ISSN 2443-8022 (online)

Boosting Investment in Social Infrastructure in Europe

Report of the High-Level Task Force on Investing in Social Infrastructure in Europe

Lieve Fransen, Gino del Bufalo and Edoardo Reviglio

DISCUSSION PAPER 074 | JANUARY 2018

EUROPEAN ECONOMY

European Commission

EUROPEAN ASSOCIATION ELTI LONG-TERM INVESTORS

European Economy Discussion Papers are written by the staff of the European Commission's Directorate-General for Economic and Financial Affairs, or by experts working in association with them, to inform discussion on economic policy and to stimulate debate.

The views expressed in this document are solely those of the author(s) and do not necessarily represent the official views of the European Commission.

Authorised for publication by Benjamin Angel, Director for Treasury and Financial Operations.

This paper exists in English only and can be downloaded from
https://ec.europa.eu/info/publications/economic-and-financial-affairs-publications_en.

Luxembourg: Publications Office of the European Union, 2018

PDF ISBN 978-92-79-77403-4 ISSN 2443-8022 doi:10.2765/794497 KC-BD-18-001-EN-N

Boosting Investment 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

Lieve Fransen, Gino del Bufalo and Edoardo Reviglio

Abstract

The High-Level Task Force (HLTF) on Investing in Social Infrastructure in Europe was initiated by the European Long-Term Investors Association (ELTI). It was chaired by Romano Prodi and Christian Sautter and comprised representatives from the European Commission, the European Investment Bank, the Council of Europe Development Bank, many National Promotional Banks as well as associations and experts from the social sector. The HLTF's mission was to raise political attention to the crucial role of social infrastructure and related services, aiming to enhance public and private investments in this sector. Long-term, flexible and efficient investment in education, health and affordable housing is considered essential for the economic growth of the European Union (EU), the well-being of its people and a successful move towards upward convergence in the EU.

This final report contains a comprehensive collection of facts and figures on social infrastructure and social services and the related financing needs. Based on the conclusions and results, the report formulates concrete recommendations aimed at enhancing current financing tools as well as for future schemes and initiatives in the social sector.

JEL Classification: I000.

Keywords: Social infrastructure; social services, market analysis, market gap, financing, public spending, private investments, social Europe.

Acknowledgements: Claudio Bruno for providing key ideas and drafting parts of the document and Lorenzo Zambernardi (special assistant to the Chairperson Romano Prodi) for his crucial contribution to the success of the initiative. Michael Feith for precious scientific guidance in the preparation of the report.

Contact: Lieve Fransen, European Policy Centre (lf@europa-insights.com), Gino Del Bufalo, Cassa depositi e Prestiti (gino.delbufalo@cassaddpp.it), Edoardo Reviglio, Cassa depositi e Prestiti (edoardo.reviglio@cassaddpp.it), Michael Feith, European Commission, Directorate-General for Economic and Financial Affairs (michael.feith@ec.europa.eu).

European Commission
Directorate-General for
Economic and Financial Affairs

European Association ELTI
Long-Term
Investors

EUROPEAN ECONOMY Discussion Paper 074

NOTE TO THE READER

This report is based on an initiative promoted by the European Association of Long-Term Investors (ELTI) in close consultation with the European Commission. A High-Level Task Force (HLTF) was established and chaired by Romano Prodi and Christian Sautter. The authors based this report on exchanges within this HLTF and their own inputs.

High-Level Task Force

Romano Prodi
Chair
Christian Sautter
Co-Chair
Benjamin Angel
Antonella Baldino
Guido Bichisao
Thomas Bignal
Giorgio Chiarion Casoni
Jérôme Hamilius
Lieve Fransen
Lutz-Christian Funke
Edoardo Reviglio
Valeria Ronzitti
Bernadette Ségol
Jonathan Watson
Eva Witt
Luk Zelderloo
Eugene Zhuchenko
Laurent Zylberberg

In memory of Philippe Maystadt, former Minister of Finance for Belgium and President of the European Investment Bank, who passed away in December 2017. His support and contribution to the initiative were invaluable and his presence and insights will be sorely missed.

HLTF Secretariat
Helmut von Glasenapp
Michael Feith
Edoardo Reviglio
Jonathan Watson

Working Group 1 – Baseline evidence on social infrastructure
Lieve Fransen - Chair
Working Group 2 – Financing social infrastructure
Edoardo Reviglio – Chair

Experts WG1: Jo Armstrong, Paolo Battaglia, Raluca Bunea, Andrea Ciarini, Gwen Dhaene, Michael Feith, Enrico Giovannini, Anton Hemerijck, Sarah Lynch, Maria Elena Perretti, Alice Pittini, Kees Slingerland, Adam Wilkinson, Jonathan Watson, Daniel Wisniewski.

Experts WG2: Filippo Addarii, Tjitte Alkema, José Aubourg, Claudio Bruno, Laurent Capolaghi, Matteo Cuda, Gino del Bufalo, Antonio Durán, Georgia Efremova, Sylvain Giraud, Gianluca Gustani, Georg Inderst, Federico Merola, Gunnar Muent, Maria-Jose Peiro, Thiebaut Weber.

Special acknowledgments: Claudio Bruno, for providing key ideas and drafting parts of the document; Lorenzo Zambernardi (special assistant to the Chair, Romano Prodi) for his crucial contribution to the success of the initiative; and Michael Feith, for his valuable scientific guidance in preparing this report.

FOREWORD

by Laurent Zylberberg
President of the European Association of Long-Term Investors (ELTI)

The European Association of Long-Term Investors (ELTI) was set up in 2013 to advocate a positive financial environment and a new investment framework in Europe. One year ago, with the support of its 27 members, the association decided to launch a High-Level Task Force on social infrastructure (SI) chaired by Romano Prodi and by Christian Sautter.

Social infrastructure is among ELTI's core objectives. In fact, it is critical for the society, though difficult to measure, it generates positive externalities; it resembles all the particular characteristics of long-term investments; and it represents a key field where efficient and productive interaction between public and private actors is mostly needed.

There is a large gap between the needs and the actual money mobilised. This report, steered by the High-Level Task Force, is very useful as it shows where there are bottlenecks and 'small stones in the shoes'. Throttle, brakes and deterrents are clearly established and, thus, all the participants involved know exactly where they can be more efficient.

This report can be considered as a first step to identifying a new asset class for European investors looking to make long-term investments – whoever they may be: national and European promotional institutions, of course, or, also, private financial institutions looking for diversification and steady returns and aiming to have a social impact.

By giving recommendations classified under three categories — political, policies and quick wins — this report is ambitious and pragmatic. Therefore, 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 arising from the increasing pace of globalisation have hit Europe and its people hard. 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 21st century imply that they need to be expanded upon and modernised.

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

The demand for social infrastructure not only results from the economic recession and scarce resources, but also reflects on significant changes at the demographic level. The structure and profile of the EU's population is changing rapidly as a result of several significant phenomena, such as low birth and fertility rates and increases in life expectancy. This rapidly changing reality implies that the existing gap in social infrastructure, which is already considerable, is likely to become a serious problem in the future. Not only are new coherent and flexible institutions and strategies needed, but, as this report shows, more investments are required. Thus, the EU, its Member States and European financial institutions should all favour an increase in social infrastructure investment.

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 can and must 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 people's wellbeing. Reversing such a trend is also eased 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 best solution to current and future challenges, but it is certainly a crucial instrument for creating inclusive growth and for strengthening Europe's social base. The goal is to accelerate job creation, 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 everyone, across all 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, this report is not an abstract study, but rather a detailed, targeted investigation of what is required and what can be done in the areas of education, health, and

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

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 bodies have the necessary financial resources. Although the principle of subsidiarity needs to be respected, as this 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, can Europe 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 EU.

Romano Prodi
Chair

EXECUTIVE SUMMARY

The goals of the HLTF

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

The infrastructure gap

Investment in social infrastructure, both private and public, is far from reaching the level needed to cater for the EU's current population, nor is the investment always appropriate in view of changing needs and expectations over the coming decades. The current investment in social infrastructure in the EU has been estimated at approximately EUR 170 bn per annum (p.a.).

The minimum infrastructure gap in social infrastructure investment is estimated at EUR 100-150 bn p.a. and represents a total gap of over EUR 1.5 tn in 2018- 2030.

Since the global economic and financial crisis, the EU has been suffering from low levels of investment. In Europe, infrastructure investments in 2016 were 20 % below the level experienced in 2007.[‡]

Moreover, investment in social infrastructure has lagged even more behind traditional infrastructure investment. Nonetheless, the gap differs widely across regions.

Another reason for the existence of this gap is that investing in social infrastructure is, by and large, the responsibility of local authorities. These are sometimes subject to even tighter budget constraints.

Regional development levels are not converging, and neither is investment in social infrastructure. Further reasons for the investment gap are discussed in this report.

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

Europe is one of the regions where people live longer and have fewer children. Therefore, Europe will have a much larger number of people in the 80+ and 65+ categories. The share of population aged 65+ in EU-28 is projected to increase from 18.9 % in 2015 to 29 % in 2060[§]. While the increase in people's life expectancy is partly due to improved nutrition and healthcare, in old age people often become frail and develop multi-morbidity conditions. This creates the need to make affordable integrated chronic health and social care accessible. EU citizens aged 65+ may expect to be able to manage their daily living activities independently for less than half of their remaining years. Addressing this issue calls for different ways of organising our communities and cities as well as our health, social and long-term care services and housing.

[†] For definition see e.g.: Eurofound (2017), Monitoring convergence in the European Union: "The European Union is committed to economic, social and territorial cohesion, inclusive growth and upward economic convergence. This means supporting Member States and regions to achieve their full potential and to bring standards of living and prosperity closer together – through overall improvement."

[‡] European Investment Bank, Investment report 2017-2018, Nov. 2017.

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

For some time now, the welfare systems and organisation of labour have slowly been adapting to the new risks and realities in people's lives. However, they are clearly not going fast enough, and progress is being made at very different speeds in different regions of Europe. Our social models need 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 healthcare systems with the need for more prevention; and dealing with people who need to manage chronic diseases and rising co-morbidities while health systems are still designed to deal with acute diseases;

(ii) an increasing number of single-women households and the higher participation of women in the workforce, creating more need and demand for childcare, short-term care and long-term care;

(iii) rapidly changing needs for skills for jobs and society in the future and major new efforts in adult and lifelong learning, including support for integrating migrant populations, as education systems are not keeping pace with the innovations needed;

(iv) additional efforts that are also necessary to support groups that typically lack adequate social provision in terms of current social infrastructure and services.

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

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

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

The imperative of consolidating public finances also adds to the pressure from demographic ageing. Furthermore, while Europe's social models continue to be the pride of the continent, their financing is coming under serious strain because fewer people now contribute to the public purse through work, while more people are becoming dependent on social benefits. In the future, the few who are working will have to support the many that are not.

The political imperative

It is clear that confronting growing inequality and divergence in Europe represents the greatest challenge to overcome, together with the need to give fresh impetus to investment in social infrastructure and human capital in Europe.

The overall gap between rich and poor is the largest in 30 years[††], and this is adversely affecting not only the EU's population, but also its wellbeing, social cohesion and economic growth. Social concerns become statistically important because they have direct financial implications.

Long-term social investment is needed, especially in regions at the lower end of the diverging economies, and it should benefit people on lower incomes in the interests of promoting upward convergence. Better

[**] Human capital is defined in the Oxford English Dictionary as "the skills the labor force possesses and is regarded as a resource or asset." It encompasses the notion that there are investments in people (e.g., education, training, health) and that these investments increase an individual's productivity. See: C. Goldin (2016): Human Capital, in: C. Diebolt, M. Haupert (eds.), Handbook of Cliometrics, pp. 56-86.

[††] OECD (2014). 'Focus on Inequality and Growth – December 2014'.

social policies, and the 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 a scenario we define as smart capacitating strategies, which focusing efforts on empowering people. In this context, this report illustrates how major bottlenecks could be removed by, among other things, 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 on average around 90 % of total public finances 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 to the wellbeing and resilience of people and communities.

Social infrastructure projects provide public infrastructure assets and services in exchange for a revenue stream that is 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 - may external cash flows contribute to the revenue stream needed to repay the initial investment. Therefore, unlike economic infrastructure, such as toll roads, ports, airports or power generation plants, which usually collect revenues from end users[‡‡], social infrastructure projects often rely on public sector financing.

Given 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 for strategic public procurement schemes to be improved and promoted to respond to societal, environmental and economic objectives. To this end, the European Commission launched (i) a public procurement strategy[§§], which focuses on six strategic policy priorities, and (ii) recently (3 October 2017), a targeted consultation[***] 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 to exploit 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 sector are usually relatively small. According to EDHEC-Risk Institute[†††], roughly 99 % of existing social infrastructure projects in Europe entail a total capital investment of less than EUR 1 bn, with the great majority of projects below EUR 30 m. Furthermore, the cost of providing and

[‡‡] 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.

[§§] 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

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

[†††] 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.

distributing services is usually much higher than the capital investment needed for building and completing infrastructure projects per se.

Social infrastructure, however, offers great opportunities for portfolio diversification, thanks to the small average capital investment. This clearly compares with investments in major economic infrastructure, which entail a great deal of concentration risk. The potential for greater portfolio diversification makes investment in 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 beforehand 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 social infrastructure investment often makes it 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 they face high active management costs for such modest levels of investment. Therefore, financial intermediaries are key to channelling 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 opportunity to invest in 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 on a larger scale.

General recommendations

Recommendations and proposals contained in this report can be grouped together and summarised as follows:

Political recommendations	Policy recommendations	'Quick wins'
- Promote social infrastructure finance, focusing on the regions with the greatest needs - Shift from an underinvestment scenario towards a smart capacitating investment framework with ongoing monitoring of progress - Establish a stable and more investment-friendly environment for social infrastructure - Boost evidence-based standard settings for impact investing - Fiscal consolidation should not weigh too much on the resources for social investment in infrastructure of the sub-national governments	- Increase and boost the pipeline of viable projects for social infrastructure - Carefully craft the prior and subsequent conditions adopted for the use of the cohesion funds and the blending of financial resources beyond 2020 so as to avoid making regions pay unduly 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 enable the take-up of social investments - Promote the development of	- In the next Multiannual Financial Framework (MFF), establish a specific policy window for social investments including social infrastructure investments - During the annual European Semester, consider assessing EU countries' investment in social infrastructure and make country-specific recommendations for investment in social infrastructure - Focus cohesion policy more tightly on social investment and infrastructure and facilitate further blending of financial resources - Pilot the launch of some thematic and/or geographic investment platforms to

- Strengthen the role of European national and regional promotional banks and institutions (NPBIs) when they cooperate with public authorities and European bodies.	new financial instruments especially dedicated to social infrastructure (such as social bonds) - Promote the development of a far-reaching system of technical assistance (TA) at local, national and EU level - Launch a European social infrastructure agenda - Set up in the medium-term a public-private fund dedicated to social investments in the EU. - 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	bundle projects and boost initiatives for social sector investments - Strengthen the strategic role of the European Investment Advisory Hub's (EIAH) technical assistance through setting up a strong network with NPBIs and other national or regional agencies - Boost the use of strategic public procurement schemes and achieve cost synergies through efficient cooperation with possible central purchasing bodies (CPBs) - Build the capacity of service provider organisations and local authorities - Learn from schemes paying for results and further develop social impact schemes - Develop standard settings for impact investing.

This 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 they are most needed.

Social infrastructure plays a critical role in moving towards upwards convergence. Considering the large investment gap in social infrastructure in Europe, the report proposes some solutions and recommends some innovations in financing social infrastructure in Europe.

This report proposes that the greatest attention should be given to:

- shifting from an underinvestment scenario towards a smart capacitating investment framework with ongoing monitoring of progress at national level;
- promoting social infrastructure finance, focusing on the regions with most needs;
- establishing a stable and more investment-friendly environment;
- increasing and boosting the pipeline of viable projects for social infrastructure;
- strengthening the role of European national and regional promotional banks and institutions (NPBIs) when they cooperate with public authorities and European bodies.

Enabling conditions are identified in a wide range of areas:

- Fiscal consolidation, while observing the framework of the Stability and Growth Pact (SGP), should not weigh too much on sub-national governments' resources for social investment in infrastructure, considering that they carry out two thirds of total government investment on average in the EU;
- Carefully craft the prior and subsequent conditions adopted for the use of the cohesion funds and the blending of financial resources beyond 2020 so as to avoid making regions pay unduly for the fiscal consolidation of the Member States at central level;
- Promote favourable taxation and incentive schemes supporting social investment;
- Promote labelling and certification that would enable the take-up of social investments;

- Promote the development of new financial instruments especially dedicated to social infrastructure (such as social bonds);
- Promote the development of a far-reaching system of technical assistance (TA) at local, national and EU level.

Expected outcomes:

Short-term – inaugural & early stage (2018-2020)

1. In the context of the next multiannual financial framework (MFF) we note that the Commission is considering a single investment scheme. In that context, we strongly recommend creating a specific policy window for social investment, including investment in social infrastructure. Furthermore, the cohesion policy should strengthen its focus on social investments and infrastructure and enable further blending of financial resources.
2. During the annual European Semester, consider assessing Member States' investment in social infrastructure and make country-specific recommendations in this area.
3. Pilot the setting up of some thematic and/or geographic investment platforms to bundle projects and boost initiatives for social sector investments. Project bundling on a thematic and/or geographic investment platform can increase the use of strategic public procurement schemes, leading to cost synergies through efficient cooperation with possible central purchasing bodies (CPBs)[‡‡‡].
4. Build the capacity of service provider organisations and local authorities and strengthen the strategic role of the European Investment Advisory Hub's (EIAH) technical assistance through setting up 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 have a mix of grants, subsidies, guarantees and financial instruments to attract private capital and participation in the sector.
6. Promoting the issuing of social bonds by relevant participants.
7. Learn from schemes paying for results and further develop social impact schemes.
8. Boost data collection for social infrastructure investment 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 under the new scheme;
2. Prepare a possible social infrastructure agenda;
3. Assess comprehensively the functioning of pilot investment platforms including an evaluation of the underlying portfolio of projects;
4. Building on the assessment, the setting up of a public-private fund dedicated to social investment can be explored by opening up the equity capital structure to long-term investors.

Long-term – fully operational stage (> 2022)

1. The fund becomes one of the main European instruments for financing social investment and infrastructure.
2. A brand-new model for financing EU social infrastructure becomes fully operational.

Contact: Author(s) Lieve Fransen, Lf@europa-insights.com; Gino del Bufalo, gino.delbufalo@cdp.it; Edoardo Reviglio, edoardo.reviglio@cdp.it

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

CONTENTS

INTRODUCTION

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

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

A High-Level Task Force (HLTF) has been set up to raise the political attention given to the critical role of social infrastructure. It aims to boost 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 wellbeing 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. 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. Such access can also help to reduce transaction costs and enable knowledge and innovation to be disseminated. It can boost community resilience and regeneration while strengthening reputation and attracting trade/business and tourism. Low-quality social infrastructure, on the other hand, may limit social and economic opportunities, cause markets to work less efficiently and marginalise some groups. It can prolong existing 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 coming 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 remaining stagnant. This is largely due to demographics, in-work and out-of-work poverty, growing polarisation and inequality, and the scourge of a generation of young people who have difficulties finding a job or career.

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

To this end, we need to develop a model capable of attracting global long-term savings into infrastructure investment. A new 'asset class' for infrastructure should materialise 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 big 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;
- a set of practical long-term financial instruments.

THE MAIN DRIVERS FOR CHANGE

The world is becoming smaller, while people are becoming older, more urbanised and more polarised. Europe is one of the regions where people live longer and have fewer children. In addition to those trends, technology is boosting rapid innovations, Europe is confronted with higher mobility, the migration of large groups of people, and climate change. All these elements are altering the environment, the economies and the societies in which we all live and work. Also, this has profound implications for our social models, investment in social welfare, social infrastructure and service provision. For some time now, the welfare systems and organisation 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 speeds across different regions in Europe.

Not surprisingly, the recent financial and economic crisis (2007-2009) still has a profound effect in Europe, on people's lives, whereby they are confronted with insecurities, high unemployment and a lack of hope in the future for themselves and their children. People are increasingly 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 recognised, it should go beyond macroeconomic policies, to generate more and better jobs, and achieve structural changes that produce more security, greater equality and social inclusion. The new model for managing the economy is making sure the economy and financial systems serve people and society. Along these lines, the G20 summit declared recently that *'the central challenge 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.'*[12]

1.1. LIVING LONGER IN MORE DIVERSE, MOBILE SOCIETIES

The populations of the EU-28 are projected to increase to a peak of 528.6 million around 2050 and thereafter gradually decline to 518.8 million by 2080.[13] Demographic data also shows that the EU population is ageing, while concerns about unemployed young people and children living in poverty remain high.

According to the latest Eurostat Population Projections, the impact of demographic changes will be an increase in the number of people aged 80+, and in their population share for all EU countries until 2060. However, the increase will be especially pronounced from 2030 to 2050. For those aged 65+, the largest increase is expected from 2020 to 2030 (Table 1).

[12] G20 Summit (2017), Investing in Resilient, Future-Oriented Growth - B20 Taskforce Financing Growth & Infrastructure.

[13] Eurostat (2017), Population projection data, http://ec.europa.eu/eurostat/web/population-demography-migration-projections/population-projections-data

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+ account for	27	30	37	48	58	63

Source: Eurostat

In old age, people often become frail and develop multi-morbidity conditions. This means that affordable integrated chronic medical and social care needs to be made more accessible. However, our hospitals and health systems are often still geared to treating acute illnesses. In 2015, taking men and women together, EU citizens aged 65+ could expect to be able to independently manage their daily living activities for less than half of their remaining years (see table below). Addressing these issues requires different ways of organising 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 %

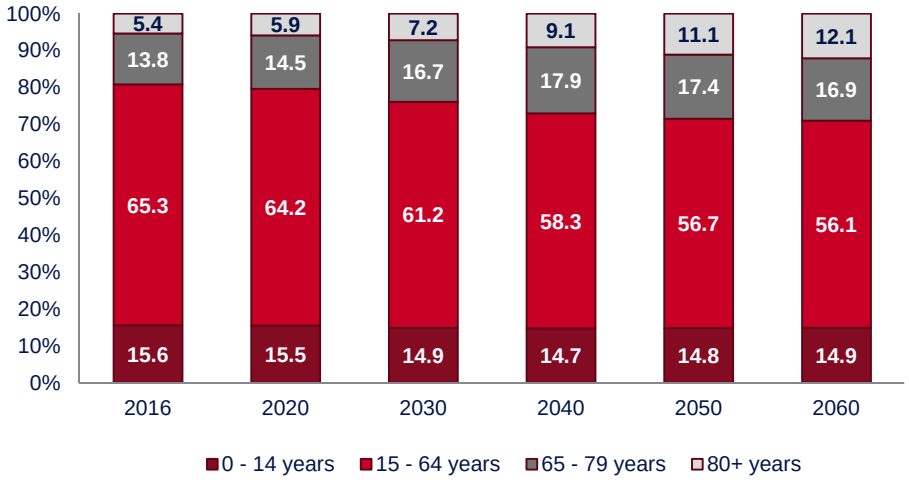
Source: Eurostat

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 the population aged 65+ in the EU-28 is projected to increase from 18.9 % in 2015 to 29 % in 2060. Ageing leads to an increase in the old age dependency ratio, which is projected to rise from 27.8 % in 2014 to 50.1 % in 206014. In other words, there will be just two people aged between 15 and 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 the "sandwich generation"15) will need further support with access to affordable child- and long-term care to able to (re)produce and in caring for those in need of help.

