Welfare 2.0: future scenarios of social protection systems in the digital age

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ABSTRACT
Europe faces today unprecedented challenges including increased life expectancy, changes in family structures, new forms of consumption and production, sedentary lives, with a growth in chronic diseases. These trends, coupled with an increasingly interconnected economic space disrupted by the spread of digital technologies, raises questions about the role and functioning of the Welfare State. After introducing the need for envisaging the future of welfare, the paper presents the approach followed and the resulting scenarios proposed. Four scenarios are created, resulting from identifying two key uncertainties: low or high levels of sustainability, and low or high levels of engagement. The four scenarios of the future of welfare are then discussed showing different implications for how welfare is understood, financed, organized and the roles of different actors. Our discussion aims at opening up the debate on where the evolutionary paths of welfare systems could lead European societies in light of the impact of the digital transformation, and the required rethinking of their functioning and role. This would provide support in identifying innovative trajectories outlining possible further research directions, and implications for European policies with an impact at national, regional and local level.

1. Introduction
Europe faces today unprecedented challenges. Life expectancy has increased significantly over recent decades (Myck 2015), while birth rates have decreased (Willekens 2015). Family structures have profoundly changed over recent years (Pahl and Spencer 2010). Changes in consumption patterns, with people living more sedentary lives, have also impacted on the health of citizens, increasing chronic diseases (Geneau et al. 2010). Technological advances have contributed to these changes and have also radically changed the labor market (OECD 2019a). Hence, alongside the claimed advantages
of the “new industrial revolution”, possible negative consequences have emerged related to new forms of production and consumption promoted by digitalization, risking widening social gaps and increasing divides, between states, across regions, and among different groups of the population (Gonzalez Vazquez et al. 2019).

These issues and uncertainties about future directions have resulted in policy makers, citizens, stakeholders and many scholars searching for a Welfare State fit for the future. The need to reform and modernize the Welfare State has been on the policy agenda for a while now, with several attempts to address this (European Commission 2013, 2017). While some countries adopted new policy measures, implementing relevant reform initiatives (Hemerijck et al. 2017), there is still need for a deep debate on how to reform the Welfare State and a general rethinking of our communities’ social fabric.

For this reason, shaping the future of welfare systems is an exercise of the utmost importance, and can be framed in terms of the need to understand and set the conditions for envisaging a more resilient and inclusive society, capable of turning the above-mentioned risks into opportunities for all (Misuraca, Pasi, and Viscusi 2018).

Our paper aims at contributing to the debate about the evolutionary paths of welfare systems and where these could lead European societies in light of the digital transformation, and the required rethinking of the functioning and role of traditional social protection systems.

Having introduced the need for envisaging the future of welfare (Section 1), the paper summarizes the challenges posed by digital transformation and faced by traditional welfare models in the EU (Section 2). Once the scope of the research has been set out, the methodological approach is briefly presented, providing reference to the knowledge base on which the scenarios exercise relies (Section 3). The building of the four scenarios of the future of welfare are then proposed and discussed (Section 4). Finally, some concluding remarks outlining possible future research directions and implications for policy are offered (Section 5).

2. Traditional welfare models are challenged by the digital transformation

2.1. The welfare state financing angle as a key perspective

As it emerged in European history, the Welfare State was mainly expected to guarantee social protection (Ferrera, 2003), that is, a kind of insurance in case of unforeseen events affecting people lives. Scholars deepened the reflection around the role and the functioning of the Welfare State with its different ways of performing depending on contexts and policy design options adopted (Bouget et al. 2015).

Without going into detail about different welfare regimes, an important aspect of how the Welfare State functions is related to its financial underpinnings. This is because the way in which the financial aspect of a welfare system is designed inevitably affects many others, such as the entitlement basis, its coverage, the form of benefits and their delivery.

