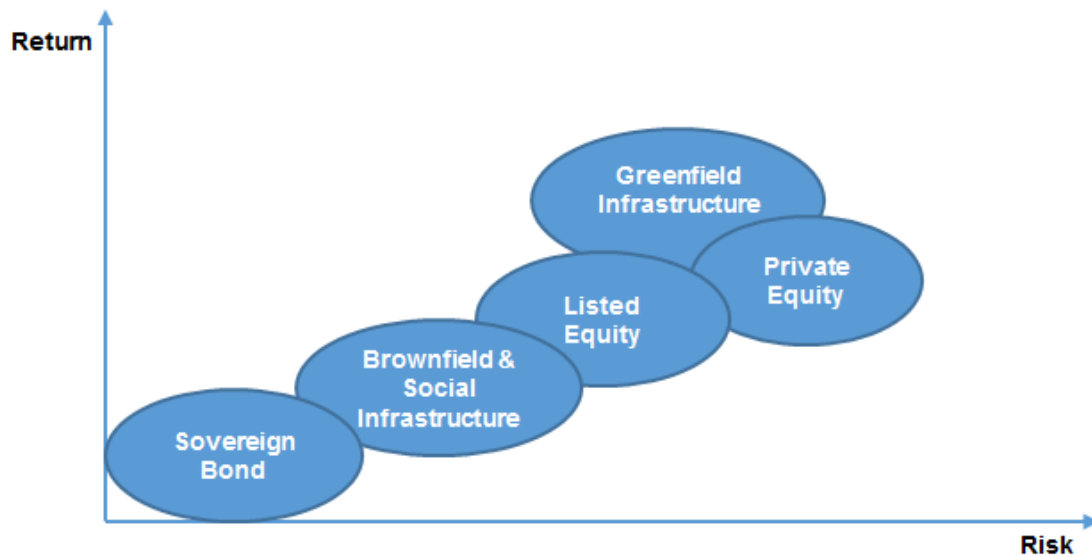
Source: OECD

- By in large, they tend to be an illiquid investment (see Figure 15) as they require large upfront costs and they are extremely difficult to sell in the short term at a fair value price. The illiquidity of infrastructure investments has a key implication: returns are likely to materialize only over a long period and therefore only investors with a long-term perspective can afford this type of investment.
- Default rates are relatively low. From Moody's well-known analysis of default and recovery rates on infrastructure loans – on a sample of 10,280 projects for a total value of 3.17 trillion US dollars over the period from 1983 to 2015 – it emerges that infrastructure debt is usually less likely to incur credit losses than corporate debt, especially over longer horizons. As a result, infrastructure ratings tend to be on average significantly more stable than corporates.⁶⁹

⁶⁹ Moody's (2017), "Default and Recovery Rates for Project Finance Bank Loans, 1983-2015", Default Research, Moody's Investors Service, 6 March 2017: (2017), "Addendum:

- When realized through PPP arrangements, they remain always at the low-risk end of project finance spectrum.

Figure 16. Risk-return profile of different asset classes



Source: Elaborations by the Authors

These characteristics broadly define the risk-return profile of the inclusive infrastructure asset class. Social infrastructure investment, as sub-class of infrastructure investment, have some peculiarities.⁷⁰

The pivotal role of the public sector. Social infrastructure projects deliver public infrastructure assets and services in exchange for a revenue stream mostly paid for by the public sector. Therefore, unlike many economic infrastructures, such as toll road, ports, airport or power generation plants, which usually collect revenues from end users, social infrastructure projects often rely on the availability fees paid by the public sector. Therefore, from a financial (and financing) perspective, it is key to bear in mind that the cash-flow streams to repay the financing of social infrastructure investments come ultimately from public budgets and this makes social infrastructure investment' risk only slightly above sovereign bonds' risk.⁷¹

Infrastructure Default and Recovery Rates, 1983-2015", Default Research, Moody's Investors Service, 27 April 2017; (2016), "Infrastructure Default and Recovery Rates, 1983-2015", Default Research, Moody's Investors Service, 18 July 2016.

⁷⁰ EDHEC-Risk Institute, Pension Fund Investment in Social Infrastructure. Insights from the 2012 reform of the private finance initiative in the United Kingdom, February 2012.

⁷¹ This means also that the underlying financing risk can heavily rely on the creditworthiness of each Member State, thus potentially reinforcing existing inequalities to some extent.

Local focus. Traditionally designed, developed, procured and operated by local entities (Public Institutions) while realized directly (or indirectly as sub-contractors) by local SMEs.

Common and extensive recourse to traditional public procurement. Due to the “public” nature of social infrastructure, public procurement is the most widely used contractual arrangement, in which the public sector is the one dealing with the large majority of risks. Public procurement is a strategic instrument, extremely valuable when aimed at spreading innovation and digitalization.

Small average capex size. Infrastructure projects in the health and education sectors are usually relatively small. According to EDHEC-Risk Institute (EDHEC, 2012), roughly 99% of existing social infrastructure projects in Europe entails a total capital investment of fewer than 1 billion euros, with the great majority of projects below 30 million. The small average size is a good feature to spread risks (portfolio’s diversification), but it reduces cost synergies during the structuring and arranging phase.

High level of operating expenses related to capex. Total cost of producing and distributing public services is usually higher than the capex related to the realization of the hard infrastructures. It is important to highlight that – in the value-chain of producing public services ⁷² – the hard infrastructures (i.e., social infrastructure or gross fixed capital formation, building, equipment, etc.) are basically enablers and therefore represent only a small portion of the total costs incurred for the ultimate production of public services.

Great opportunities for portfolio diversification. Thanks to the small average capital investment, social infrastructure investment provides a good opportunity for portfolio diversification. This is clearly in contrast with investments in economic infrastructure, which entail a great deal of concentration of risks. The potential for higher portfolio diversification makes the social infrastructure investment particularly attractive to investors.

Bundling of projects. To overcome the potential small-average capex size bottleneck while preserving the desired portfolio diversification’s feature, efficient “Bundling” of similar social infrastructure projects can be the proper solution. In fact, when bundled into a single, larger procurement, a beneficial structure can be implemented to address a group of similar assets across multiple sites, an assortment of different assets at a single site, or different assets across multiple sites. In addition, bundling of similar assets can save on design and construction costs as similar materials can be used and bought in bulk. More standardized design

⁷² Social infrastructure investments are key but the remaining parts and their impact on public budgets cannot be forgotten. For example, considering the production of public services in the education and/or the health sector, out of € 100 of public expenditures paid each year, probably € 8-15 are due to the maintenance and amortization of the social infrastructure investments while the remaining € 85-92 are due to the salary payments of teachers (doctors) and to material and organization costs. Nevertheless, social infrastructure investments are key to enable the production of an appropriate quantity and quality of public services (modern, updated, connected and energy-efficient building and equipment will enable future-proof public services). On the other hand, an efficient and newly built social infrastructure can prove useless if the public financial resources needed to operate it are not available.

and construction processes also create the opportunity to save on long-term maintenance from the use of similar replacement parts and equipment.

The low volatility of returns. Availability payments from the public sector are usually agreed ex-ante and tend to be inflation-linked. Predictable and steady real returns are desirable for investors.

Low correlation to other assets. The “public” nature of a social infrastructure investment often makes the latter less exposed to market risk and to systemic risks within capital markets.

Potential attractiveness for large long-term investors. The characteristics illustrated above make investments in social infrastructure extremely appealing to large long-term investors, which are looking for steady inflation-indexed cash flows and great opportunities for portfolio diversification.

Importance of financial intermediaries. The small average capital investment size of social infrastructure projects makes direct infrastructure investments unattractive to large long-term investors as they face relatively too high active management costs for such modest levels of investment. Financial intermediaries are therefore key to channel institutional investors’ money towards social infrastructure investments.

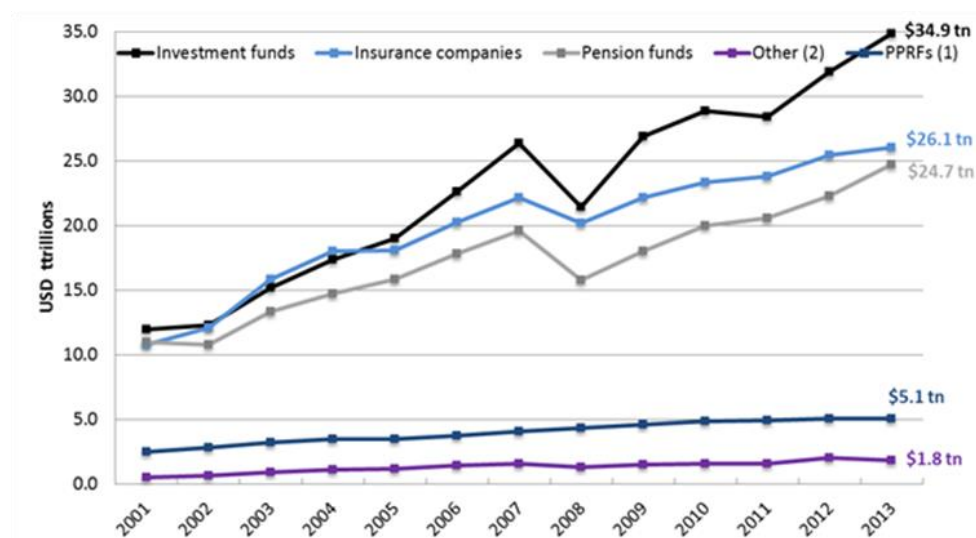
Lack of debt instruments in which institutional investors can invest their money. Institutional investors have the possibility to invest equity through listed infrastructure funds, unlisted intermediary funds or directly at the SPV level. On the other hand, there is still a lack of debt instruments or project bonds for social infrastructure.

Uncertainty related to regulatory and political risks. Political and regulatory risks, often interlinked, are a key dimension of social infrastructure investment. Public policies might change over the extended time that defines an infrastructure asset. Governments may renege on their commitments and regulators may change the regulatory framework. This clearly represents a significant risk for investors.

6.2. CURRENT AND POTENTIAL ROLE OF LONG-TERM INSTITUTIONAL INVESTORS

According to OECD estimates, institutional investors hold assets under management (AuM) over \$100tn globally. Figure 17 shows the growth of assets for public and private pension funds, insurance companies and investment funds. In addition, about \$7tn are managed by sovereign wealth funds (SWF).

Figure 17: Global institutional investors' AuM



Source: OECD (2014)

In Europe, the investment landscape is dominated by three large investor segments: insurance companies, pension funds and mutual funds. By the end of 2016, these institutional investors - together with European SWFs, foundations, charities and endowments - held an estimated total AuM of up to \$26 trillion (more than 1.35 times the region's GDP).

Institutional investors are typically investing over a long investment horizon. Life insurance companies and pension funds have usually an investment horizon of over 10-15 years and of 20 years respectively and constitute a large segment of the institutional investor landscape.

Therefore, these institutions play an important role in fixed income markets, especially as major providers of long-term funding to banks and the public sector.

Life insurance companies and funded pension schemes share the important feature that they hold large investment portfolios backing primarily long-dated liabilities. It is an important characteristic of their liabilities that they extend years or decades into the future, while they are funded up-front through premium payments or pension contributions that are invested in financial and real assets.

In addition, their business models and balance sheets are particularly exposed to the low-interest rate environment due to the long duration of their liabilities compared to that of their assets (duration gap). Low interest rates make it difficult for life

insurance companies and pension funds to meet future obligations out of meagre fixed income yields.

Over the past decade, institutional investors have been looking for new sources of long-term, inflation protected returns. Asset allocation trends show gradual globalization of portfolios, with increased interest in emerging markets and diversification into new asset classes. Increasing numbers of institutional investors are recognizing the potential for infrastructure investment to deliver inflation-linked, long-term and predictable cash flows.

Despite these encouraging trends, total amounts of institutional investment in infrastructure remain relatively limited, considering the large pool of available capital from long-term investors. Within this context, the solution to ‘unlock’ the pool of private capital held by institutional investors is to achieve global recognition of infrastructure as an investment asset class through better measurement of how infrastructure investments perform.

The current framework of European policies is focusing on removing barriers to investments and providing greater regulatory predictability to attract private investors’ capital to support real economy’s growth without additionally weighing on public finances.

Indeed, the objective of the Investment Plan for Europe (“IPE” and its instrument European Fund for Strategic Investments or “EFSI” – together “IPE/EFIS”) and the Capital Markets Union (“CMU”) initiatives is to *“mobilise capital in Europe and channel it to, among others, infrastructure projects that need it to expand and create jobs”*. These principles shall apply even more to social infrastructure investments and therefore an appropriate reassessment of the financial regulatory framework for long-term institutional investors (such as life insurance companies and pension funds) should be considered.

It is paramount to set favorable conditions for the issuance of financial instruments well-suited (i.e., with appropriate risk-return profile for duration matching and clear regulatory classification) for long term investors and that can be possibly liquid and therefore traded on the capital market.

In summary, there is already some private investment experience in this market. However, institutional asset allocation to infrastructure is still only around 2% on average globally and in Europe. With social infrastructure taking 10-20% of that, we are still talking about small “social” exposures. There is huge potential for additional asset allocation to social infrastructure investments in Europe.

To this end, it is possible to identify, among others, two main hurdles that need to be worked on:

- regulatory constraints: an appropriate fine-tuning of the regulatory framework can lead to a recalibration and/or streamlining of risk-capital charges as well as of accounting principles;
- reliable pipeline of projects: there is a real need of a sufficient supply of suitable, investable infrastructure assets. Far-reaching and extensive Technical Assistance (from project design to implementation and monitoring) could ease the lack of planning capabilities of Public Authorities and partners.

6.3. CHALLENGES IN ATTRACTING LONG-TERM INSTITUTIONAL INVESTORS' AND BANKS

6.3.1. PRUDENTIAL AND ACCOUNTING STANDARDS

The Financial Stability Board (FSB) established after the 2009 G-20 London Summit has been promoting international financial stability, providing studies and recommendations to Finance Ministers and Heads of State of the G-20. The FSB represents the first, major institutional innovation undertaken by G-20 leaders. Since then, the FSB has accomplished several important tasks, working alongside the IMF, World Bank, and WTO.⁷³

FSB members have focused on potential unintended consequences generated by regulatory reforms that may affect long-term financing investments, into the following groups:⁷⁴

- I. Possible negative effects of Basel III on long-term bank credit;
- II. Potential effects of Basel III liquidity framework (LCR and NSFR) on the provision of long-term finance investments;
- III. Lack of proper incentives for long term institutional investors, who are the natural providers of long-term funding;
- IV. About the accounting standards, possible introduction of an additional category for financial assets, which does not fall within the definition of amortized cost or in that of fair value;
- V. Asymmetries in the application, and consequently in the effects, of regulation on national and/or regional financial systems.

To mobilize these investors, we need that the FSB and, in general, regulators at the highest level, direct their effort on a much more adapted and well-focused analysis of the regulation for the financing of infrastructure. Only by doing so, they will be able to decide whether is the case to undertake specific re-calibrations within the global accounting and regulatory frameworks needed to overcome potential excessive penalization – not justified by a correct and objective probabilistic analysis of risks underlying certain class.

BOX - The G-20 Infrastructure Data Initiative

The EIB and the Long-Term Investors Club (LTIC) have tabled a proposal to the G20 German Presidency to work on the creation of an infrastructure database calling for a collective effort. The EIB has worked closely with the Global Infrastructure Hub, the

⁷³ See, LTIC, *On the effect of the current regulatory framework on Long-Term Investment*, Position Paper presented to the D20 Annual Conference 2016, Organized by China Development Bank 27 May 2016, Beijing, now in Garonna, P., (ed) (2016), *Financing Long-Term Europe*, LUIS University Press, Rome: 2016, pp. 109-125.

⁷⁴ FSB (2013). *Financial regulatory factors affecting the availability of long-term investment finance* Report to G20 Finance Ministers and Central Bank Governors, 8 February 2013. See, LTIC, *On the effect of the current regulatory framework on Long-Term Investment*, Position Paper presented to the D20 Annual Conference 2016, Organized by China Development Bank 27 May 2016, Beijing.

OECD and the Long-Term Infrastructure Investors Association (LTIIA) together with the LTIC members to further analyses the best way forward. As part of the G20/OECD Task Force on Institutional Investors and Long-term Financing (the G-20/OECD Taskforce”), a Workshop on Data Collection for Long-term Investment took place on the 10th of May 2017. In the discussions, several policy and industry initiatives to try to get a better understanding of infrastructure and long-term finance focusing on microeconomic sources of data were launched (See forthcoming OECD paper on Addressing Data Gaps 2017).⁷⁵

A new project, the “Infrastructure Data Initiative”, on data gathering and addressing data gaps. This joint initiative intends to create a centralized repository on historical long-term data on infrastructure as an asset level. The aim is to ensure a collective effort mobilizing the existing information held by MDBs and DFIs as well as private sector and governments to create a centralized repository making the information accessible, as a public good, to policy makers, regulators, investors and researchers.

The Task Force mandated the OECD in cooperation with EIB and GIH to develop a plan for the launch of the project including the creation of a preferred template of information for gathering financial and non-financial data (i.e. qualitative information that captures social and environmental, and governance dimensions) on infrastructure projects. This jointly developed project addressed to the Argentinian G20 presidency for consideration as part of next year’s plan and presented at the next Task Force meeting in November 2017.

