

A European Public Investment Outlook



EDITED BY FLORIANA CERNIGLIA AND FRANCESCO SARACENO



<https://www.openbookpublishers.com>

© 2020 Francesco Saraceno and Floriana Cerniglia. Copyright of individual chapters is maintained by the chapters' authors.



This work is licensed under a Creative Commons Attribution 4.0 International license (CC BY 4.0). This license allows you to share, copy, distribute and transmit the text; to adapt the text and to make commercial use of the text providing attribution is made to the authors (but not in any way that suggests that they endorse you or your use of the work). Attribution should include the following information:

Francesco Saraceno and Floriana Cerniglia (eds), *A European Public Investment Outlook*. Cambridge, UK: Open Book Publishers, 2020, <https://doi.org/10.11647/OBP.0222>

In order to access detailed and updated information on the license, please visit <https://doi.org/10.11647/OBP.0222#copyright>

Further details about CC BY licenses are available at <https://creativecommons.org/licenses/by/4.0/>

All external links were active at the time of publication unless otherwise stated and have been archived via the Internet Archive Wayback Machine at <https://archive.org/web>

Updated digital material and resources associated with this volume are available at <https://doi.org/10.11647/OBP.0222#resources>

Every effort has been made to identify and contact copyright holders and any omission or error will be corrected if notification is made to the publisher.

This is the ninth volume of our Open Reports Series

ISSN (print): 2399-6668

ISSN (digital): 2399-6676

ISBN Paperback: 978-1-80064-011-5

ISBN Hardback: 978-1-80064-012-2

ISBN Digital (PDF): 978-1-80064-013-9

ISBN Digital ebook (epub): 978-1-80064-014-6

ISBN Digital ebook (mobi): 978-1-80064-015-3

ISBN XML: 978-1-80064-016-0

DOI: 10.11647/OBP.0222

Cover image: Mural in Białystok, Poland. Photo by Dominik Bednarz on Unsplash, <https://unsplash.com/photos/luzUMbVUVRo>

Cover design: Anna Gatti.

7. Social Investment and Infrastructure

*Anton Hemerijck,¹ Mariana Mazzucato²
and Edoardo Reviglio³*

Introduction: The Welfare Lesson from the Great Recession

Ten years after the first economic crisis of twenty-first century capitalism, Europe seems to have passed the nadir of the Great Recession. Time to count our blessings: a rerun of the Great Depression has been avoided and recovery, albeit timid, is under way, while unemployment and poverty are coming down. The jury is still out on whether economic and job growth will return to pre-crisis levels. Unemployment remains high in the European Union (EU), especially in the economies heavily scarred by the European debt crisis, such as Greece and Spain. The political aftershocks of the Great Recession — ranging from a rather hard Brexit, the rise of populism in Western Europe, the spread of illiberal nationalism in Eastern Europe, and escalating trade tensions between China and the United States (US) — forecast the deceleration of the world economy, and the challenges of a costly transformation into a greener world economy now confront the European Union project, anchored on a premise of peace, prosperity and democracy, underpinned by an existential predicament.

In the final quarter of the twentieth century, the friction between welfare states' social and economic priorities has often been described as irreconcilable. The American economist Arthur Okun coined the “big trade-off” between equality and efficiency, proclaiming that, to the extent that welfare spending is used as a political instrument to reduce inequality, this harms economic growth because of the market distortions that come with comprehensive social protection. However, as Figure 1 reveals, this predicament no longer holds. Many welfare states in Continental and Northern Europe have proven capable of reconciling high levels of employment with comparatively low inequality (see the upper-right side of Figure 1).

1 European University Institute, Florence.

2 Institute for Innovation & Public Purpose — University College London.

3 Cassa Depositi e Prestiti — CDP; Università Luiss Guido Carli, Rome; International University College, Turin.

Even though social spending levels have been consolidated over the past two decades, practically all European welfare regimes have been recalibrating the basic policy mixes upon which they were built after 1945 in a multi-dimensional fashion, most importantly to address new social risks (Hemerijck 2013). Before the 2008 Global Financial Crisis struck, across the more mature welfare state of Europe social investment reform was swiftly becoming the *fil rouge* in welfare reform. In the face of intensified demographic ageing and disruptive technological change, future economic growth will rely heavily on high levels and employment and improvements in productivity. Today there is ample proof that social investments in child-care, long-term care, education and training, active labour market policy, lifelong learning and active ageing, paid parental leave, family services and benefits, in a complementary fashion, significantly contribute to employment, productivity, demographic balance, even through improved fertility, and tax revenue, and help reduce long-term reliance on compensatory social protection policies, at lower levels of poverty. Although the Great Recession interrupted the social investment turn in many countries, social investment reform today is even more imperative than before to make up for a lost decade. Unsurprisingly, Nordic countries with independent currencies, inclusive safety nets and a strong social service tradition, have been best able to protect social investment progress. Euro area countries, under the Fiscal Compact, have, by and large, taken a back seat on social investment.

