

Impacts of COVID-19 on social development and implications for the just transition to sustainable development

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1 Introduction

Social policy should ensure that the benefits of economic development and technological innovation are widely shared and address the needs of all social groups regardless of where they live, including those who are disadvantaged in some way. After 1945, rapid economic growth enabled huge progress towards these goals, especially in the developed countries where most people were taken out of absolute poverty. However, despite continued economic growth, especially in middle-income countries which saw them close the gap somewhat with developed countries, the period since the 1980s has seen huge increases in in-country inequality around the globe. In 2020 Oxfam claimed that "the world's richest 1% have more than twice as much wealth as 6.9 billion people"¹. This background paper highlights five key issues for the just transition to sustainable development during and in the aftermath of COVID-19:

1. Recognize that sustainability requires a new balance that shifts away from narrow short-term economic between efficiency towards interdependency between economic, social and environmental resilience.
2. Give a greater role for good governance and intelligent government and a pivotal actor in coming through the crisis and building back better.
3. Seize opportunities in the new more de-globalized world for potentially huge increases in more localized autonomy and green jobs.
4. Reform structures to release people's own agency for intelligence, hard work and motivation.
5. Complement human intelligence with digital technology based upon ethics, transparency, security and human values.

2 Changes wrought by COVID-19 on economic and social development

2.1 The economy during and after COVID-19

Rapid GDP and growth contraction

In contrast to the 2008 financial crisis characterized by a massive demand slump, COVID-19 has caused a severe supply-side recession. The pandemic has disrupted both global and local supply chains as the workforce has been restricted to virtual remote working at best, tight restrictions on the movement of people and goods with transport and logistics severely curtailed, at the same time as demand for many goods and services has mushroomed. Over the space of a few months, COVID-19 has triggered an economic contraction, leaving nearly half the US population without a job². In the US for example, supply chains optimized for shareholder value have not been able to produce enough personal protective equipment, cotton swabs or testing infrastructure. A healthcare industry built for elective surgery has struggled to adapt to a public health mission. Internet platforms designed to connect people have undermined the pandemic responses by amplifying disinformation and conspiracy theories.

¹ <https://www.oxfam.org.uk/get-involved/campaign-with-us/inequality-and-poverty>

² <https://www.cnbc.com/2020/06/29/nearly-half-the-us-population-is-without-a-job-showing-how-far-the-labor-recovery-has-to-go.html>

Compared to a decline of 8.4% in the worst quarter of 2008 at the height of the last recession, the US economy suffered the worst quarter since the second world war as GDP shrank by 32.9% between April and June 2020³ as indicated by the precipitous drop as illustrated by Figure 1. During the same quarter the Eurozone economy shrank by a record 12.1% due to coronavirus wiping out more than decade of expansion⁴. In some contrast China, having been struck by the pandemic several months before the rest of the world, reported a second 2020 quarter GDP growth of 3.2%, rebounding from a coronavirus-induced contraction of 6.8% in the first quarter⁵. We do not know yet how permanent these disruptions will be about which there are multiple views, but most agree any recovery will depend on the policy actions taken by both governments and business. Of course, GDP is by far from being the best measure of the economic health of any country, but it is one which does measure some aspects of real economic activity used by all countries, so is useful at least for comparison purposes.