[14] European Commission, The 2015 Ageing Report: Economic and budgetary projections for the EU-28 Member States (2013-2060).

[15] Meaning that part of the population which is 'sandwiched' between those too young to work and those who are too old.

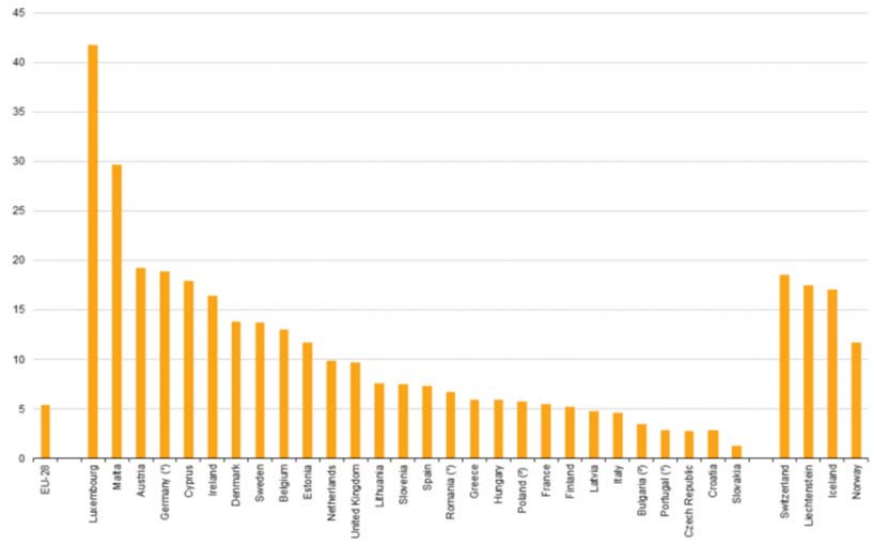
Figure 1. Population Structure by age group, EU-28



Source: Eurostat

In addition to ageing populations in the EU, there is also increased mobility (intra- EU) and migration (from outside the EU), which will continue in the coming decades and will result in Europe becoming even more diverse. A total of 4.7 million people entered one of the EU-28 Member States as immigrants 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 [16]

Out of the 4.7 million immigrants were accounted for in 2015:

- 2.4 million were citizens of non-member countries;
- 1.4 million people were citizens of a different EU country from the one they migrated to as immigrants;

[16] 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

- around 860 000 people migrated to an EU Member State where they were citizens (for example, returning nationals or nationals born abroad);
- some 19 000 people were stateless.

In 2015 Germany reported the largest total number of immigrants (1 543 8000), followed by the United Kingdom (631 500), France (363 900), Spain (342 100) and Italy (280 100). For the same year Germany reported the largest number of emigrants (347 200), followed by Spain (343 900), the United Kingdom (299 200), France (298 000) and Poland (258 800).

1.2. INNOVATION, DIGITALISATION AND TRANSFORMATION

Societies are transforming rapidly, thanks to innovation and digitalisation, which could also contribute to improving people's lives in the EU and positively change the way we educate, care, cure diseases, connect to and provide energy, collect data and produce new knowledge. This change could be disruptive and is difficult to predict in the longer term. The decrease in available jobs for low-skilled workers, with machines taking over repetitive, mechanical tasks, is worrying for those concerned. However, in the future there may not necessarily be fewer jobs but different and rapidly evolving jobs. In addition to technological changes in economies and societies, we also should confront the major impacts of climate change and invest in robust infrastructure using appropriate energy technologies critical for the long-term planning of investment in social infrastructure. By 2030 a 40 % reduction in greenhouse gas emissions (domestic) is required (against 1990 levels) along with a binding EU target for renewable energies of at least 27 %[17]. This will require major and innovative investment. Therefore, energy efficiency and confronting energy poverty are the relevant topics within this report's remit.

Investors will not only contribute to the transformation of and innovation in social infrastructure, but they must also adapt to it. Social infrastructure that undergoes transformation is a key driver for:

- individual and community empowerment;
- sharing of knowledge and ideas;
- learning from and managing complex data;
- transforming connections between people;
- facilitating services;
- revolutionising learning, health and living.

For example, an efficient healthcare system of the future should empower health professionals, carers and citizens alike. The system should increasingly be able to detect early warning signs of illness or behaviour that is likely to lead to poor health. Those who continue to invest in social infrastructure are increasingly using big data and artificial intelligence to inform investment decisions. They want to quantify ESG data and metrics, which require much closer monitoring and evaluation through specific and standardised or interoperable data which should also become available in the social and social infrastructure fields.

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

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

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.

18

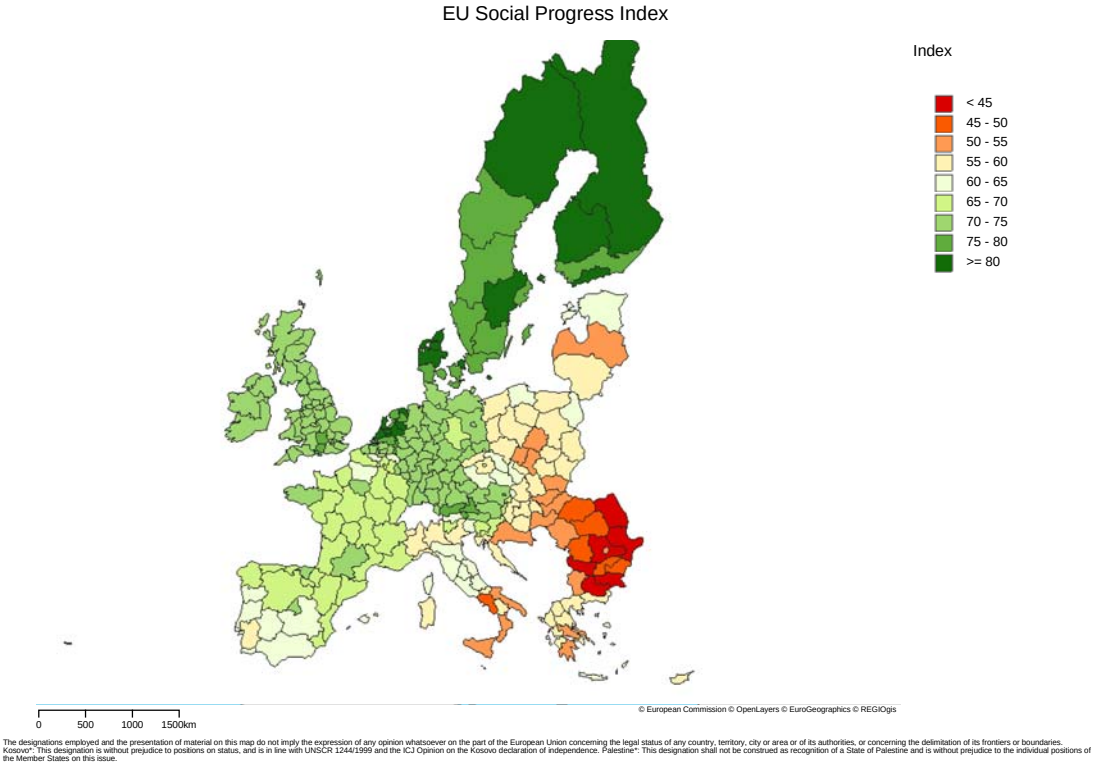
The dispersion of GDP per head since 1995 in EU has been stable, with some strong convergence within the EU-13 (reflecting the catching-up process) and some slightly divergent trends in the EU-15[19]. This overall stability in the EU-28 reflected a pre-crisis decline in GDP divergence between the two zones, which came to a halt when the 2008 crisis hit and reversed in relative terms. In the EU-15, developments of GDP per capita (pc) have been more varied, with the EU-15 South losing ground mainly since 2005 (and to a lesser extent since the early 2000s). The EU-15 Centre GDP pc levels remained broadly stable compared to the EU-28 (and gained some ground in recent years), while EU-15 North GDP pc also remained broadly stable.

Unemployment rates diverged significantly between 2009 and 2013, partially as a result 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 rates (since 2013), there was a divergence between the decline of the poverty rate for older people (-1.9 %), and its increase for young people (0.8 %). People of working age suffered more than people aged 65+, and young people saw their relative income decline (see ESDE Report 2015). Despite the overall growing level of employment, youth unemployment remains almost double the overall rate, contributing to large inequalities in the EU. Inequality is not only rife within different age groups, but also between different regions, increasing the divergence between EU citizens. One sixth of the EU population lives in regions, mostly within southern and eastern Europe, where income levels are less than half of the EU average[20].

[18] European Commission (May 2017), Reflection Paper on the Deepening of the Economic and Monetary Union, COM (2017) 291

[19] 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 the old EU-15.

[20] 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 Commission[21]

Divergence exists not only between countries but also between regions within the EU, as demonstrated in the figure above[22]. The EU Regional Social Progress Index measures social progress for each of the 272 regions of the 28 Member States 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 wellbeing, and opportunity. Regional divergences in performance are not explained by wealth, solely in terms of GDP per capita. Instead the study identifies regions with similar economic measures but extensively different social outcomes. An example, the highest performing region, Upper Norrland, Sweden has the same GDP per capita as Bucharest, Romania. However Upper Norrland scores over 30 points higher on social progress[23].

The current overall gap between rich and poor is the largest in 30 years[24], and this is not only negatively impacting people in the EU, but also the EU's wellbeing, social cohesion and economic growth. Social concerns are statistically important because they have direct economic implications 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. This should benefit people on lower incomes so

[21] Ibid

[22] 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.

[23] Ibid.

[24] OECD (2014), Focus on Inequality and Growth, December 2014.

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.

On 23 October 2017, the Commission, the Council and European Parliament adopted the European Pillar of Social Rights to provide new and more effective rights for citizens. The pillar is built on 20 key principles and accompanied by a social scoreboard[25, 26]. Some of the benchmarks and targets as defined in the scoreboard could also be used to monitor progress on 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 infrastructure. Society and technology are changing rapidly. Therefore, flexible innovative approaches are required to tackle inequalities and promote upward convergence in the EU.

[25] Council of the European Union (2017), Interinstitutional proclamation on the Pillar of Social Rights, Council (EPSCO), 23 October 2017.

[26] European Commission (2017) Social Scoreboard 2017 Luxembourg: Publications Office of the European Union.

REFORMING SOCIAL MODELS AND THE EUROPEAN WELFARE STATE

The drivers of change described in the previous chapter are critical for transforming 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 the financing of the social provisions are adapted. Also, sufficient attention must be given to the critical role of local governments in social infrastructure investment and the multilevel governance that is often involved.

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

Social policies focussing on human capital provide returns on employment, wellbeing, productivity and growth and reduce expenditure on social protection[27]. The key components for boosting GDP, namely productivity, employment and people of working age are all impacted by social infrastructure investment. In an ageing economy with widening inequalities, raising 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 the endogenous growth theory of the 1980s, suggesting that long-term growth is determined more by human capital investment decisions than by external shocks and demographic change[28]. Moreover, as empirical evidence shows that equal employment opportunities are key to mitigating poverty effectively in post-industrial economies, social investment welfare states are pressed to mobilising people's productive potential. As such, employment (quantity), employability (quality), and gender equity are important objectives behind the overarching aim of poverty mitigation[29].

Therefore, our social models are adapting continuously, in particular 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 to deal with acute diseases;

(ii) an increasing number of single-women households as well as the higher participation of women in the workforce, creating more need and demand for child care, social care and long-term care;

(iii) rapidly changing needs for skills for the jobs and society of the future while education systems are not keeping pace with current innovations.

---

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

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

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

Additional efforts are needed to provide for those people who are typically inadequately served by current social infrastructure and services. An example would be more quality childcare for low-income women and migrants. With social exclusion comes exclusion from employment, productivity, safe housing, education for 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 the course of their lives.

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 to old age while improving (gendered) work-life balance provision for working families, rather than merely pursuing policies that 'repair' social misfortune after times of economic or personal crisis[30].

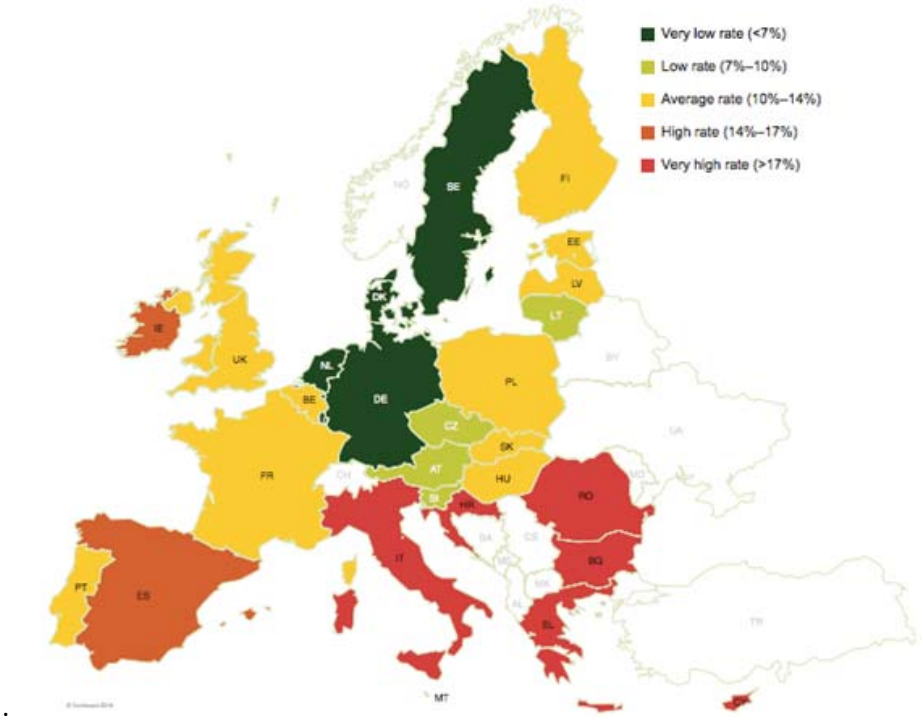
As underlined in a 2014 report from the Special Task Force (Member States, Commission, European Investment Bank (EIB)) on investment in the EU, **investments in human capital (e.g. education and health care) and deprived urban areas are key drivers for sustained productivity growth and social inclusion**. These more effectively cut the intergenerational transmission of poverty and social exclusion[31].

A key demographic component 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)

[30] Hemerijck, A. (2017), The uses of Social Investment, Oxford Press.

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

Figure 3: **NEET rate, 15-24 years, EU-28 2015 (%)**



.

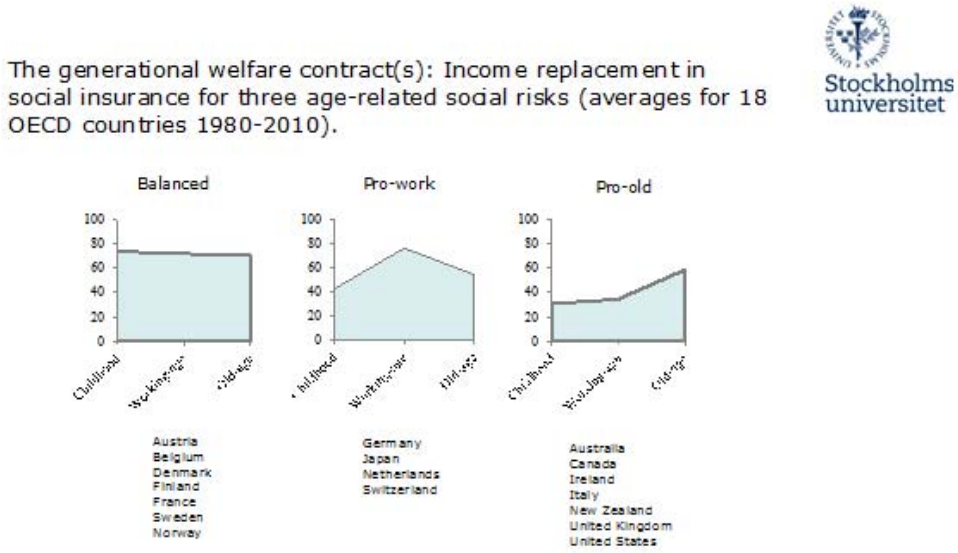
Source: Eurostat[32]

Without a suitable education, it is becoming increasingly difficult for young people to be employed and become productive members of society. The growth of a better educated, better housed and healthier working age demographic is essential for society to function properly and is directly correlated with improvements in social infrastructure.

In addition to the imbalance between younger and older people regarding employment, poverty and wellbeing, recent work by Nelson (see Figure 4) also provides evidence on how long-term investment balanced between different generations impacts on the efficiency of social welfare systems, employment and productivity (therefore this, along with growth should be relevant when deciding how to prioritise public investments and debt).

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

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



Source: Birmbaum, et al. (2017)[33]

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

In Europe, infrastructure investments in 2016 were 20 % below the level experienced in 2007.[34]

This decline also hides marked regional differences. By mid-2016, the EIB estimated that although infrastructure investment in the core member states had returned to its pre-crisis levels, the situation in the cohesion[35] and periphery countries is much less positive, as they languish badly, down 9 % and 27 % respectively from pre-crisis levels[36].

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 %)[37]. This is likely to depress growth rates over the medium term[38].

Fiscal consolidation during the crisis has, in fact, strongly reduced fiscal space for public investments in some regions. For economic infrastructure (transport, energy and telecoms) which is mostly done at the central level, and for that done by the corporate sector and by local utilities (which is mostly

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

[34] European Investment Bank, Investment report 2017-2018, Nov. 2017.

[35] Cohesion countries are the countries benefitting from the EU Cohesion Fund. For the 2014-2020 budgetary period, these are Bulgaria, Croatia, Cyprus, the Czech Republic, Estonia, Greece, Hungary, Latvia, Lithuania, Malta, Poland, Portugal, Romania, Slovakia and Slovenia.

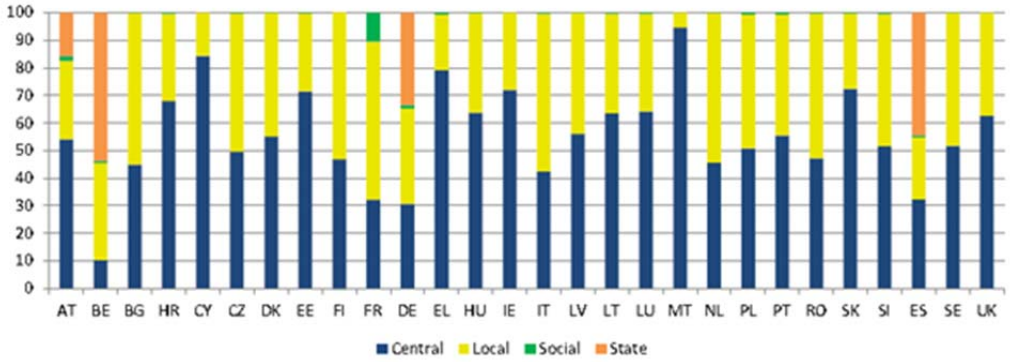
[36] Dr Lieve Fransen (2016), Why and how to grow the EU's social infrastructure financial and delivery capacity *(*in publication).

[37] CEB (2017), Investing in Public Infrastructure in Europe: A local economy perspective, Council of Europe Development Bank.

[38] 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.

outside the perimeter of the public sector) the reduction has been less pronounced. Some EU countries, where investments in small and medium-sized public works in social infrastructure are made at sub-national level, have seen a dramatic decrease in spending on social infrastructure. Because sub-national governments carry out two-thirds of total public-sector investments[39] on average in the EU (see Figure 5 below) and these investments are of a small and medium size, we have a major challenge here that is different from general infrastructure investments.

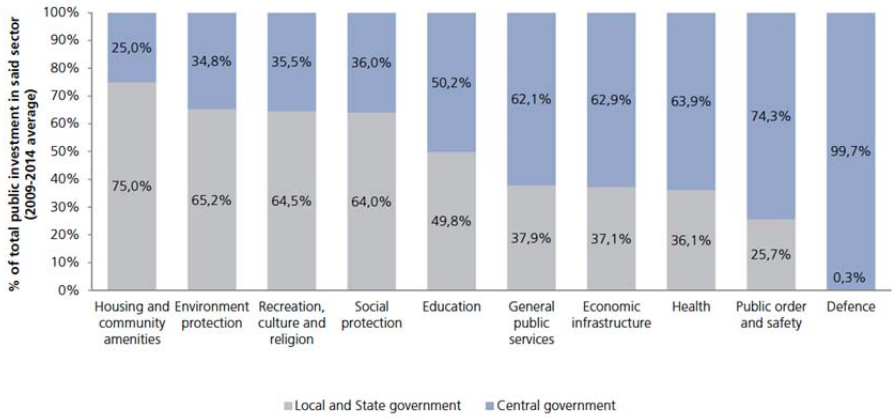
Figure 5: **Share of the four subsectors of the general government in total investment (average 2013-2014)**



Source: Eurostat[40]

Local governments tend to invest more than central governments in housing, social amenities, environmental protection, recreation, culture and religion, and social protection. Local and central governments tend to be relatively equal when investing in educational infrastructure. However, central government tends to invest more in health except where the authority for decision making has been devolved to the regional level, e.g. in Belgium, Spain and Italy (see Figure 6).

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



Source: CEB 2017 p12 – Eurostat and CEB staff calculations[41]

[39] European Commission (2016), Report on Public Finances in EMU Institutional Paper 045, p.101 December 2016.
[40] Ibid.
[41] CEB - Council of Europe Development Bank on Social Inclusion Bond Framework (2017),. p.12.

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 depend heavily on central government transfers, which often has a bearing on local investment priorities42. Specifically, it seems that local authorities and public services have tended to protect current expenditure on existing services at the cost of infrastructure investment [43].

It is also mostly at the local level that citizens notice 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. Therefore, such strong cuts in investment at the local level would have seriously negative political and economic effects.

[42] CEB - Council of Europe Development Bank on Social Inclusion Bond Framework (2017), p.11-13.