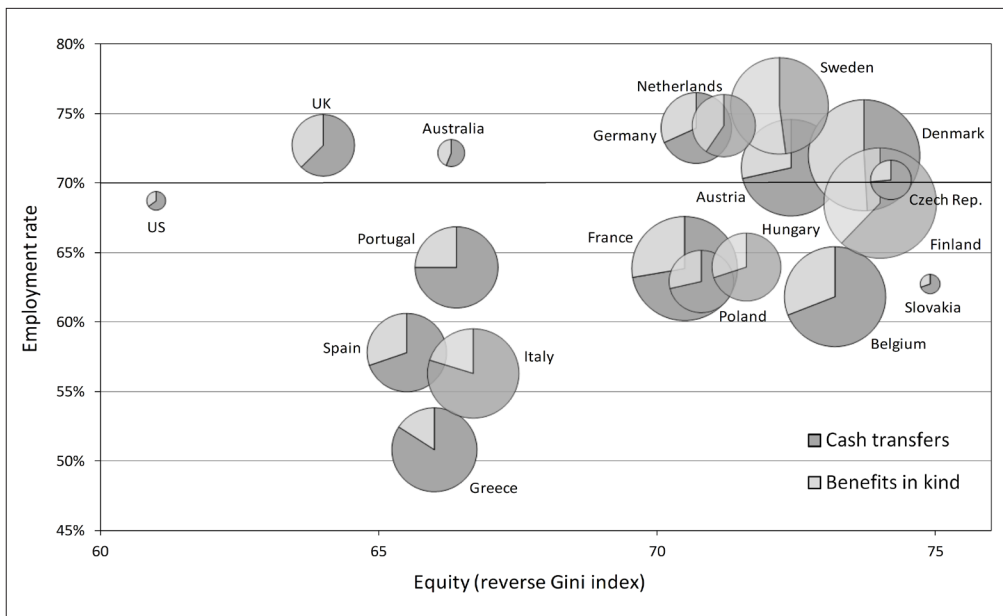


Fig. 1 Employment rate, equality and welfare spending in selected OECD countries (averages 2010-2015). *Note:* Only OECD countries with at least 5 million inhabitants are shown; missing data for Canada. The black line marks the Lisbon employment target of 70%. The size of the pie-chart markers indicates the total welfare spending.

Source: Hemerijck and Ronchi (2020).

For almost two decades, EU institutions have professed their support for social investment welfare provision, from the idea of “social policy as a productive factor” in the 1997 Amsterdam Treaty, through Social Affairs Commissioner Laszlo Andor’s “social investment package” in 2013, to the principles laid down in the 2017 European Pillar of Social Rights. However, in practice, the social investment impetus has been put on ice with the onslaught of the Great Recession. There is no justification for this continued volatile and contradictory policy orientation. Today, the evidence on social investment returns is stronger than ever before. Moreover, structurally low interest rates present us with a post-crisis opportunity not to be wasted. Not least, European publics expect pro-EU political forces to put their money where their mouth is in terms of enabling citizens to live dignified, secure lives. It is time for EU-institutions to abandon austerity and make a real commitment to social investment and its supporting infrastructure.

7.1. The Social Investment Life-Course Multiplier Effect

As the Great Recession was triggered by a financial crisis, just like the Great Depression, rather than a stagflation real-economy crisis (as in the 1970s and 1980s), it offered up a test-case for the Keynesian-Beveridgean welfare state. This welfare state is based on compulsory social insurance, able to act as an automatic stabilizer in times of recession, cushioning crises through anti-cyclical consumption smoothing. By and large, automatic stabilization social security, largely absent in the 1930s, provided the largest stimulus in most countries while protecting household income after 2008.

The number (quantity) and productivity (quality) of current and future employees and taxpayers are central to the long-term financial sustainability of the welfare state. Maximizing employment, employability and productivity helps to sustain the “carrying capacity” of the modern welfare state. To do this, states need to effectively coordinate the following three policy objectives: (1) raising and maintaining the employment “stock” (human capital, skills, health of population); (2) facilitating “flows” between various labour market and (gendered) life-course transitions; and (3) using “buffers” for the mitigation of social risks (unemployment, sickness) through income protection and economic stabilization (Hemerijck 2017). Commitments in these areas produce mutually reinforcing positive effects over the life cycle. They generate aggregate economic growth and social well-being at the individual and household levels, and are key to making social investment work.

The growing evidence on how effective social investment reinforces high employment, low poverty, decent growth in fiscal balance, has inspired Anton Hemerijck to conjecture the operation of a social investment “life-course multiplier”, whereby cumulative social investment returns over the life-course plausibly generate a cycle of well-being, in terms of employment opportunities, gender equity, and a significant mitigation of intergenerational poverty. The virtuous cycle initiates

from early investments in children through high quality ECEC (Early Childhood Education and Care), which translate into higher levels of educational attainment, which in turn, together with more tailor-made vocational training, spill over into higher and more productive employment in the medium term (Brilli 2014; Heckman 2006; Cumba and Heckman 2007). To the extent that employment participation is furthermore supported by effective work-life balance policies, including adequately funded and publicly available childcare, higher levels of (female) employment with potentially lower gender pay and employment gaps can be foreseen (del Boca, Locatelli and Vuri 2005; Korpi, Ferrarini and Englund 2009). On top of protecting households against worklessness and poverty (Härkönen 2014; Cantillon and Vandenbroucke 2014), more opportunities for women and men to combine parenting with paid labour, moreover, is likely to have a dampening effect on the so-called “fertility gap”, the difference between the desired number of children (aspirational fertility) and the actual number (Beaujouan and Sobotka 2014; Borgstrom et al. 2016; d’Albis, Greulich and Ponthière 2017). A final knock-on effect is a higher effective retirement age, provided the availability of active ageing and lifelong learning policies, including portable and flexible pensions, for older cohorts (Walker, 2002; Jenkins et al., 2003; Schmid, 2015). Higher and more productive employment implies a larger tax base to sustain welfare commitments and to keep the virtuous cycle of capacitating social justice alive.

For our contribution, what is important to emphasize with respect to social investment reform is that the welfare state has become ever more service-oriented. To the extent that the cash-benefit welfare infrastructure is essentially a well-functioning ATM-machine, the social investment welfare state is one that relies heavily on infrastructure (of day-care centres, schools, hospitals, nursery homes, post-graduate training facilities that require significant investment in both physical and professional prowess), and, most importantly, on state capacity.

7.2. A Golden Social Investment Rule in the Stability and Growth Pact

For almost two decades EU institutions have professed their support for social investment. However, in practice, the social investment impetus has been put on ice with the onslaught of the Great Recession. It is important to remember that the single currency and the Economic and Monetary Union (EMU) were negotiated at a time when the “supply side” revolution in economic theory and the folk-theorem of the big trade-off between equity and efficiency were riding high. The architects of the Maastricht Treaty naively believed a monetary union tied to the Stability and Growth Pact (SGP), would inescapably force Member States to keep their “wasteful” welfare states in check, underwritten by the Maastricht Treaty’s infamous “no-bailout” clause,

in the belief that all public spending, especially social spending, is wasteful. As such, the rule book of the SGP disqualifies public investments in lifelong education and training in the knowledge economy as wasteful consumptive expenditures.