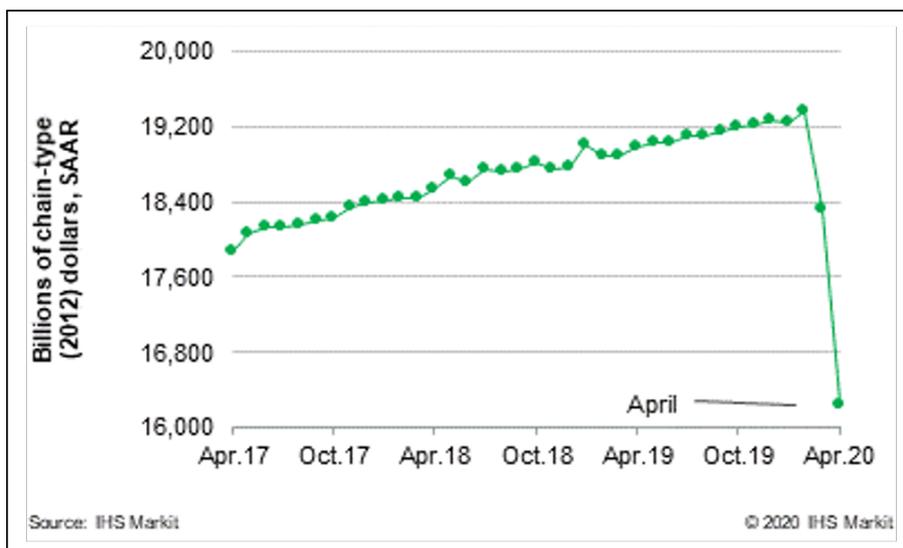


Figure 1: US monthly GDP index for April 2020⁶

As the health and human toll grows, the economic damage is already evident and represents the largest economic shock the world has experienced in decades. Despite the extraordinary efforts of governments to counter the downturn with fiscal and monetary policy support, the World Bank envisions a 5.2% contraction in global GDP in 2020⁷. Over the longer term, the deep recessions triggered by the pandemic are expected to leave lasting scars through lower investment, an erosion of human capital through lost work and schooling, and the fragmentation of global trade and supply linkages. The pandemic is expected to plunge most countries into recession in 2020, with per capita income contracting in the largest fraction of countries globally since 1870. The crisis highlights the need for urgent action to cushion the pandemic's health and economic consequences, protect vulnerable populations, and set the stage for a lasting recovery. According to the World Bank, it is critical to strengthen public health systems, address the challenges posed by informality, and implement reforms that will support strong and sustainable growth once the health crisis abates⁸.

Efficiency versus resilience

³ <https://www.theguardian.com/business/2020/jul/30/us-gdp-economy-worst-quarter-covid-19-unemployment>

⁴ <https://www.theguardian.com/business/2020/jul/31/eurozone-economy-shrinks-by-record-121-due-to-coronavirus-crisis>

⁵ <https://www.cnbc.com/2020/07/16/china-economy-beijing-reports-q2-2020-gdp.html>

⁶ Finanz.dk: <https://finanz.dk/u-s-monthly-gdp-index-for-april-2020/>

⁷ <https://www.worldbank.org/en/news/feature/2020/06/08/the-global-economic-outlook-during-the-covid-19-pandemic-a-changed-world>

⁸ <https://www.worldbank.org/en/news/feature/2020/06/08/the-global-economic-outlook-during-the-covid-19-pandemic-a-changed-world>

Although debates about the dysfunctionalities of how the global and most national economic policies and markets work are not new, the pandemic has brought them racing to the fore with new urgency and force. A fundamental issue is the balance between economic efficiency, which has been the prevailing mantra and increasingly seen as short-term, on the one hand, and economic resilience which requires a medium- to longer-term perspective, on the other. As shown in Figure 2, in order to optimize sustainability there is a trade-off between efficiency (and brittleness), on the one hand, and resilience through diversity and interconnectivity (adaptive to shock but slow to change more fundamentally), on the other. To optimise the system in Figure 2 requires finding the ‘sweet spot’ between too much efficiency, risking large scale breakdown from time to time as we see right now with the shock of COVID-19, and too much resilience, which risks stagnation and struggles to accept change. Most economies have so far failed to achieve let alone recognize the need for an ‘optimal balance’ where both are in play. This is seen in the prevailing focus on short-term shareholder, as opposed to shared or stakeholder, value⁹, ‘lean’ companies and value chains and indeed ‘lean’ governments¹⁰, and arguably an over-reliance on just-in-time supply chains with no flexibility or ability to find alternative sources in case of disruption. The economic mantra has generally been one of ‘squeezing assets’, including human assets, and squeezing value chains to maximize quarterly returns whilst leaving no margin for slack in case of shock.