[43] "The decline in government investment was offset by increased current expenditure. This resulted in a shift in the composition of total expenditure away from capital towards current expenditure. In the EU, public expenditure increased from 44.7% of GDP in 2007 to 46.7% in 2016. This growth was driven mainly by social transfers, which caused an increase in current expenditure. Most EU countries slashed capital spending and financed parallel increases of current expenditure, despite an overall decline of debt-servicing expenditure (from 6% of total expenditure in 2006 to 4.7% in 2016). This resulted in large contractions of government investment financing in nominal terms (declining from 7.3% to 5.8% of the total). The shift in public spending towards current expenditure, justified mainly by the political choice to support social transfers in a context of social distress and fiscal consolidation, has contributed to the decline in capital spending. […] Structural changes, however, do not take away important obstacles to government investment, notably (1) the relatively low political cost of downsizing/delaying government investment programs compared to current expenditure programs and subsidies; (2) an undervaluation of the role of government investment for growth, including its crowding-in effect in times of low growth; and (3) a set of European and national fiscal sustainability regulations that do not incentivize the prioritization and ring-fencing of capital spending, especially at the sub-national level." European Investment Bank, Investment report 2017-2018, Nov. 2017, pp. 27-29.

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 these are sectors related to education and lifelong learning, health and long-term care and affordable, accessible energy-efficient housing) that enable goods and services to be provided.

This definition is the one used for this 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 harmonisation of social infrastructure, typology that can soon enable standardisation and the development of an asset class.

Table 3: **Social infrastructure typology in the 3 HLTF priority sectors**

Sector	Direct tangible	Direct intangible	Excluded
Education **Life-long learning**	Kindergartens Childcare Schools Vocational colleges Universities Laboratories ICT equipment & Related cloud infrastructure Student accommodation Adjacent supporting infrastructure	Facility maintenance Energy efficiency/low carbon Student lending R&D programmes Education software development	Salaries Utilities Materials

Health **Long-term care** **Social Care**	Hospitals Clinics Inc. community Diagnostic facilities Imaging facilities Medical equipment ICT equipment Private & Public research labs Long-term care facilities Short-term care facilities Nursing accommodation Adjacent supporting infrastructure	Facility maintenance Energy efficiency/low carbon programmes Health programmes Public sector R&D and Cloud Infrastructure[44] Private sector R&D (pharma, medical equipment) Health software development Education & training programmes	Salaries Utilities Materials Pharmaceuticals and devises
Affordable housing	Residential buildings in keeping with Housing Continuum[45] Semi-residential buildings Adjacent supporting infrastructure Premises dedicated to community/ local services	Energy efficiency/low carbon programmes Programmes for housing refurbishment/ renovation Provision of care & support services for social housing residents	Salaries Utilities

[44] National Institute of Standards and Technology, http://nvlpubs.nist.gov/nistpubs/Legacy/SP/

nistspecialpublication800-145.pdf, Cloud infrastructure as a service (IaaS).

This capability provides the consumer with 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).

[45] 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: (i) assessing investment in education and lifelong learning, (ii) health and long-term care and (iii) affordable and energy-efficient housing. Drawing on Eurostat data[46] and based on wide-scale consultations with experts in different fields we provide the following overview of current investment in social infrastructure.

Public investment rates in advanced economies remain at a historic low. This has been partially responsible for lagged economic growth[47]. 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. However, it is hard to gauge the precise figure, especially as 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:

- +/- EUR 65 bn annually for education & lifelong learning

  = 0.43 % of GDP and 90 % allocated as public resources.
- +/- EUR 75 bn annually for health and long-term care

  = 0.5 % of GDP.
- +/- EUR 28 bn annually for affordable housing[48]

  = O.4 % of GDP.
- grand total = +- EUR 168 bn

In addition, available evidence is provided within background literature. However, this evidence comes with a few caveats that also need to be considered; for example, the distinction between public and private investment is not always clear in practice.

Education and Lifelong learning

Capital expenditure in the EU for education was approximately EUR 65 bn in 2015 (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 underinvestment in some of the other countries where the need is even higher. Even in countries with relatively high percentages of spending in education, there is sometimes a general fragmentation of investment plans. For instance, in France universities depend on national competences (national authorities/national government) whereas schools and colleges fall under several levels of territorial competences (national, regional, sub-regional authorities/government. This suggests that potential inefficiencies could result if they are not coordinated well. The values of investment in this sector vary widely across countries:

- ES, IT, AT, DE, IE, SK invest 0.3 % of GDP or less:
- CZ, LV, LT, EE, FI, NL, 0.8 % or more.

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

[47] IMF (2015), Making public investment more efficient, Staff Report, June 2015.

[48] Housing Europe, (GF061), COFOG Database, Eurostat Government Finance Statistics.

Per pupil, ES spends EUR 183 and NL EUR 1,283. On average public investment stagnated from 2010 to 2015 in the EU; it dropped in DE, FR, IT, ES, PT and rose in UK, BE, SE.

Education & lifelong learning

Total estimated at +/- EUR 65 bn

- **Infrastructure spending by the public sector as a % of GDP –** public investment in education infrastructure in the EU-28 was EUR 65 bn in 2015 (including gross capital formation and capital transfers). This equals to: 0.43 % of GDP; EUR 580 per student (ranging from EUR 382 at primary level to EUR 723 at third level).

- **Infrastructure spending by the private sector as a % of GDP** – private investment in education is more difficult to gauge. The OECD says that private *expenditure* represents 15 % of the total expenditure. Almost all of it consists of households' outlays for tuition + other current costs; private *investment* is likely to make up a small fraction.

Health and long-term care

The EU's capital spending in the health sector is 0.5 % of its GDP (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 in real terms by 20 % between 2005 and 2007 – 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, and Belgium but went down drastically 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 countries with the lowest share of health expenditure were CY and LV (3.5 % of GDP), and EE, HU, BG, PL, RO, and LT (below 5 % of GDP).

Assessment of allocated resources does of course not say much about whether those resources are used efficiently or effectively. For example, in the health sector 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 capacity in hospitals (Germany has 8.2 beds per 1000 inhabitants, the highest number of the OECD countries). This suggests that disinvestment may be needed. Efficiency could be increased through concentration on space and tasks as well as the increased use of connectivity and home services. This could also lead to falling costs in health. The level of resources invested in healthcare 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, forcing users (children, persons with disabilities, elderly people, homeless people and migrants) to live in segregated 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 match the evolving and complex needs of users. The lack of fiscal space over the past decade has limited these developments, with a negative impact on the social inclusion and wellbeing of disadvantaged people.

Health & long-term care

Total estimated at +/- EUR 75 bn

- **Infrastructure spending by the public sector as a % of GDP** - public investment in health and long term-care infrastructure in the EU-28[49] was EUR 75 bn 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 0.5 % 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 EU-28 – 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). Retired and single-parent families are worryingly overrepresented in the 12 countries assessed by Scanlon et al[50].

- **Public financing** for affordable housing, funded from social protection budgets mainly concerns:

    - payments to households to help with the cost of housing;
    - 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, and PL[51].

- **Social housing as a proportion of overall housing stock**:

    - over 20 % in NL, AT, DK;
    - just under 20 % in FR, UK, FI;
    - less than 10 % in IE, 4 % in DE[52], HU[53].

	% of total housing stock
Netherlands	34.1
Austria	26.2
Denmark	22.2

[49] Eurostat (2017), Government expenditure on health. Data extracted February 2017.
[50] Scanlon K, Fernández Arrigoitia M and Whitehead C (2015), Social housing in Europe. European Policy Analysis (17), p 5.
[51] Eurostat (2017), Government expenditure on social protection. Data extracted February 2017.
[52] Scanlon K, Fernández Arrigoitia M and Whitehead C (2015), Social housing in Europe. European Policy Analysis (17), pp 1-12.
[53] OECD Social Rental Housing

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
Luxembourg	1.6
Estonia	1.4
Czech Republic	0.5
Latvia	0.2

Source: oecd.org/social/affordable-housing-database[54]

- **Building permits** - Compared to 2007, in 2014 the number of building permits per 1 000 inhabitants contracted in all countries, except Germany. It fell by less than half in BE, CZ, FR, PL and SE, whereas the contraction exceeded more than half 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 investment (Eurostat) found that, in 2016, Sweden had the highest price level for investment in the EU at 35 % above the EU average, while Romania had the lowest at 36 % below the EU average[55].

- **Residential loans** - The average EU-27 total outstanding residential loans to GDP ratio has continued to increase since this 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.[56]

- **Tenures** - Data from EU SILC shows that the population distribution 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 EU-13 with a parallel decrease in the share of people renting

- **Lack of affordable housing** - According to data provided by member organisations 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 consistently decreased social housing production in recent years but there was new public

[54] OECD Affordable Housing Database, oecd.org/social/affordable-housing-database

[55] 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

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

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 50%of market rent).

- **Severe housing deprivation** - Across the EU-28 4.9 % of the population suffered from severe housing deprivation in 2015. There were four Member States where more than 1 in 10 people faced severe housing deprivation in 2015: BG, HU, LV and RO. Also, in 2015, 11.3 % of the EU-28 population lived in households that spent 40 % or more of their disposable income on housing[57].

- Another marker of poverty and of severe housing deprivation is **fuel/energy poverty**. Fuel poverty indicators across Europe show that Bulgaria and Lithuania have the highest rates of people who are not able to keep their homes sufficiently 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 sufficiently heat their homes. In particular, vulnerable consumers (e.g. elderly people or single parents with low income) are more unlikely to keep their home sufficiently warm.

Affordable housing

Total estimated at +/- EUR 28 bn

- **Infrastructure spending by the public sector as a % of GDP** – public investment in affordable housing infrastructure in the EU was EUR 28 bn in 2015. This equals to 0.2 % 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 government functions:

  - Housing and community amenities (under the code GF 06), out of which you can identify different expenditures such as housing development or other community development services;
  - Housing (GF 1006) under the general social protection function (GF 10). This mainly includes social protection payments to households and in some cases the cost for running some (limited) social housing programmes[58].

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

  The highest spend is in IE, DK, FR and UK. The lowest reported spend is in AT, CZ, LV, LT, and PL[59].

[57] Eurostat (2017), Housing statistics. Data extracted February 2017.

[58] Eurostat (2017), Government finance statistics database. http://ec.europa.eu/eurostat/web/ government-finance-statistics/data/database. Data extracted February 2017.

[59] Eurostat (2017), Government expenditure on social protection. Data extracted February 2017.

Regional development levels are not converging and the gap in investment in social infrastructure also differs widely across regions. In GDP terms, the **gap between the most advanced regions and those lagging is of 14 to 1**[60].

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 (gross fixed capital formation) growth rate and social infrastructure investment at different levels of government[61].

To put this in a wider perspective it is important to recognise that although investment in social infrastructure has a growing role, there is surprisingly a lack of statistical data or research on 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 the GFCF at both central and local levels of government across 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 to occur soon[62]. 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 levels[63].

Therefore, it is strongly recommended 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.

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

[61] 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.

[62] CEB (2017), Investing in Public Infrastructure in Europe: A local economy perspective. Council of Europe Development Bank, February p 14.

[63] Ibid.

THE INVESTMENT GAP FOR SOCIAL INFRASTRUCTURE

This chapter presents a first assessment of the need for social infrastructure investment (SII) based on literature reviews and consultations with experts and with relevant institutions. It 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, the EU needs EUR 2 tn of investment in infrastructure by 2020. Meanwhile, the European Investment Bank (EIB) estimates that the region needs to invest 3.6 % of GDP, (including investment into social infrastructure) if Europe's economy is to continue to recover and set itself on a path to sustained growth[64].

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 further underinvestment in social services, benefits and social infrastructure in many countries, regions and municipalities. Net public investment in the Eurozone periphery, with its critical need to catch up in infrastructure, has decreased from 2 % of GDP to a negative –0.6 %. Therefore, the net public capital stock is shrinking, to the detriment of the younger 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 items 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[65]. 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. 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 are far less catered for than in private workplaces. Therefore, we should boost investment in infrastructure that is most important to young people and migrant populations.

Capital investment needed

To reduce both inequality in education outcomes and skill shortages on the labour market, Europe should aim to provide relevant skills to more students, including to those coming from outside the EU.

Solution

The solution involves building more educational facilities and/or renovating dilapidated ones.

[64] see: ECB Economic Bulletin, Issue 2/2016 – Articles.
[65] Eurostat, Government expenditure on education. Data extracted in February 2017.

This would involve:

- updating IT facilities and accessibility;
- making them energy-efficient;
- enabling them to provide adult learning courses.

Creating advantage

There are two channels for investing in traditional educational infrastructure, funded by public budgets: public procurement and public-private partnerships (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 and electricity.

Unique value proposition

Payments to the investor can be based on availability of facilities, and can also include a share of the savings on energy bills for a few years, creating incentives to ensure the building meets environmental standards. 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 negative knock-on effect for many people and institutions. Furthermore, current investment in the health sector continues to focus on hospitals. It fails to promote a more flexible approach to healthcare, as needed and expected nowadays, and neglects community/local facilities and short-term care. Also, current healthcare is often inefficient, with large amounts of legacy stock in the EU-13, 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 for digital platforms, data gathering and interoperability.

Capital investment needed

Healthcare: If it is assumed that an average of 5 % of total annual health expenditure is spent on infrastructure and that for 2014 EUR 1.4 tn was the total EU healthcare spend (Eurostat 2017), then around EUR 70 bn was spent on infrastructure. In estimating future capital needs, the challenges for the EU-15 and EU-13 are different. However, the solutions depend on whether health reform moves away from a hospital-centric approach to a more pluralistic ‘closer to home’ model, with regional specialist centres supporting stronger primary care resources blending with social care. The EU-13 has a large amount of legacy stock and has a tendency to prioritise investment in hospitals and specialist centres without reducing the oversupply of beds. At the same time, considerably faster growth in demand for healthcare is expected in the coming decades in the EU-13 compared to the EU-15 (2015 Ageing Report).

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

Long-term care (LTC): As estimated in Table 4 we can assess an additional gap of EUR 50 bn p.a. The shift from informal to formal care and the converging of LTC coverage and costs for those countries that are below the EU average levels of care in this respect, imply a substantial fiscal risk (2015 Ageing Report).

Solutions

- 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, and cost-effectiveness (providing duplication);
- Financially viable (using cost-assessment methods e.g. health technology assessment (HTA) and health systems performance assessment (HSPA));
- Sufficient and strategic investment (virtuous small-to-large scale adapted infrastructure, 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 small-scale so far (regional level at most), focused on chronic-disease management. These cases require commitment to health professionals and patients, both bottom-up and top-down involvement (or enabling these types of involvement), and time to mature/show benefits. To facilitate scaling-up the size of these 'small-scale cases', attention needs to be given to:

- aligning social investment with national reform and regional programs;
- engaging stakeholders (co-design and governance);
- accountability for decision makers;
- effective & efficient services;
- other business cases.

Unique value proposition

Investments in health, long-term care and social care are safe because they tap into a secure and steady publicly-backed source of income (insurance) and into an ever increasing and invaluable personal need for health and wellbeing. The Social Protection Committee Working Groupon Ageing (SPC-WG-AGE) claim that it is possible to contain increasing needs, make care more efficient and ensure dignity in care if action is taken based on good evidence.

<u>Affordable housing</u>

Existing affordable housing stock is falling across Europe (except for France), and homelessness is rising. Therefore, measures must be taken to ensure there is enough affordable, accessible and energy-efficient housing to meet demand. Public funding is also decreasing (especially in the EU-15) while demand increases. The social pressures created by this climate have 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;
- the willingness to save money on household energy costs;
- the willingness to save on public finances that often subsidise energy costs for poor households.

Fuel poverty indicators are becoming increasingly alarming in BG, LT, CY, EL and PT. However, the potential savings in public spending are very large when assessing the spending in subsidies made by countries and regions, which aims to minimise cases where vulnerable consumers get disconnected from their energy supplies.

Capital investment needed

According to Housing Europe, approximately 450-500 000 new homes are needed and 800 000 homes require renovation.

Solutions

• Vast supply of affordable housing:

The solution would mainly involve building more homes, although in some cases an increase in supply could also be achieved, for instance, by buying privately owned dwellings to be used as social housing and/or converting 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 could help to achieve a 30 % reduction in energy consumption by 2020. This would amount to 800 000 dwellings being upgraded to the highest standards each year.

• Enable housing organisations to provide the necessary integrated services, e.g. social/care services:

The solution's effectiveness 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 to tackle market failures.

(ii) Investing in the renovating of social housing can have a significant impact on health and wellbeing of residents. It can also help to break the poverty transmission poverty transmission across generations.

(iii) There is increasingly agreement among those who provide social/affordable housing that integrated services or the 'Housing +' approach is the best way to specifically deal with vulnerable people.

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

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

In conclusion, an investment gap of EUR 142 bn p.a. is identified. The total minimum estimate for the next 12 years (until 2030) represents an investment gap of around EUR 1.5 tn (see Table 4).

Beyond ramping up finance, there is also a large potential to make 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 that improving the selection of projects, their implementation, and the management of existing assets could translate into 40 % savings. Even the most advanced economies have significant room to learn from each other and to strengthen capabilities and set up better 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 well-targeted transformation could yield substantial results.

We therefore strongly recommend that:

- long-term quality investment in social infrastructure be quickly boosted;
- that lessons are learned from case studies;
- interoperability and information on projects be improved;
- capacities to increase and improve the pipeline of projects are built up.

Table 4. **Minimum estimate of the gap in SII**

Sector	**Current annual investment in EUR bn p.a.**	**Minimum gap per sector in EUR bn p.a. (uplift of 25 % of the current percentage of GDP)**	**Additional items in EUR bn p.a.**	**Annual Investment GAP in EUR bn p.a.**
Education & lifelong learning (0.43 % of GDP)	65	15		15

Health & long-term Care (0.5 % of GDP)	75	20	EUR 50 bn p.a. for long-term care Unknown amount for disability and migrants	70 (20+50)
Affordable housing (0.4 % of GDP)	28	7	EUR 50 bn p.a. 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 show that while the EU´s population becomes more unequal, diversified and older and social services and benefits are adapting to the new realities, many countries are hard-pressed to meet the needs and expectations of their people. Also, investments gaps in social infrastructure are not keeping pace with the above. Such investment could be a powerful catalyst for more wellbeing, inclusive growth, resilience and upwards convergence across the EU.

Therefore, attaining appropriate investments will require a policy mix that takes into account the changing realities of the sectors and the economy, and creates the new financing models and investment conditions to draw in long-term investments.

The HLTF extensively considered how to get from the current underinvestment trap to attaining smart capacitating future-oriented investment.

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

For regions, countries, and cities to move towards a smart capacitating investment scenario, social infrastructure should include a mix of: (i) fixed infrastructure for learning; (ii) affordable housing; (iii) specialist regional healthcare hospitals and (iv) flexible infrastructure allowing different populations to use the space provided e.g. in the cases of emergency housing and social enterprise incubators.

Several preconditions for smart capacitating investment are identified:

1. Development of performant digital platforms that enable telecare, tele-support, distance learning etc.

2. Interconnecting infrastructure – improve the availability of ITC/data networks and assistive technologies.

3. Energy efficiency and sustainability of the infrastructure is essential.

4. Multipurpose buildings are needed in the future, as most buildings are only used for a small period of time during the day. The capacity for institutions to plan and coordinate the multipurpose use of buildings should be developed. A 'one-stop shop' model could help.

5. Other forms of flexible solutions, such as contractual flexibility. More and more participants don't buy or build their own infrastructure. They lease or rent what is needed. 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 identify partners.

7. People/workforces – people/workforces need to update their skills and abilities, and investment in flexible social infrastructure needs to take human potential into account.

8. Localisation and integrated approach; Energy efficient and safe housing need to be made available in areas where people want to live and socio-economic opportunities are made available.

9. Accessibility: all facilities need to be accessible to all people 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 options, including not only traditional teaching methods for 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 centre 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 future community learning centre (replacing former school) would focus on including all potential learners, i.e. more inclusion of pupils with socio-economic disadvantages and/or special learning needs, equipping them with proper skills which would improve their chances of finding rewarding work and leading independent lives. The social returns of investing in these centres would be the savings on welfare outlays and social assistance, on top of the usual economic returns. Community learning centres could become the anchor of broader social investment in, for example, affordable housing and social assistance.

Similarly, a university would become the hub for advanced learning, and research & innovation of a larger geographical area. The university would be a 'hub', becoming 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 on 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 of funding across areas within the EU may also be required, as needs are likely to be very varied 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. Urbanisation also creates challenges for providing education in crowded and rural areas alike.

• Upskilling: enrolment in third-level education is rising. Giving equal opportunities to all young people to get proper skills implies that access to education would be ensured from an early age for children with special needs (migrants, minorities, special needs, low-income, …) and they would be supported in completing their education.

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 could prevent fragmentation and empower people to decide or co-decide on their care. More flexible infrastructure should lead to an approach that puts people at the centre 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 & social care provision closer to where people live. This should be complemented by increased investment in prevention. The need for high cost interventions would fall, which would allow for the infrastructure to be more flexible.

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

When creating more affordable housing in urban areas with high demand we must be careful to avoid social and spatial segregation (we must learn from the past and not create the new *'banlieues'*). This means mixing different populations and ensuring the space is used in the right way — residents must be allowed to use parts of the buildings/common areas. These neighbourhoods must have supermarkets, small businesses, and places for people to meet. Housing complexes should be well connected to schools and other facilities (sports amenities, civic amenities), as well as have easy access to transport.

At the same time, we should think of the potential of rural/shrinking regions. If housing is cheaper there, can certain segments of our economy move there? Can new technologies help with this by incentivising, for instance, people to work at home (i.e. teleworking)? In this case homes should be adapted as a place of 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 does not 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 therefore 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.

FINANCING SOCIAL INFRASTRUCTURE INVESTMENT

This section concentrates on the general framework for financing EU infrastructure 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;
- current and new financial schemes and instruments;
- the role of long-term investors;
- the prudential and accounting framework for infrastructure financing;
- the need for technical assistance (TA).

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

In Europe, when financing infrastructure we should put less pressure on public finances. Long-term institutional investors are searching for low risk inflation-linked long-term financial instruments to match their long-term liabilities. After the recent financial crisis, the EIB and national promotional banks and institutions strengthened their role, stepping in to support projects by providing guarantees, after the collapse of 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 otherwise not have been in an economic position to participate in infrastructure projects. The banking system, in fact, since the beginning of the crisis, has been under pressure to repair balance sheets. It has been restricted in its capacity to finance and invest in infrastructure, due to low profits and the unintended consequences of the new accounting regulations on long-term investment[66].

Economic infrastructure (energy, transport, and TLC) can largely repay its costs with the cash flow it produces. In the utility sector, independent regulatory authorities guarantee stable returns and moderate risks. Social infrastructure, which needs almost full payment by the public sector, is characterised by predictable and steady real returns which are usually attractive for investors. Therefore, economic infrastructure and social infrastructure have similar features, although they differ in some relevant characteristics, offering investors opportunities to diversify.