There is no justification for this ideological short-sightedness anymore. Today, the evidence for social investment returns is stronger than ever before. Moreover, structurally low interest rates present us with a post-crisis opportunity not to be wasted. Not least, European publics expect pro-EU political forces to put their money where their mouth is in terms of enabling citizens to live dignified, secure lives.

We must ratchet up domestic social investment with EMU support by exempting human capital “stock” investments from the rules of the SGP. The post-crisis collapse in interest rates should be used to establish, consolidate and expand social investments that benefit future generations and consolidate fiscal health, especially in the face of adverse demographic trends.

We therefore propose a “Golden Rule” of exempting human capital stock spending from the euro area fiscal rule book for 1.5% of GDP for about one decade, as a flagship initiative of the new European Commission. A viable division of responsibilities between the EU and the Member States is possible without trespassing on treasured national welfare state jealousies. Social security “buffers,” the core prerogative of the national welfare state, should remain in the remit of national welfare provision. The “flow” function — which concerns labour market regulation and collective bargaining in synchronization with work-life balance, gender equality and family-friendly employment relations — is best served by mutual learning and monitoring processes of open coordination at national and EU level, engaging national governments with relevant experts and the social partners in sharing good practices.

What we are left with is guaranteeing social investment in lifelong human capital “stock”. Here the EU needs to change the fiscal rules in the SGP regarding social investment. Citizens all over the EU are craving support for social investments, and the financial costs are minimal given the short- and long-term profitability of the economic and social returns.

7.3. A New Deal for Social Europe: Boosting Social Infrastructure

Lifelong human capital “stock” includes investment in social infrastructure. In the EU, since 2007 investments, both public and private, have fallen by 20%. In public investments, as much as 75% of the reduction is due to the collapse of the works carried out by local administrations which, in the European average, represent around two thirds of the total public investment (European Commission 2016; Fransen, del Bufalo and Reviglio 2018; EIB 2019). Investment in social infrastructure — infrastructure that pertains to social services — has been especially weakened. This is the case for three

sectors that are crucial for the future well-being of European citizens: health, education and housing.⁴

Current investment in social infrastructure in the EU has been estimated at approximately €170 bn per year.⁵ The minimum infrastructure investment gap in these sectors is estimated at €100–150 bn, representing a total gap of at least €1.5 tn for the period between 2018 and 2030 (Fransen, del Bufalo and Reviglio 2018).

Social infrastructures are important because they shape the nature of our society. High-quality large-scale investments in social infrastructure are especially important for the EU given demographic projections, radical structural changes in the labour market and innovation. The question is, however, how to find financing to close such an enormous gap at a time of high public debt in many regions with a long-term perspective for only moderate economic growth rates?

This challenge is at the heart of former European Commission President Romano Prodi's call for a New Deal for Social Europe and contained in the recently presented Report of the High-Level Task Force on Investing in Social Infrastructure in Europe, promoted by the European Long-Term Investors Association (ELTI) and the European Commission (Fransen, del Bufalo and Reviglio 2018).

Europe's future demographics pose daunting challenges for the coming decades. Europe today already has one of the lowest proportions in the world of working population to non-working population (children and pensioners). In 2060, one in three European citizens will be over sixty-five (of whom one in three will be more than eighty years old), while only 57% of the population will be of working age (fifteen to sixty-four).

This aging of the population will have significant effects, particularly on the cost of health care and pension systems. In addition, substantial investments will need to be made in prenatal, scholastic and university structures. All this will need to happen at the same time as demand for affordable housing for new families, students and young workers continues to grow.

Incentives for procreation and well-targeted immigration policies should become an integral part of the new European social and economic agenda. If the European demography is not revived, the risk of a progressive decline of the European civilization

4 "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 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 on average in the EU [...] and these investments are of a small and medium size, we have a major challenge here that is different from general infrastructure investments" (European Commission 2016, p. 101).

5 According to estimates of the Prodi Report (Fransen, del Bufalo and Reviglio 2018), current p.a. spending in Education and Life Learning is estimated at €65 bn, and the annual investment gap at €15 bn; for Health and Long-term care current p.a. spending is estimated at €75 bn, and the annual investment gap at €70 bn; and current p.a. spending in Affordable Housing is estimated at €28 bn, and the annual investment gap at €57 bn.

becomes dramatically real. The speed of globalization requires us to act rapidly and to be ambitious.

Among the High-Level Task Force's recommendations are many addressed to the European Union and the Commission, including: stepping up the use of innovative financial products; providing more assistance in project development at the local level; implementing regulatory improvements; European Semester reporting; suggestions for the next Multiannual Financial Framework; proposals to move towards upward convergence; and a call to establish a far-reaching European public-private fund for social infrastructure. It should be noted that although the High-Level Task Force promotes a European approach, it is careful to respect the principle of subsidiarity.

This call for action seeks the greatest social investment ever undertaken in Europe. We must not, however, be afraid of this initiative. In a time of political disaffection and distrust, an ambitious, broad and effective effort will send a strong message to European citizens that their institutions and governments want to bring people and society back to the centre of the European project.

7.4. How to Invest in Social Infrastructure to Fill the Gap? The Creation of a European Fund for Social Infrastructure

The Prodi Report proposes innovative solutions to finance health, education and social housing at a sustainable cost for European public finances. Social infrastructure is mostly funded through public budgets, since they barely produce cash flows on their own. Most of the time, direct contracts are financed by long-term loans. Thanks to quantitative easing, the spreads between Member States have been reduced significantly. But this will not last forever, and local authorities' debt offers little room for manoeuvre (Prodi and Reviglio 2019).

Two issues therefore arise. The first concerns the possibility of investments that do not weigh on public debt. The second is to ensure that the weakest countries and those most in need of social infrastructure can finance it at a lower cost.