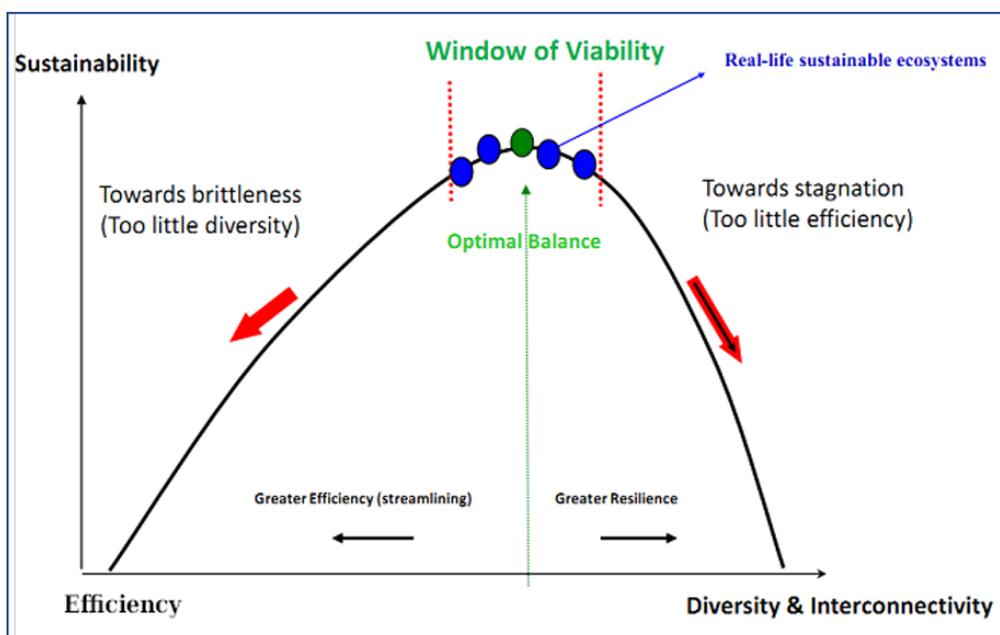


Figure 2: balance between efficiency and resilience¹¹

As a result of the economic and social disruptions caused by the pandemic, many international organizations, as well as governments, are now starting to advocate building resilience much more strongly into global economic systems. For example, the World Economic Forum’s current focus on the ‘Great Re-set’¹², which also recognizes that in the context and in recognition of the three interconnected pillars of sustainable development, resilience needs to be seen not only in narrow economic terms, but also as social and environmental resilience, an approach long advocated by economist Kate Raworth in her ‘doughnut economy’ proposals¹³. What is required instead is to build resilience into economic systems in order to cope with future shocks but also, and arguably more important, is to see resilience not just in narrow economic terms but also in relation to social and environmental

⁹ Porter, M., & Kramer, M. (2011). Creating shared value. *Harvard Business Review*, 89(1/2), Jan/Feb 2011, 62-77.

¹⁰ Millard, J (2015) Open governance systems: Doing more with more, *Government Information Quarterly*, 12 September 2015: <http://doi.org/10.1016/j.giq.2015.08.003>

¹¹ <https://www.ellenmacarthurfoundation.org/news/circular-economy>

¹² <https://www.weforum.org/great-reset>

¹³ Raworth K (2017) *Doughnut economics: seven ways to think like a 21st Century economist*, Penguin, Random House, UK.

resilience, reflecting the three interdependent pillars of the UN's 2030 Agenda¹⁴. It is clearly more efficient over the medium- to long-term, also in narrow economic terms, to focus on the joined-up resilience of all three pillars of the social, the economy and the environment, because if one fails all fail.

A less globalized world?

These initiatives recognize the need for a longer-term re-evaluation of global value chains given that the market is already contemplating the move from a more globalizing to a more de-globalized world, although not back to the same place before the last 20-30 years of massive globalization. There is talk of a 'great de-coupling' and of 'shifting tectonic plates' towards three main spheres of influence (the US, China and the EU), although not necessarily leading to isolationism¹⁵, but certainly entailing some shifts in economic and political power. This will involve some new on-shoring of economic activity and employment and a re-focus back to more domestic markets in a new form of re-localization, also down to regional and city levels, although it is important to retain openness, connectivity and cooperation at all levels including globally. This is likely to be seen especially in relation to 'strategic' manufactured goods, such as health and other vital goods as well as in critical infrastructures and increased focus on more domestic and regional sources in order to diversify supply towards greater resilience at times of future shock. This is already taking place to some extent, for example through more national and regional circular economies and a strong move to additive manufacturing using tools like 3D printing which is able to use waste from one industrial process as the feedstock for another, rather than importing new raw materials from the other side of the globe.

In recognition of these developments, and to run alongside the European Green Deal striving to be the first climate-neutral continent¹⁶, the European Union published a review in June 2020 of its trade and investment policy addressing the challenges the EU will face, and helping to promote its values and standards¹⁷. The twofold aim is to assess how trade policy can contribute to a swift and sustainable socio-economic recovery, reinforcing competitiveness in the post-Covid 19 environment, and to see how trade policy can help build a stronger EU based on a model of "Open Strategic Autonomy". This is seen as a way of deploying trade policy to reap the benefits of openness for EU businesses, workers and consumers, while protecting them from unfair practices and building up EU resilience to better face future challenges.

In the context of its 'Great Re-set', the World Economic Forum expresses some hopes and agreements on uncertainties across the economy about what the post COVID-19 world could look like¹⁸. For example:

- Governments will be much more involved in industry. This will especially be the case in critical infrastructure sectors such as utilities, travel and healthcare, and will mean increased regulation.
- The relocalization of global supply chains is expected by many, and will counter the previously unstoppable march of globalization. States and large companies will seek to gain more technological sovereignty, reducing dependence on others and improving the resilience of their operations to global shocks.
- Digital technologies are expected to see a major acceleration in adoption, especially those which enable business activity with less human contact, including e-commerce, virtual networking and robotization.