After a decade of discussion at the global and the European level on the need for infrastructure to emerge as a new asset class and for long-term institutional investors to invest more in infrastructure, the new scenario has not materialised as planned.

Why? Mostly because we do not yet have all the right conditions required to make it operative. Such action needs political will, as well as time. There is an obvious asynchronicity between the financial industry's willingness to have infrastructure 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 revert to the pre-crisis or an even higher level of investments, this time asynchronicity is a concern for our future and puts at risk a successful implementation of the new model. The report will argue that action should be taken on two major levels:

- re-calibrate prudential and accounting standards to make infrastructure investment more attractive to long-term investors and to banks, based on a reliable analysis of the risks;

66 See section 6.3.1. below.

- 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

This section argues that it would make economic sense to analyse the possible establishment of a large European public-private fund for financing social infrastructure. From an economic perspective a large fund is like a firm and as such, could have a long-term stabilising role within the European financial market for infrastructure financing. We will make the point using a well-known debate in economic theory that started with Ronald Coase’s paper on ‘The nature of the firm’.

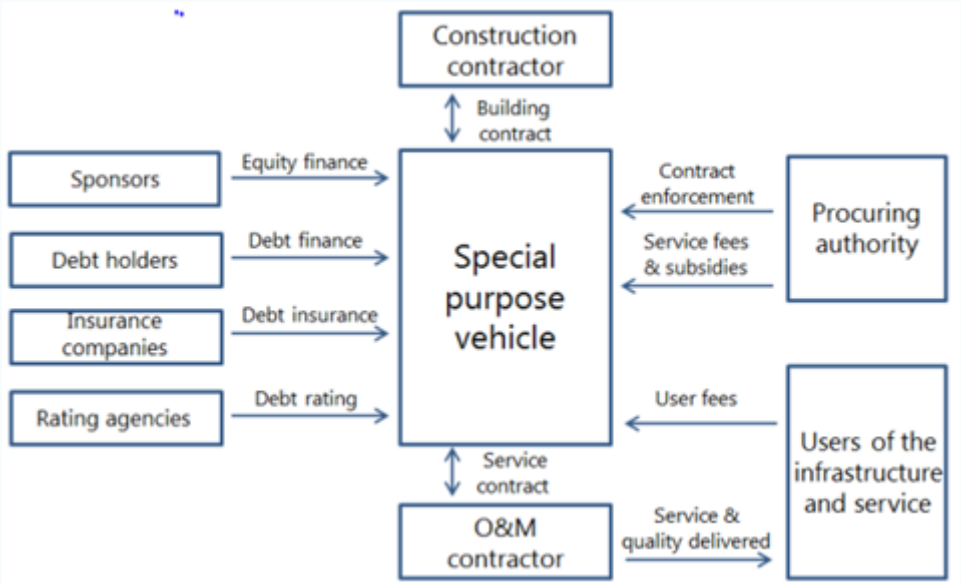
Equity for project financing at the global level is worth over USD 350 bn[67]. There is a small market today which, according to most experts, will experience great growth rates in the coming decades. It is difficult to predict when and how fast. Usually, when the financial industry is moving with such strong determination, as it has been doing in recent years, then it may become a game changer. Policymakers and regulators are pressed to move fast to create the right conditions for expanding 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 enable an orderly development, with 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 an offshore wind plant may rely mostly on the cash flows it produces. A project finance initiative, which involves many parties for a very long time (up to 50 years), consists 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, insurers and those citizens most directly affected – make designing an efficient set of contracts a complex but essential task. The nature of contingencies and the proper sharing of risks among the different agents are pivotal. The quality of institutions and the rule of law are often determining factors in providing finance for infrastructure, even when a project by itself appears to be financially viable.

Special purpose vehicles (SPV) engage external firms to plan, construct, and manage the infrastructure. If the projects are smaller – as in most social infrastructure sectors – the contracts are standardised 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”.

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

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 5% of total infrastructure building. The remaining part weighs directly on taxpayer money (59 %) or on corporates (36 %). This may imply: (1) that the 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 the Ronald Coase paper on 'The nature of the firm' where he tries to explain why some activities are directed by market forces and others 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 the setting up of 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 and it also means that they have lower transaction costs than external contracts. This is a competitive advantage of firms versus markets. Moreover, the firm usually has a large balance sheet, so it may get better financing conditions, as well as more risk-absorbing capacity. The firm is also made up of a long-term community. Employees and their skills tend to remain within the firm increasing the long-term base for human potential. Finally, a firm has lower general costs because of its scale.

So, while we concentrate on a new 'asset class' emerging, 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 these institutions such a successful case? They are the typical features of a well-run firm, such as:

- highly skilled personnel and management who share a common mission and have long-term internal contracts with the bank;
- a large and well-capitalised balance sheet which ensures low funding costs, strong capacities to manage risks and operations in 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 promoting the 'crowding in' of private money and, by doing so, the European process of economic and social convergence.

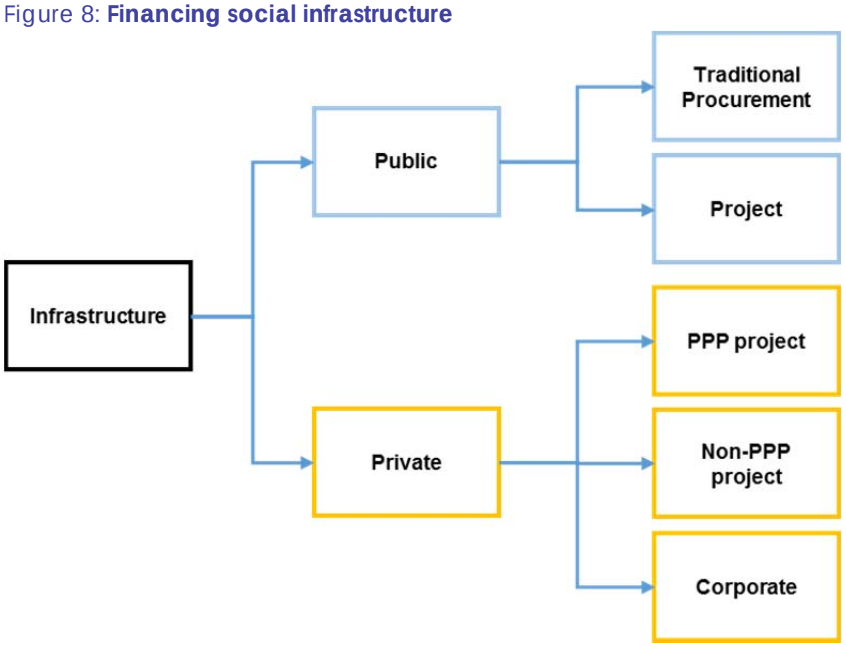
Similar considerations may apply to other sectors of the European infrastructure market. Infrastructure funds, which are comparable to firms, are another good example. So are utilities that engage in several economic and public utilities' infrastructure projects. They could also concentrate on social infrastructure. It is possibly worth analysing certain issues before choosing whether to set up a European Fund with national branches to finance EU social infrastructure, and whether to incentivise the consolidation and/or creation of large construction and management corporations (public, private, public-private), specialised in building social infrastructure. These are:

- economies of scale;
- building up and preserving high-level skills;
- large balance sheets to manage multiple projects;
- a higher potential in attracting shareholders.

5.2. FINANCING SOCIAL INFRASTRUCTURE

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

Figure 8: **Financing social infrastructure**



Source: Wagenvoort, et al. (2010)[68]

[68] 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.

Traditional public procurement, namely the process by which public authorities purchase the concrete infrastructure or the provision 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 the 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 achieve societal, environmental and economic objectives. To this end, the European Commission initiated (i) a public procurement strategy69, which focuses on six strategic policy priorities, and (ii) recently (3 October 2017), a targeted consultation70 on 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 to exploit procurement more efficiently and in a sustainable manner, while making full use of digital technologies to simplify and accelerate procedures.

[69] https://ec.europa.eu/growth/single-market/public-procurement/strategy_en.

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

5.2.1. PPP: Definition and dissemination

Although still quite marginal, public-private partnership (PPP) arrangements represent an alternative for public procurement. PPPs are cooperation agreements between a public body and private-sector body 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 involve transferring certain risks to the private sector and specifying performance outputs, rather than inputs. It should be clear that in PPP projects the public body not only acts as the principal but also as the project manager. This requires the public body to acquire a range of capabilities, such as being able 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.

According to the Eurostat Manual on Government Deficit and Debt[71] definitions, it is appropriate to further split the concepts of 'concessions' and 'PPPs'. The main difference between the two is that:

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

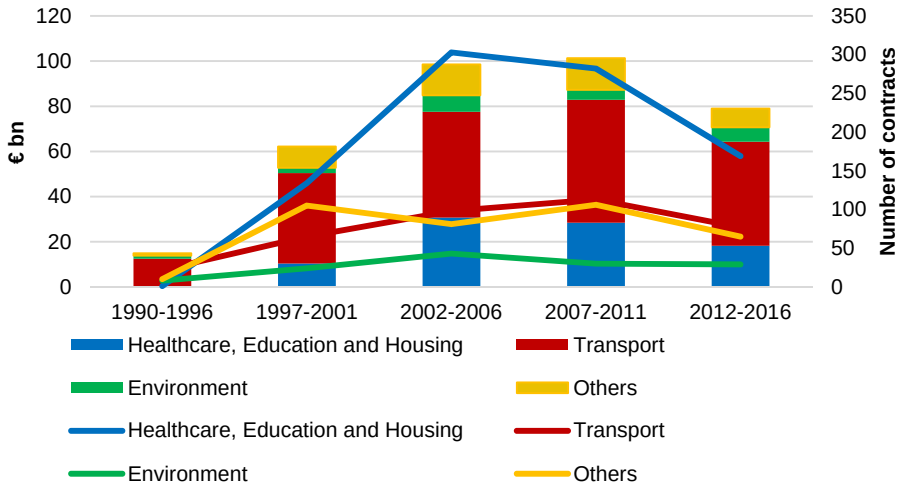
Concession contracts are used by public authorities to provide services or build infrastructure. Concessions involve a contractual arrangement between a public authority and a firm (the concession holder). The latter provides services or carries out works and is compensated by being allowed to exploit 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 provision 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 benefit both the public authority and 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.

[71] 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 EU-28, 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 had a total value of EUR 356 bn, of which 44 % of this total is concentrated in the UK, 10 % in France and in Spain, 6 % in Portugal, and between 2 and 5 % each in Belgium, Germany, Greece, Hungary, Ireland, Italy and the Netherlands.

As far as the sectoral composition is concerned, the highest number of PPP contracts took place in the education sector (24 %), followed by healthcare (22 %) and transport (21 %). Housing and community services represented just 5 % of the total number of deals. However, if the total value of the projects is considered, rather than the number of contracts, the picture substantially changes as PPP in the transport sector, clearly with a higher average deal size, reached 56 % of total value, while healthcare and education reached 13 % and 10 % respectively. In the UK, the situation is somehow more balanced as 34 % of the value was in transport, with 19 % and 17 % in healthcare and education respectively. 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 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 delayed completion, 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 due to 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 [72]

Table 7: **Forms of public sector participation**

Characteristics	Forms of public sector participation					
	Service contract (outsourcing)	**Management contract**	**Lease/ affermage**	**Build-Operate-Transfer (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)

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

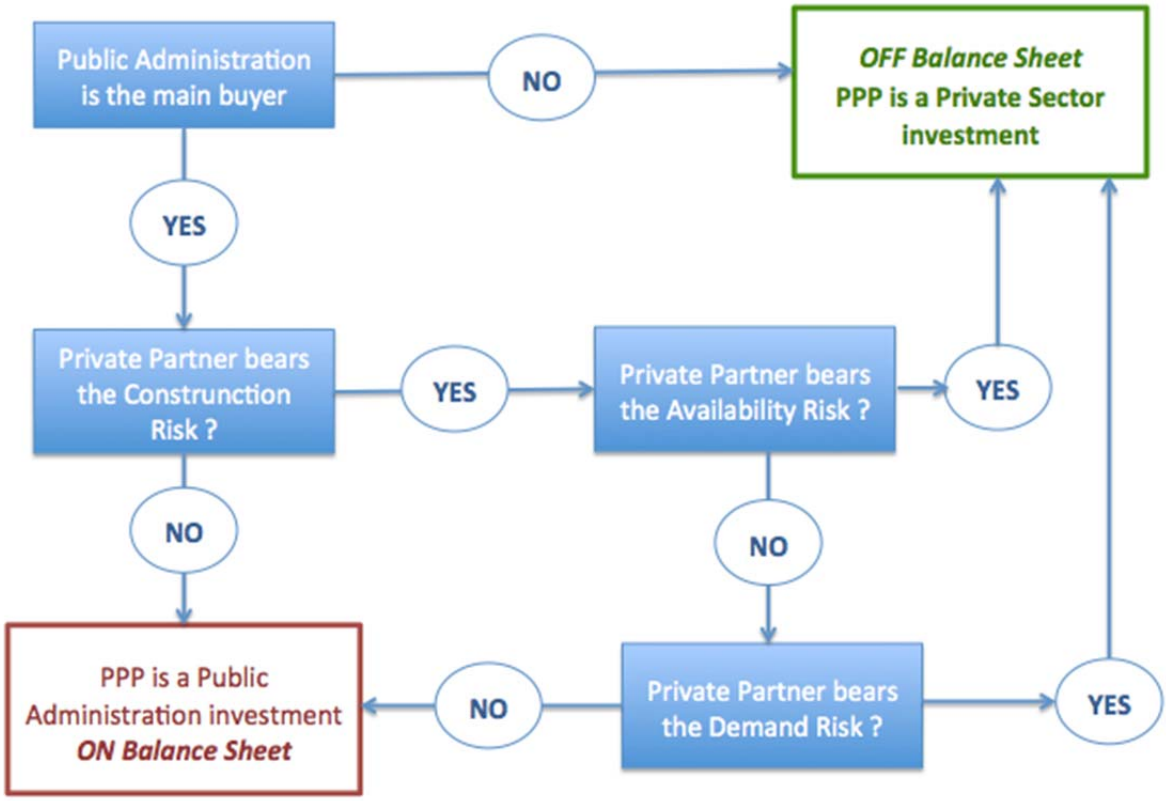
The economic convergence criteria set in the Stability and Growth Pact, as well as the Excessive Deficit Procedure (defined by the Maastricht Treaty, Art. 104) require that the debt and deficit treatment of PPPs follows the European System of Accounts (ESA). ESA 2010 is the latest

[72] See, EPEC, A Guide to Statistical Treatment of PPP, April 2016.

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 taken into account.

On a general level, statistical and accounting criteria determine 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 of the allocation of the demand and availability risks. On the other hand, if the private partner is the institution bearing the construction risk, then the financing should be classified as being off the government's balance sheet unless the government bears both the demand and the availability risks.

Figure 14: **Statistical treatment of PPP contracts. A brief summary**



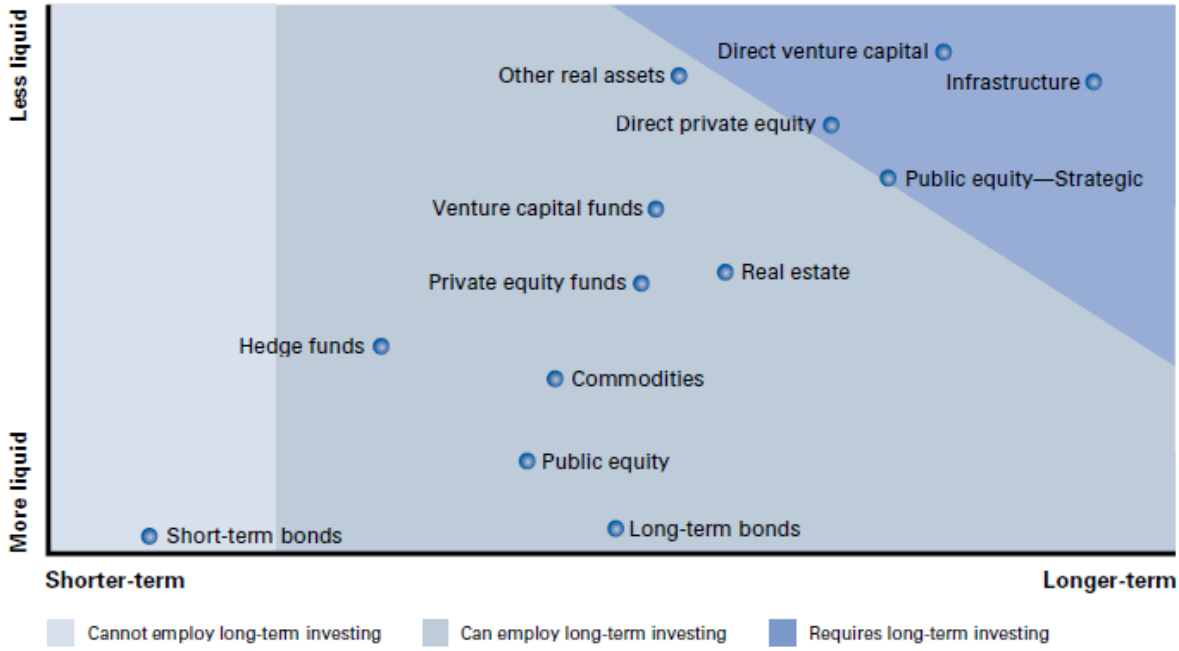
Source: Authors

Despite the reasoning above seeming rather straightforward, some critical issues exist in practice. The process of classification of a PPP usually takes 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.

6.1. FINANCIAL FEATURES OF INVESTMENTS IN SOCIAL INFRASTRUCTURE

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

Figure 15: **Liquidity and temporal horizons of different asset classes**

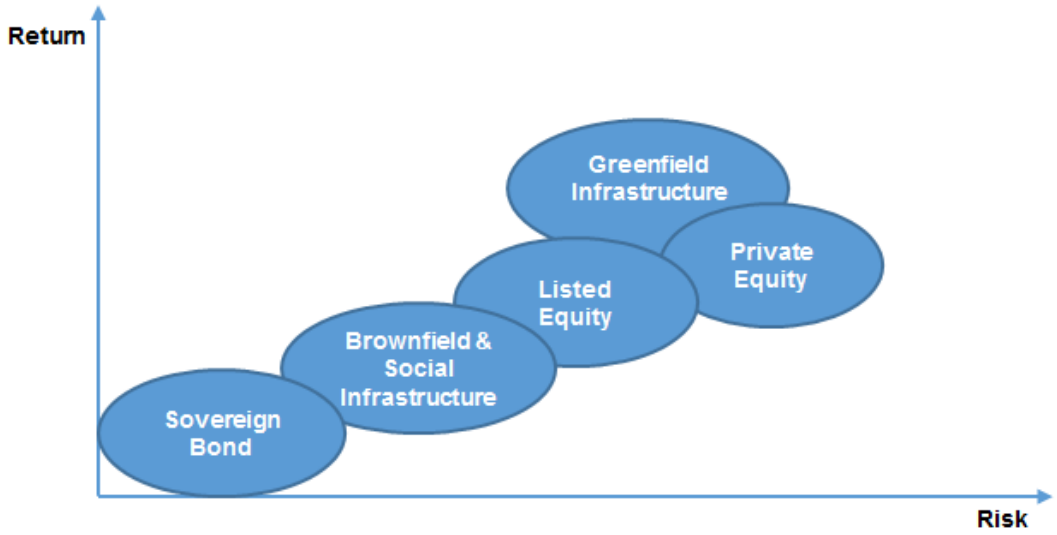


Source: OECD

- Generally, they tend to be an illiquid investment (see Figure 15) as they require large upfront costs and 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 materialise 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 USD 3.17 tn 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[73].
- When completed through PPP arrangements, they always remain at the low-risk end of project finance spectrum.

[73] 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: 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.

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 investments, as a sub-class of infrastructure investment, have some distinctive features[74].

The pivotal role of the public sector

Social infrastructure projects provide public infrastructure assets and services in exchange for a revenue stream mostly paid for by the public sector. Therefore, unlike many economic infrastructure projects, such as toll roads, ports, airports or power generation plants, which usually collect revenue 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. This means that social infrastructure investment risk is only slightly higher than sovereign bonds' risk[75].

Local focus

Traditionally social infrastructure is designed, developed, procured and operated by local bodies (public institutions) while realised 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 deals with the large majority of risks. Public procurement is a strategic instrument, extremely valuable when aimed at spreading innovation and digitalisation.

[74] 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.

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

Small average size of capital expenditure (capex)

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 entail a total capital investment of less than EUR 1 bn, with the great majority of projects below EUR 30 m. The small average size is good for spreading risks (portfolio diversification), but it reduces cost synergies during the structuring and arranging phase.

High level of operating expenses related to capex

The total cost of producing and distributing public services is usually higher than the capex related to constructing hard infrastructures. It is important to highlight that – in the value-chain of producing public services[76] – 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 in producing 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 large concentration of risks. The potential for higher portfolio diversification makes social infrastructure investment particularly attractive to investors.

Bundling of projects

To overcome the potential small-average capex size 'bottleneck' while preserving the sought-after portfolio diversification, a proper solution could be the efficient "bundling" of similar social infrastructure projects. In fact, when bundled into a single, larger procurement, a beneficial structure can be implemented to address (i) a group of similar assets across multiple sites, (ii) an assortment of different assets at a single site, or (iii) different assets across multiple sites. In addition, the bundling of similar assets can save on design and construction costs as similar materials can be used and bought in bulk. More standardised design and construction processes also create the opportunity to save on long-term maintenance due to similar replacement parts and equipment being used.

The low volatility of returns

Availability payments from the public sector are usually agreed beforehand and tend to be inflation-linked. Predictable and steady real returns are attractive for investors.

Low correlation to other assets

The "public" nature of social infrastructure investments often makes them less exposed to market risk and to systemic risks within capital markets.

[76] Social infrastructure investments are key but the remaining parts and their impact on public budgets cannot be forgotten. For example, when accounting for the production of public services in the education and/or the health sector, out of EUR 100 paid in public expenditure each year, probably EUR 8-15 accounts for the maintenance and amortisation of the social infrastructure investments while the remaining EUR 85-92 account for the salary payments of teachers and/or doctors, and to material and organisation costs. Nevertheless, social infrastructure investments are key for the production of an appropriate quantity and quality of public services (modern, updated, connected and energy-efficient buildings and equipment will enable future-proof public services). On the other hand, an efficient and newly built social infrastructure could prove to be useless if the public financial resources needed to operate it are not available.

Potential attractiveness for large long-term investors

The characteristics illustrated above make investments in social infrastructure extremely appealing to large long-term investors, who are looking for steady inflation-indexed cash flows and 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 high active management costs for such modest levels of investment. Therefore, financial intermediaries are key for channeling 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 in 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.