In terms of funding the Welfare State funding, historically two main approaches developed in Europe. On the one hand, there is the Bismarckian model, providing
protection and benefits to those who contributed to their financing via employment contributions (Titmuss 1975). On the other hand, the Beveridgean model, funded by general government tax revenues, providing coverage for the entire population (Clasen and Clegg 2011). Despite their differences, the literature shows that current Welfare States are likely to be a mix of the two, and especially due to the European integration process, the idea of a convergence has become more mainstream (Clasen and Clegg 2011). Regardless of whether and to what extent a real convergence between the two models has happened, it’s worth exploring how these two different models, pure or mixed, are now and in the future given the digital transformation and its impact on labor market and wages.

Fragmented career paths, extreme forms of flexibility and the obsolescence of skills, just to mention a few, are all aspects brought and exacerbated by the digital transformation that pushes for a paradigm shift in the functioning of labor markets and a deep change in the nature of work (Gonzalez Vazquez et al. 2019). In this context, a Welfare State financing mechanism based on social insurance contributions, as in the Bismarckian model, cannot properly work, and it can’t ensure the functioning of the Welfare States in current and future societies.

Further, labor markets have been polarizing, new technologies have replaced many middle-skilled routine jobs with new high- and low-skilled jobs, hence it can be easily understood that the fall in the relative number of middle-skilled jobs is often deemed to have contributed to the decline of the middle class (OECD 2019b). In this context, a Welfare State financing mechanism based on general tax revenues, as in the Beveridgean model, faces an important backstop if its main tax revenue base is eroded, or “squeezed”.

Therefore, the digital transformation impacting on labor markets and the middle class is a key force putting under further pressure and heavily confronting the robustness of welfare systems’ financial fundamentals.

2.2. The great transformation 2.0 and the making of the welfare state

To capture the breadth and nature of the potential changes brought by the new emerging risks and the critical conditions under which the traditional Welfare State financing mechanisms find themselves, we must thus direct our attention toward those consequential responses that have been emerging in the last years. These include new forms of collaboration and synergy between non-state actors, increasingly involved in welfare provision (Maino 2015).

Looking at these bottom-up initiatives is justified by both historical and contemporary reasons. As argued by Ferrera (2019), European societies are in the mid of a “great transformation”: an expression coined in the first half of the XIX century by Karl Polanyi to refer to the rise of market capitalism, which in turn surfaced the well-known “Social Question”. Traditional risks and opportunities are being restructured. Territories, social groups, families, and individuals are faced with situations of unforeseen need and insecurity. We are facing the Great Transformation 2.0, which again raises, but in new guises, the same old “Social Question”.

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Relying again on Polanyi’s view, Ferrera reminds us that society’s responses to the excesses of capitalism during the Great Transformation went through the aggregation of interests and collective mobilizations against a market running out of control. However, this process had been preceded by a multitude of experiments: a slow process of self-protection, which proceeded bottom-up, initially without a large-scale organizational frame or homogeneous ideological cohesion. At the local level, spontaneous and contingent initiatives to respond to risks and needs arose, without mutual connection. This social effervescence involved many different actors, with resources of very different origins and dimensions. The dynamics leading to the transversal connection between initiatives and actors, to the formation of networks and coalitions capable of acting vertically (large organizations capable of collective action) were neither linear nor systematic. Yet it was from this melting pot that the ambitious project to build mass social protection and then the effective institution of the Welfare State was born (Ferrera 2019).

According to Misuraca, Pasi, and Viscusi (2018), social innovation – despite some theoretical weaknesses – is an emergent effect that well represents this “social effervescence”, embodied by any initiative, product, process, or program that changes basic routines, resources and authority flows, or the beliefs of any social system (Moore and Westley 2011). Evidence suggests that digital technologies are both drivers of and factors resulting from this transformation process.