The goal is to create a new Infrastructure Asset Class Database, with project/asset-level long-term performance data. This central repository will be able to create the basis to support the development of Infrastructure Performance Benchmarks. An additional important outcome of the initiative will be the development of best practices and standardized data collection methods, which the G20 could consider endorsing. The proposal aims at reducing the fragmentation of initiatives in the infrastructure space, significantly improving access to data as a public good and enhancing the analytical research to inform decisions on infrastructure projects.

The data collection effort described in this proposal would be used in different interrelated areas of research:

- Financial Performance Benchmarks including new benchmarks on investment profitability metrics such as return on assets, return on equity and debt, analyzing also risk (i.e. default rates and recoveries) measured over project life-cycle.
- Economic and Financial Viability – Impact evaluation at project/asset level

⁷⁵ This concern also other type of data: for example the G20 Green Finance Study Group (GFSG) in 2017, exploring how to improve the availability, accessibility and relevance of publicly available environmental data (PAED) for the financial sector, invited the UN Environment and the OECD to develop a catalogue of datasets relevant for financial decision-making. PAED is defined as environmental data that are reported by non-corporate entities, such as government agencies, international organizations, non-governmental organizations, and science institutes, and that are useful for financial analysis. PAED is to be distinguished from corporate disclosures, which are addressed by voluntary and mandatory reporting regimes, including most recently the recommendations of the FSB Task Force on Climate-related Financial Disclosure (TCFD).

[including utilization performance (ex-poste and ex-ante analysis)/construction costs and delivery performance (ex –post and ex-ante analysis)].

- ESG Performance: Sustainability and inclusive growth impacts and climate related risks (i.e. transition risk).

6.3.2. SOLVENCY II AND INFRASTRUCTURE INVESTMENT

The penalizing nature of Solvency II towards infrastructure investments was first acknowledged by a movement of long-term investors calling for the need to establish “Infrastructure as an Asset Class”.⁷⁶ This movement, gaining increasing consensus in time, demanded regulators for a revision of risk calibrations for infrastructure assets.⁷⁷

In February 2015, the European Commission requested technical advice on infrastructure from the European Insurance and Occupational Pensions Authority (EIOPA). Following the technical advice, on 30th September 2015, the Commission adopted an amendment to the regulation to reduce the capital requirement for insurers’ infrastructure investments should the latter’s respect specific qualifying criteria. These criteria are intended to ensure that infrastructure investments exhibit a sound risk profile with respect to their stress resilience, predictability of cash flows and protection provided by the contractual framework.

In summary, the new regulation⁷⁸, which entered into force on 2 April 2016, created a distinct asset class for infrastructure investments for risk calibrations. However, the new calibrations were valid only for infrastructure projects and did not contain any revised risk calibrations for infrastructure corporates.

Infrastructure projects and infrastructure corporates refer to different investment phases. According to the definitions given by the European Commission⁷⁹, “Infrastructure projects are entities that typically set up a new project which involves the construction phase of an infrastructure. Infrastructure corporates are entities that have matured into the operational phase beyond the construction phase.”

⁷⁶ See, Bassanini, F., del Bufalo, G., Reviglio, E., (2011), Financing Infrastructure in Europe Project Bonds, Solvency II and the “Connecting Europe Facility”, article prepared for the Eurofi Financial Forum 2011.

⁷⁷ Focarelli, D., (2017), Why insurance regulation is crucial for long-term investment and economic growth, Paper prepared for ELTIF, Assonime and Oxford University, and references therein.

⁷⁸ Commission Delegated Regulation (EU) 2016/467 of 30 September 2015 amending Commission Delegated Regulation (EU) 2015/35 concerning the calculation of regulatory capital requirements for several categories of assets held by insurance and reinsurance undertakings.

⁷⁹ Commission Staff Working Document, Impact Assessment Accompanying the document Commission Delegated Regulation (EU) 2017/1542 amending Delegated Regulation (EU) 2015/35 concerning the calculation of regulatory capital requirements for certain categories of assets held by insurance and reinsurance undertakings (infrastructure corporates).

As it became clear that the proposed amendments to the regulation were penalizing infrastructure corporates, the Commission demanded for and obtained technical advice from the European Insurance and Occupational Pensions Authority (EIOPA) for a revision of risk calibrations for infrastructure corporates. In June 2017, the Commission proposed new amendments to the Solvency II delegated regulation to extend lower risk calibrations not only to infrastructure projects but also to infrastructure corporates.

As the result of the long normative process, infrastructure projects and infrastructure corporates now have risk calibrations different than those of other investments, both for equity and debt investments. Table 9 below shows equity risk calibrations of the different asset classes.

Table 9. Equity risk Calibration

Asset Class	Equity risk Calibration
Type 1 (i.e. Listed Equity)	39%
Type 2 (i.e. Unlisted Equity)	49%
Qualifying Infrastructure Projects	30%
Qualifying Infrastructure Corporates	36%

Source: by authors based on Articles and Directives mentioned

The above risk calibrations for listed and unlisted equity investments in qualifying infrastructure projects imply respective reductions of 23% and of 39% compared to non-infrastructure listed and unlisted equity investments. Similarly, risk calibrations for listed and unlisted equity investments in qualifying infrastructure corporates imply reductions of 8% and of 27% respectively compared to non-infrastructure listed and unlisted equity investments.

According to the table above, risk calibrations for infrastructure projects are lower than those for infrastructure corporates. The main reason is that lenders to infrastructure projects usually benefit from a security charge on the assets of the borrower, whereas in the case of infrastructure corporates the lending is usually unsecured. It follows that infrastructure corporates are slightly riskier than infrastructure projects and the risk calibrations reflect the different riskiness.

As far as bonds and loans are concerned, the capital charges related to qualifying infrastructure investments, both projects and corporates, have also been significantly reduced for **all maturities** and **credit quality steps**.

By means of exemplification, the table below shows the risk calibrations for a 10-year debt investments in the different scenarios:

Table 10. Debt risk Calibrations for a 10 year bond

AAA	AA	A	BBB	Unrated
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Standard Formula	7%	8.40%	10.50%	20%	23.50%
Qualifying Infrastructure Projects	5%	6.05%	7.50%	13.35%	13.35%
Qualifying Infrastructure Corporates	5.25%	6.38%	7.88%	15%	15%

Source: by authors based on Articles and Directives mentioned

The table above shows that the risk calibration for "A" rated 10-year debt investment in a qualifying infrastructure project is 7.5%, which is a reduction of 29% compared to non-infrastructure debt investments of the same rating and term (10.5%). Similarly, the risk calibration for "A" rated 10-year debt investment in a qualifying infrastructure corporate is 7.88%, which is a reduction of 25% ⁸⁰ compared to non-infrastructure debt investments of the same rating and term (again, 10.5%).

Similar reductions apply also for higher maturities. The table below shows the risk calibrations for a 20-year debt investments in the different scenarios:

Table 11. Debt risk Calibrations for a 20 year bond

	AAA	AA	A	BBB	Unrated
Standard Formula	12%	13.40%	15.50%	30%	35.50%
Qualifying Infrastructure Projects	8.6%	9.65%	11.10%	20.05%	20.05%
Qualifying Infrastructure Corporates	9%	10.13%	11.63%	22.5%	22.5%

Source: by authors based on Articles and Directives mentioned

The table above shows that the risk calibration for "BBB" rated 20-year debt investment in a qualifying infrastructure project is 20.05%, which is a reduction of 33% compared to non-infrastructure debt investments of the same rating and term (30%). Similarly, the risk calibration for "BBB" rated 20-year debt investment in a qualifying infrastructure corporate is 22.5%, which is a reduction of 25% ⁸¹ compared to non-infrastructure debt investments of the same rating and term (again, 30%).

⁸⁰ In general, the reduction in risk calibrations is approximately 25% for all maturities and all credit quality steps.

⁸¹ This is by construction as in general, the reduction in risk calibrations is approximately 25% for all maturities and all credit quality steps.

The above-mentioned tables and examples highlight how the normative process has led to the correction of a previously penalizing regulatory framework for infrastructure. Although more may be done, the normative process is continuously ongoing and ready to address areas that still require regulatory intervention. Social infrastructure can be one of these areas and further regulatory work on this type of infrastructures cannot be excluded. Indeed, different typologies of infrastructure may be assigned different risk calibrations according to the different risk profiles they entail. As recognised by the Commission ⁸², social infrastructure is a relatively safer “asset class” as the “revenues are usually availability based”. As such, social infrastructures may deserve lower risk calibrations.

6.3.3. LACK OF PIPELINES AND THE ROLE OF TECHNICAL ASSISTANCE

The need to create a reliable pipeline of projects (i.e. a sufficient supply of suitable, investable infrastructure assets) is one of the main investment bottlenecks⁸³.

In this context, the availability of suitable advisory and technical assistance services can help public administration to enhance its capacity to prepare, develop and implement projects which is sometimes constrained by lack of skills, especially for small and medium public works at the local level.

Another key bottleneck which limits the possibility to build a reliable pipeline of projects is of a structural nature and depends on Governments reforms in a number of key sectors.

Structural bottlenecks, that should be resolved by Governments, include items such as:

- political and legislative stability;
- streamlined and fast administrative procedures;
- light regulatory and bureaucratic burdens;

⁸² Commission Staff Working Document, Impact Assessment Accompanying the document Commission Delegated Regulation (EU) 2017/1542 amending Delegated Regulation (EU) 2015/35 concerning the calculation of regulatory capital requirements for certain categories of assets held by insurance and reinsurance undertakings (infrastructure corporates).

⁸³ “An Investment Bottleneck is any systematic market failure, structural impediment, shortfall of capacity or other barrier to the effective and efficient development and implementation of high quality investment projects. These are divided into two categories: structural bottlenecks that cannot be addressed by advisory services...., and those that can be addressed by advisory services.” *Market gap analysis under the European Investment Hub (EIAH)*, PricewaterhouseCoopers, October 2016, p. 11. On “infrastructure bottlenecks” see, Ehlers, T. (2014), “Understanding the challenges for infrastructure finance”, Monetary and Economic Department, BIS Working Papers No 454, August 2014.

- a fast and reliable judicial system;
- an efficient and technically prepared public administration;
- an efficient multi-level government system;
- in general, remove “red tape” obstacles and uncertainties in the regulatory framework for investment.

Typically, Public Administrations (“PAs”) “bottlenecks” instead include:

- lack of effectiveness;
- low degree of digitalization;
- inefficient administrative capacities in the multi-level government systems;
- complexity and fragmentation between the layer of governance leading to inconsistencies in the decision-making process;
- excessive length in procedures;
- legal framework fragmentation and political and regulatory uncertainties.

The needs for advisory services come from well-identified gaps included into the following three groups:

1. Availability:
 - Budget constraints;
 - Geographical dispersion of administrations;
 - Barriers to cross-border service provision due to different jurisdictions.
2. Access:
 - Inability of public administrations to choose the best service providers;
 - Inability of public administrations to formulate the request, in procuring and monitoring the services delivered;
 - Unwillingness to use external or private service providers.
3. Affordability:
 - Lack of proper resources.

TA could provide the appropriate services to PAs to overcome “bottlenecks” in the following categories:

- Project identification;
- Project preparation;
- Financial structuring;
- Procurement and state aid;
- Project delivery;
- Capacity building;
- Communication and awareness raising;
- Advise on valuation about Eurostat accounting in case on PPP and PFI schemes;
- Advise on use of European Structural Funds and other EU grant schemes, as well as on blending.

In terms of categories of services, capacity building, project preparation and financial structuring support appear as the most important. These needs are driven by the lack of capacity among project promoters and PAs to effectively and efficiently develop viable concepts into investment-ready proposals. Lower priority service categories include project identification, project delivery, procurement and state aid, and communication and awareness raising.

Although TA service providers are obviously not directly responsible with so-called structural bottlenecks, they could still play a very important role by providing suggestions and recommendations to Central and Local Governments, as well as to the EU, on specific issues that could help to streamline the process of infrastructure planning, projecting, financing, construction and monitoring. Considering the potential institutional nature of TA providers, this special activity could be formally included in their mission and activity.

Widespread TA (from project design to implementation and ongoing monitoring) to PAs is crucial for the provision of high quality social infrastructure. On the one hand, the increasing complexity of engineering and financial aspects of new generation infrastructure and, on the other the general lack of skills by PAs, especially at a local level, needs a third party that can provide technical services to managing such complexity.

Institutions and/or agencies that provide TA already exist at European, National and regional level in most MSs. However, all MSs have declared that these are not sufficiently effective and are not large enough to cover the growing demand for assistance. The problem is especially felt at the local level, which is responsible for most of the medium and small public works and include, as we have already argued, most social infrastructure.

The Report recommends a strong European effort to help mobilising national and/or regional networks to provide appropriate advisory services in all MSs. This initiative should be large enough to be able to reach out the very large numbers of administrations that are responsible for over two third of total EU28 public investments.

Such an initiative ought to be based on a system built on few general principles agreed by all MCs:

1. TA providers should have a strong link with the European Investment Advisory Hub (“EIAH”), building on an efficient network with National Promotional Banks and Institutions (NPBIs) to provide strategic assistance and favour capacity building and the standardization process:
 - a. TA providers should operate according to a public mandate and the task be given to one or more (public) independent institutions which operate in between the public administrations and the private sector;
 - b. Each MS should be responsible to organise the network of TA at national level – for example, by entrusting the national public bank/institution directly or together with any other national or regional agencies already existing or newly created, or any other solution which would fit their existing system and specific jurisdiction.
2. TA providers should be large enough to cover one-to-one client relationships, and not merely through a desk top approach;
3. TA providers should have numerous skilled personnel – hired especially for this kind of activity – thus avoiding that the public-sector transfers to the TA provider personnel that is not trained for this task;
4. TA provider should take into consideration European “best practice”, as implemented for instance the EIB and the EBRD or any other best practice at national or regional level;

5. TA providers should be independent - they should be perceived by the public administration as an “institutional facilitator” and by the private sector as a “reliable partner”;

- political and legislative stability;
- streamlined and fast administrative procedures;
- light regulatory and bureaucratic burdens;
- a fast and reliable judicial system;
- an efficient and technically prepared public administration;
- an efficient multi-level government system;
- in general, remove “red tape” obstacles and uncertainties in the regulatory framework for investment.

Typically, Public Administrations (“PAs”) “bottlenecks” instead include:

- lack of effectiveness;
- low degree of digitalization;
- inefficient administrative capacities in the multi-level government systems;
- complexity and fragmentation between the layer of governance leading to inconsistencies in the decision-making process;
- excessive length in procedures;
- legal framework fragmentation and political and regulatory uncertainties.

The needs for advisory services come from well-identified gaps included into the following three groups:

4. Availability:
 - Budget constraints;
 - Geographical dispersion of administrations;
 - Barriers to cross-border service provision due to different jurisdictions.
5. Access:
 - Inability of public administrations to choose the best service providers;
 - Inability of public administrations to formulate the request, in procuring and monitoring the services delivered;
 - Unwillingness to use external or private service providers.
6. Affordability:
 - Lack of proper resources.

TA could provide the appropriate services to PAs to overcome “bottlenecks” in the following categories:

- Project identification;
- Project preparation;
- Financial structuring;
- Procurement and state aid;
- Project delivery;
- Capacity building;
- Communication and awareness raising;
- Advise on determining fiscal space;
- Advise on valuation about to Eurostat compliance in case on PPP and PFI schemes;
- Advise on use of European Structural Funds and on Blending;

- EU Rating to projects.

In terms of categories of services, project preparation and financial structuring support dominate. These needs are driven by the lack of capacity among project promoters and PAs to effectively and efficiently develop viable concepts into investment-ready proposals. Reflecting this is the fact that capacity building is also a priority need across MCs and sectors. Lower priority service categories include project identification, project delivery, procurement and state aid, and communication and awareness raising.

Although TA service providers are obviously not directly responsible with so-called structural bottlenecks, they could still play a very important role by providing suggestions and recommendations to Central and Local Governments, as well as to the EU, on specific issues that could help to streamline the process of infrastructure planning, projecting, financing, construction and monitoring. Considering the potential institutional nature of TA providers, this special activity could be formally included in their mission and activity.

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 - a. TA providers should operate according to a public mandate between the public and the private sector;
 - b. Each MS should have the freedom to organize the network of TA as it wishes – for example, to entrust the national public bank/institution directly or together with any other national or regional agencies already existing or newly created, or any other solution which would fit their existing system and specific jurisdiction.

7. TA providers should be large enough to cover all the needs with one-to-one relationships, and not merely through a desk top approach;
8. TA providers should have numerous skilled personal – hired especially for this kind of activity – thus avoiding that the public-sector transfers to the TA provider personnel that is not trained for this task;
9. TA provider should take into consideration the European “best practice”, such as for instance the EIB and the EBRD or any other best practice at national or regional level;
10. TA providers should be independent - they should be perceived by the public administration as an “institutional facilitator” and by the private sector as a “reliable partner”;

Box: The European Investment Advisory Hub

Launched in September 2015 as part of the Investment Plan for Europe, the European Investment Advisory Hub (the "EIAH") is a tool to strengthen Europe's investment environment and improve the quality of investment projects.