2.2 Social development: increased poverty and inequality in the wake of COVID-19

The World Bank has undertaken a series of estimates and analyses of the impact of COVID-19 on global extreme poverty, most recently in June 2020¹⁹. In April, the estimate was that COVID-19 was pushing between 40 and 60 million more people into extreme poverty, but since then the epicenter of the pandemic has shifted from Europe

¹⁴ <https://www.un.org/ecosoc/en/promoting-sustainable-development>

¹⁵ <https://www.bbc.co.uk/programmes/m000jxw2>

¹⁶ https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en

¹⁷ https://trade.ec.europa.eu/doclib/docs/2020/june/tradoc_158779.pdf

¹⁸ <https://www.weforum.org/agenda/2020/06/ceos-reflections-on-leading-through-covid-19-so-far/>

¹⁹ <https://blogs.worldbank.org/opendata/updated-estimates-impact-covid-19-global-poverty>

and North America to the global south where the death toll has increased in low- and middle-income countries. This has induced longer shutdowns and increased the economic costs of the pandemic, so that the latest estimates of global extreme poverty increase are between 71 and 100 million, as sketched in Figure 3. Both a baseline and a downside scenario are depicted, the former assumes that the outbreak remains at levels currently expected and that activity recovers later in 2020, while the latter assumes that outbreaks persist longer than expected, forcing lockdown measures to be maintained or reintroduced. The places where the virus is taking its highest toll depends primarily on two factors: 1) the impact of the virus on economic activity and 2) the number of people living close to the international poverty line. Especially low- and middle-income countries will suffer the greatest consequences of extreme poverty given that low-income workers are more likely to lose their jobs due to COVID-19, meaning that global progress in eliminating extreme poverty is likely to be set back by at least three years.

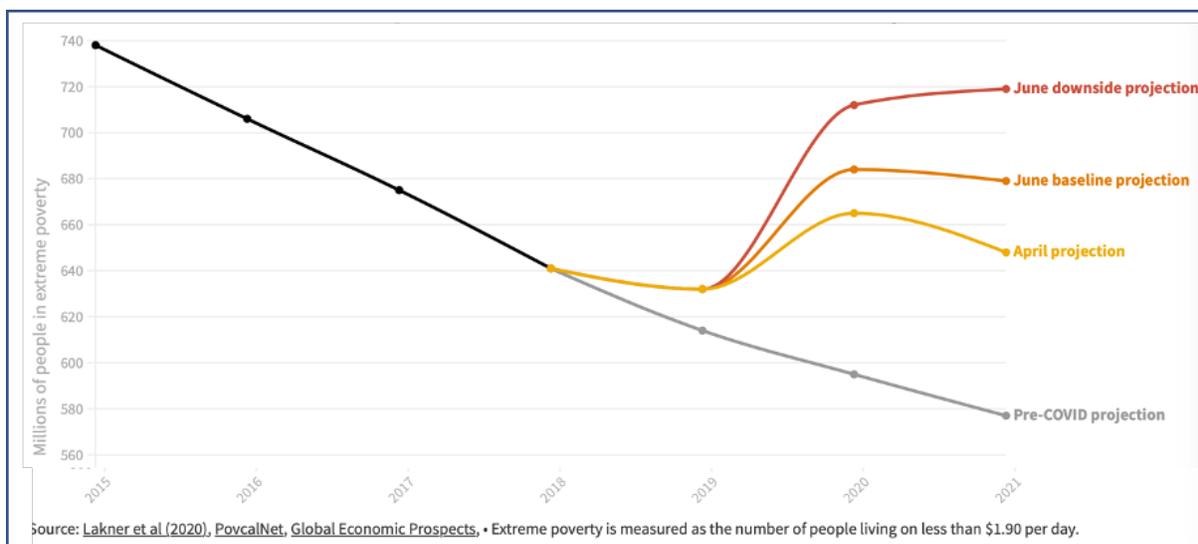


Figure 3: The impact of COVID-19 on global extreme poverty²⁰

The data in Figure 3 is based on the widely used international poverty line of \$1.90 per day, although the World Bank now also provides estimates based on \$3.20 and \$5.50 per day. At the latter level, COVID-19 would result in between 175 and 230 million additional people living in extreme poverty, much more than a doubling of the estimates. As the standard measure of extreme poverty, the \$1.90 per day level is criticized as being much too low so that COVID-19 needs to be seen as a pandemic of poverty²¹. The international community “mistakenly gauges progress in eliminating poverty by reference to a standard of miserable subsistence rather than an even minimally adequate standard of living. This in turn facilitates greatly exaggerated claims about the impending eradication of extreme poverty and downplays the parlous state of impoverishment in which billions of people still subsist. While the Sustainable Development Goals have achieved a great deal, they are failing in relation to key goals such as poverty eradication, economic equality, gender equality, and climate change. They need to be recalibrated in response to COVID-19, the ensuing recession, and accelerating global warming. Poverty is a political choice and its elimination requires: (i) reconceiving the relationship between growth and poverty elimination; (ii) tackling inequality and embracing redistribution; (iii) promoting tax justice; (iv) implementing universal social protection; (v) centering the role of government; (vi) embracing participatory governance; and (vii) adapting international poverty measurement.”²²