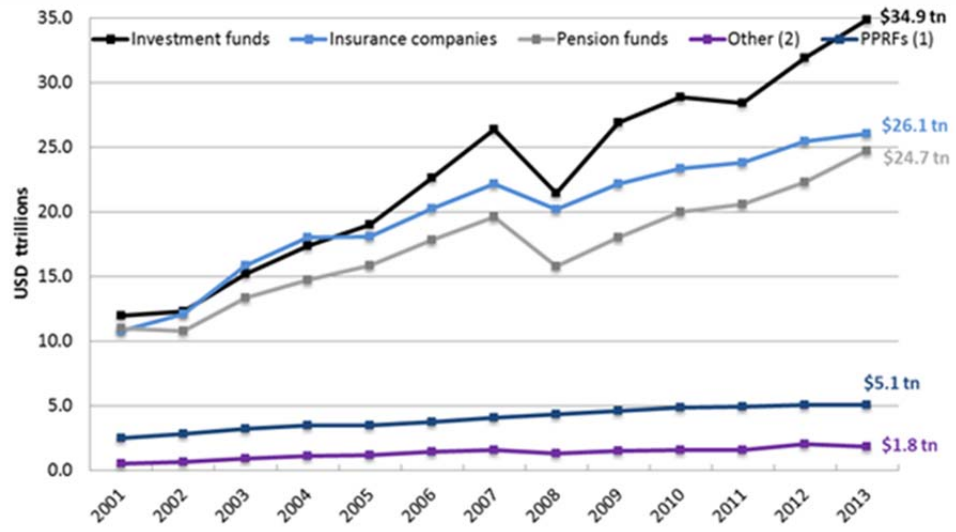
Uncertainty related to regulatory and political risks

Political and regulatory risks, often interlinked, are a key dimension of social infrastructure investment. Public policies might change over the extended life span of 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) of over USD 100 tn globally. Figure 17 shows the growth of assets for public and private pension funds, insurance companies and investment funds. In addition, about USD 7 tn 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 USD 26 tn (more than 1.35 times the region's GDP).

Institutional investors typically invest over a long investment horizon. Life insurance companies and pension funds usually have an investment horizon of over 10-15 years and 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 an important feature in that they hold large investment portfolios backing primarily long-term liabilities. An important characteristic of their liabilities is 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 from their meagre fixed income yields.

Over the past decade, institutional investors have been looking for new sources of long-term, inflation-protected returns. Trends in asset allocation show that portfolios are being gradually globalised, with increased interest in emerging markets and diversification into new asset classes. Increasing numbers of institutional investors are recognising the potential for infrastructure investment to produce 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 ensure that infrastructure is recognised globally 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, the European Fund for Strategic Investments or "EFSI" – together "IPE/EFSI") 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 will apply even more to social infrastructure investments. 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 important to set favourable conditions for issuing 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 possibly be 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 accounting for 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 for a sufficient supply of suitable, investable infrastructure assets. Far-reaching 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 & BANKS

6.3.1. Prudential & accounting standards

The Financial Stability Board (FSB) has promoted international financial stability and provided G20 finance ministers and heads of state with studies and recommendations since its inception after the 2009 G-20 London Summit. It represents G20 leaders' first major institutional innovation, and has accomplished several important tasks in cooperation with the IMF, the World Bank and the WTO[77].

FSB members have focused on the possible unintended consequences of regulatory reforms, which may affect long-term financing investments. These are as follows[78]:

I. Possible negative effects of Basel III on long-term bank credit;
II. Possible 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. As regards accounting standards, the possible introduction of an additional category for financial assets, which does not fall within the definitions of amortised cost or fair value;
V. Asymmetries in the application of the regulation and consequently in its impact on national and/or regional financial systems.

To mobilise these investors, we need the FSB and regulators at the highest level to analyse the regulation on the financing of infrastructure in a more focused way. This is the only way they will be able to decide whether certain recalibrations are needed within global accounting and regulatory frameworks to correct any excessive penalisation that is not justified by a correct and objective probabilistic analysis of the risks underlying certain classes.

The G-20 Infrastructure Data Initiative

The EIB and the Long-Term Investors Club (LTIC) have tabled a proposal to the German Presidency of the G20 that work be carried out to set up an infrastructure database that will require a collective effort. The EIB has worked together closely with the Global Infrastructure Hub, the OECD and the Long-Term Infrastructure Investors Association (LTIIA) and LTIC members to determine the best way forward. In connection with the G20-OECD Task Force on Institutional Investors and Long-term Financing (the G-20-OECD Task Force), a workshop on data collection

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

[78] 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, organised by the China Development Bank on 27 May 2016 in Beijing.

for long-term investment was held on 10 May 2017. Discussions resulted in a number of policy and industry initiatives designed to improve understanding of infrastructure and long-term finance, focusing on microeconomic data sources. (See the forthcoming OECD paper, Addressing Data Gaps, 2017)[79].

A new joint project, the Infrastructure Data Initiative, focuses on data gathering and tackling data gaps. Its aim is to establish a centralised repository of historical long-term data on infrastructure. The aim is to mobilise the information held by Multilateral Development Banks (MDBs) and Development Financial Institutions (DFIs), the private sector and governments to establish a central repository that will make this information accessible, as a public good, to policy-makers, regulators, investors and researchers.

The Task Force mandated the OECD, together with the EIB and Global Infrastructure Hub (GIH), to develop a plan to launch a project including a new information template to gather financial and non-financial data on infrastructure projects (qualitative information that captures the social, environmental and governance dimensions). This project, which was developed jointly, was addressed to the Argentinian Presidency of the G20 for consideration as part of next year's plan and presented at the Task Force meeting in November 2017.

The goal is to set up a new Infrastructure Asset Class Database containing project long-term performance data. This central repository will be able to create the basis to support the development of infrastructure performance benchmarks. The initiative is also designed to develop best practice and standardised data collection methods which the G20 could consider endorsing. The proposal aims to reduce the fragmentation of initiatives in the infrastructure space, significantly improving access to data as a public good and improving analytical research so as to inform decisions on infrastructure projects.

The data collection efforts described in this proposal would be used in various interrelated areas of research:

- Financial performance benchmarks, including new benchmarks for investment profitability metrics, such as the return on assets and the return on equity and debt; these also analyse risk (default rates and recoveries) and are measured over the project's life-cycle.
- Economic and financial viability – impact evaluation at project/asset level (including utilisation performance (subsequent and prior analysis)/construction costs and delivery performance (subsequent and prior analysis)).
- Environmental Social and Governance (ESG) Performance - sustainability and inclusive growth impacts and climate- related risks (transition risk).

6.3.2. Solvency II & infrastructure investment

The fact that Solvency II penalised investments in infrastructure was first acknowledged by a movement of long-term investors which argued that there was a need to establish 'Infrastructure as an

[79] This also relates to other types of data. For example, in 2017 the G20 Green Finance Study Group, exploring how to improve the availability, accessibility and relevance to the financial sector of publicly available environmental data, called on the UN Environment Programme and the OECD to develop a catalogue of datasets relevant to financial decision-making. Publicly available environmental data are environmental data useful for financial analysis that are reported by non-corporate entities such as government agencies, international organisations, non-governmental organisations and science institutes. They should be distinguished from corporate disclosures, which are covered by voluntary and mandatory reporting regimes, including, most recently, the recommendations of the FSB Task Force on Climate-Related Financial Disclosure.

Asset Class'[80]. This movement, which attracted increasing support over time, called on regulators to revise risk calibrations for infrastructure assets[81].

In February 2015, the Commission requested technical advice on infrastructure from the European Insurance and Occupational Pensions Authority (EIOPA). After receiving the advice requested, the Commission adopted, on 30 September 2015, an amendment to the regulation. The amendment was designed to reduce the capital requirement for insurers' infrastructure investments if such investments complied with specific qualifying criteria. These criteria are intended to ensure that infrastructure investments have a sound risk profile as regards their resilience to stress, the predictability of cash flows and the protection provided by the contractual framework.

In summary, the new regulation[82], 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 contained no revised risk calibrations for infrastructure corporates.

Infrastructure projects and infrastructure corporates refer to different investment phases. According to the Commission's definitions[83], 'infrastructure projects are entities that typically set up a new project which involves the construction phase. Infrastructure corporates are entities that have matured into the operational phase beyond the construction phase.

As it became clear that the proposed amendments to the regulation penalised infrastructure corporates, the Commission requested and obtained technical advice from the EIOPA on 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 to infrastructure projects and infrastructure corporates alike.

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

Table 9: **Equity risk calibration**

Asset class	Equity risk calibration
Type 1 (listed equity)	39 %
Type 2 (unlisted equity)	49 %
Qualifying infrastructure projects	**30 %**
Qualifying infrastructure corporates	**36 %**

Source: various authors, on the basis of the articles and directives mentioned.

[80] See: Bassanini, F., del Bufalo, G., Reviglio, E. (2011), Financing Infrastructure in Europe Project Bonds, Solvency II and the 'Connecting Europe Facility', article written for the 2011 Eurofi Financial Forum.

[81] Focarelli, D. (2017), Why insurance regulation is crucial for long-term investment and economic growth, a paper written for ELTIF, Assonime and Oxford University, and references therein.

[82] 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.

[83] Commission Staff Working Document, Impact Assessment Accompanying 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).

The above risk calibrations for listed and unlisted equity investments in qualifying infrastructure projects imply reductions of 23 % and 39 % respectively, 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 borrower's assets, whereas lending to infrastructure corporates is usually unsecured. It follows that infrastructure corporates are slightly riskier than infrastructure projects, and the risk calibrations reflect the difference in risk.

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 way of an example, the table below shows the risk calibrations for a 10-year debt investment under the different scenarios:

Table 10: **Debt risk calibrations for a 10-year bond**

	AAA	AA	A	BBB	Unrated
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: various authors, on the basis of the 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 %, a 29 % reduction compared to non-infrastructure debt investments with 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 %, a reduction of 25%84 compared to non-infrastructure debt investments with the same rating and term (again, 10.5 %).

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

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

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: various authors, on the basis of the 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 %, a 33 % reduction 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 %, a reduction of 25 %[85] compared to non-infrastructure debt investments with the same rating and term (again, 30 %).

The above-mentioned tables and examples highlight how the normative process has helped correct a previously penalising regulatory framework for infrastructure. Although more may be done, the normative process is ongoing and ready to address areas which still require regulatory intervention. Social infrastructure may be one such, and further regulatory work on this type of infrastructure cannot be ruled out. Indeed, different typologies of infrastructure may be assigned different risk calibrations, according to the different risk profiles they entail. The Commission[86] recognises social infrastructure as a relatively safer 'asset class', as the 'revenues are usually availability based'. Social infrastructure may thus deserve lower risk calibrations.

6.3.3. Lack of pipelines & the role of Technical Assistance

One of the main investment 'bottlenecks'[87] is the difficulty of establishing a reliable pipeline of projects (an adequate supply of suitable, infrastructure assets open to investment)..

Appropriate advisory and technical assistance services can help public administration expand its capacity to prepare, develop and implement projects. Such capacity is sometimes constrained by lack of skills, especially where small and medium-sized public works at local level are concerned.

[85] This is by construction, as the reduction in risk calibrations is generally about 25 % for all maturities and all credit quality steps.

[86] Commission Staff Working Document, Impact assessment accompanying 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).

[87] '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.

Another significant bottleneck that curbs the capacity to build a reliable pipeline of projects is structural in nature, depending on government reforms in various key sectors.

Structural bottlenecks needing government action include items such as the lack of:

- political and legislative stability;
- fast, streamlined administrative procedures;
- light regulatory and bureaucratic burdens;
- a fast, reliable judicial system;
- an efficient and tech-savvy public administration;
- an efficient multi-level government system.

In general, red tape and uncertainties in the regulatory framework for investment need to be eliminated.

Typically, public administrations' 'bottlenecks' include:

- a lack of effectiveness;
- low digitalisation;
- inefficient administrative capacities in multi-level government systems:
- complexity and fragmentation between governance layers, leading to inconsistencies in the decision-making process;
- excessively long procedures;
- a fragmented legal framework and political and regulatory uncertainties.

The need for advisory services arises from clearly identified gaps that fall into the following three groups:

1. Availability:
   - budget constraints;
   - geographical dispersal of administrative bodies;
   - barriers to cross-border service provision due to different jurisdictions.
2. Access:
   - inability of public administrative bodies to choose the best service providers;
   - inability of public administrative bodies to formulate the request, when 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' falling into the following categories:

- project identification;
- project preparation;
- financial structuring;
- procurement and state aid;
- project implementation;

- capacity building;
- communication and awareness-raising;
- in case of PPP and PFI schemes, advice as regards accounting treatment for Eurostat purposes;
- advice on use of European Structural Funds and other EU grant schemes, as well as on blending.

Capacity building, project preparation and financial structuring support appear to be the most important categories of services. 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 identifying and implementing projects, procurement and state aid, and communication and awareness-raising.

Although technical assistance (TA) service providers clearly bear no direct responsibility for structural bottlenecks, they could still have a vital role to play in putting forward suggestions and recommendations to central and local government and the EU on specific issues that could help streamline the process of infrastructure planning, projecting, financing, construction and monitoring. Given the potentially institutional nature of TA providers, this special activity could be formally included in their mission and activity.

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

Institutions and/or agencies that provide TA already exist at European, national and regional level in most EU countries. However, all EU countries have stated that these are not sufficiently effective or large enough to cover the growing demand for assistance. The problem is especially acute at local level, the level responsible for most medium and small-scale public works which, as we have argued, includes most social infrastructure.

This report recommends vigorous EU-wide efforts to help mobilise national and/or regional networks to provide appropriate advisory services in all EU countries. This initiative should be extensive enough to reach the very large numbers of administrations that are collectively responsible for over two thirds of total EU-28 public investment.

Such an initiative should be based on a system built on a few general principles to be agreed by all EU countries:

1. TA providers should have a strong link with the European Investment Advisory Hub (EIAH), building on an efficient network including national promotional banks and institutions (NPBIs) to provide strategic assistance and promote capacity building and standardisation:
    a. TA providers should operate on the basis of a public mandate, and the task should be given to one or more public independent institutions operating between public administrative bodies and the private sector;
    b. Each country should be responsible for organising the TA network at national level, for example, by conferring this responsibility to the relevant National Promotional Institution (NPI), either directly or together with any other national or regional agencies

(existing or newly created). Alternatively, any other solution which would fit their existing system and specific jurisdiction could be chosen.

2. TA providers should be large enough to cover one-to-one client relationships; they should not merely take a desk-top approach;

3. TA providers should have plenty of skilled staff engaged specifically for this kind of activity, to avoid the need for public-sector staff who lack appropriate training to be transferred to the TA provider;

4. TA providers should take account of European best practice, as implemented by the EIB and the EBRD, for instance, or of national or regional best practice;

5. TA providers should be independent; they should be perceived by the public administration as 'institutional facilitators' and by the private sector as 'reliable partners'.

The European Investment Advisory Hub

Set up in September 2015 under the Investment Plan for Europe, the European Investment Advisory Hub (EIAH) is a tool designed to improve Europe's investment environment and the quality of investment projects.

The EIAH is designed to provide project promoters with a single entry point to obtain advisory and technical assistance, enabling them to identify, prepare and develop investment projects across the EU.

The Hub comprises:

1. a single point giving access 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 for leveraging, sharing and disseminating expertise among the EIAH’s partner institutions and beyond;

3. an instrument to assess and address unmet needs by improving 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 Commission. Its operations are financed jointly from the EU budget (75 %) and the EIB (25 %), and its yearly resources are up to EUR 26.6m until 31 December 2020. It is managed by the EIB.

The Hub's services are available to project promoters, public authorities and private companies, which can:

- receive technical support to help get their projects started, or make them investment-ready,
- be given advice on suitable funding sources, and
- access a wide range of technical and financial expertise.

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

By the end of November 2017, the EIAH had received over 610 requests from all the EU countries. Of these, about 480 were directly project-related, and more than the half came from the private sector.

The EIAH builds on the expertise and the existing advisory services provided by the EIB and the Commission, such as 'fi-compass' or JASPERS. It also relies on the expertise of national promotional banks and institutions and on the managing authorities of the European structural and investment funds.

Currently, it 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 together closely with a network of NPBIs to provide comprehensive and complete advisory services nationally and regionally, as well as at EU level.

As of November 2017, 22 NPBIs have signed a Memorandum of Understanding to establish cooperation with the EIB on the EIAH. A call for expressions of interest for the delivery of decentralised services in priority areas by interested NPBIs was 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.

FUNDING SOURCES, ACTORS & INSTRUMENTS

7.1. THE ROLE OF EU RESOURCES & FINANCIAL INSTRUMENTS

7.1.1. European Structural & Investment Funds

As mentioned in previous paragraphs, most social infrastructure is publicly funded. Sources include EU countries' resources and resources from the EU budget. These resources, deployed under different funding arrangements - grants, loans, guarantees, subsidies and prizes - are particularly valuable, as they can both unlock additional public and private resources and enable projects to be implemented that would not otherwise have been funded, owing to low returns or a scarcity of capital.

A substantial share of EU budget is channelled through five funds jointly managed by the Commission and the EU countries and totalling EUR 443.2 bn (2014-2020). These are the European Structural and Investment funds (ESI funds):

- **European Regional Development Fund (ERDF)** – EUR 199.4 bn – improves economic and social cohesion in the EU by correcting imbalances among its regions.

- **European Social Fund (ESF)** – EUR 88.8 bn – supports employment –related projects throughout the EU and invests in Europe's human potential.

- **Cohesion Fund (CF)** – EUR 63.6 bn – aims to reduce economic and social disparities and promote sustainable development. This fund is deployed in EU countries with a per capita gross national income (GNI) less than 90 % of the EU average. Over 2014–2020, the Cohesion Fund can be used to 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 bn – addresses the challenges facing the EU's rural areas.

- **European Maritime and Fisheries Fund (EMFF)** – EUR 6.4 bn – helps fishermen to adopt sustainable fishing practices and coastal communities to diversify their economies, improving quality of life along European coasts.

ESI funds are assigned to EU countries and allocated through national, regional and cross-border programmes. These programmes are included in the partnership agreements that each country drafts in collaboration with the Commission to specify how the funds will be deployed.

The first three of these funds may be used to fund social infrastructure projects. The ERDF, the largest of the funds, is potentially the most suitable for funding social infrastructure, as the regulation governing it lists 'health and social infrastructure' among its investment priorities[88].

The ESF's four thematic objectives are[89]:

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

1. 'promoting sustainable and quality employment and supporting labour 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, either among the thematic objectives or in the regulation governing the fund. However, they could potentially lie within the scope of points 2, 3 and 4 above.

In summary, of the ERDF, ESF and CF, the first two (especially the ERDF) appear the most promising in terms of funding social infrastructure projects.

The regulations governing these funds all include prior and subsequent conditions, which have grown more stringent over the years. Sometimes, social infrastructure investments planned and partly co-financed by the regions have had their access to cohesion funds blocked by the macroeconomic prior conditions imposed by central government in efforts to secure sound economic governance. The condition to be adopted for the use of the cohesion funds and the blending of financial resources beyond 2020 should thus be designed carefully, so as to avoid making regions pay unduly for fiscal consolidation at national level.

7.1.2. Blending

Although EU funds can be allocated through a variety of instruments (interest rate subsidies, loans, guarantees, risk capital, prizes, etc.), grants are undoubtedly the most common one. They can be used to fund a project in its entirety or deployed as just part of the funding package. In the latter case, EU grants are combined with other grants, and, especially, financial instruments (loans, guarantees or equity) from public and private financiers through a mechanism known as 'blending'. The intuitive rationale for this instrument is to make a project more bankable by reducing risk exposure of potential investors for projects considered strategically important. The general purpose of blending grants with other financial instruments is to increase the impact of the financial support provided. Blending a grant with another financial instrument (or budgetary guarantee) may enable a previously economically non-viable project with considerable socioeconomic benefits to be implemented, when it might otherwise have faced difficulties in securing financing. By making financially unfeasible or sub-investment-grade projects bankable, blending may provide a solution to the problems posed by "the principle of additionality" that now underpins EU policies. Blending can also prove particularly useful in sectors or areas characterised by market failure (as may be the case with 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 infrastructure.

European Fund for Strategic Investments (EFSI)

While making efficient use of EU budgetary resources – in the form of an EU guarantee to mobilise finance for projects with high EU policy relevance from the EIB Group and other public and private funds – the EFSI also provides for mixed contributions drawing on a range of 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), which may or may not involve EU or national grants,

[89] 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.

may be found in EFSI operations approved under the Infrastructure and Innovation Window or under the SME window. EFSI operations that present blended/combined sources of financing, with NPBI involvement and the presence of EU funds, are designated as investment platforms.

European Structural and Investment Funds (ESIF)

Although ESIF funds are mainly disbursed as grants and implemented in shared management with EU countries, a proportion can be deployed through financial instruments developed and implemented by EU countries. This possibility was introduced in the 2014-2020 Multiannual Financial Framework (MFF). While adopting the Omnibus regulation (see below) will make it easier to combine these different modes of funding, various operations combining EU funds under direct and shared management with EIB lending (through EFSI, as well as by other means) have already been approved.

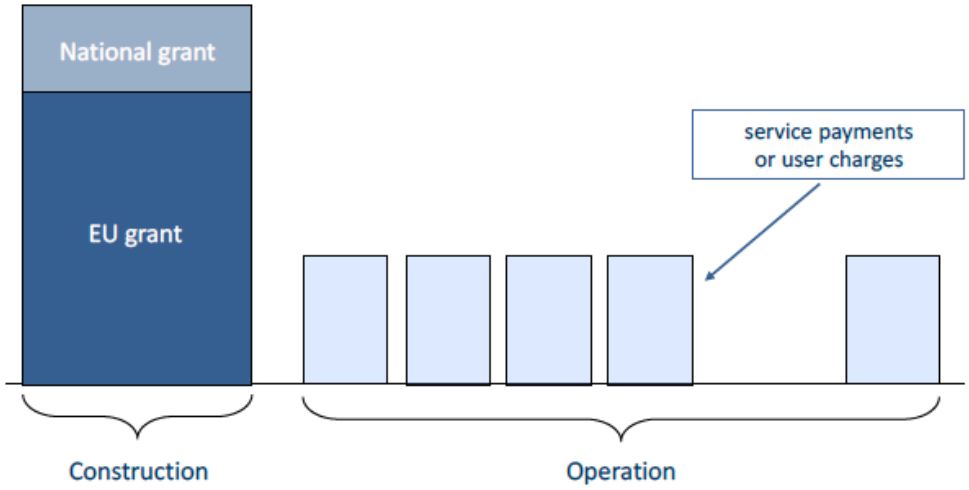
In the area of ESIF funds, the term 'blending' has been used to designate combinations of ESIF funds with private financing resources in a public-private partnership. The CPR rules allow for two possible ways of combining ESI funds with other forms of financial support. Firstly, certain types of grants (interest rate subsidies, guarantee fee subsidies or technical support) and financial products can be combined within the same operation and treated as a financial instrument. (Other types of grants cannot be presented under a single financial instrument operation.) Secondly, the grant operation and the financial instrument operation can be combined to finance the same investment at the final recipient stage, but as separate operations. National public and private co-financing contributions under programmes may be provided through the financial instrument (fund of funds or financial intermediary) or through the investment in the final recipient.