Hence, studies on digital social innovation is a privileged viewpoint to start from, as it brings to a better understanding of the main features and behaviors of those networks that populate the innovation ecosystems and from which the public sector might take advantage to build a transformative capacity, and go through a self-regeneration process. Social innovation, and especially when it is digital, might be seen as a welfare reform micro-strategy, structured along different – both in terms of nature and intensity – intervention logics (Misuraca, Pasi, and Viscusi 2018).

This paper aims to make sense of these emerging logics of intervention and the positive contribution an informed deployment of Information and Communication Technologies (ICTs) could play in the design of innovative institutional settings, envisaging possible scenarios for the future of welfare. This also means providing indications for informed decisions and anticipating behaviors of those actors involved in shaping a new generation of social policy and the welfare systems and structures that will come.

3. Methodology

This foresight exercise was developed alongside research conducted by the authors in the field of social innovation, with a strong focus on the role ICTs are playing in shaping new service delivery models and modernizing the way social protection systems contribute to fairer and more resilient societies (Misuraca, Pasi, and Urzi 2017a).

The research on which this paper on the future of welfare systems relies is the multi-year research project entitled ‘ICT-Enabled Social Innovation to support the implementation of the Social Investment Package’ (in short IESI), launched in 2014.
and carried out by the European Commission’s Joint Research Center and DG Employment, Social Affairs and Inclusion.

The IESI project led to the collection of (i) a unique database of almost 1000 ICT-enabled social innovation initiatives which promote social investment, and (ii) a more detailed “mapping analysis”, and (iii) case studies, so to provide the empirical ground on which to build a comprehensive conceptualization of how digital technologies can contribute to modernizing social protection systems.

Building on this conceptual and empirical research, the foresight exercise was carried out to explore possible impacts of the digital transformation on the future of welfare systems. The methodology adopted relies on two main steps, according to the literature of future studies (Ramirez and Wilkinson 2016; Wright and Cairns 2011): horizon-scanning to identify the most important trends and drivers of change for the subject of the research, and the design of scenarios against two relevant dimensions of impacts.

Along with the identification of trends and patterns related to the deployment of ICTs within European social protection systems and its beneficial combination with most successful social innovation practices, the IESI research identified the need to embrace the policy domain as well, i.e. going beyond the observation of service delivery models, and identifying main trends in policy design and their underpinning institutional arrangements.

Hence, horizon-scanning mainly meant a systematization of the results already achieved, with a further integration of main trends related to the current institutional changes.

The scenario design phase moved toward the choice of a few important trends to work with. These trends have been then discussed in relation to two most relevant dimensions of impacts, expressed as a continuum between two opposite uncertain outcomes (Lustig 2017).

The scenario design process was structured along the methodological steps as in Figure 1.

The elaboration of a first set of scenarios and their underlying trends served to frame an informed reflection on the future of welfare during a broader foresight exercise conducted by the Joint Research Center to contribute to the debate on the design of the European Pillar of Social Rights.¹ This included expert participatory foresight workshops to debate findings that emerged from the research and to shape future scenarios addressing the social implications of the digital transformation on our society.

This enabled deepening the analysis, and refining the scenarios to handle the typical conceptual risks entailed by the use of this methodology. Particular attention has been given to the risk of building scenarios that are extremes (Lustig 2017). To this extent, a special effort was made to ensure the axes of the scenario exercise not only make sense

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¹ The scenario design process was structured along the methodological steps as in Figure 1.

**Figure 1.** Scenario design process.
but also truly represent the most important uncertainties and generate strategic insight. The iterative process allowed us to identify additional elements to be considered in the design of the scenarios, with the aim of producing scenarios rich and broad enough to cover a wide enough spectrum in their respective narratives.

4. Envisioning the future of welfare systems

4.1. Trends

The literature provides a huge amount of trends affecting contemporary societies, spanning from demographic changes, to public budget constraints, not to mention the changing nature of work and labor market. Whilst these are important trends, we advance here some conceptually elaborated trends that are higher in the level of abstraction, and at the same time encompass other issues, from both a theoretical and empirical standpoint.