The period since the 1980s up until COVID-19 has seen taxation become less progressive and many contend that politics has increasingly been dominated by money and special interests. Side by side with this, welfare states in

²⁰ <https://blogs.worldbank.org/opendata/updated-estimates-impact-covid-19-global-poverty>

²¹ <https://chrgj.org/wp-content/uploads/2020/07/Alston-Poverty-Report-FINAL.pdf>

²² <https://chrgj.org/wp-content/uploads/2020/07/Alston-Poverty-Report-FINAL.pdf>

most countries, whether developed, middle-income or developing, have become less generous with a labor market that has become much more volatile. Many people now work in informal, precarious or ‘gig’ economy jobs, typically based on new digital technology, leading to increasing numbers of the ‘working poor’. Numerous governments, such as the US and UK, have hailed their low unemployment rates as major achievements but have sidestepped the issue of the poor remuneration, quality and security of many of the jobs existing today. It is an interesting observation that many of these low paid and insecure workers, typically obliged to work in poor, crowded and often unhealthy conditions prone to COVID-19 infection, are precisely those that many employers and governments are now applauding as ‘essential workers’ who are keeping the economy and society functioning during COVID-19. For example, people working in the health and care sectors, in transport and maintenance, cleaners and caterers, in retail, food and agricultural workers, as well as drivers and delivery workers. It remains to be seen whether the wages, status and conditions of such workers will be raised after the crisis of COVID-19 is over. The huge inequalities within as well as between countries such situations illustrate have visited pernicious effects on societies: eroding trust, increasing anxiety and illness and encouraging excessive consumption. It is clear that across a wide range of health and social problems (physical health, mental health, drug abuse, education, imprisonment, obesity, social mobility, trust and community life, violence, teenage pregnancies, and child well-being) that outcomes are significantly worse in more unequal countries, whether rich or poor²³. Other research has shown conclusively that the global economy has developed to such a point that greater income is being derived simply through the continuing increase in the value of already accumulated wealth assets rather than through income derived from work in the labor market where this wealth is actually produced. Tickle-down has been entirely discredited both as a theory and as a real phenomenon²⁴.

3 Some strategic and policy implications

3.1 The need for structure as well as agency

Focus on the structures that surround people’s lives

There is a need both to recognize and address the duality and interrelationships between:

- the structures within which people, families and communities operate that are largely beyond their own immediate control
- the support given to the development of people’s own agency to function successfully within these structures and over which they have, at least partially, a good measure of own control²⁵.

This is sketched in Figure 4 illustrating the hypothetical choice area that individuals and groups have through their own agency within the constraints of prevailing structures. The ideal goal should be that the two circles increase their mutual overlap, so they coincide as closely as possible. However, it is recognized that in practice structures (both formal and informal) take longer to adapt and reform than agency demands in response to, for example, crisis shocks, inertia, cultural practices, vested interests, and even of course corruption, cronyism and paternalism.

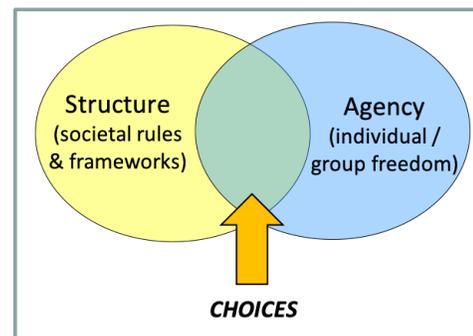


Figure 4: Structure versus agency

²³ Wilkinson P, Pickett K. (2009) *The spirit level: why more equal societies almost always do better*. Allen Lane Press, Penguin Group, London.

²⁴ Piketty, T. (2014). *Capital in the Twenty-First Century*. Translated from the French edition 2013. Cambridge: Harvard University Press.

²⁵ Millard J, Holtgrewe U, Hochgerner J (2017) Addressing social demands, societal challenges and systemic change, in Howaldt J, Schröder A, Butzin A, Rehfeld D (Editors) “Towards a General Theory and Typology of Social Innovation”, Technical University of Dortmund.

Thus, policies need to tackle structure as well as agency. For example, changing the system to reduce homelessness and unemployment should go hand in hand with helping the homeless or unemployed themselves find accommodation or work. Too many social and economic policies tackle poverty and inequality by only attempting to improve the ‘agency’ of the poor through training and so-called ‘empowerment’, instead of also tackling the root causes embedded in societal structures that prevent the poor from making the most of their own efforts²⁶. Legal and regulatory frameworks need to be conducive to the new social and business models required to successfully come through the pandemic and then build back better. These frameworks need to be re-cast to ensure fair distribution of social, economic and environmental rights and benefits that are all too often undermined, and more recently made even worse during the pandemic. Labor market issues are paramount, for example in relation to the burgeoning gig economy, the problems of zero-hours contracts, and ensuring people have stable, simple and predictable structures so they can thrive in both their working and private lives. Policymakers should aim at specific outcomes and impacts and open up for process innovation as long as these processes remain ethical, transparent and legal.