While making efficient use of EU budgetary resources in the form of an EU guarantee to mobilise finance for projects with high EU policy relevance from the EIB Group and other public and private funds, the EFSI also provides for mixed contributions drawing on a range of 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), which may or may not involve EU or national grants, may be found in EFSI operations approved under the Infrastructure and Innovation Window or under the SME window. The EFSI operations that present blended/combined sources of financing, with NPB involvement and the presence of EU funds, are designated as investment platforms.

Although this looks convenient in theory, blending has so far been used relatively little for PPP projects. According to the European PPP Expertise Centre (EPEC), fewer than 4 % of PPP projects during the 1994-1999 and 2007-2013 programming periods involved blending. EPEC attributes this to:

- the grant procedures' relative inflexibility (mostly in terms of timing);
- risks associated with the impossibility of extending EU grant funding beyond the ongoing programming period;
- the lack of certainty about the level of the grant (leaving part of the funding risk in the hands of the procuring authority);
- the PAs' limited capacity to manage both procedures for EU grants and the PPP structure;
- the impossibility of linking the EU grant component to the availability fee.

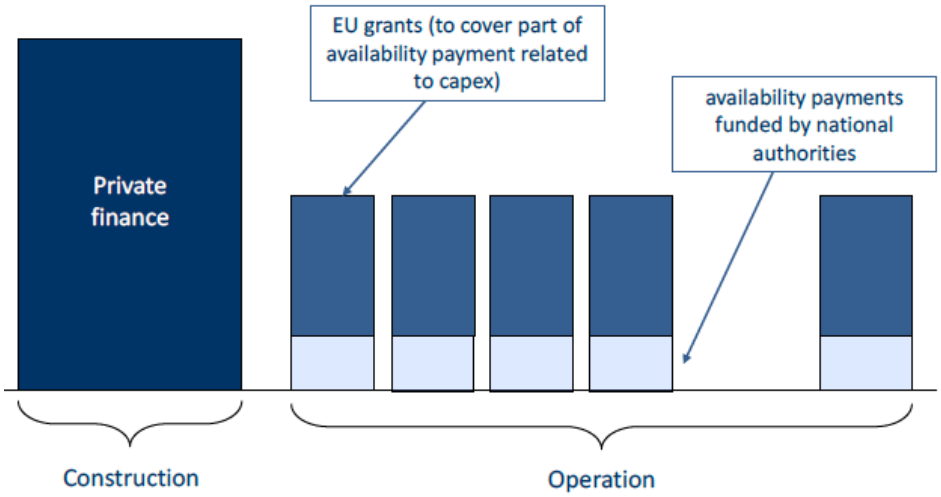
Figure 19: **EU grant as a contribution to capital costs in a construction-only contract**



Source: EPEC (2016)

New provisions were introduced in the 2014 – 2020 programming period, including some designed to remedy the obstacles referred to above. However, the possibility of extending the EU grant component in the operational phase as well may significantly increase the use of blending in PPP projects.

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



Source: EPEC (2016)

Of the five funds introduced above, ERDF and CF are the ones that could be eligible for blending. As ERDF is the one that might be most suitable for funding social infrastructure, blending within the ERDF is arguably the most relevant within the scope of this report. Following the new provisions referred to above, blending is expected to be used more often in PPP social infrastructure projects.

One of the key benefits of blending solutions is that they can catalyse private finance. By combining state guarantees and/or funding from development banks with institutional capital, which is usually more costly, investment platforms help unlock significant flows of non-public money. This enables

many more projects to attract investment than would otherwise be possible. For example, EFSI (mentioned below) is set to unlock up to EUR 15 of private capital for each EUR 1 of EIB funding and EU guarantees. Investment platforms with capital blending can be particularly effective in expanding the financing of new social infrastructure. A material differential between the cost of capital that development banks can provide for this purpose and the cost of institutional capital suggests that there would be a strong multiplier effect[90].

7.2. THE EIB'S ROLE

Owned by the EU countries, 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 both within Europe and in regions with greater investment needs. It develops its business mainly through its longstanding lending activity, but also provides guarantees and carries out equity investments. Moreover, the EIB plays a particularly valuable role in attracting financing from other private and public resources, implementing financing from the EU budget and advising administrative bodies throughout the project lifecycle. It has four priorities:

(i) innovation and skills,

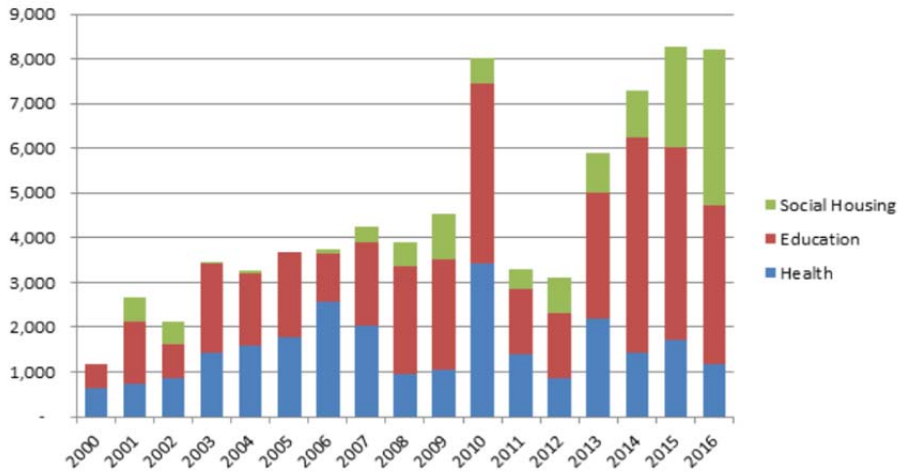
(ii) access to finance for smaller businesses,

(iii) climate and environment, and

(iv) infrastructure. In 2016, the EIB provided EUR 19.7 bn to support infrastructure investment, mainly within the EU.

Social infrastructure investment in the three sectors examined in this report (health, education and social housing) represents a key share of the Bank's total infrastructure investment. Investment in these sectors has risen since the beginning of the century, while its sectoral composition has changed significantly. While in 2016 investment levels in health infrastructure were only slightly above 2000 levels, investment in education infrastructure has grown significantly in the last three years. Finally, although the EIB started to invest in social housing relatively recently, this represents a fast-growing sector.

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



Source: EIB Group (2017)

[90] The EDHEC Infrastructure Institute estimates historic long-term returns to equity from investing in greenfield social infrastructure in Europe at 10-11 %. Development banks might be able to provide the same finance at lower rates.

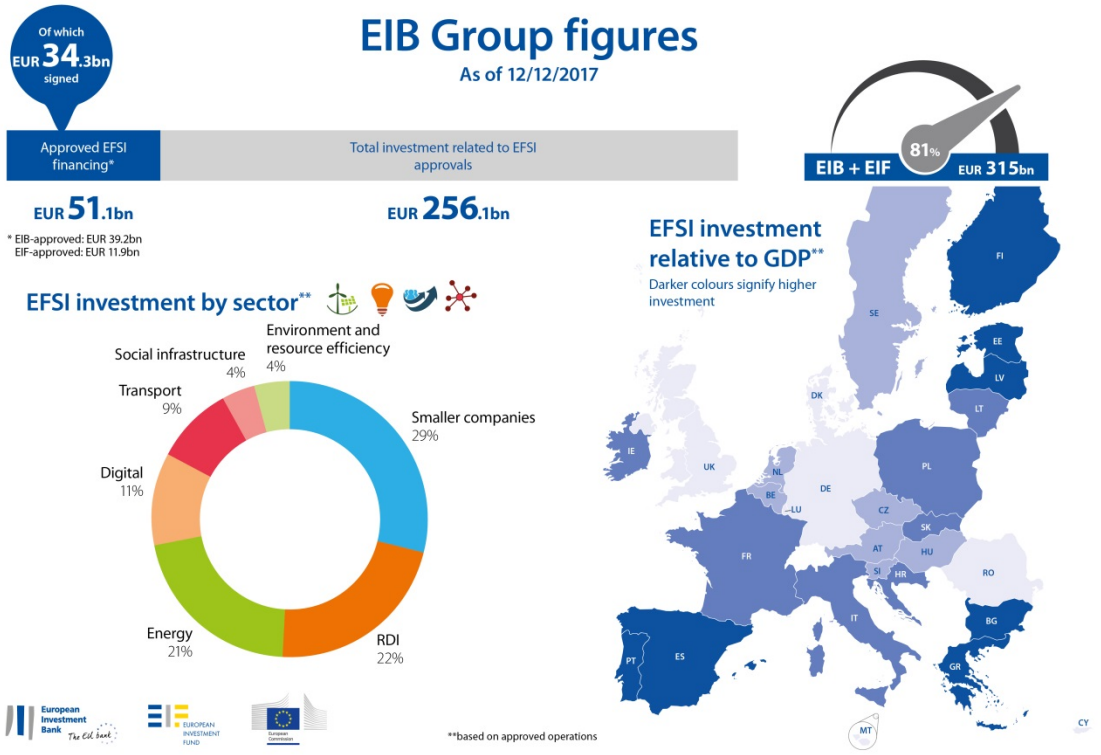
Beyond its lending activity, the EIB also contributes a small amount of resources to investment in social infrastructure; it commits roughly EUR 250 m to equity infrastructure funds which invest in the social infrastructure sector.

Finally, the EIB's traditional lending activity is also part of its 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 set up jointly by the Commission and the EIB Group (EIB and EIF) under the Investment Plan for Europe to help bridge the EU's current investment gap by mobilising private investment in infrastructure, innovation and SMEs. The idea behind the initiative is to boost strategic investments through a leverage effect based on an EU guarantee backing 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. The EFSI has a total risk-bearing capacity of EUR 21 bn, comprising EUR 16 bn under a guarantee from the EU budget and EUR 5 bn from the EIB's own funds. The EFSI aims to mobilise roughly EUR 315 bn in private and public investments.

Figure 22: **EFSI – state of implementation – Dec. 2017**



Source: EIB Group (2017)

Social infrastructure is one of the EFSI's priority sectors. A broad range of projects are eligible for support, such as the construction, expansion or refurbishment of schools and universities, clinics and hospitals, and affordable and social housing. For instance, under the EFSI the EIB has financed the

design, building, financing, maintenance and facilities management of 14 primary care centres in different parts of Ireland, the construction of a new campus for the Nova School of Business and Economics in Portugal, and the building of affordable houses in Poland. In addition, under the EFSI SME Window, the European Investment Fund has supported a payment-by-results scheme in Finland, designed to enable refugees and migrants to find jobs.

However, currently only 4 % of approved EFSI financing supports social infrastructure projects in the EU. Given the wide investment gap identified in social infrastructure, a 4 % allocation is still relatively low compared to needs, even if further projects in the affordable housing area are classified under EFSI´s resource efficiency or energy categories, which may add further percentage points. EFSI financing is generally demand-driven, and the Investment Plan for Europe establishes no fixed sector quotas. For the share of social infrastructure to increase in future years, there needs to be an increase in the pipeline of viable projects in the social sector, which is currently lagging behind other sectors. This increase would also help extend the Investment Plan under the 'EFSI 2.0'. Such an extension would extend the EFSI timeline up to 2020. The investment to be triggered is expected to increase to over EUR 500 bn, based on an increased EU guarantee of EUR 26 bn and a higher EIB contribution of EUR 7.5 bn.

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. These are public-private co-investment arrangements, structured in such a way as to catalyse investment in a portfolio of projects (as opposed to individual projects) with a thematic or geographic focus.

Investment platforms are a means to aggregate financing so as to support groups of investment projects, cut transaction and information costs and enable risks to be shared more efficiently among investors.

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

(a) national or sub-national platforms comprising several investment projects within a particular EU country;

(b) multi-country or regional platforms made up of partners from several EU or non-EU countries that are interested in projects in a given geographic area;

(c) thematic platforms bringing together 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 organisations and private investors or partners. The EIB can advise on setting up platforms through the European Investment Advisory Hub (EIAH). It can also support such platforms financially through the EFSI.

Investment platforms can be useful for blending resources and bundling projects. Under such platforms, each smaller or riskier project must be assessed as technically and economically viable if it is to be considered for financing by an investment platform under the EFSI.

An EFSI investment platform can provide financial products (e.g. loans, equity, guarantees) to projects that have potential to generate revenue or save costs but are generally too small and/or too risky to be financed solely by private investors. Co-investment in investment platforms can boost cooperation between the EIB, NPBIs and other interested parties.

As of November 2017, over 30 investment platforms have already been approved for EFSI backing. There are also a number in the social sector, including the two examples provided in Annex 5.

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

The CEB is a multilateral development bank with a social mandate. It promotes social cohesion across Europe by providing financing and technical expertise for investment projects that have a major impact on people's lives. The CEB's operations span a broad range of areas, including social housing, health, education, job creation in MSMEs, energy efficiency, environmental protection and judicial infrastructure. Its investments in social infrastructure help provide EU citizens with affordable and sustainable essential services. It also responds to emergency situations (such as refugee/migrant crises and natural/ecological disasters) and helps improve the living conditions of the most vulnerable.

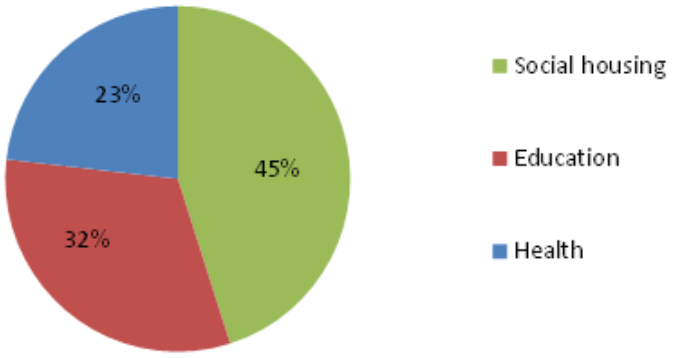
In the HLTF priority sectors, CEB lending totalled EUR 14 bn in 2000-2016 (see Figure 23 below). The breakdown is as follows:

- EUR 6.2 bn helped provide affordable social housing for people on low and middling incomes and retrofit existing housing stock;

- EUR 4.4 bn was invested in preschools, primary and secondary schools and universities, plus scientific research and development programmes;

- EUR 3.2 bn funded the building, refurbishment and equipment of healthcare facilities (including those that specialise in helping vulnerable groups), and various research and development programmes.

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



Source: Council of Europe Bank (2017)

7.4. THE ROLE OF NATIONAL PROMOTIONAL BANKS & INSTITUTIONS[91]

NPBIs [92] are national financial institutions designed to provide medium and long-term capital for productive investment. They have historically played an important role in funding social infrastructure and in shared cross-border initiatives at a pan-European level and beyond.

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

More generally, they continue to play an important role in financing the real economy (primarily in terms of long-term, patient, capital investment). In the event of market failure, NPBIs can partially fill the gap by using their professional banking and investment skills and risk absorption capacity, and by acting as brokers of developmental/transformational financing.

Moreover, they have expanded their role thanks to their credibility as intermediaries in financial flows. There are several reasons for this: they have a long history (track record); they behave in a predictable, non-volatile way; they remain untainted by financial crisis abuses; they are known to structure transactions carefully; they have in-depth local knowledge; they benefit from preferred creditor status; they have political weight; and they have provided returns that are consistent with the risk (and the market) concerned.

7.5. SOCIAL BONDS

Social bonds (SBs) are bonds of any type whose proceeds are used exclusively to finance or refinance, in part or in full, new and/or existing eligible social projects, and which are aligned with the four core components of the Social Bond Principles (SBPs)[93].

Currently, there are four main types of social bonds on the market; additional types may emerge as the market develops:

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 SBPs, in which the credit exposure in the bond is to the pledged cash flows of the revenue streams, fees, taxes, etc., and whose proceeds go to related or unrelated social project(s).
3. **Social project bond**: a project bond for a single social project or multiple social projects, where the investor has direct exposure to the risk which the project(s) entail(s), with or without potential recourse to the issuer, and which is aligned with the SBPs.

[91] See Annex 6.

[92] European Commission (2015), 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, COM(2015) 361 final.

[93] See: https://www.icmagroup.org/Regulatory-Policy-and-Market-Practice/green-social-and-sustainability-bonds/social-bond-principles-sbp/

4. **Social securitised bond**: a bond collateralised by one or more specific social project(s), including, but not limited to, covered bonds, ABS, MBS, and other structures; and aligned with the SBPs. The first source of repayment is generally the cash flows of the assets.

Having started life as an offshoot of the green bond category, SBs are proving that, though 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 the overall commitment to using proceeds for environmental social governance (ESG) purposes, while still developing as a distinct asset class.

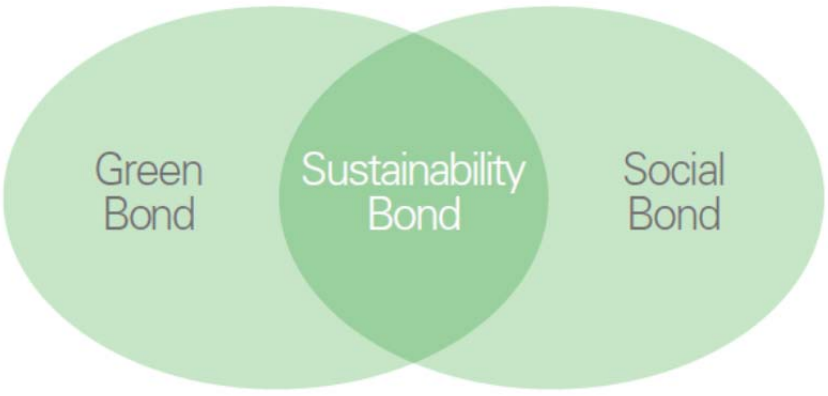
In 2007, green bonds were issued for the first time by two multilateral institutions, the European Investment Bank (EIB) and the World Bank. The wider bond market started to react after the first USD 1 bn green bond was sold by IFC in March 2013. The new impetus for sustainable fixed income instruments, targeting the growing constituency of socially responsible investors, soon gained momentum. Between 2008 and 2012, issuers brought USD 2.5 bn of green bonds to market, but in 2013, issuances took an exponential leap, vaulting to USD 11 bn. New issuance trebled again to USD 35 bn in 2014 and rose to USD 42 bn in 2015. In 2016, approximately green bonds to the value of USD 31 bn were issued, with China alone issuing bonds to the value of about USD 11 bn.

Social and sustainability bonds, two categories developed more recently, have experienced remarkable traction of their own. In the first four years of their existence, almost USD 15.6 bn worth of these products were issued.

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 EUR 500 m in April 2017. The proceeds from this issuance will be used exclusively to finance social investment in social housing, education and job creation in micro, small, and medium-sized businesses. The launch has enabled the CEB to demonstrate its leading role in the social bond market, with plans for the annual issue of a social inclusion bond.

Looking at the different categories of sustainable financing (Figure 24), it is clear that green and social bonds overlap to create 'sustainability' offerings, which can cover either type 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 on from strictly environmental or social goals, sustainability bonds have a hybrid set of objectives that bridge green and social issues. For instance, previous issuances have included energy-efficient buildings for disadvantaged people and clean public transport with tramline extensions and bicycle lanes.

As the sustainable financing market has moved from niche to mainstream, investors have become increasingly keen to clarify that they are spending their money wisely, both financially and socially.

The Green Bond Principles (GBPs) provide essential information about these bonds, shedding light on their structure, documentation, monitoring and reporting.

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

This 'Guidance' was issued on 16 June 2016 as part of the 2016 GBP update. In 2017, it was integrated into and replaced by the Social Bond Principles (SBPs).

The Council of Europe Development Bank (CEB) has belonged to ICMA's social bonds working group since its inception in early 2016.

The SBPs 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.

The SBPs define social projects[94] 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)[95].'

The **SBPs** have four core components:

1. **Use of proceeds**: what defines a social bond is the fact that its proceeds are invested in social projects (including related and supporting expenditure, such as R&D spending), which should be appropriately described in the legal documentation about the bond. If the proceeds (or a proportion of them) are or may be used for refinancing, issuers are recommended to provide an estimate of the ratio of financing to refinancing. Where appropriate, it is also recommended that they clarify which investments or project portfolios may be refinanced, and what look-back period they expect for refinanced social projects (if this is relevant).

2. **Project evaluation and selection process**: The issuer of a social bond should inform investors clearly about:
   (i) the social objectives;
   (ii) the process by which the issuer determines how the projects fit into the eligible social project categories identified;

[94] 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 generation, including through SME financing and microfinance; (v) food security; (vi) socioeconomic advancement and empowerment.

[95] Examples of target groups include, but are not limited to, those that are: (i) living below the poverty line; (ii) excluded and/or marginalised populations and /or communities; (iii) vulnerable groups, including those made vulnerable by natural disasters; (iv) people with disabilities; (v) migrants and /or displaced persons; (vi) undereducated people; (vii) people who are not sufficiently well served by social services; (viii) unemployed people.

(iii) the related eligibility criteria, including, if applicable, exclusion criteria or any other process used to identify and manage potentially material social and environmental risks associated with the projects.

The SBPs encourage a high level of transparency and recommend an external review in addition to an issuer's process for project evaluation and selection.

3. **Management of proceeds**: The net proceeds of the social bond, or an equivalent amount, 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 SBPs encourage a high level of transparency and recommend that an issuer's management of proceeds be supplemented by using an auditor or other third party[96] to verify the internal tracking method and the allocation of funds from the social bond proceeds

4. **Reporting**: Issuers should collect, 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 any 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 SBPs 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 the impacts achieved are encouraged to include them in their regular reporting.

7.6. IMPACT INVESTING

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

Impact investing is commonly defined as "the provision of finance to organisations addressing social needs with the explicit expectation of a measurable social, as well as financial, return" "[97].. It grows

[96] The SBPs recommend that issuers use an external review to confirm the alignment of their social bonds, and that they publicly disclose external reviews. Such reviews might include:

1) Consultant Review: An issuer can seek advice from consultants and/or institutions with recognised expertise in social issues or other aspects of the issuing 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 refer to external criteria;

3) Certification: an issuer can have its social bond or associated social bond framework or use of proceeds certified 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 specialised 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 SBPs.