Suppose a municipality or region needs to invest in social infrastructure but has no fiscal space. It can decide to implement it through innovative forms of institutional public-private-community-not profit partnerships (Foster and Iaione 2016, 2019). If the construction risk is transferred to the private individual it will not weigh on public debt (Fransen, del Bufalo and Reviglio 2018; EPEC 2016). The local administration will pay for the work through an "availability fee" which will affect expenditures year after year, but not its debt. Costs can be kept down by a national or European grant, public guarantees or tax incentives. Fiscal space can be provided through a "special clause for social investments". Contributions in kind can be made using local public heritage assets (land or buildings, for example). An institutional "technical assistance" system can ensure that risks and profits are well distributed between the public and the private sectors. This solution, known as "blending", helps contain debt and, at

the same time, may represent an incentive to reduce waste in current expenditures. First- and second-generation PPP in the UK and elsewhere have not been always very successful. But this does not mean that new, more advanced and innovative schemes may be structured today. More of these “urban regeneration initiatives” should be supported. Time is of the essence. Aging society and support to the younger generation must become a priority in EU policy agenda. If we don’t act bravely, Europe is destined for an inexorable decline.

This means, as we shall argue in the last part of this chapter, building mutualistic partnerships. There are many publics in ‘the public.’ In the public value framework, contestation of actual value production and evaluation systems is a critical success factor. Involving civil society organizations in framing public policy goals (missions) is a central part of the co-creation process. Producing public value requires collaboration and co-creation; public value cannot be created from the top down. Missions present an opportunity to put citizen participation at the heart of social innovation policy.

Some EU countries are desperately in need of infrastructure and growth, but are penalized by their credit rating. The creation of a European Fund for Social Infrastructure would address this.⁶ It would issue European Social Bonds to all Member States. The bonds would have a high rating and mitigate the risks associated with certain projects. This would largely solve the problem of sovereign spreads. The Fund would have a technical assistance network (the European Investment Bank (EIB) and State Investment Banks (SIBs) may be the best candidates for this endeavour) to assist administrations in building “European” quality economic and financial plans. Long-term investors, infrastructure Funds and SIBs would contribute to its capital through shares and investing in a liquid market of European Social Bonds issued by the Fund.⁷ This would help meet the investors’ demand for infrastructural long-term finance instruments. In 1993, then-European Commission President Jacques Delors introduced Eurobonds. There are two main differences between these and the Euro Social Bonds proposed in the Prodi Report. First, the Fund does not require a guarantee from Member States. It manages uncertainty by “tranching” securities according to their riskiness. Second, the Fund would limit itself to social infrastructure and specialize in sectors with specific characteristics. The markets, along with the EIB and the SIBs, would remain in charge of economic infrastructure.

6 The High-Level Task Force (HLTF) produced a paper with a proposal to set up a New European Fund for Social Infrastructure as part of a potential EU Social Infrastructure Agenda within the Juncker Plan. The paper has been discussed by internal and external experts and found consensus both on technical and political ground. However, it was decided not to include the paper in the *Report* (Fransen, del Bufalo and Reviglio 2018), but rather mention the work done with the hope that it may be re-discussed within the new Commission.

7 Social infrastructure investments, as a sub-class of infrastructure investment, have some distinctive features: small average size of capital expenditure (capex); high level of operating expenses related to capex; great opportunities for portfolio diversification; bundling of projects; low volatility of returns; low correlation to other assets; potential attractiveness for large long-term investors (see EDHEC-Risk Institute 2012).

7.5. 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 (Fransen, del Bufalo and Reviglio 2018; Prodi and Reviglio 2019). From an economic perspective a large fund is like a firm and as such, could have a long-term stabilizing role within the European financial market for infrastructure financing. We will make the point using a well-known debate in economic theory that started with Ronald Coase's paper on "The Nature of the Firm" (Coase 1937).

Equity for project financing at the global level is worth over \$350 bn (Inderst 2017). 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. Policy makers 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 (Bassanini and Reviglio 2011; Bassanini 2012; Ehlers 2014; Bassanini and Reviglio 2015; Arezki et al. 2016).

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 fifty years), consists of a "bundle or web of external contracts". 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 — makes 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 standardized and numerous projects bundled together to increase the size of the financial instruments issued for private investors. Such arrangements are doomed to face the typical complexities of the "principal-agent theory of contracts".

The point we wish to make is that firms may be preferred to markets in building and financing infrastructure. In economic theory, this is a question, which goes back to the Coase's paper on "The Nature of the Firm" (1937), in which 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 (Bassanini and Reviglio 2012, 2015; Garonna and Reviglio 2015). What makes these institutions such successful cases? The answer is 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/institutional money and, by doing so, the European process of economic and social convergence.

7.6. The Role of State Investment Banks (SIBs) in Financing Social Infrastructure in the European Union

State Investment Banks (SIBs) in Europe include the European Investment Bank (EIB) and the Council of Europe Development Banks (CEB).⁸ They are designed to provide medium- and long-term capital for productive investment. They have historically played, among others, an important role in funding social infrastructure (Macfarlane and Mazzucato 2018; Luna-Martinez and Vicente 2012).

The role of SIBs has grown during the crisis and will probably remain crucial for years. They have introduced a new philosophy in the European financial system.

⁸ National State Investment Banks (SIBs) in the EU are also known as National Promotional Banks and Institutions (NPBIs).

They have created new financial instruments and new guarantee schemes; provided significant additional resources to support the economy during the Great Recession, 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 capitalization.

More generally, they continue to play an important role in financing the real economy (primarily in terms of long-term, patient, capital investment), 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 (Bassanini, Pennisi and Reviglio 2015).

Traditionally their role in the financial system is to intervene to fill market failures, to be complementary to the market (and not in competition with it) being careful not to “crowd-out” private capital. Today, as we shall argue, these missions need deep re-thinking. We shall try to explain how and why we need this “radical” conceptual transition.