The EIAH is designed to offer project promoters a single point of entry for advisory and technical assistance to identify, prepare and develop investment projects across the EU.

The EIAH has the following key components:

1. a single access point to a wide range of advisory and technical assistance programmes and initiatives for public and private beneficiaries, provided by high-level experts;
2. a cooperation platform to leverage, exchange and disseminate expertise among the EIAH's partner institutions and beyond;
3. an instrument to assess and address unmet needs by reinforcing or extending existing advisory services or creating new ones as demand arises

The EIAH was established as a partnership between the European Investment Bank Group and the European Commission. The EIAH's operations are jointly financed from the EU budget (75%) and from the EIB (25%) and the yearly resources amount to up to EUR 26.6 million until 31 December 2020. The EIB is responsible for its management.

The services of the Hub are available to project promoters, public authorities and private companies, which can receive technical support to help get their projects started, make them investment ready, gain advice on suitable funding sources and access a wide range of both technical and financial expertise.

The services available via the Hub are free of charge for public sector project promoters, while a contribution may be requested from private sector beneficiaries in order to align interests and ensure ownership of results.

As of end of September 2017, the EIAH had received more than 500 requests from all Member States. Of those about 430 were directly project-related and about 2/3 came from the private sector.

The EIAH builds on the expertise and the existing advisory services provided by the

EIB and the European Commission, such as 'fi-compass' or JASPERS. It also relies on the expertise of National Promotional Banks and Institutions as well as the managing authorities of the European structural and investment funds.

Currently the EIAH operates mainly via the EIB network of offices. However, to ensure broad coverage of services across the whole EU, the EIB and the Commission are working closely with a network of NPBI to deliver comprehensive and complete advisory services also at national and regional level.

As of October 2017, 22 NPBI have signed a Memorandum of Understanding to establish cooperation with the EIB on the EIAH. A Call for expression of interest for the delivery of decentralised services in priority areas by interested NPBI has been published towards the end of 2017.

The EIAH also works in cooperation with other international partners such as the European Bank for Reconstruction and Development (EBRD) and the World Bank to cover sectors currently not served by the EIB.

7. FUNDING SOURCES, ACTORS AND INSTRUMENTS

7.1. THE ROLE OF EU RESOURCES AND FINANCIAL INSTRUMENTS

7.1.1. EUROPEAN STRUCTURAL AND INVESTMENT FUNDS

As mentioned in previous paragraphs, the large majority of social infrastructure is funded by means of public resources. These include not only Member States' resources, but also resources from the EU common budget. These resources, deployed under multiple typologies of funding opportunities, such as grants, loans, guarantees, subsidies and prizes are particularly valuable as they can both unlock additional public and private resources and foster the realization of projects that would have not otherwise been funded due to low returns or scarcity of capital.

A substantial share of EU budget is channeled through five funds jointly managed by the European Commission and the EU Member States for a total of EUR 443.2 billion (in the time horizon 2014-2020), the so-called European Structural and Investment funds (ESI funds):

- **European Regional Development Fund (ERDF)** – EUR 199.4 billion – aims at strengthening economic and social cohesion in the European Union by correcting imbalances among its regions.
- **European Social Fund (ESF)** – EUR 88.8 billion – supports employment-related projects throughout Europe and invests in Europe's human capital.

- **Cohesion Fund (CF)** – EUR 63.6 billion – aims at reducing economic and social disparities and at promoting sustainable development. It is dedicated to Member States with a per capita gross national income (GNI) less than 90% of the EU average. For the 2014–2020 period, the Cohesion Fund can fund projects in Bulgaria, Croatia, Cyprus, the Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia and Slovenia.
- **European Agricultural Fund for Rural Development (EAFRD)** – EUR 85 billion – focuses on resolving the challenges facing EU's rural areas.
- **European Maritime and Fisheries Fund (EMFF)** – EUR 6.4 billion – helps fishermen to adopt sustainable fishing practices and coastal communities to diversify their economies, improving quality of life along European coasts.

ESI funds are allocated to Member States and delivered through national, regional and cross-border programmes. These programmes are included in the partnership agreements that each Member State drafts in collaboration with the European Commission to outline with precision how the funds will be deployed.

Among the above-mentioned funds, the former three are potentially eligible to fund social infrastructure projects. The ERDF, the largest among the funds, is potentially the most suitable to fund social infrastructure as the Regulation of the fund lists “health and social infrastructure” among the investment priorities of the fund.⁸⁴

As far as the ESF is concerned, its four thematic objectives are:⁸⁵

1. “promoting sustainable and quality employment and supporting labor mobility”;
2. “promoting social inclusion, combating poverty and any discrimination”;
3. “investing in education, training and vocational training for skills and life-long learning”
4. “enhancing institutional capacity of public authorities and stakeholders and efficient public administration”.

Social infrastructure projects are not explicitly mentioned neither among the thematic objectives nor within the entire regulation of the fund. However, they could potentially lie within the scope of points 2, 3 and 4 above.

To sum up, among the ERDF, ESF and CF, the former two but especially ERDF appear to be the most promising to fund social infrastructure projects.

⁸⁴ Art 5, c. 9, let. a) of the Regulation (EU) No 1301/2013 of the European Parliament and of the Council of 17 December 2013 on the European Regional Development Fund.

⁸⁵ Regulation (EU) No 1304/2013 of the European Parliament and of the Council of 17 December 2013 on the European Social Fund and repealing Council Regulation (EC) No 1081/2006.

All the funds have ex- ante and ex- post conditionality in their regulations and those have become increasingly more stringent over the years. Sometimes the social infrastructure investments planned for and partially co-financed by the regions have seen their access to the cohesion funds hampered because of the macroeconomic ex-ante conditionality to sound economic governance of the central government of the member state. Therefore, the conditionality to be adopted for the use of the cohesion funds and the blending of financial resources beyond 2020, should be carefully crafted not to unduly make regions pay for the fiscal consolidation of the Member states at central level.

7.1.2. BLENDING

Although EU funds can be delivered by means of several instruments (i.e. interest rate subsidies, loans, guarantees, risk capital, prizes, etc.), grants are undoubtedly the most common one. Grants can be used to fund a project in its entirety or they can be employed as just a part of the funding package. In the latter case, the mechanism by which EU grants are combined with other grants and especially financial instruments (loans, guarantees or equity) from the public and private financiers is known as “blending”. Easily intuitive, the rationale behind this instrument is to improve the bankability of a project by reducing exposure to the risk of potential financiers to attract the latter in the investment of a project considered to be of strategic importance. The general purpose of blending of grants with other financial instruments is to increase impact of the financial support. Blending a grant with another financial instrument (or budgetary guarantee) may enable the implementation of a previously economically non-viable project that has high socio-economic benefits and that otherwise could have difficulties in securing financing. By allowing financially unfeasible or sub-investment grade projects to become bankable, blending is potentially a solution to the principle of additionality that is now at the core of EU policies. Furthermore, blending can be especially useful when used in sectors or areas characterized by market failures (as it can be the case for social infrastructure).

NPBIs can use appropriate blending of financial resources to efficiently leverage the size and impact of investments in strategically relevant sectors, such as social infrastructures.

Box: European Fund for Strategic Investments (EFSI)

While making an efficient use of EU budget resources in the form of EU guarantee for mobilizing finance for projects with high EU policy relevance from the EIB Group and other public and private funds, the EFSI also enables mixed contributions of various sources of finance (see section 7.2.1 for more details). Such combinations of financing sources (e.g. the EIB, National Promotional Banks or commercial lenders) with or without the involvement of EU or national grants is present in EFSI operations approved under the Infrastructure and Innovation Window, as well as SME window. The EFSI operations presenting blended/combined sources of financing with NPBI involvement and presence of EU funds are designated as investment platforms.

Box: European Structural and Investment Funds (ESIF)

Although mainly delivered in the form of grants and implemented in shared management with EU member states, a part of ESIF funds can be deployed through financial instruments developed and implemented by Member States. This possibility was introduced in the 2014-2020 MFF. While these combinations will be further facilitated with the adoption of the Omnibus regulation (see below), a number of operations combining EU funds under direct and shared management with EIB lending (incl. through EFSI) have already been approved.

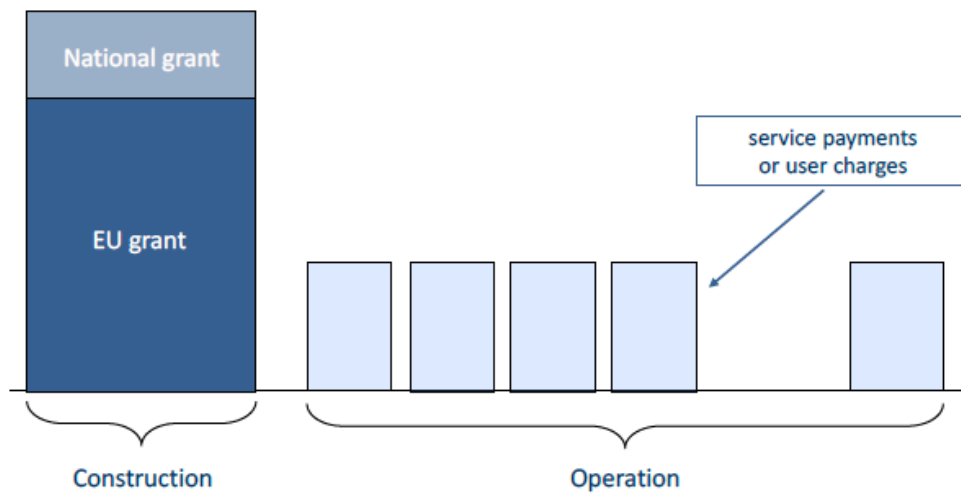
In the area of ESI Funds, the term of 'blending' has been used to designate combinations of ESI Funds with private financing resources in a Public Private Partnership. For the combination of ESI Funds with other forms of financial support, the CPR rules allow two possibilities. Firstly, it is possible for certain types of grants (interest rate subsidy, guarantee fee subsidy, or technical support) and financial products to be combined within the same operation and to be treated as a financial instrument. Other types of grants cannot be presented under a single financial instrument operation. Secondly, it is possible for the grant operation and the financial instrument operation to be combined to finance the same investment at the level of final recipient, however as separate operations. National public and private co-financing contributions under programmes may be provided at the level of the financial instrument (fund of funds or financial intermediary) or at the level of the investment in final recipient.

While making an efficient use of EU budget resources in the form of EU guarantee for mobilizing finance for projects with high EU policy relevance from the EIB Group and other public and private funds, the EFSI also enables mixed contributions of various sources of finance (see section 7.2.1 for more details). Such combinations of financing sources (e.g. the EIB, National Promotional Banks or commercial lenders) with or without the involvement of EU or national grants is present in EFSI operations approved under the Infrastructure and Innovation Window, as well as SME window. The EFSI operations presenting blended/combined sources of financing with NPB involvement and presence of EU funds are designated as investment platforms.

Despite this theoretically apparent convenience, recourse to blending for PPP projects has been so far rather limited. According to the European PPP Expertise Centre (EPEC), in the programming periods from 1994-1999 to 2007-2013, blending involved less than 4% of total PPP projects. According to EPEC, the reasons for such a limited recourse probably lied in:

- the lack of flexibility in the grant procedures (mostly in terms of the timing);
- the risks linked to the impossibility to extend the EU grant funding beyond the ongoing programming period;
- the uncertainties related to the level of the grant (thus partially leaving the funding risk in the hands of the procuring authority);
- the limited capacity of the PA to manage both procedures for EU grants and the PPP structure;
- the impossibility to link the EU grant component to the availability fee.

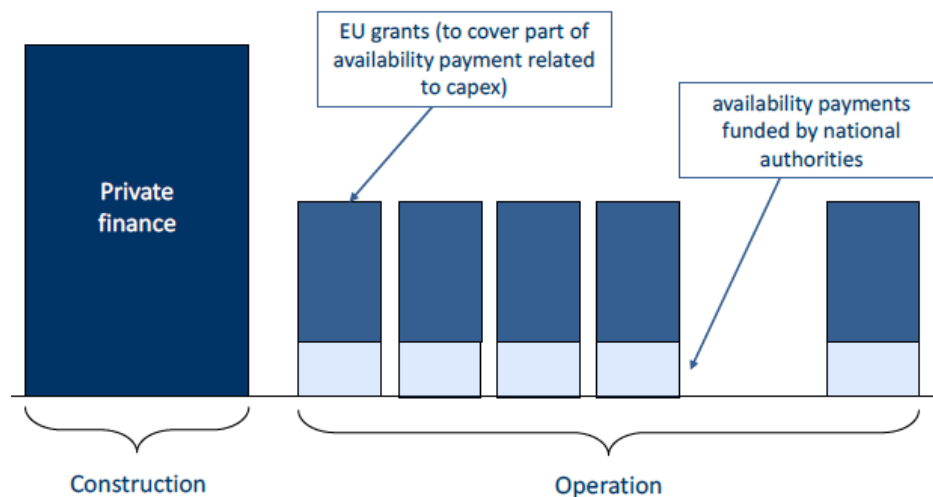
Figure 19: EU grant as a contribution to the capital costs in a construction-only contract



Source: EPEC (2016)

New provisions were undertaken in the programming period 2014 – 2020 and including some remedies to the above-mentioned obstacles, nonetheless the possibility to extend the EU grant component also in the operational phase may significantly leverage the recourse to blending in PPP projects.

Figure 20: EU grant as a contribution to the capital costs in the operational phase



Source: EPEC (2016)

Among the five funds introduced in the section above, ERDF and CF are potentially the ones eligible for blending. As ERDF is potentially the most suitable to fund social infrastructure, the blending within the ERDF is arguably the most relevant for the

scope of this report. Following the new above-mentioned provisions, the recourse to blending in PPP social infrastructure projects is expected to increase.

One of the key benefits of blending solutions is the catalysing effect on private financing. By combining state guarantees and/or funding from development banks with (usually more expensive) institutional capital, investment platforms help unlock significant flows of non-public money and make many more projects investable than what would be possible otherwise. For example, EFSI (mentioned below) is set to unlock up to €15 of private capital for each €1 of EIB funding and EU guarantees. Investment platforms with capital blending can be particularly effective for expanding the financing of new social infrastructures. A material differential between cost of capital that development banks can provide for this purpose and the cost of institutional capital, suggests that the multiplier effect would be strong⁸⁶.

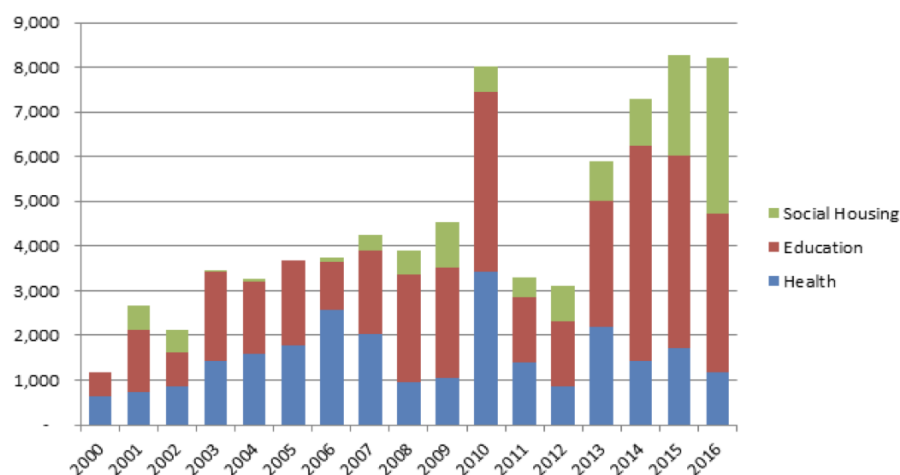
7.2. THE ROLE OF THE EIB

Owned by the EU Member States, the European Investment Bank (EIB) is the world's largest multilateral borrower and lender, providing long-term finance to support economic growth and social development not only in Europe but also in areas with larger investment needs. It mainly develops its business through its long-standing lending activity, but it also provides guarantees and carries on equity investments. Furthermore, the EIB is particularly valuable for attracting financing from other private and public resources, implementing financing from the EU budget and advising administrations during the entire project lifecycle. The EIB is focused on four key priority areas: (i) innovation and skills, (ii) access to finance for smaller businesses, (iii) climate and environment and (iv) infrastructure. As far as the latter point is concerned, in 2016, the EIB provided EUR 19.7 billion to support infrastructure investments, mainly in the EU.

Social infrastructure investments in the three sectors under scrutiny in the Report (health, education and social housing) represent a key share of total infrastructure investments carried forward by the EIB. Since the beginning of the century, not only the amount of investments dedicated to these sectors has increased, but also the between-sectors composition has significantly changed. While in 2016 investment levels in the health infrastructures were just slightly above the levels recorded in 2000, in the last three years' investments in education infrastructures have grown significantly. Finally, although relatively recent, the social housing represents a fast-growing sector of the intervention of the EIB.

Figure 21: EIB lending to the HLTF priority sectors 2000-2016

⁸⁶ EDHEC Infrastructure Institute estimate historic long-term returns to equity from investing in greenfield social infrastructure in Europe at 10-11%, whereas development banks might be able to finance same at lower rates.