A good example that has successfully increased the benefits for both sides of the labor market, is the Scandinavian ‘flexi-curity’ structure. Here, the focus shifts from having and keeping a particular job, to being employable and relatively easily able to obtain a good job if the existing one is lost. On the one hand, this gives significant flexibility for employers by allowing them to hire and fire relatively easily. On the other hand, it also provides good security for employees by strong labor market support through relatively high unemployment and re-training benefits, as well as proactive interventions from government, employers and trades unions working together. Current social policy experimentation is also addressing the issue of ‘conditionality’. For example, in the labor market context to obtain unemployment benefit, the unemployed need to prove they are actively seeking work, thereby requiring significant form filling and bureaucracy. The debate about the effectiveness of conditionality feeds into the debate about the value and effectiveness of the so-called ‘universal basic income’ (UBI) as an unconditional payment, sufficient for a very basic but still comfortable living, made to all adults regardless of whom they are or their labor market status. The latest results from a two-year Finnish study show that UBI under certain conditions can improve the mental wellbeing, confidence, life satisfaction and the civil engagement of citizens, as well as have a mild positive effect on employment on those otherwise of working age but not initially working²⁷.

Current labor markets, as well as other socio-economic policies and structures, typically entrench inequality and poverty and entrap the poor despite their own efforts to escape. Time poverty is often more significant than income poverty, as the poor in any society have precarious structures within which to live and work, surviving from day to day or week to week, without sufficient time or energy to plan for and invest in their own, their family’s or their community’s future²⁸. This is a form of structural scarcity far removed from the picture often painted of the poor as being lazy, indolent and lacking motivation. Instead, poor people, more than others in society, have to contend with a highly complex and unpredictable social and economic environment, so they are typically hard working, nimble and conscientious. Simplifying the structures that surround the poor can go a long way to helping direct the energies and capacities they possess, at least as much as people not in poverty, towards improving their own lives rather than simply surviving. One example is the early 2017 ruling in the UK that Uber can no longer classify drivers using their app as self-employed, but instead as employees who have the right to receive the national living wage and holiday pay. This simplifies drivers’ lives and provides more long-term security. Another example is the use of ICT in India to promote the financial inclusion of the poor by simplifying and linking up contextual structures around them through the world’s largest biometric ID system. The pre-existing complex system of subsidies and benefits for the poor, often scattered and hidden in paper archives, are now available through a one-stop shop with simple identification. This makes it easy for the poor to be aware of

²⁶ Millard *et al* (2017) *op cit*.

²⁷ <https://www.theguardian.com/society/2020/may/07/finnish-basic-income-pilot-improved-wellbeing-study-finds-coronavirus>

²⁸ Mullainathan S, Shafir E. (2013) “Why having too little means so much”, Allen Lane, Penguin Group, London.

their benefits and to access them²⁹. These examples and many others involve changing the ‘choice structure’ and ‘choice space’ of beneficiaries, including by drawing on behavioral, psychological and nudge studies³⁰. This involves policy makers attempting to understand choices made in a deprived situation. Important goals for policy also include the expansion of choices and the perception of choices for individuals to increase their own agency.

Putting agency into perspective

Poverty and inequality are highly complex and multi-dimensional, typically resulting in multiple forms of deprivation that include the notion of relative poverty leading to being left out of the mainstream and unable to participate in the normal activities of the community/locality even in developed countries. Thus, there is a need to focus on ‘all-round’ approaches which treat people as whole individuals with their own dignities and identities through joined-up policy responses, for example innovations that integrate across silos, across sectors, between levels, and/or involve multi-actors working together. Civil society organizations, typically trusted by the poor and the vulnerable and which have greater local knowledge and are more nimble, often act, in effect, as ‘trusted third parties’ A poverty-deprivation-vulnerability nexus-thinking approach should be adopted to avoid focusing only on one part of the nexus without considering interconnections, risks and unintended consequences. Nexus thinking focuses on policy linkages, synergies and trade-offs to balance different interests and outcomes through democratic and open consensus building. Policy should develop, test and promote tools and approaches for operationalizing the nexus at all levels³¹.

