

# Building Societal Resilience

The Role of Inclusion in a Fragmented World

A collection of perspectives by the AXA Research Fund Winter 2022

# About the AXA **Research Fund**

The AXA Research Fund was launched in 2008 to better address the major risks faced by our planet through science. AXA has committed a total of €250M to scientific funding and supported close to 700 research projects in the areas of health, climate and environment, and socioeconomics. The AXA Research Fund's mission is to support transformative scientific research and to help inform science-based decision-making in both the public and private sectors.



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Marie Bogataj Head of the AXA Research Fund and Group Foresight

Over the past three decades, the world has seen high levels of economic growth and development as well as significant advances in innovation and technology. Between 1990 and 2015, the proportion of people living in extreme poverty more than halved, meaning that more than 1 billion people were lifted out of extreme poverty, while world GDP doubled and literacy rates in youth increased from 83 per cent to 91 per cent. However, these positive outcomes were accompanied by environmental damage and an uneven distribution of growth with growing inequality by most measures — within regions and also countries. In many economies, households face limited access to housing, healthcare, and jobs while the urban-rural divide continues to deepen and intersect with inequalities of race, gender, and ethnicity.

Compounding this trend, Covid-19 dealt an immense setback to the progress we had made along the 17 Sustainable Development Goals (SDGs) set by the United Nations. For the second year in a row, we have made no progress on the SDGs. Performance on "No Poverty" and "Decent Work and Economic Growth" are still below the pre-pandemic levels in many low and lower-middle income countries. More recently, geopolitical tensions and war have continued to divert resources and attention from the guiding priorities of the SDGs. And yet rising inequality is one of today's greatest threats to global progress and peaceful societies.

There are many factors to consider when approaching the question of how to facilitate inclusion. Communities and cultures, economic realities, histories, and areas of opportunity all come into play, with governments, institutions, businesses, and individuals each having a unique role. As a corporate scientific funder, the AXA Research Fund has supported top-tier research in the area of inclusion with projects focusing on the specific issues faced by population groups and geographies and pathways towards a more equitable society.

As a business and a global insurer, AXA aims at promoting inclusion, with innovative products, serving new market segments currently overlooked by traditional insurance such as gig economy workers or the middle class in emerging markets and by addressing protection gaps; by helping people build back after an adverse event and protecting their health; by enabling risk-taking with a direct contribution to development and economic growth. With this variety of factors, pathways and tools, adequate responses to the issue of inequality will need to integrate a holistic view and require action from all relevant players of society.

With this report, the AXA Research Fund brings together business, academic, and institutional experts and aims to provide a holistic view of the most salient issues in the fields of inclusion and societal resilience. It explores the global landscape of inequality, the opportunities and challenges in building a more evenly distributed growth as well as the role insurers can play in building societal resilience.

# Executive Sumary

As our societies become increasingly characterized by uncertainty, interconnectedness, and complexity, they continue to face recurring and simultaneous shocks. This new paradigm requires new skills of adaptation and resilience to ensure the stability and healthy development of our communities. Resilience is a key pre-requisite in our ability to withstand these shocks: it involves coping capacity to overcome adversities, adaptive capacity to learn from adversities for the future, and transformative capacity to craft institutions and welfare measures to build societal resilience for future shocks<sup>1</sup>.

There is a direct link between egalitarian societies and resilience. Populations based on trust, mobility, and opportunity at all socioeconomic levels are better able to respond and adapt to crises. Meanwhile, inequality and exclusion hinder resilience and growth. Achieving inclusion is not an easy task as exclusion comes in many forms. Creating work opportunities for women and marginalized groups, bolstering left-behind regions, closing the digital divide, providing insurance and financial protection for all, and enabling the transition to a greener future are some of the multiple challenges that require effective policies and the commitment of many players simultaneously, be they corporations, the public sector, civil society, academia, or international organizations.

# The many faces of inequality and exclusion

From a socio-economic point of view, nation-based economic analysis can provide a misleading picture of a country's wellbeing, with wealth concentrated only in certain cities and regions. Geographically, growth and opportunity even within single countries has been unevenly distributed, with the rise of **left-behind regions** presenting a particular challenge. These areas, typically characterized by the departure of a key industry or exhaustion of a natural resource, struggle to support and retain their populations. Fostering resilience in left-behind regions hinges on policies that encourage investment and innovation in addition to understanding of and engagement with the local population.