Source: EIB Group (2017)

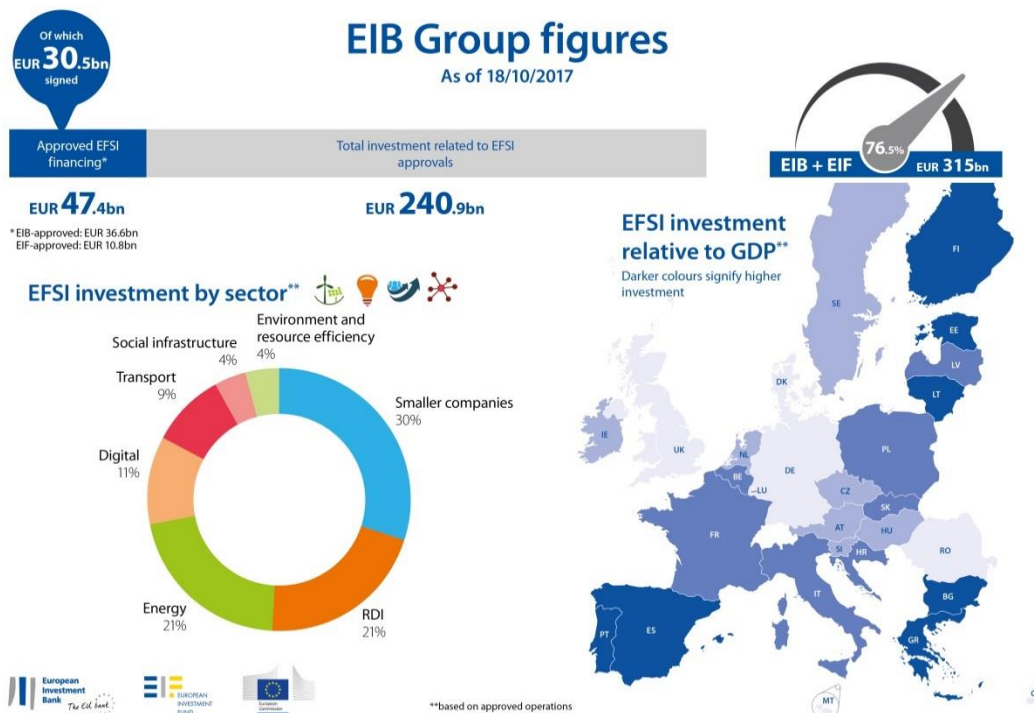
Beyond its lending activity, the EIB also participates with minor resources to the investment of social infrastructure by committing roughly EUR 250 million into equity infrastructure funds partially investing in the social infrastructure sector.

Finally, EIB's traditional lending activity also adds up to the institution's new pivotal role within the Investment Plan for Europe.

7.2.1. THE EUROPEAN FUND FOR STRATEGIC INVESTMENTS (EFSI) - OVERVIEW

The European Fund for Strategic Investment (EFSI) is an initiative launched jointly by the European Commission and the EIB Group (EIB and EIF) under the umbrella of the Investment Plan for Europe to help bridge the current investment gap in the EU by mobilizing private investment in support of infrastructure, innovation and SMEs. The idea behind the initiative is to boost strategic investments by means of a leverage effect elicited by an EU guarantee backing the selected EFSI investments. The EU guarantee allows the EIB to focus on riskier investments capable of addressing market failures and sub-optimal investment situations in the EU. EFSI has a total risk-bearing capacity of EUR 21 billion, of which EUR 16 billion under a guarantee from the EU budget and EUR 5 billion from the EIB's own funds. EFSI aims at mobilizing roughly EUR 315 billion in private and public investments.

Figure 22: EFSI – state of implementation – Oct. 2017



Source: EIB Group (2017)

Social infrastructure is among the priority sectors for EFSI. A broad range of projects can be supported in this sector, such as the construction, expansion or refurbishment of schools and universities, clinics and hospitals, affordable and social housing. By way of example, the EIB financed under EFSI the design, build, financing, maintenance and facilities management of 14 Primary Care Centers located throughout Ireland and the construction of a new campus for the Nova School of Business & Economics in Portugal or the building of affordable houses in Poland. In addition, under the EFSI SME Window, the European Investment Fund supported a Payment-by-Results scheme in Finland aiming to foster the inclusion of refugees and migrants in the labour market.

However, currently only 4% of approved EFSI financing is supporting social infrastructure projects in the EU. Given the great investment gap identified in the field of social infrastructure, a 4% allocation is still relatively low compared to the needs, even if further projects in the affordable housing area are classified under EFSI's resource efficiency or energy categories, which may add further percent points. EFSI financing is generally demand driven and there are no fixed sector quotas established by the Plan. For the share of social infrastructure to increase in future years, there needs to be an increase of the pipeline of viable projects in the social sector, which is currently lagging other sectors. This increase would be beneficial also in view of the extension of the plan under the so-called "EFSI 2.0". This extension which will expand the timeline of EFSI until 2020, where the investment to be triggered is expected to increase to more than EUR 500 billion, based on an increased EU guarantee of EUR 26 billion and increased EIB contribution of EUR 7.5 billion.

7.2.2. EFSI INVESTMENT PLATFORMS

EFSI investment platforms could be an appropriate tool to improve the pipeline of projects in the social infrastructure sector.

The Regulation establishing the EFSI specifically provides for the use of investment platforms. Investment platforms are public-private co-investment arrangements, structured with a view to catalyse investments in a portfolio of projects (as opposed to individual projects) with a thematic or geographic focus.

Investment platforms are a mean for aggregating financing to support groups of investment projects, to reduce transaction and information costs and to provide for more efficient risk allocation between various investors.

EFSI investment platforms shall have a defined scope, which may include:

- (a) national or sub-national platforms that regroup several investment projects on the territory of a given Member State;
- (b) multi-country or regional platforms that regroup partners from several Member States or third countries interested in projects in a given geographic area;
- (c) thematic platforms that gather investment projects in a given sector.

Investment platforms are not set up by the European Investment Bank (EIB), but by sponsors or project promoters, which may be public authorities or National Promotional Banks and Institutions (NPBIs), or social sector actors and private investors or partners. The EIB can provide advice to the setting up of platforms through the European Investment Advisory Hub (EIAH) and can support financially such platforms, through EFSI.

Platforms can be useful for blending of resources and bundling of projects. Under the scope of investment platforms, each of the smaller or riskier projects must be assessed as being technically and economically viable to be considered for financing by an investment platform under EFSI.

An EFSI investment platform can provide financial products (e.g. loans, equity, guarantees) to projects that have the potential of generating revenues or saving costs, but which are generally too small and/ or too risky to be financed by private investors only. The co-investment in investment platforms can reinforce the cooperation between the EIB, NPBIs and other interested parties.

As of November 2017, more than 30 investment platforms have already been approved to receive EFSI-backing, with a number also in the social sector. Below are two examples given.

7.3. THE ROLE OF THE COUNCIL OF EUROPE DEVELOPMENT BANK (CEB)

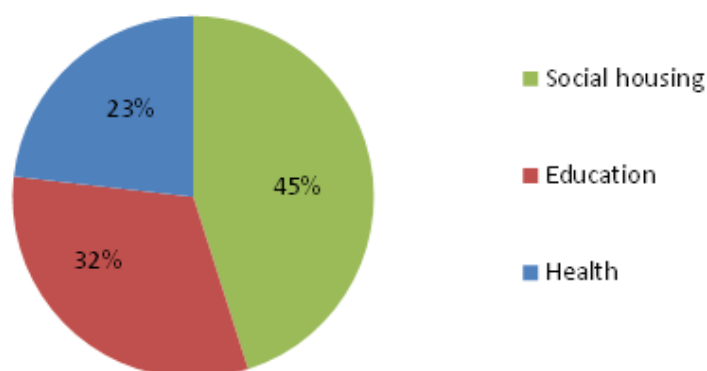
The CEB is a multilateral development bank with a social mandate. Through the provision of financing and technical expertise for investment projects with a high impact on people's lives, it actively promotes social cohesion across Europe. CEB's operations span a broad range of areas such as social housing, health, education, job creation in MSMEs, energy efficiency, environmental protection and judicial

infrastructure. CEB's investments in social infrastructure contribute to delivering affordable and sustainable essential services to European citizens. Furthermore, the Bank responds to emergency situations (such as refugee/migrant crises and natural/ecological disaster events) and helps improve the living conditions of the most vulnerable.

In the HLTF priority sectors, CEB lending totaled € 14 billion over the period 2000-2016 (see Figure 23 below) and was distributed as follows:

- € 6.2 billion contributed to the provision of social and affordable housing for low- and middle-income persons and to the retrofitting of existing housing stock;
- € 4.4 billion went to investments in preschools, primary and secondary schools and universities, as well as in scientific research and development programmes;
- € 3.2 billion financed the construction, rehabilitation and equipment of healthcare facilities (including those specialised in assisting vulnerable populations), and various research and development programmes.

Figure 23: CEB lending to the HLTF priority sectors (2000 – 2016): € 14 bn



Source: Council of Europe Bank (2017)

7.4. THE ROLE OF NATIONAL PROMOTIONAL BANKS AND INSTITUTIONS⁸⁷

NPBIs ⁸⁸ are national financial institutions designed to provide medium and long-term capital for productive investment. They have historically played an important role in social infrastructure financing as well as at a pan-European level and beyond with common cross-border initiatives.

The role of the major national and multilateral promotional banks has grown with the crisis and will remain crucial for years. In recent years, they have played an important countercyclical role. They have created new financial instruments and new guarantee schemes; they have provided significant additional resources to support the economy during the crisis, by financing infrastructure and SMEs, either through the banking system or directly; and new European and domestic long-term equity funds have been launched to invest in infrastructure projects and strengthen company capitalization.

More generally, they keep an important role in financing the real economy (primarily in terms of long term, patient, capital investment). NPBIs are in the position to partially fill in the gap in the case of market failure by using their professional banking and investment skills, risk absorption capacity and by acting as a broker of developmental/transformational financing.

Moreover, they increased their role thanks to their credibility to act as intermediaries of financial flows for several reasons: long history (track record); predictable (non-volatile behaviour); not tainted by financial crisis abuses; known as carefully structuring transactions; in-depth local knowledge; benefit from preferred creditor status; have political weight, have delivered returns consistent with risk (and market).

7.5. SOCIAL BONDS

Social Bonds (“SB”) are any type of bond instrument where the proceeds will be exclusively applied to finance or re-finance in part or in full new and/or existing eligible Social Projects and which are aligned with the four core components of the so-called Social Bond Principles (“SBP”)⁸⁹.

Currently, there are four main types of Social Bonds in the market (additional types may emerge as the market develops):

⁸⁷ See Annex 6.

⁸⁸ Communication from the Commission to the European Parliament and the Council, working together for jobs and growth: The role of National Promotional Banks (NPBIs) in supporting the Investment Plan for Europe

⁸⁹ Please refer to: <https://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/green-social-and-sustainability-bonds/social-bond-principles-sbp/>

1. **Standard Social Use of Proceeds Bond:** a standard recourse-to-the-issuer debt obligation aligned with the SBP.
2. **Social Revenue Bond:** a non-recourse-to-the-issuer debt obligation aligned with the SBP in which the credit exposure in the bond is to the pledged cash flows of the revenue streams, fees, taxes etc., and whose use of proceeds go to related or unrelated Social Project(s).
3. **Social Project Bond:** a project bond for a single or multiple Social Project(s) for which the investor has direct exposure to the risk of the project(s) with or without potential recourse to the issuer, and that is aligned with the SBP.
4. **Social Securitized Bond:** a bond collateralized by one or more specific Social Project(s), including but not limited to covered bonds, ABS, MBS, and other structures; and aligned with the SBP. The first source of repayment is generally the cash flows of the assets.

Having started life as an offshoot of the green bond category, SB are proving that while they are separate in nature they are equally viable for both issuers and investors. They dovetail neatly with the green bond market, in terms of their structures and overall commitment to Environmental Social Governance (“ESG”) purposes for the use of proceeds, while still developing as a distinct asset class.

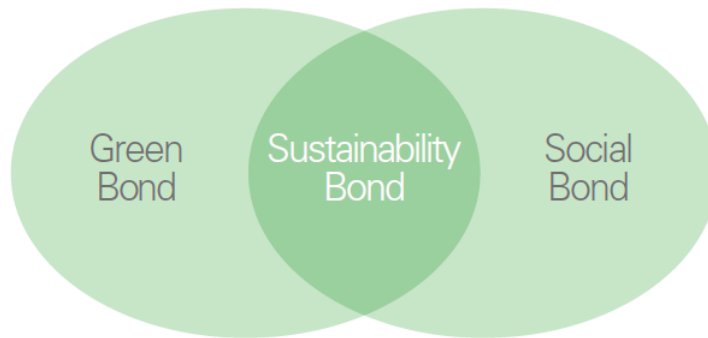
In 2007, the green bond market kicked off with issuance from multilateral institutions European Investment Bank (EIB) and World Bank. The wider bond market started to react after the first \$1 billion green bond was sold by IFC in March 2013. The new impetus for sustainable fixed income instruments, aimed at the growing constituency of socially responsible investors, soon gained momentum. Between 2008 and 2012, issuers brought \$2.5 billion of green bonds to market, but in 2013, issuances took an exponential leap, vaulting to \$11 billion, new issuance trebled again to \$35 billion in 2014 and stepped on to \$42 billion in 2015. In 2016, approximately \$31 billions of green bonds were issued with China alone issuing around \$11 billion equivalent.

Social and Sustainability bonds, the more recently developed categories, have experienced remarkable traction of their own. In the first four years of their existence, these products reached almost \$15.6 billion in issuance.

In 2017, the Council of Europe Development Bank (CEB) developed a Social Inclusion Bond Framework in line with the ICMA Social Bond Guidance, with the first bond issuance of € 500 million in April 2017. The proceeds from this issuance will exclusively finance social investments towards social housing, education, and job creation in micro, small, and medium enterprises (MSMEs). The launch has enabled the CEB to demonstrate its leading role in the social bond market, with plans to issue a social inclusion bond on an annual basis

Looking at the different categories of sustainable financing (Figure 24), it is clear how both green and social bonds overlap to create “sustainability” offerings, which can cover either types of transaction, or a combination of both.

Figure 24: Sustainable financing



Note: Some issuers also use Sustainability as a term of reference for all their green and social bond activities.

Source: ICMA and HSBC

Moving out more broadly from strictly environmental or social goals, sustainability bonds comprise a hybrid set of objectives, bridging both green and social issues. For instance, previous issuances have included energy efficient buildings for disadvantaged people, or clean public transport with tramway extensions and bicycles lanes.

With the move from niche to mainstream for the sustainable financing market, investors are keen for clarity that they are spending their money wisely, both financially and socially.

In the green bond space, the Green Bond Principles (GBP) play a key role in providing clarity, by defining the structure, documentation, monitoring and reporting.

Taking a leaf out of the same book, a Social Bond Guidance was launched by ICMA (International Capital Markets Association) with a complementary mission of promoting transparency, disclosure and integrity in the social and sustainability bond market.

The Social Bond Guidance was released on the 16th June 2016 as part of the 2016 GBP update. In 2017, the Guidance was integrated and replaced in by the SBP.

The CEB has been part of ICMA's social bonds working group since its inception in early 2016.

The SBP are voluntary process guidelines that recommend a clear process and disclosure for issuers, which investors, banks, investment banks, underwriters, placement agents and others may use to understand the characteristics of any given Social Bond.

In the SBP, Social Projects⁹⁰ are defined as “projects, activities and investments that directly aim to help address or mitigate a specific social issue and/or seek to achieve positive social outcomes especially, but not exclusively, for target population(s)⁹¹.”

⁹⁰ Social Project categories typically include, but are not limited to, providing and/or promoting: (i) affordable basic infrastructure (e.g. clean drinking water, sewers, sanitation, transport); (ii) access to essential services (e.g. health, education and vocational training, healthcare, financing and financial services); (iii) affordable housing; (iv) employment

The **SBP** have four core components:

1. **Use of Proceeds:** the cornerstone of a Social Bond is the utilization of the proceeds of the bond for Social Projects (including other related and supporting expenditures, such as R&D), which should be appropriately described in the legal documentation for the security. If all or a proportion of the proceeds are or may be used for refinancing, it is recommended that issuers provide an estimate of the share of financing vs. re-financing, and where appropriate, also clarify which investments or project portfolios may be refinanced, and, to the extent relevant, the expected look-back period for refinanced Social Projects.
2. **Process for Project Evaluation and Selection:** The issuer of a Social Bond should clearly communicate to investors: (i) the social objectives; (ii) the process by which the issuer determines how the Projects fit within the eligible Social Project categories identified; (iii) the related eligibility criteria, including, if applicable, exclusion criteria or any other process applied to identify and manage potentially material social and environmental risks associated with the Projects. The SBP encourage a high level of transparency and recommend that an issuer's process for project evaluation and selection be supplemented by an external review
3. **Management of Proceeds:** The net proceeds of the Social Bond, or an amount equal to these net proceeds, should be credited to a sub-account, moved to a sub-portfolio or otherwise tracked by the issuer in an appropriate manner, and attested to by the issuer in a formal internal process linked to the issuer's lending and investment operations for Social Projects. The SBP encourage a high level of transparency and recommend that an issuer's management of proceeds be supplemented using an auditor, or other third party⁹², to verify the internal tracking method and the allocation of funds from the Social Bond proceeds

generation including through the potential effect of SME financing and microfinance; (v) food security; (vi) socioeconomic advancement and empowerment.