7.7. The Concept of “Public Value” and the Role of Social Action

Public value is value that is created collectively for a public purpose (Mazzucato and Ryan-Collins 2019; Macfarlane and Mazzucato 2018; Mazzucato and Penna 2016). This requires an understanding of how public institutions, such as mission-oriented public banks, can engage citizens in defining purpose (participatory structures), nurture organizational capabilities and capacity to shape new opportunities (organizational competencies); dynamically assess the value created (dynamic evaluation); and ensure that societal value is distributed equitably (inclusive growth). Purpose-driven capitalism requires more than just words and gestures of goodwill. It requires purpose to be put at the centre of how companies, public investment banks and governments are run and how they interact with civil society. This is especially true for social innovation which has a very tight relationship between the traditional mission of promotional banks and participatory democracy. Social infrastructure, in fact, shapes the nature of our society and as such needs direct participation from citizens.

We consider “public value mapping” and “public value failure” as counterpoints to market failure theory, as a means of justifying government intervention and public policy.

Public value results from the collective imagination, investments and pressure from social movements. To produce effective social movements, knowledge and capabilities are required in the planning, production, management and interactions among the different interest groups and citizens.

The conventional view is that public goods are required to fill the gap created by a lack of investment by the private sector. This is another example of the state playing the market-fixing role. However, public value goes beyond public goods. Rather than asking what gap or failure public goods are filling and fixing, we should ask what are the outcomes that society desires, and how can we make these happen? To do this, it is useful to begin with an understanding of markets as outcomes of the interactions between different actors in the economy.

The concept of public value enables us to overcome the dubious dichotomy between market and state. The market-failure justification also implies that pure private market goods can exist independently of public action. However, as illustrated by the seminal work of Karl Polanyi, *The Great Transformation*, there are very few examples of such phenomena. Most markets were forced into existence by collective action and policy. Many government actions enable markets to function or create and shape markets through investment, demand generation through procurement, legal codes, antitrust policies, university scientists and physical infrastructure. Markets are co-created by actors from all sectors, but economic theory does not view public actors as creators and shapers. This new role for governments as co-creators of markets would make it possible to shift not only the rate but also the direction of economic growth through collective action. Thus, the concept of public value is fundamental for guiding public action in shaping markets and co-creating the direction of economic growth. Public investment banks can have a crucial role in this change of paradigm.

7.8. How Social Investment and Social Infrastructure is Part of Public Value

The search for value should not be limited to soul-searching inside the private sector. Public institutions must also carefully consider their role in creating public value. The most ambitious public organizations did more than just fix market failures. They had ambition, purpose and a mission that extended beyond day-to-day politics.

We argue that public value should be understood as a way of measuring progress towards the achievement of broad and widely accepted societal goals that are agreed on by participatory processes. Creating a social space where citizenship rethinking public sector delivery and social infrastructure reshape the very nature of community. Participatory democracy in common value creating contributes to reshape capitalism.

To get real about value we need to concentrate on purpose throughout governance and production, recognize that economic value is created collectively, and build more symbiotic partnerships among public institutions, private institutions and civil

society. This is not about levelling the playing field but tilting it towards the direction of sustainable and inclusive growth. The concept of public value must be nested within a theory and practice of creating value within the public sector. From a policy perspective, it is essential to answer and operationalize the four following challenges:

1. What value is created: a purpose-driven approach engaged with civil society;
2. How to create it: capabilities within the public sector and dynamic partnerships;
3. How to assist it: dynamic metrics beyond cost benefit analysis;
4. How to share its benefits: risks and rewards for inclusive growth.

7.9. The Need for Mission-Oriented State Investment Banks

Finance is not neutral; the type of finance available can affect both the investments made and the type of activity that occurs (O’Sullivan 2004; Mazzucato 2013). The types of financial institutions and markets that exist have a material impact on activity in the real economy.

Financing social infrastructure requires not just any type of finance, but long-term patient strategic finance. Short-termism and risk-aversion means that the private sector will often not invest in higher-risk areas until future returns become more certain. Because the governance arrangements of SIBs typically do not create pressure to deliver short-term returns, they can provide patient financing over a longer time horizon, prioritize wider social and environmental objectives, and take a different approach to risk and reward.

Although certain sectors might be more suited for sector-specific strategies, there is a growing consensus that SIBs that are “mission-oriented”, with investment activities guided by specific missions focused on overcoming key societal challenges, tend to be more effective than those which are focused on more neutral economic objectives, such as promoting “growth” or “competitiveness”, sometimes referred to as “grand challenges”. These include environmental threats, such as climate change, and demographic, health and well-being concerns, as well as the difficulties of generating sustainable and inclusive growth (Macfarlane and Mazzucato 2017). “Mission-oriented” policy responds to these grand challenges by identifying and articulating concrete problems that can galvanize production, distribution and consumption patterns across various sectors. In doing so, it recognizes that:

- economic growth has not only a rate but also a direction;
- innovation requires investments and risk taking by both private and public actors;
- the state has a role in not only fixing markets but also in co-creating and shaping them;

- successful innovation policy combines the need to set directions from above with the ability to enable bottom-up experimentation and learning; and
- missions may require consensus building in civil society.

A mission-based approach can help to ensure that SIBs do not end up merely supporting a static list of sectors — a strategy that often gets criticized for its risk of “picking winners”. Rather, mission-oriented policies focus the vertical element not on sectors but on societal challenges, that require different sectors to invest and innovate. This involves picking the problems and helping any organization (across the public sector, private sector, third sector and across all manufacturing and services) that are willing to engage with the investments and activities that such challenges require. In other words, they require picking the “willing” not picking the “winners”.

There is therefore an opportunity to tailor the mandates of Europe’s SIBs towards supporting a mission-oriented agenda. To fulfil a mission-oriented mandate, SIBs must have a wide range of instruments at its disposal, including both debt and equity, suited to different areas of the risk landscape. For example, equity investments may be suitable for radical innovation, while debt instruments, such as long-term loans, may be better for lower-risk activities. This will enable SIBs to invest across the innovation chain from the pre-R&D phase all the way through to providing long-term patient capital for established firms. In addition to lending operations, many SIBs offer advisory services such as strategic planning, capacity building, and training programs that help to create viable projects and catalyze investments that otherwise would not happen (Macfarlane and Mazzucato 2017).