Compounding the formation of left-behind regions, a breakdown of tight-knit but longstanding informal networks that are vital to resilience in lower-income populations is another root cause of inequality. In much of the world, informal networks are vital tools of

societal resilience where more formal structures are weak or simply not present. In urban environments, a more transitory population and lower social trust limit the impact of these networks. Targeted help from the state and the private sector to provide social protection could largely improve the effectiveness of informal network resilience, supporting those facing the challenges of poverty, and improving their ability to cope with current and future crises. There is also a cultural aspect of inclusive growth and social resilience to consider — the example of indigenous populations who tend to have a particular sense of community and remarkable resilience over the past centuries despite dramatic impacts on their communities are a case in point.

demographic point of From a intergenerational inequality, or inequality of opportunity, remain particularly challenging to combat. Intergenerational inequality refers to the inheritability of socioeconomic status and the difficulty of social mobility. It is a major and persistent challenge to building effective societal resilience, even in the face of reducing poverty and improvements in other wellbeing indicators. A complex constellation of factors, including parental education, occupation, gender, and other social factors, blended with the local environment, all play a part in the stubborn persistence of wealth gaps and inherited poverty in many countries. Understanding how intergenerational inequality happens and creating effective policy tools to address it are crucial to peaceful and resilient societies.

From a gender perspective, pay gaps, barriers to women's labor force participation and business leadership are sustained in many countries, despite women obtaining a larger number of higher-education degrees than men in developed nations. However, fuller participation

and representation of women in the workforce have tangible benefits for societal resilience, and female participation is positively related to economic growth, so it is crucial that states and organizations create policies to address these persistent issues.

A little discussed lens of inequality is the effect of the digitalization of money and the movement away from cash. Although providing undebatable positive aspects such as efficiency gains, digitalization of money has a perverse and direct effect on the financial exclusion of the elderly, poor, non-tech-savvy, and other marginalized groups in society. As the scales tip further toward digital currencies, the payment system becomes more a private good than a public one — and one that risks leaving the most vulnerable behind. Monetary systems are not just technical in nature, but vital tools of social cohesion, creating a "community of payment". They embody shared values, legitimacy, and societal trust. Their functionality is vital for societal resilience. States serve an essential role in both the design of digital currencies and the preservation of cash and its corresponding infrastructure as a public good and have the power to prioritize inclusivity through policysetting and regulation of digital currency.

The pandemic has without a doubt accelerated change in the world of work, introducing flexibility and technological innovation. A hybrid workforce seems more resilient to external shocks. But benefits have been unevenly distributed, particularly in the favor of white-collar workers. This shifting landscape has the potential to open avenues toward diversity for some but should be managed in a way that allows to retain the social value of in-person work life through community building, figuring out the balance between flexibility and community and making sure the benefits are evenly spread across the workforce.

The health crisis has also highlighted the weight of society on those working on the front lines of care, delivery, education, inducing a debate on the social value of work and the rights and status of workers in a broad sense and opened the door to issues such as diversity, wellbeing, mental health. Developing positive diversity policies, examining the rights and status of frontline

workers, and using the workplace as a tool for inclusion allows us to build stronger resilience.

Finally, the impacts of climate change are unequally distributed overall: the most vulnerable are the ones who suffer its effects the most. The IPCC is unambiguous on the damage to ecosystem resilience from climate change: climate change erodes the capacity of ecosystems to function, and to adapt, weakening societal resilience especially among the poorest individuals and societies. However, climate action itself could be just as unfair.

On a micro level, much of the climate action taking place in cities tends to increase urban inequalities and create further injustice with the weight being disproportionally carried by the most vulnerable. So, responding to the impacts of climate change is not sufficient as climate action must also address the structural drivers of vulnerability. One way forward is "climate urbanism": a new way of thinking about cities fostered by concerns about climate change and inclusion based on the context and history of each urban area that integrate the effects of policy design and planning on the most vulnerable.