⁹¹ Examples of target populations include, but are not limited to, those that are: (i) living below the poverty line; (ii) excluded and/or marginalized populations and /or communities; (iii) vulnerable groups including because of natural disasters; (iv) people with disabilities; (v) migrants and /or displaced persons; (vi) undereducated; (vii) underserved; (viii) unemployed.

⁹² The SBP recommend that issuers use an external review to confirm the alignment of their Social Bonds as well as public disclosure of external reviews. External reviews might include: 1) Consultant Review: An issuer can seek advice from consultants and/or institutions with recognized expertise in social issues or other aspects of the issuance of a Social Bond, such as the establishment/review of an issuer's Social Bond framework. "Second party opinions" may fall into this category; 2) Verification: An issuer can have its Social Bond, associated Social Bond framework, or underlying assets independently verified by qualified parties, such as auditors. In contrast to certification, verification may focus on alignment with internal standards or claims made by the issuer. Evaluation of the social features of underlying assets may be termed verification and may reference external criteria; 3) Certification: An issuer can have its Social Bond or associated Social Bond framework or Use of Proceeds certified

4. **Reporting:** Issuers should make, and keep, readily available up to date information on the use of proceeds to be renewed annually until full allocation, and as necessary thereafter in the event of material developments. This should include a list of the projects to which Social Bond proceeds have been allocated, as well as a brief description of the Projects and the amounts allocated, and their expected impact. The SBP recommend the use of qualitative performance indicators and, where feasible, quantitative performance measures (e.g. number of beneficiaries) and disclosure of the key underlying methodology and/or assumptions used in the quantitative determination. Issuers with the ability to monitor achieved impacts are encouraged to include those in their regular reporting.

7.6. IMPACT INVESTING

Increasingly we see how investors, enterprises and public authorities plan to work in close partnerships and are in need to share useful information on the outcomes and impacts the interventions and the projects have on people, budgets, services, environment as described earlier (See also Annex 4 and Annex 5).

Impact investing as a method is on the rise in many continents since the G8 launched an initiative under the UK's presidency social impact investment task force launched in June 2013 in London.

Since then several countries also adopted some recommendations to enable and catalyse impact investment. Interesting avenues for instance are the establishment of impact investing matching programmes paired with incentives such as credit enhancement, guarantees and tax advantages which have been used to attract of private capital to support public priorities. Some also developed an outcome payment fund, specifying maximum prices public authorities would pay for certain outcomes.

There is indeed a growing interest of both public and private actors in financial instruments which combine financial return with public value generation. It's called impact investing, also referred to as social finance, as defined by the Global Impact Investing Network (GIIN), the platform established by the Rockefeller Foundation in 2007. The global impact investing market has grown from \$4.3billion in 2011 to \$60billion in 2015 (GIIN, 2017), driven by a new generation of funds that offers social and environmental impact alongside financial return creating a new paradigm focused on responsible, sustainable, thematic, or impact-first investments, in contrast to the traditional finance-only vs impact-only philanthropy.

against an external assessment standard. An assessment standard defines criteria, and alignment with such criteria is tested by qualified third parties/certifiers; 4) Rating: An issuer can have its Social Bond or associated Social Bond framework rated by qualified third parties, such as specialized research providers or rating agencies. Social Bond ratings are separate from an issuer's ESG rating as they typically apply to individual securities or Social Bond frameworks/programmes. An external review may be partial, covering only certain aspects of an issuer's Social Bond or associated Social Bond framework or full, assessing alignment with all four core components of the SBP.

Social finance is not new. There is a long tradition in Europe dating back to the first cooperative and ethical banks. But, over the last 15 years, impact investing has grown especially in the US and UK as a response to socially disruptive effects of the financial industry and limits of the state in providing public services. Public sector's leadership has been critical to design and foster the new paradigm matched by a maturing social corporate responsibility (CSR). The global financial crisis in 2008 has provided the basis for impact investing to really take off that peaked in 2013 when the British government launched a dedicated taskforce during the presidency of the G8 to set international standards. This qualifies impact investing as an interesting option to fund social infrastructures.

BOX. Social Impact Bonds

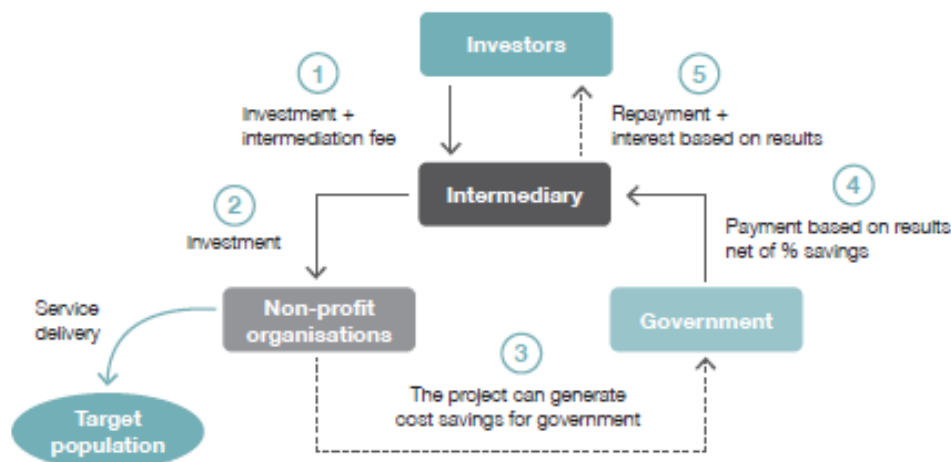
Social Impact Bonds (SIBs) have been designed to raise private capital to finance innovative solutions in welfare services, relieving government from upfront costs and risks against the commitment to pay for predetermined and quantifiable impact (called 'payment by result' or 'payment for success') that is independently and scientifically assessed. Despite the name, SIBs are not real bonds, given that redemption and remuneration of principal are not guaranteed, but rather are tied to the achievement of targets set when the project is launched. The first SIB was launched in 2010 in the UK to reduce re-offending rates. Today, there are over 89 SIBs around the world with a total value of around £300m. Most of SIB are in the UK. There are a few in the rest of Europe and, in June 2017, and the Finnish Ministry of Economic Affairs and Employment announced a new SIB for migrants' integration co-financed with EIF and the private fund manager Epique.

Accordingly, this type of instrument enables government to link payment of the service provided to the community to the actual results achieved, thereby creating a virtuous circle and enhancing the quality of public spending.

Often the SIB is financing the first test or pilot phase of an innovative measure developed by private or non-governmental entities and then, if proven successful, is adopted by the public sector at scale. Investors provide the initial capital to an intermediary, which selects and finances non-profit organisations to provide the service. Only if the impact on the target population reaches the specified targets will the public authority remunerate the investors through the intermediary, using a payment structure like that of an ordinary bond, i.e. comprising annual interest coupons and final redemption of principal. Achievement of the results, which is certified by an independent third party, should result in savings that are able to:

- repay the initial investment;
- provide the investors with a return to remunerate the risk;
- provide the public sector with a cost savings compared with the initial cost of the service.

Figure 25 How SIBs work



Given that payment is tied to the achievement of objectives, there are several key elements that determine whether SIBs are an appropriate instrument. First, the performance indicators must be robust, objectively verifiable and comparable against benchmarks⁹³ so that they lead to objective results rather than producing distorted incentive mechanisms. Secondly, the target population must be clearly identifiable, and the critical issues to be addressed must be specified. Causality between problems and solutions is also critical. Finally, the projects must be able to generate savings in public expenditure to repay investors.

The investors take on the greatest risk, which is why SIBs are mainly used for projects with an innovative approach for social problems that the standard public services have failed to address and has a proven social impact. So far investors have been mainly philanthropic organisations, foundations, charities, corporate CSR. In Europe only the Finnish SIB involved institutional investors. Investors expect a return in terms of social impact in addition to the financial rewards although the latter is not always a deal-breaker, and can get some sort of public guarantee. SIBs have been applied to employment inclusion of disadvantaged people, education (e.g. former convicts or addicts, youth in disadvantaged neighbourhoods), healthcare, disabilities, or home-assistance services. Such projects have an average time horizon of 5 years, which includes the initial setup and final performance measurement, and the return on investment ranges around 3% annually.

Impact investing includes all types of capital funds, established by both government and private sector. They are increasing in number and size. In 2012 the British Government launched Big Society Capital, £600m fund of funds to foster the impact investing market. It's the largest in Europe.⁹⁴ In 2015, EIB launched a similar fund of

⁹³ We can conduct three types of comparison between the KPIs and the initial values: historical projection; pre- and post-initiative for the same population; and comparing the target population against a control group.

⁹⁴ <https://www.bigsocietycapital.com/>

funds - Social Impact Accelerator – which is currently managed by the European Investment Fund (EIF).⁹⁵ Portugal has created a dedicated programme to impact investing earmarking €150m of ESF 2014 – 20.⁹⁶ Deutsche Bank and Barclays have also launched impact funds and we can expect the major financial institutions to follow this trend. Insurance Groups such as Axa and Unipol have already made investment commitments in this space.

Impact investing - and SIB in particular – creates an opportunity to correlate the investment in real assets and socio-economic outcomes. There are already a few cases that show how such a correlation can generate a positive outcome. In July 2017, EIB confirmed its co-financing of a PPP for the extension and upgrade of the public hospital of Treviso using EFSI guarantee.⁹⁷ The developer committed all the savings generated by concessionary cost of capital offered by EIB to finance new health and education services that generate a further value for the community increasing the overall value of the investment. This is the “shared value” theorized by Michael Porter making concrete the commitment to ‘societal value’ as investment criteria of the Juncker Plan. Furthermore, The government of New Zealand has just commissioned a private contractor to design, finance, build and manage the Auckland South Correctional Facility.⁹⁸ The contract is pegged to the success in the rehabilitation of offenders. Maximising public interest is the incentive of the contractor to maximise revenues. This is payment by results aligning investment and design of the infrastructure to social service provision and outcomes that could be replicated for any other social infrastructure investment.

⁹⁵ http://www.eif.org/what_we_do/equity/sia/index.htm

⁹⁶ <http://inovacaosocial.portugal2020.pt/>

⁹⁷ <http://www.eib.org/infocentre/press/releases/all/2017/2017-215-juncker-plan-eib-finances-better-healthcare-in-the-veneto-region.htm>

⁹⁸ <https://www.citylab.com/equity/2017/08/new-zealand-tries-a-different-kind-of-private-prison/538506/>

8. RECOMMENDATIONS AND PROPOSALS

Recommendations and proposals contained in this Report can be regrouped and summarised as follows:

Political Recommendations	Policy Recommendations	“Quick Wins”
<ul style="list-style-type: none"> - Shift from an underinvestment scenario towards a smart capacitating investment framework with ongoing monitoring of the progress; - Establish a stable and more investment friendly environment for social infrastructure; - Enhance evidence-based standard settings for impact investing; - Fiscal consolidation should not weight too much on the resources for social investment in infrastructure of the sub-national Governments; - More data collection, on infrastructure risk in general and social infrastructure in particular, should be put in place to help regulators in their effort to combine proper risk valuation and financial stability; - Enhance the role of European national and regional promotional banks and institutions (NPBIs) in their cooperation with public authorities and European entities. 	<ul style="list-style-type: none"> - Foster social infrastructure finance, focussing on the regions with the highest needs; - During the annual European Semester exercises, consider assessing member states investment in social infrastructure; - Increase and enhance the pipeline of viable projects for social infrastructure; - Carefully craft the ex-ante and ex-post conditionalities beyond 2020; - Promote favourable taxation and incentive schemes supporting social investments; - Promote labelling and certification that would facilitate the take-up of social investments; - Favour the development of new financial instruments especially dedicated to social infrastructure (such as social bonds); - Favour the development of an extensive and a far-reaching system of Technical Assistance (TA) at local, national and EU level; - Launch of a European Social Infrastructure Agenda; 	<ul style="list-style-type: none"> - In the next MFF, create a specific policy window for social investments including social infrastructure investments; - During the annual European Semester exercises, make country specific recommendations for investment in social infrastructure; - Strengthen the focus of cohesion policy on social investments and infrastructures and facilitate further blending of financial resources; - Pilot the launch of some thematic and/or geographic investment platforms to bundle projects and boosting initiatives for social sector investments; - Strengthen the strategic role in Technical Assistance of the EIAH by means of the creation of a strong network with NPBIs and other national or regional agencies; - Enhance the use of strategic public procurement schemes and lead to cost synergies through efficient cooperation with possible CPBs; - Build up the capacity of service provider organisations and local authorities;

	<ul style="list-style-type: none"> - Creation in the medium-term of a public-private Fund dedicated to social investments in the EU. 	<ul style="list-style-type: none"> - Promoting the issuance of Social Bonds by relevant actors; - Learn from schemes paying for results and further develop social impact schemes; - Enhance data collection for social infrastructure investments in Europe; - Develop standard settings for impact investing.
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8.1. GENERAL RECOMMENDATIONS AND ENABLING CONDITIONS

The Report supports an approach towards upwards convergence based on regions (like cohesion policies) rather than only at central government level. This approach will be important to allow more resources to be efficiently allocated where most needed.

Social infrastructures play a critical role in moving towards upwards convergence. Considering the great investment gap in social infrastructure in Europe, the Report proposes some solutions and recommends some innovations in financing social infrastructure in Europe.

The Report proposes that the greatest attention should be given to:

- Shift from an underinvestment scenario towards a smart capacitating investment framework with ongoing monitoring of the progress at a national level;
- Foster social infrastructure finance, focussing on the regions with the highest needs;
- Establish a stable and more investment friendly environment;
- Increase and enhance the pipeline of viable projects for social infrastructure;
- Enhance the role of European national and regional promotional banks and institutions (NPBIs) in their cooperation with public authorities and European entities.

Enabling conditions are identified in a wide range of areas:

- Fiscal consolidation, while respecting the framework of the Stability and Growth Pact (SGP), should not weigh too much on the resources for social investment in infrastructure of the sub-national Governments, considering that these carry out two-third of total government investment on average in the EU;
- Carefully craft the ex-ante and ex-post conditionalities adopted for the use of the cohesion funds and the blending of financial resources beyond 2020 not

to unduly make regions pay for the fiscal consolidation of the Member States at central level;

- Promote favourable taxation and incentive schemes supporting social investments;
- Promote labelling and certification that would facilitate the take-up of social investments;
- Favour the development of new financial instruments especially dedicated to social infrastructure (such as social bonds);
- Favour the development of an extensive and a far-reaching system of Technical Assistance (TA) at local, national and EU level.

8.2. SPECIFIC PROPOSALS: TOWARDS A LONG-TERM STRATEGY IN BOOSTING SOCIAL INFRASTRUCTURE INVESTMENT AND FINANCING IN THE EU

The Report proposes a Roadmap that, if implemented, would contribute to a more social, resilient and cohesive Europe.

While tracing ideally the path to the launch of a European Social Infrastructure Agenda (the “Agenda”) and the creation of a public-private Fund dedicated to social investments (the “Fund”), the Roadmap focuses on specific early deliverables that can be already achieved within the next two years.

The early deliverables will set the milestones towards a long-term strategy in boosting social infrastructure investments and financing in the EU.

Furthermore, the Roadmap can mark off the implementing process for the upcoming Agenda and the Fund in the following development stages:

- Inaugural Stage (years 0 to 1): call for the creation of a specific policy window for social investments including social infrastructures and strengthening the focus of the cohesion policy through appropriate blending of financial resources;
- Early Stage (years 0 to 2): launch of thematic and geographic investment platforms to bundle projects. Build-up the capacity of service provider organisations and enhance Technical Assistance services;
- Phasing-in Stage (years 2 to 4): while the investment platforms continue to finance social infrastructure projects, preparation and launch of the Agenda. Building on a comprehensive assessment of the functioning of pilot investment platforms, the final approval for the creation of the Fund can be awarded. The governance structure of the Fund is finalized. At the end of the Phasing-in Stage, the newly established Fund evaluates which investment platforms can be merged into the Fund.
- Fully-operational Stage (years 4 to n): a completely new model in the EU – the Fund becomes one of the key instruments for financing social infrastructures.

The Roadmap should therefore include the following milestones:

Short-Term – Inaugural & Early Stage (2018-2020)

1. In the framework of the next MFF we take note that the Commission is reflecting on a single investment scheme, in that context we strongly recommend creating a specific policy window for social investments including social infrastructure investments. Furthermore, the cohesion policy should strengthen its focus on social investments and infrastructures and facilitate further blending of financial resources.
2. During the annual European Semester exercises, consider assessing member states investment in social infrastructure and make country specific recommendations in this area.
3. Pilot the launch of some thematic and/or geographic investment platforms to bundle projects and boosting initiatives for social sector investments. Projects' bundling on a thematic and/or geographic investment platforms can enhance the use of strategic public procurement schemes and lead to cost synergies through efficient cooperation with possible Central Purchasing Bodies (CPBs)⁹⁹.
4. Build up the capacity of service provider organisations and local authorities and strengthen the strategic role in Technical Assistance of the European Investment Advisory Hub ("EIAH") by means of the creation of a strong network with European national and regional promotional banks and institutions ("NPBIs") and other national or regional agencies.
5. Given their characteristics, social infrastructure assets are particularly well-suited for blending. Therefore, the platforms should mix grants, subsidies, guarantees and financial instruments to attract private capital and participation in the sector.
6. Promoting the issuance of Social Bonds by relevant actors.
7. Learn from schemes paying for results and further develop social impact schemes.
8. Enhance data collection for social infrastructure investments in Europe;
9. Develop standard settings for impact investing.