A key difference between mission-oriented NPBI and private financial institutions is the breadth of expertise and capacities contained within staff. In many cases this includes not only financial expertise but significant in-house engineering and scientific knowledge about the sectors the bank is active in and the nature of the investments being made. This enables investment decisions to be based on a wider set of criteria rather than relying on market signals alone, meaning that they are better placed to appraise social and environmental considerations (Macfarlane and Mazzucato 2017).

Acting as lead investor necessarily means absorbing a high degree of uncertainty and accepting failures when they happen. In making investments SIBs can use their balance sheet to structure investments across a risk-return spectrum so that lower risk investments help to cover higher risk ones. For this to work, it is important that SIBs are able to capture some of the reward (the “upside”) that is made possible by their risk-taking and investment in order to cover the inevitable losses. This can be done by employing mechanisms such as retaining equity in the innovative companies it supports, or co-owning intellectual property with innovative firms it invests in (Macfarlane and Mazzucato 2018).

SIBs and other public financial institutions are often criticised on the basis of “picking winners”, “crowding-out” or funding large incumbent companies. While

there are instances where criticism may be merited, part of the reason for this lies in the absence of monitoring and evaluation frameworks which adequately capture the dynamic spillovers generated by the mission-oriented investments made by these institutions. As a result, it is important to develop appropriate monitoring and evaluation frameworks which do not focus on market failures but which instead assess the extent to which they have been successful at catalyzing activity that otherwise would not have happened (Macfarlane and Mazzucato 2018)

Finally, in order to be successful, it is important that mission-oriented SIBs work closely with other actors in the wider financial, business and innovation ecosystems. In some cases, it may be most appropriate to invest directly in firms and infrastructure aligned with the missions of the SIB, while in other cases it may be more appropriate to co-invest with other actors (Macfarlane and Mazzucato 2018). Structured properly, investments should seek to “crowd-in” private investment by giving private sector actors the confidence they need to invest (Macfarlane and Mazzucato 2018).

7.10. Closing Remarks

In this chapter, we make three proposals.

First, at a time where an entire generation still views the EU as the austerity headmaster, social investment provides an opportunity for the EU to revive its political capital. Reviving the EU with an assertive “social investment pact” (not package) would confront head on the political vacuum between right-populist welfare chauvinism and the ongoing calls for overnight fiscal consolidation that has emerged at the heart of the European project in the crisis aftermath. In this context, the EU is faced with two options: First, business as usual. EU Member States may choose to muddle-through with the ideology of the long-term myth of unproductive social spending, instead of adapting to new realities. In this scenario, the EU will risk not only bearing the expensive economic costs of blindness, but this would also precipitate a political backlash in undermining the resilience of the European project. A more constructive option would be for the EU to ratchet up domestic social investment with EMU rules that allow for exempting human capital “stock” investments from the Stability and Growth Pact (SGP). Concretely, this would take the form of a “Golden Rule” exempting human capital “stock” spending from the euro area fiscal rule book for 1.5% of GDP for about decade, as a flagship initiative of the new Commission. Given the absence of a stabilization budget for the euro area, investing in the economic and social resilience of national welfare states is imperative. As the economist Jean Pisani-Ferry (2019) convincingly argued in a recent article: “When Facts Change, Change the Pact”. The time for social investment to be accounted at its just value is now. Today’s favourable low interest rate environment should be put to use to establish, consolidate and expand social investments that benefit future generations and consolidate fiscal health in the face of adverse demography.

Second, good social services need good social infrastructure. A major boost is needed in long-term social infrastructure investment. Such needs will have to consider future changes in European social models. Social infrastructure investment 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 almost completely paid by tax payers' money. How do we ensure that a member country with a particularly penalizing sovereign rating (and fiscal position), but very much in need of infrastructure and growth, can finance itself at "sustainable" rates? We propose the creation of a large European Fund for Social Infrastructures — with public-institutional-SIBs shareholding — which issues European Social Bonds with a high rating capable of distributing the risk downstream — on projects — to give finance to all member countries, overcoming, at least in large part, the problem of sovereign spreads and foster "upward convergence".

The Fund would have a technical assistance network to assist administrations in building "European" quality economic and financial plans. In turn, the European Fund would have a reputation that would attract long-term patient investors. Both in terms of their participation in the fund's capital (through shares) and through investment in European Social Bonds, this would create the match between long-term investors, such as pension funds and life insurance, and infrastructural financial instruments, on which much has been written and discussed, but that has not yet been realized in the dimension that both demand and offer seem to require.

Third, recent decades witnessed a trend whereby private markets retreated from financing the real economy, while, simultaneously, the real economy itself became increasingly financialized. This trend resulted in public finance becoming more important for investments in capital development, technical change and social innovation. Within this context, we believe that a growing role should be played by a particular source of public finance: State Investment Banks (SIBs).

The role of "mission-oriented" SIBs in social innovation — and how SIBs can play a more central role by transforming from institutions which simply "fill market failures" to institutions which "shape the market", thereby becoming major providers of sustainable long-term and patient finance for the public good — is one of the great challenges that Europe must now face. We beg policy makers at all levels to take very seriously the present social challenge and to ask themselves, "if not now, when?"