[97] http://www.oecd.org/sti/ind/social-impact-investment.htm

out of the need to optimize the alignment of risk, return and impact to benefit people and the planet and meet sustainability objectives. Impact investing has become an increasingly popular method of bringing purpose and capital together worldwide, since the establishment of a G8 Social Impact Investment Taskforce under the UK Presidency, in June 2013 in London. It has at present grown into a global movement headed by the successor Global Steering Group for Impact Investing, established as an independent organisation in 2015.

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

Both public and private actors, including governments and social sector organisations, and leaders from the world of finance, business, and philanthropy, are showing increasing interest in financial instruments that combine financial return with public value generation. This 'impact investing' is 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 expanded from USD 4.3bn in 2011 to USD 60bn in 2015 (GIIN, 2017), driven by a new generation of funds offering social and environmental impact alongside financial return. This has created a new paradigm focused on responsible, sustainable, thematic, or impact-first investments, in contrast to the traditional finance-only vs impact-only philanthropy.

Social finance is not new. Europe has a long tradition of it, dating back to the first cooperative and ethical banks. But, over the last 15 years, impact investing has grown - especially in the US, the UK, Canada and Australia - in response to the socially disruptive effects of the financial industry and the limits of the state in providing public services. Public sector leadership has played a vital role in the design and promotion of this new paradigm, and it has gone hand in hand with maturing social corporate responsibility. It was the global financial crisis of 2008 that propelled impact investing to really take off, and the trend peaked in 2013, when, during the British presidency of the G8, the British Government set up a special taskforce to set international standards. As a result, impact investing has become a viable possible way to fund social infrastructure.

Impact investing includes all types of capital funds, established by both the government and the private and philanthropic sector. They are increasing in number and size. In 2012 the British Government launched Big Society Capital, with GBP 600m in funds to promote the impact investing market. This is Europe's largest fund[98]. In 2015 the EIB set up a similar fund of funds, the Social Impact Accelerator, which is currently managed by the European Investment Fund (EIF)[99]. Portugal has set up a dedicated programme designed to have an impact on earmarking EUR 50m of ESF 2014 – 20[100]. 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.

Impact investing –- especially SIB – creates an opportunity to correlate investment in real assets with socioeconomic outcomes. There are already a few cases that show how such a correlation can generate a positive outcome. In July 2017, the EIB confirmed that it would be co-financing a PPP to extend and upgrade Treviso public hospital using an EFSI guarantee[101]. The developer committed all the savings

[98] https://www.bigsocietycapital.com/

[99] http://www.eif.org/what_we_do/equity/sia/index.htm

[100] http://inovacaosocial.portugal2020.pt/

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

generated by the concessionary cost of capital provided by the EIB to finance new health and education services. These, in their turn, will generate further value for the community, thereby increasing the overall value of the investment. This is the 'shared value' about which Michael Porter has theorised, putting into practice the commitment to ‘societal value’ as an investment criterion under the Juncker Plan.

To give a further example, the New Zealand Government has just commissioned a private contractor to design, finance, build and manage the Auckland South Correctional Facility[102]. The contractual payments are conditional to the success of the contractor in rehabilitating offenders. The contractor has in incentive to maximise public interest, in that this also maximises revenue. This is an example of payment by results, in which investment and infrastructure design are aligned with social service provision and outcomes that could be replicated for any other investment in social infrastructure.

Social Impact Bonds

Social impact bonds (SIBs) have been designed to raise private capital to finance innovative solutions in welfare services addressing the root causes of societal challenges, to support the development of strategic capacity in local government and to encourage a change management process through the aligned focus on outcomes of all partners. They relieve government of 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 their name, SIBs are not real bonds, as there is no guarantee that the principal will be reimbursed; rather, this depends on meeting targets set when the project begins. The first SIB was launched in 2010 in the UK, with the aim of reducing re-offending rates. Today, there are over 89 SIBs around the world, with a total value of around GBP 300m. Most are in the UK, with a few in the rest of Europe. In June 2017, the Finnish Ministry of Economic Affairs and Employment announced a new SIB to help migrants integrate into society; this was co-financed by EFSI and Epiqus, the private fund manager.

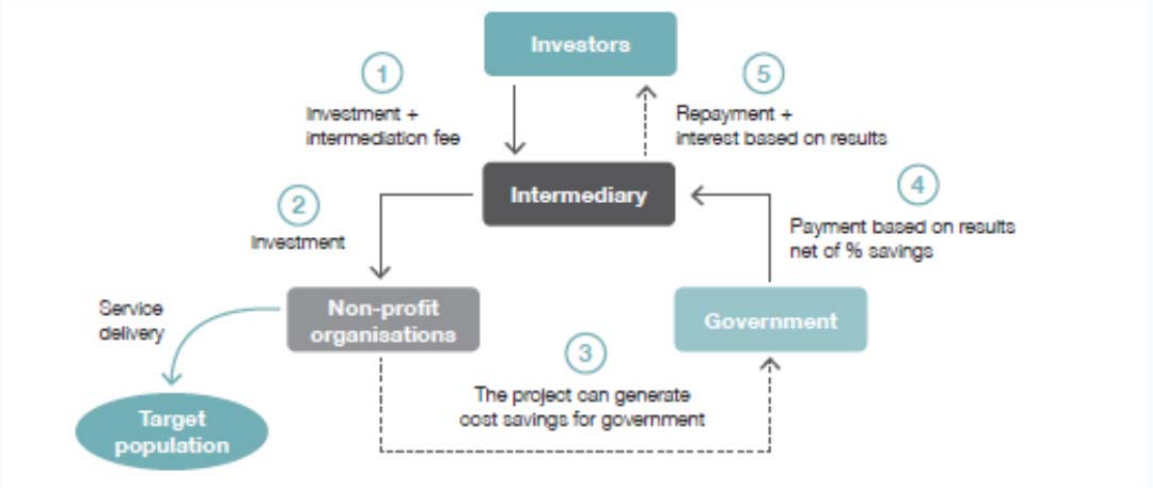
Social impact bonds enable government to link payment for the service provided to the community to the results achieved. This creates a virtuous circle and improves the quality of public spending.

Often the SIB finances the first test or pilot phase of an innovative measure developed by private or non-governmental bodies. If that proves successful, the measure may be adopted by the public sector on a larger scale. Investors supply the initial capital to an intermediary, which selects and finances the non-profit organisations providing the service. Only if the impact on the target population reaches the specified targets will the public authority pay the investors through the intermediary. This involves using a payment structure like that of an ordinary bond, i.e. comprising annual interest coupons and, ultimately, the redemption of the principal. The results, which are certified by an independent third party, should result in savings that:

- repay the initial investment;
- provide the investors with a return as a reward for the risk;
- achieve cost savings for the public sector with respect to the initial cost of the service.

[102] https://www.citylab.com/equity/2017/08/new-zealand-tries-a-different-kind-of-private-prison/538506/

Figure 25: **How SIBs work**



Since payment depends on achieving 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 benchmarks[103], 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 save public money to repay investors.

It is the investors who take the largest risk. This is why SIBs are used mainly for projects with an innovative approach to social problems that standard public services have failed to address. So far, investors have been mainly philanthropic organisations, foundations, charities. In Europe, only the Finnish SIB involved institutional investors. Investors expect a return in terms of social impact in addition to the financial rewards and can get some sort of public guarantee. SIBs have been used to get disadvantaged people into work, education (e.g. former convicts or addicts, young people in disadvantaged neighbourhoods), healthcare, disabilities, or home-assistance services. Such projects take an average of five years, including the initial set-up and final performance measurement. The annual return on investment is around 3 %.

[103]Three types of comparison can be made between the KPIs and the initial values: historical projection; pre and post-initiative for the same population; and a comparison between the target population and a control group.

RECOMMENDATIONS & PROPOSALS

The recommendations and proposals in this report can be grouped and summarised as follows:

Political recommendations	Policy recommendations	'Quick wins'
- Promote social infrastructure finance, focusing on the regions with the greatest needs - Shift from an underinvestment scenario towards a smart capacitating investment framework with ongoing monitoring of progress - Establish a stable and more investment-friendly environment for social infrastructure - Boost evidence-based standard settings for impact investing - Fiscal consolidation should not weigh too much on the resources for social investment in infrastructure of the sub-national governments - Strengthen the role of European national and regional promotional banks and institutions (NPBIs) when they cooperate with public authorities and European bodies.	- Increase and boost the pipeline of viable projects for social infrastructure - Carefully craft the prior and subsequent conditions adopted for the use of the cohesion funds and the blending of financial resources beyond 2020 so as to avoid making regions pay unduly 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 enable the take-up of social investments - Promote the development of new financial instruments especially dedicated to social infrastructure (such as social bonds) - Promote the development of a far-reaching system of technical assistance (TA) at local, national and EU level - Launch a European social infrastructure agenda - Set up in the medium-term a public-private fund dedicated to social investments in the EU. - 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	- In the next Multiannual Financial Framework (MFF), establish a specific policy window for social investments including social infrastructure investments - During the annual European Semester, consider assessing EU countries' investment in social infrastructure and make country-specific recommendations for investment in social infrastructure - Focus cohesion policy more tightly on social investment and infrastructure and facilitate further blending of financial resources - Pilot the launch of some thematic and/or geographic investment platforms to bundle projects and boost initiatives for social sector investments - Strengthen the strategic role of the European Investment Advisory Hub's (EIAH) technical assistance through setting up a strong network with NPBIs and other national or regional agencies - Boost the use of strategic public procurement schemes and achieve cost synergies through efficient cooperation with possible central purchasing bodies (CPBs) - Build the capacity of service provider organisations and local authorities - Learn from schemes paying for results and further develop social impact schemes - Develop standard settings for impact investing.

8.1. GENERAL RECOMMENDATIONS & ENABLING CONDITIONS

This report supports an approach to upward convergence that is based on regions (like cohesion policies) rather than central government alone. This approach will be important to allow more resources to be efficiently allocated where they are most needed.

Social infrastructure plays a critical role in making progress towards upward convergence. This report suggests a number of ways to bridge Europe's huge investment gap in social infrastructure and recommends some innovative ways to finance social infrastructure in Europe.

This report proposes that the greatest attention should be given to:

- shifting from an underinvestment scenario towards a smart capacitating investment framework with ongoing monitoring of progress at national level;
- promoting social infrastructure finance, focusing on the regions with most needs;
- establishing a stable and more investment-friendly environment;
- increasing and boosting the pipeline of viable projects for social infrastructure;
- strengthening the role of European national and regional promotional banks and institutions (NPBIs) when they cooperate with public authorities and European bodies.

Enabling conditions are identified in a wide range of areas:

- Fiscal consolidation, while observing the framework of the Stability and Growth Pact (SGP), should not weigh too much on sub-national governments' resources for social investment in infrastructure, considering that they carry out two thirds of total government investment on average in the EU;
- Carefully craft the prior and subsequent conditions11\1 adopted for the use of the cohesion funds and the blending of financial resources beyond 2020 so as to avoid making regions pay unduly for the fiscal consolidation of the Member States at central level;
- Promote favourable taxation and incentive schemes supporting social investment;
- Promote labelling and certification that would enable the take-up of social investments;
- Promote the development of new financial instruments especially dedicated to social infrastructure (such as social bonds);
- Promote the development of a far-reaching system of technical assistance (TA) at local, national and EU level.

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

The report puts forward a roadmap that, if implemented, would help make Europe more socially responsible, while also improving its resilience and social cohesion.

This roadmap sets out what should ideally be done in preparation for a new European Social Infrastructure Agenda (referred to below as the 'Agenda') and a new public-private social investment fund (referred to below as the 'Fund'). At the same time, it focuses on specific goals that could be achieved rapidly, within the next two years.

Reaching these goals early on will help establish a long-term strategy of boosting investment in and funding for social infrastructure in the EU.

The roadmap also sets out the process by which the future Agenda and Fund will be implemented. This falls into the following stages:

- **Inaugural stage** (years 0 to 1): call for the creation of a specific policy window for social investment (including investment in social infrastructure) and focusing cohesion policy more tightly through appropriate blending of financial resources;
- **Early stage** (years 0 to 2): setting up thematic and geographic investment platforms to group projects together (appropriate bundling); building the capacity of service provider organisations and improving technical assistance services;
- **Phasing-in stage** (years 2 to 4): while the investment platforms continue to fund social infrastructure projects, the Agenda will be developed and established. Once the functioning of pilot investment platforms has been comprehensively assessed, final approval can be given to set up the Fund. The Fund's governance structure will then be finalised. At the end of the phasing-in stage, the administrators of the newly established Fund will assess 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 will become a key instrument for financing social infrastructure.

The roadmap should therefore include the following goals:

Short-term – inaugural & early stage (2018-2020)

1. In the context of the next multiannual financial framework (MFF) we note that the Commission is considering a single investment scheme. In that context, we strongly recommend creating a specific policy window for social investment, including investment in social infrastructure. Furthermore, the cohesion policy should strengthen its focus on social investments and infrastructure and enable further blending of financial resources.
2. During the annual European Semester, consider assessing Member States' investment in social infrastructure and make country-specific recommendations in this area.
3. Pilot the setting up of some thematic and/or geographic investment platforms to bundle projects and boost initiatives for social sector investments. Project bundling on a thematic and/or geographic investment platform can increase the use of strategic public procurement schemes, leading to cost synergies through efficient cooperation with possible central purchasing bodies (CPBs)[104].
4. Build the capacity of service provider organisations and local authorities and strengthen the strategic role of the European Investment Advisory Hub's (EIAH) technical assistance through setting up 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 have a mix of grants, subsidies, guarantees and financial instruments to attract private capital and participation in the sector.
6. Promoting the issuing of social bonds by relevant participants.
7. Learn from schemes paying for results and further develop social impact schemes.
8. Boost data collection for social infrastructure investment 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 under the new scheme;
2. Prepare a possible social infrastructure agenda;

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

3. Assess comprehensively the functioning of pilot investment platforms including an evaluation of the underlying portfolio of projects;
4. Building on the assessment, the setting up of a public-private fund dedicated to social investment can be explored by opening up the equity capital structure to long-term investors.

Long-term – fully operational stage (> 2022)

1. The fund becomes one of the main European instruments for financing social investment and infrastructure.
2. A brand-new model for financing EU social infrastructure becomes fully operational.

8.2.1. EU Social Infrastructure Agenda

The report proposes establishing a European Social Infrastructure Agenda (the 'Agenda'), with long-term targets designed to promote increasing convergence across the EU. If this Agenda were to follow the models adopted for the European Digital Agenda and the 2030 Climate & Energy framework, it could help initiate a shift towards intelligent investment in social infrastructure for education and training. It should include ambitious targets to be reached by 2030 and set out a roadmap for the short, medium and long term.

The HLTF is putting forward a number of proposals using data that are already available at European level. It proposes that the indicators for health and education for the young suggested in the scoreboard for the Social Pillar be used.

However, social infrastructure in general is not included in any of the datasets available at this stage. We therefore suggest that one of the first tasks to be tackled could be identifying a series of possible projects for implementation (suitable pipeline). The Commission, along with a number of academic institutions and think-tanks, is currently developing a framework for monitoring framework affordable housing and energy-efficient housing. Our suggestion is that this would be used for the same purpose as here.

Examples of targets and supporting data:

1. By 2030, 90 % of EU citizens are to have access to specific services (quality and quantity to be defined) in each of the relevant sectors (education, health and long-term care, and affordable housing).

2. By 2030, 90 % of EU citizens are to have access to affordable health care, whether close to where they live or remotely (through 'telehealth').

   The proportion of people reporting inability to meet their medical needs rose after the crisis for financial reasons. On average, across EU countries, the proportion of people in low-income groups reporting unmet medical needs for financial or geographical reasons, or because of long waiting times, was four times that of high-income groups (6.4 % versus 1.5 %). The main reason given by people in low-income groups for reporting unmet health care needs was that care was too expensive. Any increase in unmet care needs, particularly among people on low incomes, may worsen the health status of the group affected and aggravate health inequalities. In 2015, the proportion of people reporting an inability to meet their medical needs ranged from just 0.1 % in Austria and the Netherlands to over 10 % in Greece and Estonia[105].

[105] Source: Social Scoreboard, 2017, Commission.

3. By 2030, there should be a higher proportion of young people (up to 25 years of age) in school or in training.

   NEETs correspond to the share of the population aged 15 to 24 who are not employed and not involved in education or training.

   The proportion of NEETs fell from 13.2 % in 2012 to 12.2 % in 2015. There are considerable differences among EU countries, with the NEET rate ranging in 2015 from 4.7 in the Netherlands to 21.4 in Italy.

   Early leavers from education and training are people aged between 18 and 24 who have completed lower secondary education at most and are not taking further education or training. Figures are expressed as a percentage of the total European population aged 18 to 24.

   In the EU, the proportion of early leavers has been falling continuously since 2005. Despite improvements in some southern EU countries, disparities across the EU countries remain, with figures ranging from 2.8 % in Croatia to 19.4 % in Spain (2016)[106].

8.2.2. Public-Private Fund for social investment

As an integral part of the long-term strategy for boosting social infrastructure investments and financing in the EU, the report proposes the creation, in the medium to long-term, of a brand-new innovative financial instrument for financing social infrastructure, a new public-private Fund for social investment (referred to below as the 'Fund').

Given the nature of social infrastructure assets, they are particularly well-suited to 'blending'. This suggests that the Fund should mix grants[107], subsidies, guarantees and financial instruments to attract private capital to the sector.

In setting up a new framework for financial instruments for investment in social infrastructure, the new Fund should leave the option of updating or adapting individual instruments to respond to changing market conditions, needs and local market structures. The Fund's financing structure should be developed further and oriented towards best practice.

Within a social investment policy window, the Fund should (i) gather appropriate resources from EU instruments (blending grants, subsidies, guarantees, etc.) to improve financial commitment by European regional promotional banks, European NPBIs and the EIB by mitigating their risks; and (ii) efficiently redistribute and allocate them to countries and/or macro-regions that are in greater need of investment in social infrastructure in order to converge towards EU and where more needs to be done to boost their underlying economic and financial strength.

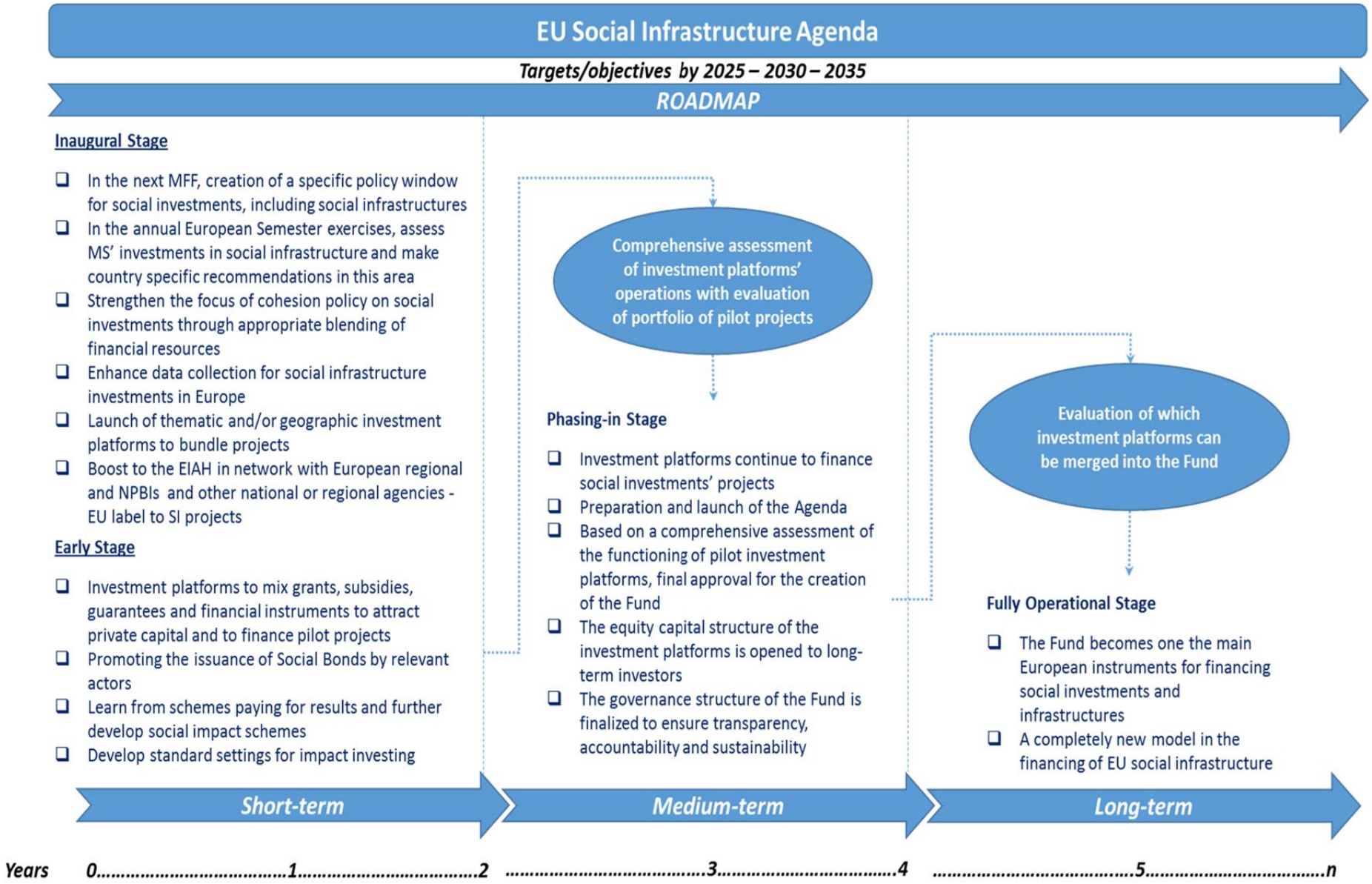
Ultimately, the Fund should be allowed to issue Euro Social Bonds; these would suit the investment needs of long-term institutional investors perfectly, and they could subsequently be traded on the capital market (CMU).

[106] Source: Social Scoreboard, 2017, Commission.

[107] ERDF and perhaps the ESF to take account of services associated with social infrastructure.