Medium-Term - Phasing-in Stage (2020-2022)

1. Investment platforms continue to finance social infrastructure projects according to the new scheme;
2. Prepare a possible Social Infrastructure Agenda;
3. Comprehensive assessment of the functioning of pilot investment platforms including an evaluation of the underlying portfolio of projects;
4. Building on the assessment, the creation of a public-private Fund dedicated to social investments can be explored by opening the equity capital structure to long-term investors.

Long-Term – Fully Operational Stage (> 2022)

⁹⁹ Commission Communication: Making Public Procurement work in and for Europe.

1. The Fund becomes one the main European instruments for financing social investments and infrastructures.
2. A completely new model in the financing of EU social infrastructure becomes fully operational.

8.2.1. EU SOCIAL INFRASTRUCTURE AGENDA

The Report proposes to create a European Social Infrastructure Agenda (the “Agenda”) with long-term targets moving towards European convergence. By tracing the models adopted for the European Digital Agenda and the 2030 Climate & Energy framework, the Agenda could be pivotal for moving in the direction of smart capacitating social infrastructure investment. The Agenda should include high-level targets to be reached by 2030 and define a Roadmap for the short, medium and long-term.

The HLTF provides some proposals using data already available at European level. Therefore, the HLTF proposes to use indicators for health, youth education as suggested in the scoreboard for the Social Pillar.

However, social infrastructure, in general, is not included in any of the datasets available at this stage. Thus, we suggest that one of the first short-term exercises could be to identify a possible pipeline of projects. The Commission along some academic institutions and think-tanks are currently developing a monitoring framework on Affordable Housing and Energy Efficient Housing. Our suggestion is that this would be used for the same purpose as here.

Target examples and supporting data:

1. By 2030, 90% of European citizens are to have access to specific (quality and quantity to be defined) services in each of the relevant sectors (education, health and long term-care and affordable housing).
2. By 2030, 90% of European citizens are to have access to affordable health care, whether close to where they live or remotely per telehealth.
The share of the population reporting that they are not able to meet their medical needs showed an increasing trend after the crisis due to financial reasons. On average, across EU countries, four times more people in low-income groups reported unmet medical needs for financial, geographic or waiting time reasons as did people in high-income groups (6.4% versus 1.5%). The main reason for people in low-income groups to report unmet health care needs was that care was too expensive. Any increase in unmet care needs, particularly among people with low income, may result in poorer health status for the population affected and increase health inequalities. In 2015, the share of the population reporting that they are not able to meet their medical needs ranged from merely 0.1% in Austria and the Netherlands to more than 10% in Greece and in Estonia.¹⁰⁰

¹⁰⁰ Source Social Scoreboard 2017 EC.

3. By 2030, significant increase in the share of young population (until 25 years old) in school or in training.

Young people neither in employment nor in education and training (NEETs) corresponds to the share of the population aged 15 to 24 who are not employed and not involved in education or training.

The share of NEETs declined from 13.2% in 2012 to 12.2% in 2015. Considerable differences are found between the Member States, with the NEET rate ranging in 2015 from 4.7 in the Netherlands to 21.4 in Italy.

Early leaver from education and training refers to a person aged 18 to 24 who have completed at most lower secondary education and is not involved in further education or training. Figures are expressed as a percentage of the total European population aged 18 to 24.

In the EU, the share of early leavers from education and training has been falling continuously since 2005. Despite improvements in some southern EU Member States, disparities across the EU Member States persist up to now (ranging from 2,8% in Croatia to 19,4% in Spain, 2016).¹⁰¹

8.2.2. PUBLIC-PRIVATE FUND FOR SOCIAL INVESTMENT

As integral and connotative part of the long-term strategy in boosting social infrastructure investments and financing in the EU, the Report proposes the creation, in the medium- to long-term, of an innovative and completely new financial instrument for the financing of social infrastructure, a new public-private Fund dedicated to social investments (the "Fund").

Given their characteristics, social infrastructure assets are particularly well-suited for "Blending", therefore the Fund should mix grants¹⁰², subsidies, guarantees and financial instruments to attract private capital in the sector.

In setting up a new framework for financial instruments for Social Infrastructure Investments, the new Fund should leave the possibility to update or adapt individual instruments to respond to changing market conditions, needs and local market structures. The financing structure of the Fund should be further developed and oriented towards best practices.

As a matter of fact, within a social investment policy window, the Fund should (i) gather appropriate resources from EU instruments (blending grants, subsidies, guarantees, etc) in order to enhance the financial commitment of European regional promotional banks, European NPBI and the EIB by mitigating their risks; and (ii) efficiently redistribute and allocate them to countries and/or macro-regions where social infrastructure investments are more needed in order to converge towards EU standards as well as where underlying economic and financial strength has to be further supported.

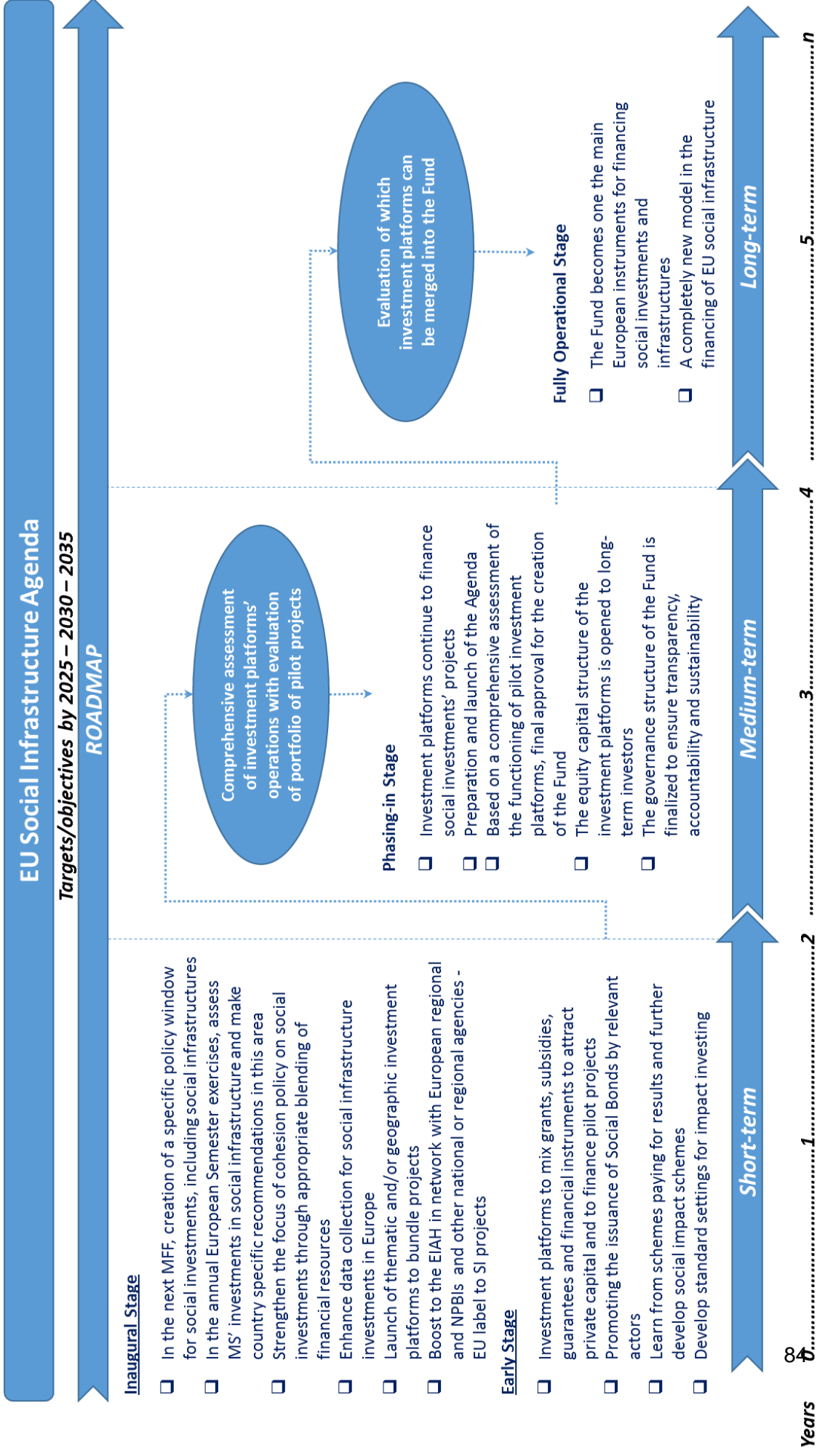
¹⁰¹ Source Social Scoreboard 2017 EC.

¹⁰² FEDER and perhaps the ESF to take account of services associated with social infrastructures.

Ultimately, the Fund should be allowed to issue Euro Social Bonds that can perfectly suit the investment needs of long-term institutional investors and successively can be traded on the capital market (CMU).

8.3. ADDRESSEE OF RECOMMENDATIONS AND PROPOSALS

The recommendations and proposals contained in this Report are addressed as suggestions, open to improvement, to all stakeholders involved in social infrastructure investments such as EU institutions, regulators, European regional as well as national promotional banks and institutions (NPBIs), private sector partners, non-profit organisations, non-governmental agencies, academics, national and local authorities.



9. CONCLUSIONS

The deliberations of the High-Level Task Force on Social infrastructure investment and the analysis performed by experts and discussions held in the working groups and with relevant institutions, have come to the firm conclusion that the gap in social infrastructure investments is significant, has increased since the financial crisis in 2007 and that time has come to launch and implement an ambitious strategy to boost long-term investment in social infrastructure in the EU28.

It is imperative that the implementation starts in the short-term with existing institutions as well as that the first projects are launched and financed to demonstrate first relevant results before the next EP elections in 2019. It is therefore critical to launch the European Social Infrastructure Agenda, adopt the New Convergence Strategy, create regional platforms, provide highly needed technical assistance, especially in the regions with the highest need, prepare a pipeline of investable projects, if needed through bundling, and provide the appropriate resources through efficient blending of public and private funds.

The actions required can be initiated by the NPBI and all the relevant institutions involved and committed, while fully respecting policies and fiscal competences at national and regional level.

Further, while immediately kick-starting the short-term part of the strategy, preparatory works could be performed to implement the medium- and long-term part that can be rapidly deployed after the new financial framework will be adopted in 2020.

The HLTF has throughout its mandate reiterated how important such a strategy would be to rebuild trust with the citizens and recreate a momentum towards convergence through future-oriented, smart capacitating investment in education and lifelong learning, health and social and long-term care as well as affordable and energy efficient housing.

The group also reflected on possible solutions to increase and improve the current financing instruments of social infrastructure investments and therefore presents a range of suitable new financial models as well as proposes specific legislative and regulatory requirements for enhancing private capitals' contribution.

All the proposals are clearly set out in the recommendations and should contribute to:

- help implement policies and instruments for accelerating the achievements of the European social welfare state, adapted to the future knowledge economies and ageing societies in a globalised world;
- incentivise reforms and boost investment in innovations, bringing the European innovators and SMEs to the forefront;
- build an even more efficient partnership between public and private actors with a key role for long-term investors and NPBI;
- create a new asset class and financing instruments, which are adapted to the needs in the social field.

It is now for decision-makers and political leaders to make some rapid steps forward to launch an ambitious initiative and keep the momentum created by the work of the HLTF as expected by the citizens in Europe.

POSTSCRIPT: A RENAISSANCE OF SOCIAL EUROPE

by Christian Sautter*

When the European Association of Long Term Investors (ELTI) took the initiative to set up a working group on "Boosting investments in social infrastructure in Europe", it was confronted with major contradictions.

The contradiction between the needs for education, health, affordable housing and the rapid decline in investments, mainly public investments, since the 2008 financial crisis.

The contradiction between the desire to trigger a positive dynamic of the European Union and the reality of social competence focused on municipal and local actors (regions or agglomerations).

The contradiction between the large size of economic infrastructure projects of transport or energy with billions of Euro investment on the one hand and the huge number of social infrastructure projects below the threshold of 30 million Euro.

The group refused the inevitability of reflexes of the past, because it was composed of dynamic personalities, convinced Europeans supported by talented rapporteurs.

Immense technical difficulties have been overcome because of a political imperative shared by all: the European feeling is in decline among the peoples of the Union, particularly in the less developed or transition regions where the crisis hit with particular brutality.

We propose concrete actions, modest at the beginning, which will demonstrate to the most fragile citizens of the most affected regions that social Europe is not an empty slogan, but a lever to allow the children and adults to have better education or training; workers and pensioners to have better health; young households to have access to low-cost housing where they can start their future.

We are convinced that the mixture of this group including political, social, technical and financial competences allows to raise posters before the European elections of 2019: "The European Union will facilitate the construction of a high school, a health center, a retirement home "!

We identified technical and financial hurdles and how to overcome the challenges based on three keywords.

"Labelling". The projects, mostly small, concern the daily life of citizens (education, health, housing are basic needs such as food and employment) and local elected officials bear high responsibility in these fields. It is not easy to stimulate projects or to implement them top down; local actors must take the initiative (bottom up). It is still necessary that the projects are of high quality, social (meet the needs expressed), technical (realisable at controlled cost) and financial (capacity of the local authorities to repay the loans and to finance the operation).

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The working group proposes to start from the needs of the inhabitants; transform them into technically and financially viable projects with technical assistance that can be partly supported by the national level (in particular by National Promotional Banks and Institutions present in the EU Member States) or the European level (European Investment Advisory Hub, European Investment Bank, Council of Europe Development Bank, Structural Funds).

The label would therefore be delivered in the country itself by decentralised "platforms", according to a grid of efficiency criteria defined at European level.

"Bundling". Projects labelled EUSI ("European Union Social Infrastructure") would be small projects in size, often less than 30 million Euro, which would be too small to attract interest of large public financiers and even more from private investors. Hence the proposal is that regional or national platforms bring them together in "packages" to achieve a critical financial size.

"Blending". As public funding has become scarce since the 2008 crisis, it is important to mobilize long-term private funds for projects that have relatively low financial return, but high societal return. The working group aims to reduce the risk by proposing mixed financing, public and private, European, national and local, and by granting a quality label to the projects. "Public-Private Partnerships" (PPPs), or "social impact investments", are financial innovations that, after a sometimes-bumpy start, have proven their relevance when fitted to local contexts. Large pension funds and other long-term private investors could devote a small fraction of their assets to safe investments with low financial return but a strong social image. It is by offering them labelled projects, grouped and restructured that investors are convinced to go a little beyond the strict financial return on investment.

With reflected decidedness, the working group validated an approach from the ground to the cusp of Europe; from millions of Euro to billions of Euro; and finally, from the short term to the long term.

The working group could have proposed hundreds of billions of Euro by 2030, as the gap between demand and supply of social services is breath-taking. The group preferred to propose a step-by-step approach, starting by breaking the trend of decline that has been observed for a decade and proposing a recovery, modest at first but gaining momentum as success emerges in the most fragile European regions.

In conclusion, we believe in Europe by evidence rather than Europe by eloquence! This will give European youth confidence by offering them a credible and concrete perspective of better education, health and housing services that will enable them to build a more dynamic and fair future than the life of their parents and grandparents.

Christian Sautter

Vice-Chairperson

SOURCES AND REFERENCES

- Aked J., Michaelson J. and N. Steur (2010), Good Foundations: towards a low carbon, high well-being built environment, New Economics Foundation: London p3.
- Arezki, R., Bolton, P., Peters, S., Samama, F. and J. Stiglitz (2016), From Global Savings Glut to Financing Infrastructure: The Advent of Investment Platforms, IMF Working Paper Research Department, February 2016.
- Barro, R. J. and X., Sala-i-Martin (1992), Convergence, in Journal of Political Economy, University of Chicago Press, vol. 100(2), pages 223-251, April, 1992.
- Bassanini F. and E. Reviglio (2015), From the financial crisis to the Juncker Plan, in Garonna. P., and Reviglio, E., (eds), Investing in Log-Term Europe. Fixed, Re-launching Fixed, Fixed, Network and Social Infrastructure, LUISS University Press: Rome.
- Bassanini, F. (2011), Financing Long Term Investment after the Crisis: a View from Europe, in Bolton, P., Samama, F., and Stiglitz, J. E., (eds), Sovereign Wealth Funds and Long-Term Investing, Columbia University: Press New York.
- Bassanini, F. and E. Reviglio (2011), Financial Stability, Fiscal Consolidation and Long-Term Investment after the Crisis, in OECD Journal of Financial Markets Trends, Volume 201, 1, 2011.
- Bassanini, F., del Bufalo, G. and E. Reviglio (2011), Financing Infrastructure in Europe Project Bonds, Solvency II and the Connecting Europe Facility, article prepared for Eurofi Financial Forum 2011.
- Birmbaum, S., Ferrarini, T., Nelson, K. and J. Palme (2017), The Generational Welfare Contracts: Justice, Institutions and Outcomes. Edward Elgar (in press).
- Bitsch, F., Buchner, A. and C. Kaserer (2010), Risk, return and cash flow characteristics of infrastructure fund investments, in Public and private financing of infrastructure: Evolution and economics of private infrastructure finance, EIB Papers, Volume 15, No1, 2010.
- Blanc-Brude, F., Hasan, M., and T. Whittaker (2016), Revenue and dividend payouts in privately held infrastructure investments. Evidence from 15 years of UK data March 2016.
- Blanc-Brude, F. and M. Hasan (2015), The valuation of privately-held infrastructure equity investments, in EDHEC-Risk Institute Publications, volume January, 2015.