It is also clear that, on the one hand, the poor -- and especially the communities in which they live – are best by huge challenges, complexities and structures that do not work for them, but on the other hand and as noted above they possess huge potential, resilience and latent ability to be a big part of their own solution. Thus, there should be less focus just on ‘problem solving’, and much more on ‘opportunity-seeking’, i.e. the opportunities open to the poor and awareness raising, advocacy and mobilization of poor people and their communities through their own efforts. Part of this is undoubtedly promoting the sharing and collaborative economy in order to maximise asset use through sharing rather than exclusive ownership. This is might be termed ‘agency boosting’ but can only really work if proactively boosted and enabled by appropriate structures. It is very important to build reciprocal trust between all involved actors, and particularly with the beneficiaries.

Above all, investing in human capital is central to emancipating and boosting agency, both for the labor market and a competitive economy, as well as in peoples’ everyday lives to promote cultural development and knowledge acquisition. Education and skills development is essential at all levels and in all contexts. For example, teaching not only how to program and code in schools, but more importantly how to create new ICT solutions and use them socially, commercially and ethically to improve prosperity, wellbeing and sustainability. Careful embedding of technology into traditional as well as innovative activities is essential to both support existing as well as enable new forms of social development. New innovative forms of education are needed to meet the growing challenges of the knowledge economy, including life-long and life-wide-learning, blended learning using different channels such as traditional face-to-face, mass media and new technology innovations like social media, MOOCs (mass open online courses), personalized, self directed and independent learning, as well as crowd- and collaborative learning, etc. It is also important to enable open participation as in citizen science, citizen journalism, and in civic engagement using digital tools in decision-making.

²⁹ Millard J (2017a) Summary report on social innovation for poverty reduction and sustainable development, a deliverable of the EU supported project Social Innovation - Driving Force of Social Change (SI-DRIVE): www.si-drive.eu.

³⁰ Thaler RH and Sunstein CR (2008) *Nudge: Improving Decisions about Health, Wealth, and Happiness*, Yale University Press.

³¹ Millard J (2017a) Summary report on social innovation for poverty reduction and sustainable development, a deliverable of the EU supported project Social Innovation - Driving Force of Social Change (SI-DRIVE): www.si-drive.eu

3.2 New forms of localism

As noted above, COVID-19 has hugely accelerated an already incipient re-focus back to more domestic markets in a new form of re-localization, also down to regional and city levels. Policies at the local, municipality and city levels often have most impact, as they are close to the beneficiaries. Cities are at the structure-agency 'sweet spot', large enough to have sufficient power and resources but at the same time small enough to be local and contextually based. Interesting successful examples include approaches like local currencies that are not in competition with national or regional monetary systems, but purely designed to keep as much value local as possible. This is the same rationale, but at a lower scale, as current attempts by the EU, the OECD and others to design tax regimes that oblige multinational companies to pay fair taxes on the turnovers and profits made in each national jurisdiction. At both scales, the focus is on the retention of as much of the value as possible created by a given community for their own use and further investment, rather than seeing this value seep away to a multinational with no local commitment and often to a tax haven. This does not mean that local areas should become 'independent' or isolated from the outside world, but that they are given every incentive and opportunity to self-help in addition to any needed external help because of poverty or vulnerability. Policymakers should also ensure that such efforts are not wasted, degraded or captured by free-riders (which is what too many multinationals are in practice), whether operating in the market or other contexts. Also important for the new localism are local research, engagement and evaluation, good governance and management, to ensure efficiency, accountability and beneficial regional development.

3.3 Technology serving people and society in the age of COVID-19

COVID-19 has seen a huge boost to existing trends towards greater online work, business, commerce, health, education, culture, entertainment and leisure. It seems likely that most of these changes will remain once the main COVID-19 crisis is over. However, already today it is clear that digital technology, as the 21st Century's general purpose technology that underlines most if not all other technologies and innovations, needs to be seen as complementing and supporting human activity rather than completely replacing it. Not least, there is increasing insecurity regarding the relationship between people and advanced technology, where individuals need to learn to cope with the consequences of omnipresent machines and networks of a completely new kind. How are human values, ethics and wellbeing protected and promoted in such a context? What are the philosophical implications of blurring boundaries between the physical, biological and digital spheres, as already apparent on the Fourth Industrial Revolution³²? An ethical dimension needs to be introduced in the exploitation, for example, of big data, artificial intelligence, bio-technologies, as well as the tensions between the citizen's right to privacy and to security systems that can deal with huge threats from massive data collection and analysis as well as routine penetrating surveillance by both tech companies and governments, especially in the context of the 'post-truth' society³³. For example, there are numerous examples where AI algorithms can accentuate biased decision making after being trained on biased or incomplete data, and that this is confounded by the fact that how the algorithm actually reaches its decisions which affect the lives of ordinary people are typically hidden as if in a 'black box'³⁴. For this purpose, a useful policy innovation would be to create digital ombudsmen, independent of the market and government, with the legal power and resources to investigate complaints about unclear or unfair decisions taken by AI, breaches of data privacy or of data misuse on behalf of those affected. The EU's 2018 launch of its GDPR (General Data Protection Regulation) is the only major attempt to date by a public authority to address data protection, data privacy and the transfer of personal data outside the

³² WEF (2016) The fourth industrial revolution: what it means and how to respond, World Economic Forum:

<http://www.weforum.org/agenda/2016/01/the-fourth-industrial-revolution-what-it-means-and-how-to-respond>.