The selected trends have a particular nature. In contrast to other trends (e.g. demographic ones or new consumption uses and life-styles), both entail a certain specific awareness of those people active in their domains, and a clear willingness to produce a change for the better. Socio-technical and social innovation trends share a common feature: the “intentionality” behind the change they aim to bring forward. This intentionality in searching for a positive change means a quest for systemic impact, so both the trends unveil a political meaning, with the ambition to affect the way in which institutions work.

a) Socio-technical trends:

Insights from studies in the field of digital governance and the deployment of new technologies in the delivery of social services (Misuraca, Pasi, and Urzi 2017a) reveal that ICTs can contribute to increasing productivity of social systems, reducing costs due to simplification of processes and easier take-up of services. ICTs can help to free up resources, which can then be reallocated to specific targeted activities for improvement of services. This can increase beneficiaries’ quality of life, strengthening the (active) inclusiveness of social protection systems. Moreover, greater ICT-enabled accountability and transparency means a contribution in terms of democratic legitimacy of welfare systems, establishing closer and trustworthy relationships with citizens.

Hence, relevant consolidated socio-technical trends are:

- Diffusion of pervasive, always-on Internet connections: increasing the amount of services and content consumed and produced by users, taking advantage of social, cloud, ubiquitous, quantum and more recently edge computing, IoT and augmented reality;
- “Democratization” of software and the “data deluge”: a combination of web-based and open source software which lowered entry barriers for web-based services, opening up potential for creativity and experimentation, supported by Big-Open-Linked-Data;
• Raising expectations of citizens pushed by collective intelligence movements: citizens are no longer willing to accept government services as they are, and expect to be given greater voice, i.e. space for co-creating public services through user-generated content;
• Development of tools based on simulation and complex systems modeling: these capture not only predictable human behavior via linear top-down forecasting methods, but also unplanned outcomes via data analytics and ICT-based simulation-modeling techniques.

b) Social innovation trends

Clearly, these socio-technical trends are not sufficient per se to modernize social protection systems. In order to be transformative, technological innovation needs to contribute to the creation of public value, and thus it requires cultural change, trust between service providers and beneficiaries, multi-sectorial partnerships, collaborative design, implementation and evaluation of services.

Social innovation refers to “new solutions that simultaneously meet a social need and lead to new or improved capabilities and relationships and better use of assets and resources” (Mulgan et al. 2007). Available data show social innovation is also a formidable catalyst of what Venturi and Zandonai (2014), among others, defined as “hybridization”. In line with the idea of social innovation as a process that leads to deep changes in daily routines, allocation of resources, power relations or values (Moore and Westley 2011), hybridization is shedding a new light on the social economy, which cannot be anymore considered as an insulated sector.

Also, as demonstrated by results from the IESI research (Misuraca et al. 2017b), digital and social innovation can play an important role in support to the modernisation of welfare systems, namely:

• ICTs combined with social innovation have a potential disruptive impact on the way social services are organized and delivered;
• ICTs development and implementation applied in social innovation initiatives push for organizational re-engineering.

Likewise, innovative financial instruments are increasingly being adopted to boost the social impact of social innovation initiatives, being a powerful means to achieve (i) integration of services across levels and types of governments, (ii) cross-sectorial partnerships, (iii) increased access and take-up of services, and (iv) improved service quality.