- Blanc-Brude, F. (2014), Benchmarking Long-Term Investment in Infrastructure, in EDHEC-Risk Institute Position Paper, 2014.
- Burroni, L., Keune, M. and G. Meardi (2012), Economy and society in Europe. Cheltenham: Edward Elgar, p.53.
- CCRE/CEMR (2012), Further decline in European subnational investments in 2011, Council of European Municipalities and Regions/Dexia Crédit Local. Press Release, Brussels and Paris, 18 September 2012.
- CEB (2017), Investing in Public Infrastructure in Europe: A local economy perspective. Council of Europe Development Bank, February p14.
- CEB (2017), Council of Europe Development Bank Social Inclusion Bond Framework, pp. 11-13.
- Council of the European Union (2017), Interinstitutional proclamation on the Pillar of Social Rights, Council(EPSCO), 23 October 2017.
- Davey K (Ed.) (2012), Local government in critical times: Policies for Crisis, Recovery and a Sustainable Future, Council of Europe texts 2011.
- Della Croce, R. and G. Inderst (2013), Pension Fund Investment in Infrastructure: A Comparison between Australia and Canada, OECD Working papers on finance, insurance and private pensions, No. 32.
- Della Croce, R. (2012), Trends in Large Pension Fund Investment in Infrastructure, OECD Working Papers on Finance, Insurance and Private Pensions, No 29, December 2011.
- ECB, (2016), Economic Bulletin, Issue 2/2016 – Articles.
- EDHEC-Risk Institute (2012), Pension Fund Investment in Social Infrastructure. Insights from the 2012 reform of the private finance initiative in the United Kingdom, February 2012.
- EESC (2016), New measures for development-oriented governance and implementation – evaluation of the European Structural and Investment Funds and ensuing recommendations, ECO/400.
- Ehlers, T. (2014), Understanding the challenges for infrastructure finance, Monetary and Economic Department, BIS Working Papers No 454, August 2014.
- EIOPA, (2015), Final Report on Consultation Paper no. 15/004 on the Call for Advice from the European Commission on the identification and calibration of infrastructure investment risk categories. 29 September 2015.

EIOPA, (2017), EIOPA's first set of advice to the European Commission on specific items in the Solvency II Delegated Regulation. 30 October 2017

Engel, E., Fischer, R. and A. Galetovic (2010), The economics of infrastructure finance: Public-Private Partnerships versus public provision in Public and private financing of infrastructure: Evolution and economics of private infrastructure finance, EIB Papers, Volume 15, No1, 2010.

EPEC (2016), A Guide to Statistical Treatment of PPP, April 2016.

EPEC (2016), Blending EU Structural and Investment Funds and PPPs in the 2014-2020 Programming Period – Guidance Note European PPP Expertise Centre, January 2016.

Esping-Andersen, G., D. Gallie, A. Hemerijck, and J. Myles (2002), Why We Need a New Welfare State. Oxford University Press: Oxford.

Eurofound (2016), Exploring the diversity of NEETs. Luxembourg: Publications Office of the European Union.

European Commission Directorate-General for Regional and Urban Policy (September 2017). My Region, My Europe, Our Future – Seventh report on economic, social and territorial cohesion. Luxembourg: Publications Office of the European Union.

European Commission (2017), Social Scoreboard 2017 Luxembourg: Publications Office of the European Union.

European Commission (2017), Communication from the Commission to the Institutions: Making Public Procurement work in and for Europe, 3 October 2017.

European Commission (2017), Consultation document on Guidance on Public Procurement of Innovation, Draft version to be submitted to the targeted consultation.

European Commission (May 2017) Reflection Paper on the Deepening of the Economic and Monetary Union. COM (2017) 291.

European Commission (2017), «My Region, My Europe, Our Future », Seventh report on economic, social and territorial cohesion. April 2017.

European Commission, (2017), 10 trends transforming education as we know it, European Political Strategy Centre, 2017.

European Commission (2016), Report on Public Finances in EMU, Economic and Financial Affairs, Institutional Paper 045, December 2016.

European Commission (2016) Directorate-General for Employment, Social Affairs and Inclusion: Assessing Social Investment Synergies (ASIS) Luxembourg: Publications Office of the European Union, 2016.

European Commission Directorate-General for Regional and Urban Policy (DG Regio), Orkestra Basque Institute of Competitiveness, and Social Progress Imperative (2016). European Union Regional Social Progress Index. [Data file]. Retrieved from <http://www.socialprogressimperative.org/custom-indexes/european-union/> - Of 50 indicators, 25 are official statistics provided by EUROSTAT and other EU institutions, and 25 are survey data from EU-SILC, Quality of Institutions Index, Gallup, and Eurobarometer.

European Commission (2015), The 2015 Ageing Report: Economic and budgetary projections for the EU28 Member States (2013-2060).

European Commission (2014), Investment for jobs and growth – Promoting development and good governance in EU regions and cities, Sixth report on economic, cohesion and territorial cohesion, EC: Luxembourg ISBN 978-92-79-39425-6.

European Commission (2014), Commission Communication, An investment plan for Europe, 26 November 2014. COM (2014).

European Commission & Social Protection Committee (2014). Adequate Social Protection for long-term care needs in an ageing society. Luxembourg: Publications Office of the European Union.

European Commission (2013), Long-Term Financing of the European Economy. Green Paper, March.

European Commission (2013a), Towards Social Investment for Growth and Cohesion – including implementing the European Social Fund 2014-2020, COM (2013) 83 final, Brussels, 20.02.2013.

European Commission (2013), Green Paper - A 2030 framework for climate and energy policies. COM/2013/0169 final */.

European Commission (2011), Project Bond Initiative. Commission Staff Working Paper, February.

European Mortgage Federation (2017) - Hypostat A Review of Europe's Mortgage and Housing Markets.

European Parliament (2016), New Financial Instruments and the role of National Promotional Banks, Directorate-General for internal policies Policy Department Budgetary Affairs (2016).

Eurostat (2017), Government expenditure on health. Data extracted in February 2017.

Eurostat (2017), Government expenditure on social protection. Data extracted in February 2017.

Eurostat (2017) Housing statistics. Data extracted February 2017.

Eurostat. Migration and migrant population statistics. Data extracted September 2017.
[http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Immigrants_2015_\(per_1_000_inhabitants\).png](http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Immigrants_2015_(per_1_000_inhabitants).png)

Eurostat (2017) Government finance statistics database.
<http://ec.europa.eu/eurostat/web/government-finance-statistics/data/database>
Data extracted February 2017.

Eurostat - Price level indices for construction, 2016, EU-28
http://ec.europa.eu/eurostat/statistics-explained/index.php/File:Price_level_indices_for_construction_2016_EU-28%3D100.png

Eurostat (2016), Manual on Government Deficit and Debt – Implementation of ESA 2010, 2016 edition, p. 309.

Focarelli, D. (2017), Why insurance regulation is crucial for long-term investment and economic growth, Paper prepared for ELTIF, Assonime and Oxford University: 2017.

Fransen, L. and E. Reviglio (2017), Social Infrastructure reform: Improved welfare structure promote growth, OMFIF, Global Public Investors, London 2017.

Fransen, L. (2016), Why and how to grow the EU's social infrastructure financial and delivery capacity. In publication.

Fransen, L. and Claire Dhéret 2017: Social Investment first! A precondition for a modern social Europe. European Policy Centre.

Fransen, L. 2017 Chair of Energy poverty tasks force in EPC , Tackling energy poverty and what more needs to be done?

FSB (2014), Update on financial regulatory factors affecting the supply of long-term investment finance, Report to G20 Finance Ministers and Central Bank Governors, 16 September 2014.

- FSB (2013), Financial regulatory factors affecting the availability of long-term investment finance Report to G20 Finance Ministers and Central Bank Governors, 8 February 2013.
- Garonna, P. and E. Reviglio (eds) (2015), Investing in Long-Term Europe. Fixed, Re-launching Fixed, Fixed, Network and Social Infrastructure, LUISS University Press, 2015 Rome.
- Garonna, P. (ed) (2016), Financing Long-Term Europe, LUISS University Press, Rome: 2016.
- G20 Summit (2017), Investing in Resilient, Future-oriented Growth. B20 Taskforce Financing Growth & Infrastructure.
- Hemerijck, A. (2017), The uses of Social Investment. Oxford Press.
- Hemerijck, A., Vandenbroucke, F. and B. Palier (2011), The EU needs a Social Investment Pack. Observatoire Social Européen.
- Housing Europe, (GF061), COFOG Database, Eurostat Government Finance Statistics.
- IMF (2015), Making public investment more efficient. Staff Report, June 2015.
- Inderst, G., (2017), Social infrastructure investment: financing sources and investor perspective, HLTF SI, Draft for discussion, June 15, 2017.
- Inderst, G. (2011), Infrastructure - the new asset class? portfolio institutional, issue No. 2, April 2011.
- Inderst, G. (2010) Infrastructure as an asset class in Public and private financing of infrastructure: Evolution and economics of private infrastructure finance, EIB Papers, Volume 15, No1 (2010).
- Invest Europe (2016) Europe's economic foundations: investing in infrastructure, Briefing November 2016: p2.
- Long-Term Investors Club (2016), On the effect of the current regulatory framework on Long-Term Investment, Position Paper presented to the D20 Annual Conference 2016, organized by China Development Bank 27 May 2016, Beijing.
- Masera, R (2017), Bank Capital Regulation: A Review, EDHEC Business School, 24-25 Nice.
- McKinsey Global Institute (2016), Bridging Global Infrastructure Gaps, June 2016.

Moody's (2017), Default and Recovery Rates for Project Finance Bank Loans, 1983-2015, Default Research, Moody's Investors Service, 6 March 2017

Moody's (2017), Addendum: Infrastructure Default and Recovery Rates, 1983-2015, Default Research, Moody's Investors Service, 27 April 2017.

Moody's (2016), Infrastructure Default and Recovery Rates, 1983-2015, Default Research, Moody's Investors Service, 18 July 2016.

National Institute of Standards and Technology
<http://nvlpubs.nist.gov/nistpubs/Legacy/SP/nistspecialpublication800-145.pdf>

Nicholls, J., Lawlor, E., Neitzert, E. and T. Godspeed (2012), A Guide to Social Return on Investment January 2012.

OECD Affordable Housing Database – <http://oe.cd/ahd>. OECD - Social Policy Division - Directorate of Employment, Labour and Social Affairs.

OECD (2014), Focus on Inequality and Growth – December 2014.

Rosenfeld, O. & European Commission EUUA Housing Partnership, Paris social infrastructure conference 2017.

Sala-i-Martin, Xavier X, (1996). "The Classical Approach to Convergence Analysis," Economic Journal, Royal Economic Society, vol. 106(437), pages 1019-1036, July 1996.

Scanlon K, Fernández Arrigoitia M. and C. Whitehead (2015), Social housing in Europe, European Policy Analysis (17): pp 1-12.

Special Task Force (Member States, Commission, EIB) on investment in the EU, Dec. 2014.

Wagenvoort, R., de Nicola, C. and A. Kappeler (2010), Infrastructure finance in Europe: composition, evolution and crisis impact in Public and private financing of infrastructure: Evolution and economics of private infrastructure finance, EIB Papers, Volume 15, No1 (2010).

Weber B., Staub-Bisang M. and H. W. Alfen (2017), Infrastructure as an Asset Class: Investment Strategies, Project Finance and PPP, Second Edition, Wiley, New York: 2017.

GLOSSARY

BCG Boston Consulting Group

BCR Benefit Cost Ratio

CDC Caisse des Dépôts et Consignations

CDP Cassa Depositi e Prestiti

CEB Council of Europe Development Bank

EBRD European Bank for Reconstruction and Development

EFSl European Fund for Strategic Investments

EPEC European PPP Expertise Centre

ERR Economic Rate of Return

ESA European system of accounts

ESG Environmental Social Governance

ESIF European Structural and Investment Fund

EU European Union

GFCF Gross Fixed Capital Formation

IPE Investment Plan for Europe

KfW Kreditanstalt für Wiederaufbau

MDB Multilateral Development Bank

MFF EU Multiannual Financial Framework post 2020

MSs EU Member States

NPBIs National Promotional Banks and Institutions

NEET Not in Education, Employment or Training

OECD Organisation for Economic Co-operation and Development

Pas Public Administrations

PFI Private Finance Initiative

PISA Programme for International Student Assessment

PIAAC Programme for the International Assessment of Adult Competencies

PPP Public Private Partnership

RDS Regional Development Strategy

SIB Social Inclusion Bonds

SB Social Bonds

SBP Social Bond Principles

SGAAP Social Generally Accepted Accounting Principles

short-term care

SPV Special Purpose Vehicle

SRI Socially Responsible Investment

SROI Social Return on Investment

SWF Sovereign Wealth Fund

TEN Trans-European Networks

ANNEX 1. MONITORING PERFORMANCE

Performance indicators are measures of project impacts, outcomes, outputs and inputs that are monitored during project implementation to assess progress towards project objectives.

Until recently very few efforts have been made to develop rigorous performance and impact assessments for social policies or social infrastructure projects. The public sector is still often mainly reporting on inputs and rarely worked on methodologies to assess return on investment and cost benefit. Rarely do the projects include clear risks that most influence the project outcomes and often the methodologies used depend on judgements of individuals and not enough on objective criteria and transparent information. Furthermore, measuring and reporting the positive and negative externalities of projects in the social field are even more difficult to get to. For instance, how to not only consider the impact of the child care center on the child's wellbeing and on the productivity of the parents but also on the value for the child's chances in life in the future, when we know that such investment outcomes also depend on a range of other factors such as socio-economic status of the mother

Finally, with increased blurring of the boundaries between for profit and nonprofit and public-sector roles we see the importance of a shared value concept being developed recognizing that economic value can be created through the creation of societal value and new processes such as co-creations have been tested.

Partnerships between different entities and blending of private capital with public finances have now really called for a leap forward to deliver on measurable social outcomes and this represents a major innovation in the social sectors.

In recent years, this has evolved and several institutions and academics are further working on refining the existing methodologies and processes.

The recommendation therefore is to use the methodologies available for the moment for the first pilot phase and refine those in the next few years.

Specific performance indicators and KPIs of course should be developed for each project or programme and some standardisation/ interoperability could be further helpful when developed.

However, the HLTF identified general areas for monitoring as presented in the table below.

Table. Areas to be considered for indicators as proposed by experts for the HLTF

Education & Lifelong Learning	Health & Long-Term Care	Affordable housing
1. Early school leaving 2. Tertiary attainment 3. Cognitive and social competences of	1. Effectiveness of a health intervention (health outputs measured as intervention achieving its project-life health-related objectives)	1. Number of net additional or renovated affordable dwellings, including energy efficiency measures 2. New and existing dwelling with acceptable quality and

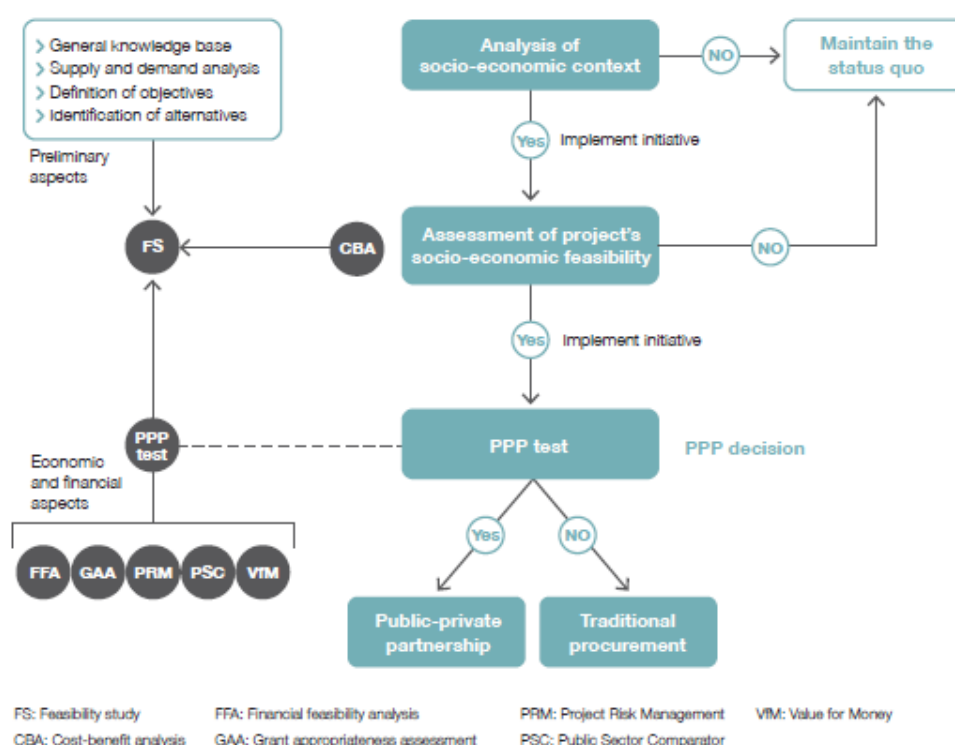
<p>population (PISA – PIAAC surveys)</p> <p>4. Level of professional training of teachers</p> <p>5. Job market opportunities (empl. rates / earnings of graduates from different education paths/institutions)</p> <p>6 Sustainability.</p> <p>7. Quality of education infrastructure.</p>	<p>2. Improved health and wellbeing (health outcomes measured as gains in healthy life years/quality adjusted life years (HLY and QALY, in 1-5-10-15 years) of catchment area or patient group)</p> <p>3. Less cost of services for the same quality (cost-effectiveness measured as ratio price-outcome (- number of interventions))</p> <p>4. Quality of a health intervention (one factor is access -proximity, waiting times, affordability-)</p> <p>5. Empowered citizens and patients (patient satisfaction and autonomy)</p> <p>6. Greater (system) integration/coordination</p> <p>7. Connectivity</p> <p>8. Social and territorial cohesion (contributing to 'same level' of service for all citizens)</p> <p>9. Sustainability</p>	<p>accessibility levels</p> <p>3. Households with low or middle income and age classes.</p> <p>4. Average time of rent contracts and of the duration of tenancies.</p> <p>5. Average income and inequality level of households</p> <p>6. Active engagement of local stakeholders</p> <p>7. Energy efficiency</p> <p>8. Sustainability</p>
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Some of these monitoring areas could be considered for social and economic impact measures during contract negotiation for new social infrastructure projects.