References

- d'Albis, H., A. Greulich and G. Ponthière (2017) "Education, Labour, and the Demographic Consequences of Birth Postponement in Europe" *PSE Working Papers*, <https://halshs.archives-ouvertes.fr/halshs-01452823>

- Arezki, R., P. Bolton, S. Peters, F. Samama and S. Joseph (2016) "From Global Savings Glut to Financing Infrastructure: The Advent of Investment Platforms", *IMF Working Paper* 16(18), <https://www.imf.org/external/pubs/ft/wp/2016/wp1618.pdf>
- Bassanini, F. (2012) "Financing Long Term Investment after the Crisis: A View from Europe", in *Sovereign Wealth Funds and Long-Term Investing*, ed. by P. Bolton, F. Samama, J. E. Stiglitz, (New York: Columbia University), pp. 37–44, <https://doi.org/10.7312/columbia/9780231158633.001.0001>
- Bassanini, F. and E. Reviglio (2011) "Financial Stability, Fiscal Consolidation and Long-Term Investment after the Crisis", *OECD Journal: Financial Markets Trends* 1: 37–75, <https://doi.org/10.1787/fmt-2011-5kg55qw1vbjl>
- Bassanini, F. and E. Reviglio (2015) "From the Financial Crisis to the Juncker Plan", in *Investing in Long-Term Europe. Fixed, Re-Launching Fixed, Fixed, Network and Social Infrastructure*, ed. by P. Garonna and E. Reviglio (Rome: LUISS University Press), pp. 59–80.
- Bassanini, F., G. Pennisi and R. Reviglio (2015) "Development Banks: From the Financial and Economic Crisis to Sustainable and Inclusive Growth", in *Investing in Long-Term Europe. Re-launching fixed, Network and Social Infrastructure*, ed. by P. Garonna and E. Reviglio (Rome: LUISS University Press), pp. 312–16.
- Beaujouan, É. and T. Sobotka (2014) "Two Is Best? The Persistence of a Two-Child Family Ideal in Europe", *Population and Development Review* 40(3): 391–419, <https://doi.org/10.1111/j.1728-4457.2014.00691.x>
- Borgstrom, E., R. Morris, D. Wood, S. Cohn and S. Barclay (2016) "Learning to Care: Medical Students' Reported Value and Evaluation of Palliative Care Teaching Involving Meeting Patients and Reflective Writing", *BMC Medical Education* 16(1): 306, <https://doi.org/10.1186/s12909-016-0827-6>
- Brilli, Y. (2014) "Does Child Care Availability Play a Role in Maternal Employment and Children's Development? Evidence from Italy", *Review of Economics of the Household* 14(1): 27–51, <https://doi.org/10.1007/s11150-013-9227-4>
- Cantillon, B. and F. Vandenbroucke (eds) (2014) *Reconciling Work and Poverty Reduction. How Successful are European Welfare States?* Oxford: Oxford University Press.
- Coase, R. H. (1937) "The Nature of the Firm", *Economica* 4(16): 386–405, <https://doi.org/10.1111/j.1468-0335.1937.tb00002.x>
- Cumba, F. and J. Heckman (2007) "The Economics of Human Development. The Technology of Skill Formation", *American Economic Review* 97(2): 31–47, <https://doi.org/10.1257/aer.97.2.31>
- del Boca, D., M. Locatelli and D. Vuri (2005) "Child Care Choices by Working Mothers: The Case of Italy", *Review of Economics of the Household* 3: 453–77, <https://doi.org/10.1007/s11150-005-4944-y>
- Deleidi, M., M. Mazzucato, V. de Lipsis, J. Ryan-Collins and P. Agnolucci (2019) *The Macroeconomic Impact of Government Innovation Policies: A Quantitative Assessment*. UCL Institute for Innovation and Public Purpose, Policy Report working paper series (IIPP WP 2019-06), <https://www.ucl.ac.uk/bartlett/public-purpose/wp2019-06>
- Deleidi, M., F. Iafrate and E. S. Levrero (2019) *Public Investment Fiscal Multipliers: An Empirical Assessment for European Countries*. UCL Institute for Innovation and Public Purpose, Policy Report working paper series (IIPP WP 2019-08), https://www.ucl.ac.uk/bartlett/public-purpose/sites/public-purpose/files/final_working_paper_deleidi_iafrate_levrero_19_aug.pdf

- EDHEC-Risk Institute (2012) "Pension Fund Investment in Social Infrastructure. Insights from the 2012 Reform of the Private Finance Initiative in the United Kingdom", https://www.edhec.edu/sites/www.edhec-portail.pprod.net/files/publications/pdf/edhec-publication-pension-fund-investment-in-social-infrastructure-f_1332412681078.pdfjgp
- Ehlers, T. (2014) "Understanding the Challenges for Infrastructure Finance", *BIS Working Papers* 454, <https://www.bis.org/publ/work454.pdf>
- EIB (2018) *EIB Investment Report 2018/2019: Retooling Europe's Economy*. Luxembourg: European Investment Bank, https://www.eib.org/attachments/efs/economic_investment_report_2018_en.pdf
- EPEC (2016) "A Guide to the Statistical Treatment of PPPs", https://www.eib.org/attachments/thematic/epec_eurostat_statistical_guide_en.pdf
- European Commission (2016) "Report on Public Finances in EMU, Institutional Paper 045", https://ec.europa.eu/info/sites/info/files/ip045_en_0.pdf
- Foster, S. and C. Iaione (2016) "The City as a Commons", *Yale Law & Policy Review* 34: 281–349, <https://digitalcommons.law.yale.edu/cgi/viewcontent.cgi?article=1698&context=yldr>
- Foster, S. and C. Iaione (2019) "Ostrom in the City: Design Principles and Practices for the Urban Commons", in *Routledge Handbook of the Study of the Commons*, ed. by D. Cole, B. Hudson and J. Rosenbloom (London: Routledge), pp. 235–55, <https://doi.org/10.4324/9781315162782-19>
- Fransen, L., G. del Bufalo and E. Reviglio (2018) *Boosting Investment in Social Infrastructure in Europe. Report of the HLTF Force on Investing in Social Infrastructure in Europe chaired by Romano Prodi and Christian Sautter*. Luxembourg: Publications Office of the European Union, https://www.fondazioneifel.it/notizie-ed-eventi/item/download/2376_ee5d868e16ae749daced6f41cce3709c
- Garonna, P. and E. Reviglio (eds) (2015) *Investing in Long-Term Europe. Fixed, Re-Launching Fixed, Fixed, Network and Social Infrastructure*. Rome: LUISS University Press.
- Härkönen, J. (2011) "Children and Dual Worklessness in Europe: A Comparison of Nine Countries", *European Journal of Population* 27(2): 217–41, <https://doi.org/10.1007/s10680-011-9232-3>
- Heckman, J. (2006) "Skill Formation and the Economics of Investing in Disadvantaged Children", *Science* 312(5782): 1900–02, <https://doi.org/10.1126/science.1128898>
- Hemerijck, A. (2013) *Changing Welfare States*. Oxford: Oxford University Press.
- Hemerijck, A. (ed.) (2017) *The Uses of Social Investment*. Oxford: Oxford University Press, <https://doi.org/10.1093/oso/9780198790488.001.0001>
- Hemerijck, A. and S. Ronchi (forthcoming, 2020) "European Welfare States' Detour(s) to Social Investment", in *The Oxford International Handbook of Public Administration for Social Policy: Promising Practices and Emerging Challenges*, ed. by J. Boston, E. Ferlie, F. Filgueira, Y. Jing, E. Ongaro and V. Taylor (Oxford: Oxford University Press).
- Inderst, G. (2017) "Social Infrastructure Investment: Financing Sources and Investor Perspective", *HLTF SI*, Draft for discussion, June 15.
- Jenkins, A., A. Vignoles, A. Wolf, and F. Galindo-Rueda, Fernando (2003) "The Determinants and Labour Market Effects of Lifelong Learning", *Applied Economics* 35(16): 1711–21, <https://doi.org/10.1080/0003684032000155445>
- Kattel, R., M. Mazzucato, J. Ryan-Collins and S. Sharpe (2018) *The Economics of Change: Policy Appraisal for Missions, Market Shaping and Public Purpose*. UCL Institute for Innovation and