Finally, according to findings from Maduro, Pasi, and Misuraca (2018), social innovation trends entail also a set of additional persistent shifts:

• From outputs to outcomes: new contractual arrangements between social economy service providers and governments at different levels subordinating payments to achieved outcomes instead of outputs are spreading;
• From grants to repayable funding: most innovative social economy actors often find out that traditional grant schemes do not fit to their financial needs, and have started to look for different financing schemes (e.g. debt and equity).
4.2. Dimensions of impact

We developed two types of impact as the basis for our future scenarios. Building on the identified trends, the first dimension of impact revolves around the notion of “sustainability”, understood here in a broader sense than in merely financial terms. Despite the emphasis on finance, this is not its entire meaning of “sustainability”: financial mechanisms are a function of a public value perspective, which includes principles of solidarity, the ethos of social responsibility and “satisfaction” (Stiglitz 2009). Sustainability, while being underpinned by financial aspects, is inherent to both material and immaterial conditions of present and future well-being. Sustainability refers to citizens’ reasonable beliefs and expectations that solidarity can be considered as a driving value. Sustainability means, at least in part, intergenerational solidarity.

The second impact dimension for our scenario framework is defined by “engagement”, meaning the production of welfare, that is, the variety of welfare sources and their possible ways of relating to each other. Where engagement is lower, there is only one source of production, while higher engagement means more or even all the sources are in force and active, regardless the type of relationships between them (collaboration or competition, for instance). This dimension of impact is clearly affected by the trends we have identified, as social innovation, especially when enabled by ICTs, focuses on inter-sectoral integration and stakeholders’ partnerships, often involving citizens’ participation and collective intelligence.

4.3. Proposed scenario framework

The two dimensions of impact are represented by two axes, producing the four scenarios for the future of welfare depicted in Figure 2. While the scenarios show similar characteristics to existing welfare models, they are defined by different criteria than those discussed by the literature on welfare regimes.

The “Individualist/Do-It Yourself – Distributed Welfare Insurance-extended model” and the “Post-Industrial Retrenched Welfare – Occupational-extended model” share low levels of sustainability, where sustainability does not refer only to the financial

![Figure 2. Future of welfare scenarios framework.](image)
dimension of welfare sustainability, although this is likely the most intuitive one. However, the reason for the low level of sustainability differs from one scenario to the other.

**Individualist/Do-It Yourself – Distributed Welfare Insurance-extended model**

In this scenario sustainability is low due to the fact that the polarization between good and bad jobs in the labour market, with implications for wage distribution among the population and the emerging “squeezed middle class”, inevitably decreases the overall tax revenue at regional and state level. This changes the equilibrium between fiscal levy and social public expenditure, that is, the traditional insurance scheme logics standing behind a welfare model.

A closer look reveals high pressure on the average distribution of wages, provoking heterogeneous and limited access to welfare, with a particular impact on the affordability of available alternatives. In the absence of enhancing mechanisms for the demand of welfare, also the level of engagement will be affected. For the few people able to access welfare services out-of-pocket, i.e. paying complementary insurance schemes, some “engagement” will emerge because of a weak-but-still-existing demand. The polarization between the few that can afford integrative welfare plans, mainly delivered by private for-profit companies, and the many that will be left behind as not able to further increase their out-of-pocket expense for welfare services, will end up in some sort of collective endeavors, taking advantage from economies of scale, achieved via online social networks or communities. For this reason this scenario scores positively in terms of engagement.

Nevertheless, this scenario entails a clear risk of fragmentation of the solidarity value, that is, “the normative expectation of mutual support among members of large anonymous groups” (Genschel and Hemerjick 2018). Here, the high engagement is only apparent, as it emerges only on the demand side, and not solving the issue of restricted access to welfare for disadvantaged groups and exacerbation of social and digital exclusion. Forms of cooperation and collective-self-organization of insular communities happen only to deal with the issue of access to services for the few with purchasing power, leaving untouched the issue of welfare production. The amount of resources to produce best and higher levels of welfare remains unaltered in this scenario.

**Post-Industrial Retrenched Welfare – Occupational-extended model**

This scenario also shows a low level of sustainability. The impact of the digital revolution on the labour market translated into fragmented career paths, often discontinued by job destruction processes and the need for re-skilling and adjustments to new job market opportunities. A welfare model financially based on contributions made by workers cannot sustain itself if the status of being employed reaches too high a level of volatility. This part of the scenario is an extension of the Bismarckian model.