ANNEX 2. PPP DECISION-MAKING PROCESS

To launch a PPP, approval of a feasibility study (FS) and/or preliminary design is sufficient to add a public work to the annual list of projects. The FS, whose objective is to transform a project idea into actual investment proposals, analyses the general context and assesses the economic and financial feasibility of the project. This requires a cost-benefit analysis, which assesses the appropriateness of the investment in relation to the desired goals. Finally, the decision by the public entity on whether to use a PPP or a more traditional procurement agreement is tied to a series of analyses known as “PPP tests”.

Figure 10. PPP decision-making process for Government



These include: a financial-feasibility analysis (FFA), which examines the economic and financial soundness of the investment and the consequent attractiveness of the investment to the market; a grant appropriateness assessment (GAA) in order to determine the optimal level of the public resources to be devoted to the project in order to ensure its economic and financial soundness; Project Risk Management (PRM), which involves the project’s entire life cycle; and the Public Sector Comparator (PSC), which quantifies the project’s value for money (VfM) through a monetary comparison of the PPP approach against executing/managing the project directly.

ANNEX 3. PPP MODELS

Contract types and procedures

With PPPs, contracts can be customised based on the type of project to be executed and the various players involved. The following actions, in whole or in part, typically coexist within a PPP:

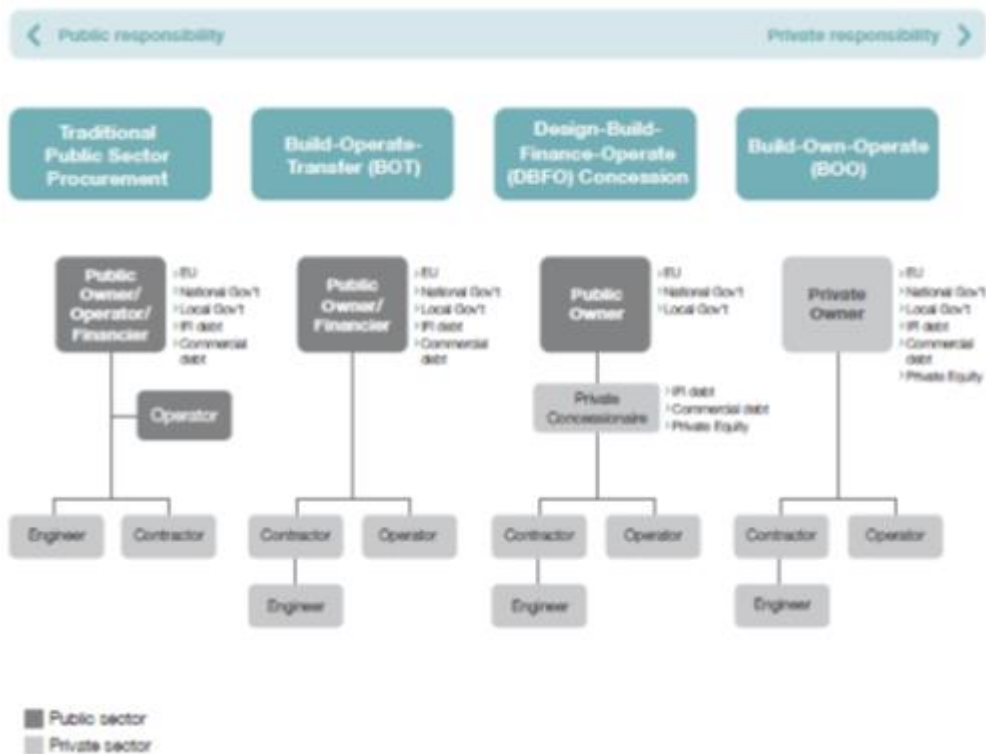
- Design (D);
- Finance (F);
- Build or renovate (B);
- Operations and Maintenance (O&M) or Operate (“O”).

Combined, these factors form the basis of several models, some of which are listed below in increasing order of the level of responsibility for the private sector¹⁰⁴:

- Traditional procurement: the public sector may contract the private sector to design and build of the work for a specified price;
- Build-Operate-Transfer (BOT): this involves a concession agreement between the public and private sectors covering the design, build and operate phases, also known as a turnkey contract. The advantage of this approach is that it aggregates the various functions under a single entity;
- Design-Build-Finance-Operate (DBFO): compared with the BOT model, in this arrangement the contractor also assumes the risk of financing the project until the end of the contract;
- Build-Own-Operate (BOO): compared with the DBFO model, the private sector retains ownership of the work at the end of the contract. This approach is normally adopted when the physical life of the work coincides with the term of the concession.

¹⁰⁴ The legal forms underlying these models can include tenders, mixed tenders, and build & operate or operate concessions.

Figure 11. Contract types and procedures



Source: European Commission (2009)

Figure 12. PPP procedures allowed within the European Union

	Open procedure	Restricted procedure	Negotiated procedure	Competitive dialogue
Scope for limiting number of participants	No prequalification or shortlisting is permitted. Any interested company may submit a bid.	The number of bidders may be limited to no fewer than five in accordance with criteria specified in procurement notice (prequalification and shortlisting permitted).	The number of bidders may be limited to no fewer than three in accordance with criteria specified in procurement notice (prequalification and shortlisting permitted).	The number of bidders may be limited to no fewer than three in accordance with criteria specified in procurement notice (prequalification and shortlisting permitted).
Discussions during process	The specifications may not be changed during the bidding process, and no negotiations or dialogue may take place with bidders. Clarification is permitted.	The specifications may not be changed during the bidding process, and no negotiations or dialogue may take place with bidders. Clarification is permitted.	Negotiations permitted throughout the process. Successive stages can be used to reduce the number of bidders.	Dialogue with bidders permitted on all issues. When dialogue is concluded, final complete bids must be requested.
Discussions after final bid is submitted	No scope for negotiations with a bidder after bids are submitted.	No scope for negotiations with a bidder after bids are submitted.	Not relevant because the negotiations can continue until the contract is agreed. There need be no "final bid" per se.	Only permitted to clarify, fine tune or specify a bid or confirm commitments. No changes permitted to basic features.
Basis for award	Lowest price or most economically advantageous tender.	Lowest price or most economically advantageous tender.	Lowest price or most economically advantageous tender.	Most economically advantageous tender.

Source: European PPP Expertise Centre (2011)

ANNEX 4. CRR2 AND BANKS' INFRASTRUCTURE FINANCING

Before the financial crisis of 2008, banks used to be active lenders in infrastructure, due to ability to match funding to long-term profiles of infrastructure projects, for their expertise in project finance credit evaluation, hedging of interest rate and inflation risk and managing decisions when borrowers' conditions change.

However, in a post-crisis scenario, due to pressures on de-leveraging their balance sheet, minimize the maturity transformation risk and stricter capital and liquidity requirements, banks have been less active in this asset class and reduced their exposures to infrastructure.¹⁰⁵

The capital requirements for banks are part of the Banking Union's single rulebook and implement the Basel III agreement (the internationally agreed bank capital adequacy standards) in EU legislation.

The rules consist of in a Regulation (capital requirements regulation - CRR) and a Directive (capital requirements directive - CRD IV). Specific points include:

- Higher and better capital requirements. Banks should hold a total amount of capital that corresponds to at least 8% of their assets measured according to their risks. Safe assets (e.g. cash) are disregarded; other assets (such as loans to other institutions) are considered riskier and get a higher weight. The riskier assets an institution holds, the more capital it must have.
- Liquidity measures. To ensure banks have sufficient liquidity means (e.g. cash or other assets that can be quickly converted into cash with no or little loss of value), the regulation introduces 2 liquidity buffers:
 - the liquidity coverage ratio (LCR) which aims to ensure that banks have enough high-quality liquid assets in their liquidity buffer to cover the difference between the expected cash outflows and the expected capped cash inflows in the short term (e.g. 30 days): $\text{High Quality Liquid Assets} / (\text{Cash outflows} - \text{Capped Cash inflows}) \geq 100\%$
 - the net stable funding requirement (NSFR) which aims to ensure that banks have an acceptable amount of stable funding to support their assets and activities over the medium term (e.g. over 1 year period): $\text{Available amount of stable funding}^{106} / \text{required amount of stable funding} \geq 100\%$.

¹⁰⁵ See, Rainer Masera, *Bank Capital Regulation: A Review*, EDHEC Business School, 24-25 Nice.

¹⁰⁶ The available amount of stable funding is generally determined by applying varying percentages to different balance sheet liabilities. Long term funding/liabilities are assumed to be more stable than short-term liabilities. Deposits by retail customers and SMEs are considered more stable than, for instance, wholesale funding from other counterparties. The required amount of stable funding is also calculated by applying varying percentages to

- Limiting leverage effect. The regulation introduces a new regulatory instrument called the leverage ratio. Its aim is to limit banks from incurring excessive debts on financial markets. From 2015, banks must publicly disclose their leverage ratio. If appropriate, the Commission will propose legislation to make this new ratio binding for banks as of 2018.

However, in the CRR2 package adopted in November 2016, the EU Commission decided to support infrastructure investments also in the banking sector and defined infrastructure projects through a set of criteria in line with those that determine preferential treatment in Solvency II.

The EU Commission proposed to grant special treatment to specialized lending exposure aimed at funding infrastructure projects, under both the Standardized and Internal Ratings Based approaches for credit risk. Indeed, specialized lending transactions are a relevant asset class for financing infrastructure and physical assets (including social infrastructure).

Capital requirements for credit risk for exposures to entities that operate or finance physical structures or facilities, systems and networks that provide or support essential public services shall be multiplied by a factor of 0.75 (so-called scaling factor) provided the exposure complies with a whole series of criteria.

different balance sheet liabilities. Short-term assets and high-quality liquid assets require less stable funding than long term assets such as loans and mortgages with a maturity stretching many years into the future.

ANNEX 5. EFSI INVESTMENT PLATFORMS

POLAND SOCIAL AND AFFORDABLE HOUSING PROGRAMME

The EIB is setting up an Investment Platform together with Bank Gospodarstwa Krajowego (“BGK”), the national promotional bank of Poland, to formulate and propose a joint financial product specifically aimed at social and affordable housing promoters in Poland (“Investment Platform”). The proposed Programme Loan of is aimed at co-financing investments in social and affordable housing by municipal authorities and registered social and affordable housing providers throughout Poland in the period 2016-2021 at a total investment cost of PLN 1,300m (EUR 307 million).

The use of the Programme Loan enables the Bank to support investments from smaller promoters. Eligible social and affordable housing providers in Poland may apply for investment loans from this facility for partially funding their investment programmes and these sub-operations will be subject to separate appraisals during which the eligibility and quality of the investments will be assessed.

The promoters will be given the possibility to benefit from technical and/or financial support to the preparation and implementation of the relevant projects given by the EIAH – European Investment Advisory.

LOGEMENTS INTERMEDIAIRES – SLI (France)

This operation will enable the construction of 13 000 affordable rental housing units, subject to Government approval, a rent ceiling and means testing. These housing units will be located in certain specific geographical areas where property is at a premium (“areas under pressure”). This programme will be carried out by Société pour le Logement Intermédiaire (SLI- an open-end real estate company created by the French Government.

The project is part of the recovery plan for housing construction in France, which was announced in September 2014 to help meet the needs of the middle classes in areas where there is severe pressure on housing (large conurbations and rapidly growing border areas). The EIB's financing under the EFSI is up to EUR 500m, which represents the 22% of the overall project cost (EUR 2.3 billion).

BOX. Development of Investment Platforms

To develop an Investment Platform, a project lead is often necessary on the public side, which would most likely be a team or department responsible for the management of EU Funds at Member State level, especially in the case where the public funding to the investment platform could come from ESIF. This project lead is also referred to as the “platform sponsor”. In partnership with the EIB Group, the

platform sponsor would have to drive the process through the following main steps:¹⁰⁷



* EIAH : European Investment Advisory Hub

¹⁰⁷ Details please see under: http://ec.europa.eu/commission/sites/beta-political/files/set-up-efsi-investment-platform_en.pdf

ANNEX 6. NATIONAL PROMOTIONAL BANKS AND INSTITUTIONS

Almost all EU Member States have now established a National Promotional Bank or Institution (NPBI) with the exceptions of Denmark, Greece, Malta, Romania and Portugal. However in some of these countries political discussions to set-up a NPBI have started.

Several countries have only established a NPBI within the last three years (namely Ireland, the Netherlands and the UK). The purpose was to help to implement EU financial instruments.

The fact that almost all EU countries have established (one or more) NPBIs demonstrates their value as a mechanism for implementing financial instruments mainly at national and regional level but in many cases combined with EU funding.

The growing importance of NPBIs in implementing EU financial instruments, mostly in an intermediary capacity, has been recognised in the recent 2015 Commission Communication.

The research found evidence of considerable diversity among NPBIs in terms of their length of experience, field of financing- and investment activities, level of financing and access to refinancing for on-lending.

It is worth considering how the involvement of NPBIs in implementing EU financial instruments schemes might be further strengthened. The next Multiannual Financial Framework of the European Union (Post 2020) should foster the direct cooperation between European Institutions and NPBIs.

European National Promotional Banks

Bank Gospodarstwa Krajowego (BGK) is Poland's state development bank. BGK's status is defined as a banking enterprise specialized in servicing the public finance sector. The primary objective of BGK is to support government social and economic programs, as well as local government and regional development projects, especially those implemented with the use of funds from the European Union and international financial institutions.

Caisse des Dépôts et Consignations (CDC) is a long-term investor at the service of public interest and economic development. CDC:

- manages funds held in regulated savings accounts and invests these on a secure basis in projects in the public interest, particularly social housing,
- acts as public banker to the judicial and social security systems,
- manages public and semi-public pension schemes,
- invests in regional and local development alongside local authorities,
- acts as a long-term investor in the French economy,
- participates in national economic development via its subsidiaries.

Cassa Depositi e Prestiti (CDP) is a key partner for public entities, the development of infrastructure projects and the growth and international expansion of Italian enterprises.

CDP provides financing to major strategic sectors : transportation networks and local public services, public building and social housing, energy and communication, support for SMEs and export finance, research and innovation, the environment and renewable energy.

Cassa Depositi e Prestiti works with major long-term international institutional investors to provide support for sustainable global economic growth: it participates in private equity funds, focused on transport and energy infrastructures in Europe and in the southern and eastern Mediterranean.

On 15th November 2017, CDP has successfully placed its first social bond for a nominal value of € 500 million. CDP is the first Italian operator to issue a social bond and the first in Europe to capitalize on areas affected by natural disasters. At € 2.25 bn, demand was about five times greater than the offer, more than 70% from foreign investors, with a significant presence of socially responsible investors.

Instituto de Crédito Oficial (ICO) purpose is to support and foster economic activities which contribute to the growth and the improved distribution of national wealth. These aims are pursued by ICO in its twofold function as: State-owned Bank and as State's Financial Agency.

KfW is one of the world's leading promotional banks. With its decades of experience, KfW is committed to improving economic, social and ecological living conditions all around the world on behalf of the Federal Republic of Germany and the federal states. To do this, it supplied funds totaling 81.0 billion euros in 2016 alone; and of this, 44 % went into measures for protecting the environment and combating climate change. KfW sustainably supports change in the economy, ecology and society. The focal points of its work include the promotion of small and medium-sized companies and start-ups, provision of equity capital, programs for energy-efficient refurbishment of residential buildings, support of measures to protect the environment, educational finance for retail customers, funding programs for municipalities and regional development banks, export and project financing and promotion of developing countries and emerging economies.