- Public Purpose, Policy Report working paper series (IIPP WP 2018-06), <https://www.ucl.ac.uk/bartlett/public-purpose/wp2018-06>
- Korpi, W., T. Ferrarini and S. Englund (2009) "Egalitarian Gender Paradise Lost? Re-Examining Gender Inequalities in Different Types of Welfare States", *Swedish Institute for Social Research*, Stockholm University, Paper presented at Equalsor Conference, Berlin 9 May 2009.
- Luna-Martinez, J. and L. Vicente (2012) "Global Survey of Development Banks", *World Bank Policy Research Working Paper* 5969, <http://documents.worldbank.org/curated/en/313731468154461012/pdf/WPS5969.pdf>
- Macfarlane, L. and M. Mazzucato (2018) *State Investment Banks and Patient Finance: An International Comparison*. UCL Institute for Innovation and Public Purpose, Policy Report working paper series (IIPP WP 2018-01), <https://www.ucl.ac.uk/bartlett/public-purpose/wp2018-01>
- Mazzucato, M. (2013) "Financing Innovation: Creative Destruction vs Destructive Creation", *Industrial and Corporate Change* 22(4): 851–67, <https://doi.org/10.1093/icc/dtt025>
- Mazzucato, M. and C. Penna (2016) "Beyond Market Failures: The Market Creating and Shaping Roles of State Investment Banks", *Journal of Economic Policy Reform* 19(4): 305–26, <https://doi.org/10.1080/17487870.2016.1216416>
- Mazzucato, M. and R. Kattel (2019) "Getting Serious about Public Value", *IIPP Policy Brief* 07, https://www.ucl.ac.uk/bartlett/public-purpose/sites/public-purpose/files/iipp_policy_brief_07_getting_serious_about_value.pdf
- Mazzucato, M. and L. Macfarlane (2017) *Patient Strategic Finance: Opportunities for State Investment Banks in the UK*. UCL Institute for Innovation and Public Purpose, Policy Report working paper series (IIPP WP 2017-05), <https://www.ucl.ac.uk/bartlett/public-purpose/wp2017-05>.
- Mazzucato, M. (2013) *The Entrepreneurial State: Debunking Public vs. Private Sector Myths*. London: Anthem Publishing.
- Mazzucato, Mariana (2018) *Mission-Oriented Research & Innovation in the European Union: A Problem-Solving Approach to Fuel Innovation-Led Growth*. Luxembourg: Publications Office of the European Union, https://era.gv.at/object/document/3844/attach/mazzucato_report_2018.pdf
- Mazzucato, M. (2019) "Governing Missions in the European Union", https://ec.europa.eu/info/sites/info/files/research_and_innovation/contact/documents/ec_rtd_mazzucato-report-issue2_072019.pdf
- Mazzucato, M. and J. Ryan-Collins (2019) *Putting Value Creation back into "Public Value": From Market Fixing to Market Shaping*. UCL Institute for Innovation and Public Purpose, Policy Report working paper series (IIPP WP 2019-05), https://www.ucl.ac.uk/bartlett/public-purpose/sites/public-purpose/files/public_value_final_30_may_2019_web_0.pdf
- O'Sullivan, M. (2014) "Finance and Innovation", in *The Oxford Handbook of Innovation*, ed. by J. Fagerberg, D. C. Mowery and R. R. Nelson (New York: Oxford University Press), pp. 240–65.
- Pisani-Ferry, J. (2019) "When Facts Change, Change the Pact", *Project Syndicate*, April 29, <https://www.project-syndicate.org/commentary/europe-stability-pact-reform-investment-by-jean-pisani-ferry-2019-04?barrier=accesspaylog>
- Polanyi, K. (1944) *The Great Transformation: The Political and Economic Origins of Our Time*. New York: Farrar & Rinehart.
- Prodi, R. and E. Reviglio (2019) "A New Fund for Europe. The Creation of a New European Social Bond Would Help EU Member States Meet their Infrastructure Needs without

Exacerbating Public Debt”, in *OMFIF Global Public Investor*, ed. by Danae Kyriakopoulou (London: OMFIF Ltd), pp. 132–33.

Schmid, G. (2015) “Sharing Risks of Labour Market Transitions: Towards a System of Employment Insurance”, *British Journal of Industrial Relations* 53(1): 70–93, <https://doi.org/10.1111/bjir.12041>