Dysfunctional career paths are an indicator of the collapse of traditional labour market mechanisms. Where once stable and homogeneous labour markets were the engine of societal resilience, in this scenario the labour market is the main disturbance shock that put at risk societal stability, making the Welfare State a sort of permanent contingency plan, in turn poorly working under permanent austerity.

The consequence of a flawed labour market translates into an unbalanced system, not able to ensure intergenerational social protection of disadvantaged groups, being destined to a retrenchment process. This in turn brings to a lack of cohesion in community development and distrust in government capacity to intervene as a “guarantor”. Those intermediary actors performing as insurers and gathering contributions to then provide coverage in case of need to the workers will barely reach any sort of financial sustainability, being in this way bound to fail. This explains a
general impoverishment of the engagement dimension, characterised by a reduced number of actors able to produce welfare. This would likely further reduce citizens and groups engagement, because of the causal and reciprocal relationship between solidarity and social capital (that is the main engine for citizens and groups engagement).

A higher degree of sustainability characterizes the “Liquid-Post-Modernist – Supermarket-Welfare” and the “Collaborative Nested Welfare – Adaptive-extended model” scenarios. However, the high sustainability of the “Liquid-Post-Modernist – Supermarket-Welfare” scenario might be only apparent.

**Liquid-Post-Modernist – Supermarket-Welfare**

In this scenario, low levels of engagement reflect poor levels of solidarity. This means that despite many potential sources of welfare, all them establish a null relationship between and among themselves, each running their activities, as they were insulated dealers of commodities with a welfare aspect. Hence, there is an increase in the fragmentation of the welfare supply side, heavily misaligned with the emerging needs for integrated services and far from a systemic vision about the design and the delivery of social services in a life-cycle approach. Low levels of solidarity, combined with high level of sustainability, means the disappearance of what scholars have so far identified as the Welfare State.

Some welfare services and goods will be produced, but the difficulties to access them, entirely relying on the out-of-pocket capacity of some individuals (no more identifiable as citizens, but instead “clients” or “consumers”) will result in a perceived – when not actual – scarcity, that will inevitably affect demand. This will push for the rise of a possible welfare market. This will be built as long as an aggressive market building strategy is adopted from the supply side: intuitively this will translate into a “consumerist” view of welfare services, produced by pure market-based actors, reinforced in their businesses by data-sharing and privacy-on-design approaches.

Such scenario clearly represents a strong discontinuity with regard the European traditional social protection culture, informed by the principle of universal access. This scenario is light-years from the Beveridgean model, and at the same time it recognises some kind of protection only to those having enough financial resources to cover by themselves their social needs and risks, completely disregarding whether these financial resources proceed from work and hence participation in the value production chain (i.e. the Bismarckian model), or from an earlier advantageous position, or other similar forms of value extraction.

**Collaborative Nested Welfare Adaptive-extended model**

In the last scenario, both engagement and sustainability score high. Here, the collaboration component is crucial, unveiling the strong positive interdependencies between sustainability and solidarity. Collaboration characterises the type of relationship between the different sources of production (different to the previous scenario). This collaborative spirit means that each institution works at different levels and on different dimensions of the welfare system “continuum”. Depending on the nature of the source of production, its engagement assumes different nuances with regard to the type of welfare service or good provided, the criteria for access, forms of take-up, duration, intensity and principles. For instance, some sources might provide services under conditionality principles, while others might opt for no-conditionality but a shorter period of coverage.

This scenario embodies a multi-layered welfare system: its morphological space is built on many layers of production and consumption, often intersecting and sometimes even
overlapping. The collaborative component does not mean a fixed distribution of tasks and perimeters of action; rather it includes also coordination and mutual support (showing once again the relevance of solidarity). This scenario includes multiple sub-welfare systems capable of guaranteeing the inter-generational shift and the protection of the most vulnerable in society through peer-support or other means, due to the emergence of shared-value systems for public value creation and co-management of the welfare “commons”.