³³ Zuboff S (2019) "The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power", New York: PublicAffairs; and McAfee A, Brynjolfsson E (2017) Machine Platform Crowd: harnessing our digital future, W.W. Norton & Company, New York.

³⁴ McAfee A, Brynjolfsson E (2017) Machine Platform Crowd: harnessing our digital future, W.W. Norton & Company, New York

regulation's jurisdictional area. The GDPR's primary aim is to give control to individuals over their personal data and to simplify the regulatory environment for international business by unifying the regulation within the EU³⁵.

With such caveats and given that the ITU estimates that over half the total global female population (52%) is still not using the Internet, compared to 42% of all men³⁶, it is important to undertake pro-active and gender-sensitive national high-quality infrastructure rollout, and adequate funding for more general initiatives, such as the promotion of digital literacy. For example, it is reported that the higher the level of Internet and broadband coverage, the higher is Internet use even for less educated and less skilled individuals. In addition, household Internet access increases the educational attainment of individuals in a given area, even when Internet coverage and GDP per capita are relatively low³⁷. Ensuring Internet, mobile and broadband infrastructure availability is necessary, but not sufficient, for more adoption and beneficial use of ICT. It is also necessary to create appropriate incentives, awareness, reward systems, as well as support provider and user ecosystems, driven by high levels of cooperation and co-creation, in addition to market competition. In the case of ICT design, there is a strong trend in some developed countries to move away from technology designed purely for specific disadvantaged groups towards 'inclusion by design'. Technology for social development works best when technology does not set the whole agenda, and policy and procedures do not try to play catch-up for technology's sake. Instead they should promote "a better understanding and appreciation of appropriate technology in the ICT for development field – local ownership of technologies and tools, local content, and projects where end-users drive the process among them."³⁸

The use of digital technologies and innovation to 'build back better' post-pandemic is highly challenging because most people do not trust the digital tools or those who develop them. It is not really a question of whether we will begin to build and innovate again as this is part of human nature. Rather the questions are: what technologies do we want to build, who will be motivated to build them, and how will they be built? If we want to build a transformative society that is resilient to the next disaster, then a systems approach is essential coupled with solving the digital trust problem. According to the WEF, the use of digital tools during the COVID-19 crisis offers three main lessons: keep essential organizations safe, learn from the 'Great Work-from-Home' experiment, and mistrust hampers crisis response³⁹.

An additional lesson is that many of the most successful and useful digital tools for use during COVID-19 are ones that have been adapted from pre-existing already successful applications. For example, the non-profit GoodSAM app was founded in the UK in 2013 by leading emergency medics to radically improve emergency response times to cardiac arrest. By alerting those trained to nearby cardiac arrests while an ambulance is en-route, earlier CPR and defibrillation has saved many lives⁴⁰. During COVID-19 GoodSAM has been adapted for use by large numbers community volunteers to assist mainly disadvantaged housebound people by doing their shopping, running errands or simply providing contact and friendship over the phone or garden fence for the lonely. Another example is the commercial What3Words app as a simplified way to define any location on the planet within a 3m square using a unique combination of three words available in a multitude of languages⁴¹. It originated in 2013 in the music industry organising live events around the world given that most ordinary people struggle with complicated GPS coordinates to precisely locate addresses or specific manmade or natural features. It is used today by millions around the world, including for example to request or deliver emergency aid precisely where it is needed, as deployed by the UN and the Philippine Red Cross in disasters and during the pandemic to assist in rapidly building field hospitals and directing supplies to precise locations.

³⁵ <https://gdpr.eu>

³⁶ <https://www.itu.int/en/mediacentre/Pages/2019-PR19.aspx>

³⁷ Millard, J (2015) "The digital divide and the post-2015 development debate" in *Digital Divides: The New Challenges and Opportunities of e-Inclusion*, Taylor and Francis Publishing Group, Abingdon, UK.

³⁸ <http://www.theguardian.com/global-development/poverty-matters/2011/jan/04/technology-poverty-development-policy-discussion>

³⁹ <https://www.weforum.org/agenda/2020/06/the-great-reset-and-digital-trust-3-lessons-on-digital-tools-from-the-covid-19-crisis/>

⁴⁰ <https://www.goodsamapp.org/>

⁴¹ <https://what3words.com/>