8.3. ADDRESSEE OF RECOMMENDATIONS & PROPOSALS

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


EU Social Infrastructure Agenda
Targets/objectives by 2025 – 2030 – 2035
ROADMAP
Inaugural Stage
In the next MFF, creation of a specific policy window for social investments, including social infrastructures
In the annual European Semester exercises, assess MS' investments in social infrastructure and make country specific recommendations in this area
Strengthen the focus of cohesion policy on social investments through appropriate blending of financial resources
Enhance data collection for social infrastructure investments in Europe
Launch of thematic and/or geographic investment platforms to bundle projects
Boost to the EIAH in network with European regional and NPBIs and other national or regional agencies - EU label to SI projects
Early Stage
Investment platforms to mix grants, subsidies, guarantees and financial instruments to attract private capital and to finance pilot projects
Promoting the issuance of Social Bonds by relevant actors
Learn from schemes paying for results and further develop social impact schemes
Develop standard settings for impact investing
Comprehensive assessment of investment platforms' operations with evaluation of portfolio of pilot projects
Phasing-in Stage
Investment platforms continue to finance social investments' projects
Preparation and launch of the Agenda
Based on a comprehensive assessment of the functioning of pilot investment platforms, final approval for the creation of the Fund
The equity capital structure of the investment platforms is opened to long-term investors
The governance structure of the Fund is finalized to ensure transparency, accountability and sustainability
Evaluation of which investment platforms can be merged into the Fund
Fully Operational Stage
The Fund becomes one the main European instruments for financing social investments and infrastructures
A completely new model in the financing of EU social infrastructure
Short-term
Medium-term
Long-term
Years 0.....1.....2 .....3.....4 .....5.....n

CONCLUSIONS

The deliberations of the High-Level Task Force on Social Infrastructure Investment, analysis by experts, and discussions held in the relevant working groups and with relevant institutions have resulted in a firm conclusion: the gap in social infrastructure investments is significant, it has widened since the 2007 financial crisis, and it calls for the launch and implementation of an ambitious strategy to boost long-term investment in social infrastructure in the EU-28.

Implementation must get under way soon, involving existing institutions, and the first projects must be launched and financed, enabling the first relevant results to be presented before the next European Parliament elections in 2019. It is thus important to launch the European Social Infrastructure Agenda; adopt the New Convergence Strategy; create regional platforms, and provide much-needed technical assistance, especially in the regions with most need; prepare a number of projects ready for investment (suitable pipeline), if necessary by bundling; and provide the appropriate resources through efficient blending of public and private funds.

The NPBIs and all the relevant institutions that are involved and committed can start the ball rolling without undermining national and regional policies and fiscal powers in any way.

The short-term part of the strategy could get under way immediately, while preparatory work could also be undertaken to implement the medium and long-term part, which can be rapidly deployed once the new financial framework is adopted in 2020.

Throughout its mandate, the HLTF has reiterated how important such a strategy would be to rebuild trust with the public and recreate a momentum towards convergence through intelligent, forward-looking investment in education and lifelong learning, health and social and long-term care as well as affordable and energy efficient housing.

The group has also reflected on possible ways of increasing and improving the current financing instruments of social infrastructure investments. It therefore presents a range of suitable new financial models and proposes specific legislative and regulatory requirements for boosting the contribution made by private capital.

All the proposals, which are clearly set out in the recommendations, should help:

- implement policies and instruments designed to expand the achievements of the European social welfare state, adapting it to the knowledge economies of the future and to ageing societies in a globalised world;
- incentivise reforms and boost investment in innovations, bringing European innovators and small and medium-sized businesses to the fore;
- build an even more efficient partnership between public and private participants in investment, with a key role for long-term investors and NPBIs;
- establish a new asset class and financing instruments that are adapted to needs in the social field.

It is now up to decision-makers and political leaders to make swift progress towards launching an ambitious initiative, thereby maintaining the momentum created by the work of the HLTF, in line with the expectations of Europe's people.

POSTSCRIPT: *RENAISSANCE* OF SOCIAL EUROPE

by Christian Sautter*

When the European Association of Long-Term Investors (ELTI) decided to set up a working group to boost investment in social infrastructure in Europe, it faced a number of major contradictions.

One was the contradiction between the need for education, healthcare and affordable housing, and the rapid fall in investment – especially in the public sector – that followed the 2008 financial crisis.

A second was the contradiction between the desire to trigger a positive dynamic within the European Union and the reality that powers in this field lie with local and regional bodies (regions or agglomerations).

Thirdly, there was the contradiction between the vast scale of economic infrastructure projects involving transport or energy, which require investment worth billions of euros, and the huge number of social infrastructure projects below the EUR 30 m threshold.

The group rejected the fatalism of the past, being made up of dynamic personalities, champions of the European idea with the back-up of talented rapporteurs.

Huge technical difficulties have been overcome, and this is the result of a political imperative common to all of us: European ideals are in decline among the peoples of the European Union, particularly in less developed regions or those undergoing transition, which were hit especially hard by the crisis.

What we are proposing is to take practical action – on a modest scale to begin with – that will show the most vulnerable people in the worst affected regions that 'social Europe' is no empty form of words, but a lever that will upgrade education and training for both children and adults, improve the health of workers and pensioners alike, and give young families access to low-cost homes where they can build a future for themselves.

Given the mixed nature of this group, which includes members with political, social, technical and financial expertise, we have every confidence that we will be able to get across the following message in the run-up to the European elections of 2019: the European Union is here to help build secondary schools, health centres and homes for the elderly.

Having identified a number of technical and financial hurdles, we have singled out three key words that exemplify the challenges we need to tackle.

'**Labelling**'. The projects, mostly small-scale, relate to people's daily lives; education, health and housing are basic needs, along with food and jobs. Local elected officials bear much of the responsibility for these areas. It is not easy to promote or implement projects from the top down; the initiative needs to come from individuals and organisations at local level (the 'bottom-up' approach). Projects need to be of a high quality, have a social focus (meeting the needs people have articulated), and to be technically and financially feasible (meaning that they must be achievable at a controlled cost; the local authorities must be able to repay the loans and finance the projects).

The working group aims to transform people's articulated needs into technically and financially viable projects, making use of technical assistance supported in part at national level (in particular by national promotional banks and institutions within EU countries) and in part at European level (by the

* Former French Minister for Economics, Finance and Industry

European Investment Advisory Hub, the European Investment Bank, the Council of Europe Development Bank and/or the EU's Structural Funds).

Projects would thus be carried out in the country concerned by decentralised 'platforms', in line with a grid of efficiency criteria defined at European level.

'Bundling'. Projects carried out under the EUSI label ('European Union Social Infrastructure') would be small-scale, often with a budget of under EUR 30 m, which is too limited to attract interest from large public financiers, let alone from private investors. Hence our proposal that regional or national platforms collect them into 'packages' to meet the critical financial threshold.

'Blending'. The dwindling of public funding since the 2008 crisis has made it necessary to mobilise long-term private funding for projects that have a relatively low financial return, but high returns in terms of social benefits. The working group seeks to reduce the risks involved by providing a mix of public and private, European, national and local funding, and by assigning projects a quality label. Public-private partnerships (PPPs) and 'social impact investments', are financial innovations which - after a sometimes bumpy start - have proven their usefulness at local level. Large pension funds and other long-term private investors could channel a small fraction of their assets into safe investments with a low financial return but a strong social profile. Offering investors projects that have been assigned a quality label, grouped together and restructured is a way of inducing them to broaden their focus somewhat beyond the narrow measure of financial returns on investment.

Thoughtfully and resolutely, the working group has validated an approach that links grassroots aspirations with EU-level policymaking, moving up from millions to billions of euro, and from the short to the long term.

We could have proposed spending hundreds of billions of euro by 2030, given the huge gulf between the demand for social services and the actual supply. But we have chosen instead to propose a step-by-step approach, beginning by interrupting the downward trend of the last decade and proposing a possible way to recovery. This will be modest to begin with, but it should gain momentum with growing success in Europe's most vulnerable regions.

In conclusion, the Europe we believe in is founded on deeds, not words. This Europe will instil confidence in our young people by offering them real prospects they can believe in: better education, health and housing that will help them build a fairer and more dynamic future than the life led by their parents and grandparents.

Christian Sautter

Co-Chair

SOURCES & REFERENCES

Aked J., Michaelson J. and N. Steur (2010), Good Foundations: towards a low carbon, high well-being built environment, New Economics Foundation: London.

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), pp. 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 Long-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, vol. 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 written for the 2011 Eurofi Financial Forum.

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, vol. 15, No 1, 2010.

Blanc-Brude, F., Hasan, M., and T. Whittaker (2016), Revenue and dividend pay-outs 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, vol. 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 2017

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 Bulleting, 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, vol. 15, No 1, 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 for 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 2013.

European Commission (2013a), Towards Social Investment for Growth and Cohesion – including implementing the European Social Fund 2014-2020, COM (2013) 83 final, Brussels, 20.2.2013.

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 2011.

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, Budgetary Affairs Policy Department (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 in February 2017.

Eurostat. Migration and migrant population statistics. Data extracted in September 2017. 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 in 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.

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 Log-Term Europe. Fixed, Re-launching Fixed, Fixed, Network and Social Infrastructure, LUISS University Press, Rome: 2015.

Garonna, P. (ed) (2016), Financing Long-Term Europe, LUISS University Press, Rome: 2016.

Goldin, C. (2016): Human Capital, in: Diebolt. C., M. Haupert, M. (eds.), Handbook of Cliometrics, Springer-Verlag, Berlin/Heidelberg: 2016, pp. 56-86.

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, No 1 (2010).

Invest Europe (2016) Europe's economic foundations: investing in infrastructure, Briefing November 2016.

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, organised by the 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), pp. 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, vol. 15, No 1 (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
EFSI 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
NPBIs National Promotional Banks and Institutions
NEET Not in Education, Employment or Training
OECD Organisation for Economic Cooperation 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
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 little effort has been made to develop rigorous performance and impact assessments for social policies or social infrastructure projects. The public sector still reports mainly on inputs in many cases, and has rarely worked on methodologies for assessing returns on investment and cost benefit. Rarely do such projects include the clear risks that most influence their outcomes, and often the methodologies used depend on the judgement of individuals, and not enough on objective criteria or transparent information. Moreover, measures of and reports on the positive and negative externalities of projects in the social field are even more difficult to come by. For instance, how do we consider the impact of a childcare centre, not only on a child's wellbeing and her parents' productivity, but also in terms of its value for the child's future life chances, bearing in mind that investment outcomes also depend on a range of other factors, such as the mother's socioeconomic status.

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

Partnerships between different bodies and blending of private capital with public finances have now really called for a leap forward that will produce measurable social outcomes. This represents a major innovation in the social sectors.

This has developed over the last few years, and several institutions and academics are working to refine existing methodologies and processes further.

We therefore recommend to use the methodologies currently available for the first pilot phase and refine them during the next few years.

Specific performance indicators and KPIs should, of course, be developed for each project or programme, and it could also be helpful to develop a degree of standardisation or interoperability.

However, the HLTF has identified general areas for monitoring, as set out 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 population (PISA – PIAAC surveys) 4. Level of teachers' professional training 5. Job market opportunities	1. Effectiveness of a health intervention (health outputs measured as intervention achieving its project-life health-related objectives) 2. Improved health and wellbeing (health outcomes measured as gains in healthy life	1. Number of net additional or renovated affordable dwellings, including energy efficiency measures 2. New and existing dwelling with acceptable quality and accessibility levels 3. Households with low or middle income and age

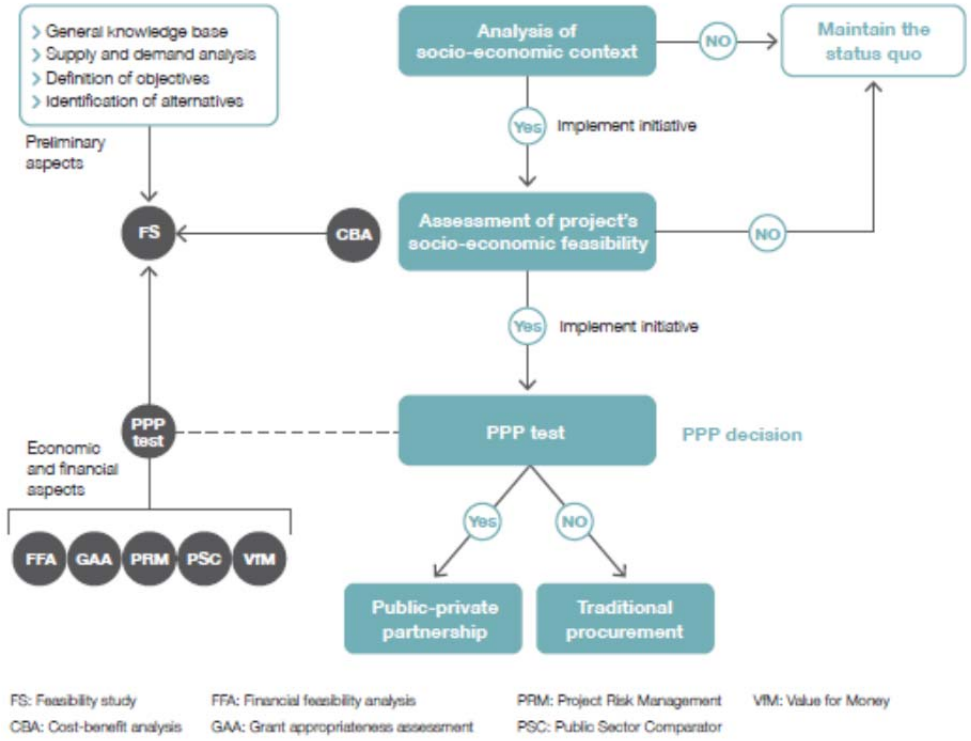
(empl. rates / earnings of graduates from different education paths/institutions) 6. Sustainability 7. Quality of education infrastructure.	years/quality adjusted life years (HLY and QALY, in 1-5-10-15 years) of catchment area or patient group) 3. Lower cost of services for the same quality (cost-effectiveness measured as the ratio of price tooutcome (-number of interventions)) 4. Quality of a health intervention (one factor is access -proximity, waiting times, affordability-) 5. Empowered citizens and patients (patient satisfaction and autonomy) 6. Greater (system) integration/coordination 7. Connectivity 8. Social and territorial cohesion (contributing to 'same level' of service for all citizens) 9. Sustainability	classes. 4. Average time of rent contracts and of the duration of tenancies. 5. Average income and inequality level of households 6. Active engagement of local stakeholders 7. Energy efficiency 8. Sustainability

Some of the areas to be monitored could be considered for social and economic impact measures during the negotiation of contracts for new social infrastructure projects.

ANNEX 2. PPP DECISION-MAKING PROCESS

To launch a PPP, it is enough to approve a feasibility study (FS) and/or preliminary design in order to add a public work to the annual list of projects. The FS, the purpose of which is to transform a project idea into actual investment proposals, analyses the general context and assesses the project's economic and financial feasibility. This requires a cost-benefit analysis, which assesses how appropriate the investment is in relation to the goals. Finally, the public body concerned decides whether to use a PPP or a more traditional procurement agreement on the basis of 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 how economically and financially sound the investment is and thus how attractive it is to the market; a grant appropriateness assessment (GAA) to determine the optimum level of the public resources to be assigned to the project so as 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 implementing/managing the project directly.

ANNEX 3. PPP MODELS

Contract types and procedures

With PPPs, contracts can be customised in line with the type of project to be executed and the various players involved. Some or all of the following components typically coexist within a PPP:

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

In combination, 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 sector[109]:

- Traditional procurement: the public sector may contract the private sector to design and build the work at a *specified price*;

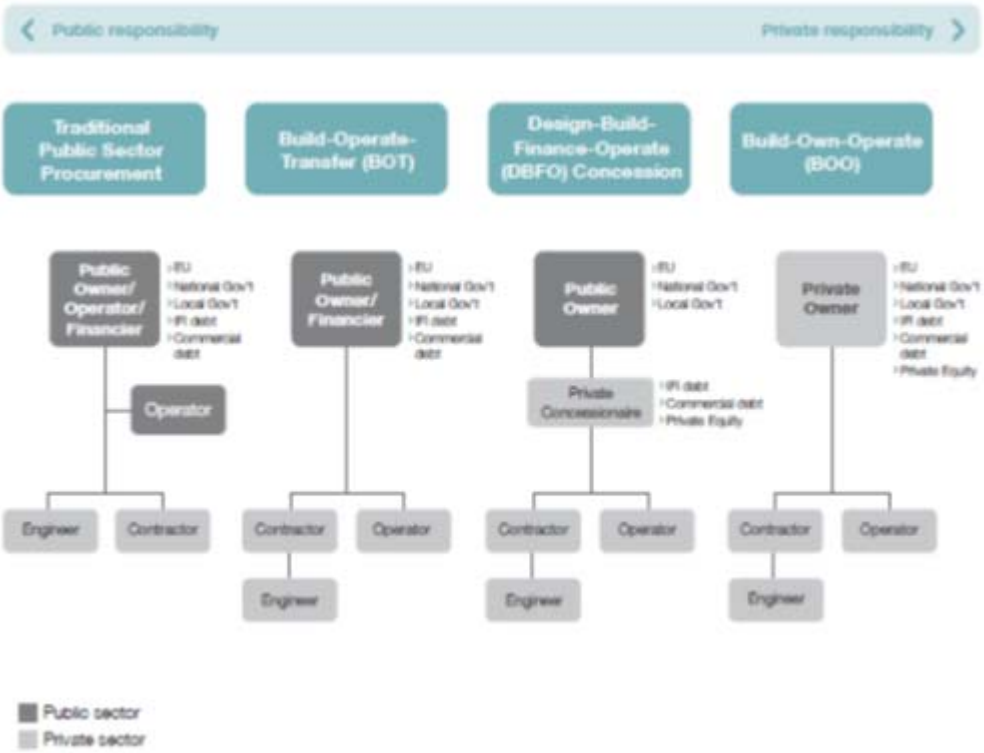
- Build-Operate-Transfer (BOT): this involves a concession agreement between the public and private sectors covering the design, build and operate phases, also known as a turnkey contract. The advantage of this approach is that it brings together the various functions within a single entity;

- 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.

[109] 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 2008 financial crisis banks were active lenders in infrastructure, given their ability to match funding to the long-term profiles of infrastructure projects, their expertise in evaluating project finance credit, hedging the interest rate and inflation risk, and managing decisions when borrowers' conditions change.

However, in a post-crisis scenario, due to pressures to de-leverage their balance sheet, minimise the maturity transformation risk and abide by stricter capital and liquidity requirements, banks have been less active in this asset class and have reduced their exposure to infrastructure[110].

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 a regulation (the Capital Requirements Regulation - CRR) and a directive (the 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 the 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 little loss of value, or none at all), the regulation introduces two liquidity buffers:

    - the liquidity coverage ratio (LCR), designed 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): High Quality Liquid Assets/ (Cash outflows – Capped Cash inflows) ≥ 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 in the medium term (e.g. over one year): Available amount of stable funding[111]/ required amount of stable funding ≥ 100 %.

- **Limiting leverage effect.** The regulation introduces a new regulatory instrument called the leverage ratio. Its aim is to prevent 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.

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

[111] 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 small and medium-sized businesses 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 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.

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

The Commission proposed to grant special treatment to specialised lending exposure aimed at funding infrastructure projects, under both the Standardised and Internal Ratings Based approaches for credit risk. Indeed, specialised 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.

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), Poland's national promotional bank, to put together and offer a joint financial product targeting promoters of social and affordable housing in Poland ('Investment Platform'). The programme loan would be used to co-finance investment in social and affordable housing by municipal authorities and registered providers of social and affordable housing throughout Poland over 2016-2021 at a total investment cost of PLN 1 300 m (EUR 307 m).

The use of the Programme Loan enables the Bank to support investment by smaller promoters. Eligible providers of social and affordable housing in Poland may apply for investment loans from this facility to fund their investment programmes in part. These sub-operations will be subject to separate appraisals involving assessment of the investments' eligibility and quality.

The promoters will be given an opportunity to obtain technical and/or financial support for preparing and implementing the relevant projects. This will be provided by the EIAH – European Investment Advisory Hub.

LOGEMENTS INTERMEDIAIRES – SLI (France)

This operation will enable 13 000 affordable rental housing units to be built, subject to government approval, a rent ceiling and means testing. They 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 set up 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 will provide up to EUR 500m under the EFSI, representing 22 % of the overall project cost (EUR 2.3 bn).

BOX. Developing investment platforms

To develop an investment platform, a project lead is often needed on the public side. This would most likely be a team or department responsible for managing EU funds at Member State level, especially if the public funding for 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:[112]

[112] For details, see: http://ec.europa.eu/commission/sites/beta-political/files/set-up-efsi-investment-platform_en.pdf


1
IDENTIFY THE DEMAND
through
market study and consultations
2
IDENTIFY THE SUPPLY
considering
potential investors and barriers to investment
Support from EIAH*
3
DESIGN THE LEGAL STRUCTURE
including
term sheet preparations and state-aid considerations
4
IDENTIFY A MANAGER
with
strong credibility/track record and aligned interests
5
FINALISE APPROVALS AND DOCUMENTATION
6
SIGN AND CLOSE
FIRST INVESTMENTS
* EIAH : European Investment Advisory Hub

ANNEX 6. NATIONAL PROMOTIONAL BANKS AND INSTITUTIONS

Almost all EU countries, apart from Denmark, Greece, Malta, Romania and Portugal, have now established a national promotional bank or institution (NPBI). Political discussions on setting up a NPBI are under way in some of these five countries.

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

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

The Commission's 2015 communication[113] acknowledged the growing importance of NPBIs in implementing EU financial instruments, mostly in an intermediary capacity.

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 NPBIs might be given an even more prominent role in implementing EU schemes involving financial instruments. The next Multiannual Financial Framework (after 2020) should promote direct cooperation between European Institutions and NPBIs.

[113] COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL. Working together for jobs and growth: The role of National Promotional Banks (NPBs) in supporting the Investment Plan for Europe (2015).

EUROPEAN ECONOMY DISCUSSION PAPERS

European Economy Discussion Papers can be accessed and downloaded free of charge from the following address:
https://ec.europa.eu/info/publications/economic-and-financial-affairs-publications_en?field_eurovoc_taxonomy_target_id_selective=All&field_core_nal_countries_tid_selective=All&field_core_date_published_value[value][year]=All&field_core_tags_tid_i18n=22617.

Titles published before July 2015 under the Economic Papers series can be accessed and downloaded free of charge from:
http://ec.europa.eu/economy_finance/publications/economic_paper/index_en.htm.

GETTING IN TOUCH WITH THE EU

In person
All over the European Union there are hundreds of Europe Direct Information Centres. You can find the address of the centre nearest you at: http://europa.eu/contact.

On the phone or by e-mail
Europe Direct is a service that answers your questions about the European Union. You can contact this service:

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- at the following standard number: +32 22999696 or
- by electronic mail via: http://europa.eu/contact.

FINDING INFORMATION ABOUT THE EU

Online
Information about the European Union in all the official languages of the EU is available on the Europa website at: http://europa.eu.

EU Publications
You can download or order free and priced EU publications from EU Bookshop at: http://publications.europa.eu/bookshop. Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see http://europa.eu/contact).

EU law and related documents
For access to legal information from the EU, including all EU law since 1951 in all the official language versions, go to EUR-Lex at: http://eur-lex.europa.eu.

Open data from the EU
The EU Open Data Portal (http://data.europa.eu/euodp/en/data) provides access to datasets from the EU. Data can be downloaded and reused for free, both for commercial and non-commercial purposes.

Publications Office