The high level of engagement means a plethora of continuously changing new actors, belonging to the public sector, the private sector or the social economy or even to all of them together. Hence, some risks might arise: territorial disparities due to different levels of social capital or different maturity of the social economy sector, segmentation of the entitled population, exacerbation of the insider vs. outsider dilemma, and lack of efficiency and coverage due to duplication of similar programs and inconsistencies between different initiatives. However, among the many actors what could – or hopefully should – emerge is a renewed and redefined role for governments. In this last scenario, governments have the responsibilities of the governance of the supply side of the new multi-layer welfare system (steer-to-nest).

5. Conclusions

The proposed scenarios are instrumental to raise the debate on what policy actions are needed to move toward a future of welfare similar to the one envisaged under the “Collaborative Nested Welfare – Adaptive-extended model” scenario, and which research is required to build the evidence to inform the choices underpinning those policy interventions.

The chance of reaching the ideal scenario increases if a set of adopted policy measures goes in the direction of supporting what has been defined as social effervescence. In other words, there is here the need for policies assuming the capacitation of solidarity as their goal. This approach can be described as “capacitating solidarity as a policy compass” (Hemerijck 2013). This concept, although in need of further elaboration, also means that regardless of the policy field, policymakers should aim – through the measures they are willing to take – at pursuing the capacitation of solidarity.

This vision recalls the concept of “mission-oriented policy” (Mazzucato 2015), but it differs through its unambiguous and explicit value choice. While the idea of “mission-oriented policy” leaves open the question of which missions to address, in the notion of “capacitating solidarity as a policy compass” a value choice is already made (solidarity is a value, indeed). Probably this is a choice at a higher level of abstraction, but nevertheless able to pave the way for much needed reflection on the political dimensions of the steps to be taken. This would also allow scholars to address the issue of which theory of justice is worth referring to and building on.

On an operational level, “capacitating solidarity as a policy compass” could take advantage of new and innovative financial instruments developed to facilitate access to funding for promoting social innovation initiatives and nurturing “social effervescence” across the EU.

Within this context, social innovation and ICTs have a crucial role to support designing and implementing a broader strategy for orchestrating a renewed and sustainable multi-layer welfare system. Such an idea could provide inputs to the design of
a new generation of policies, breaking silo-based approaches that have characterized the realm of policymaking so far. It aims to go beyond traditional distinctions between the “social” and the “economic”.

In this respect, important aspects to be considered, and on which further research should focus, could be:

1. The way in which ICTs trends are governed and managed in terms of risks and opportunities, as well as their impact on citizenship;
2. Support from public sector to private and social economy actors in terms of use and management of funding opportunities;
3. Considering the capacity of public funded social innovation initiatives to be institutionalized and to undergo different scaling processes.

This suggests funding mechanisms and type of available resources are crucial, and require further investigations. Existing and forthcoming demand for finance to provide support to social effervescence and experimentation via social innovation are a priority. This should help to make governance mechanisms of welfare management fit for a multi-layer welfare system, where the digital infrastructure is the backbone on which service design and delivery can be implemented, sustained and proactively targeted to different users and stakeholders.

New governance systems and a profound institutional redesign are needed, especially to address old and new challenges and make sure that collectively we can pass through the Great Transformation 2.0 and get to a new Welfare State, where sustainability – in terms of solidarity, cohesion and fiscal stability – and engagement of relevant stakeholders and beneficiaries, can bring forward inclusive growth, reducing inequalities and enhancing well-being and quality of life of all citizens.

**Note**

1. The European Pillar of Social Rights is an initiative launched by the European Commission in 2017: it consists of 20 principles, serving as the EU’s compass to achieve better working and living conditions in Europe.

**Disclosure statement**

The views expressed in this chapter are purely those of the authors and may not in any circumstances be regarded as stating an official position of the European Commission.

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