On a macro level, a major challenge comes from the need to transition while still meeting the development objectives of the emerging world. To facilitate the transition in emerging countries, transfers and solidarity will be necessary through financial solidarity funds, fair trade agreements, technology transfer agreements, and debt relief to implement environmental projects.

The ability to produce commodities that have been central to the comparative advantage of many countries is also eroding due to climate change. While richer countries better adapt to climate change being focused on the processing part of the international supply chain, many developing countries produce agricultural commodities, which are already strained by changing climate conditions. Here, **trade policy** has a crucial role to play in levelling the playing field in the adaptation to climate change through international co-operation based on existing trade architecture to allow developing countries to receive support to adjust to the changing climate.

# Inclusion and resilience: The role of the financial sector and the insurance industry

Broad economic trends as well as successive crises have contributed to the widening gap between the wealthiest and poorest in our societies. While the financial sector is often seen as a primary driver of rising inequality, **insurers and investors** have an important role to play.in supporting inclusive growth.

Empirical findings show that countries with high insurance penetration have a higher ability to recover from shocks. Insurers stand in a unique position to support resilience and inclusive growth in several ways, particularly in financial stability and healthcare. As an industry designed with the principles of inclusion and mutualization at its core, insurance has the power to undergird society's resilience in the face of crisis. Further than its intrinsic role of recovery purveyor, new insurance offers have emerged to address the industry's potential to serve previously excluded or underserved customers by designing new financial products or covering gaps in protection. These customers include middle class individuals in emerging and mature markets and workers in the gig economy who suffer financial vulnerability and volatility. This kind of innovative intervention from insurers could provide stability, upward mobility, and resilience to an expanded customer base and allows the industry to achieve social impact as well as business objectives.

In healthcare too insurers can increase resilience through innovative tools and an expanded role they can play in delivering care. Digital tools offer expanded access and scalability of health systems to reach more people in more clinical and geographical areas than in-person services, supplementing the traditional model. When coupled with a holistic, community-driven framework for health, the potential for improved patient outcomes is considerable.

As institutional investors, insurers can support inclusive growth through targeted, responsible investment strategies by allocating their portfolios towards socially and environmentally responsible organizations. **Responsible investment** is an

effective tool alongside regulation and legislation to help address unequal opportunities issues and can help direct support toward firms which have a regard for these issues. Dealing with inequality in the investment field requires the development of a level-playing field on the model of the "green" taxonomy implemented in the EU to guide investors and issuers and allowing investment to play a role in supporting inclusive corporate practices.

Inequality comes through many forms, some of which this report touches upon with the aim of setting the scene and discussing the ways forward towards a resilient future based on a cohesive, inclusive society. Achieving healthy societies requires a holistic view of inclusion, bringing together multiple players and issues to ensure peaceful and vibrant democracies, taking into consideration both the obvious and more pernicious issues of inclusion, highlighting and grasping the opportunities to surpass them and making an impact in creating an inclusive and resilient society.

# What Is Societal Resilience?



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The concept of resilience is today widely used across the natural, human and social sciences as well as in a wide range of commercial, social and political discourses. In an age of new global risks such as pandemics, financial crises, and rising geopolitical tensions, resilience is more important than ever. The concept of durable resilience also lies on the capability for all groups in society to move forward equally following a shock, making inclusivity an essential subject to tackle for a sustainable world.

# The origins of resilience as a tool of social adaptation and transformation

Resilience as a concept emerged in the 1970s in the field of ecology, building on what is known as systems theory, a method used by scientists to understand and analyze phenomena in terms of the system they are a part of, be it mechanical, economic, or, in the case of ecology, environmental. Any system can be described as a basic equilibrium of all its components. The resilience of a system is its ability to return to that equilibrium after a disturbance. For example, an ecological system is considered resilient if, after a fire, flood, drought or other disaster, it quickly returns to its ecological equilibrium.

More recently, the concept of resilience has been applied to the human systems in order to understand the dynamics of individuals in groups, organizations, and communities. The idea of 'Social resilience' emerged from this new way of thinking as a way of studying the behavior of a group as a function of the behavior of its individual members. In this context, it has become common to differentiate between the ways that social groups reestablish equilibrium after a shock and the ways that they evolve and change in response to shock.

The concept of resilience has evolved and spread rapidly through the social sciences, but it retains the basic distinction, formulated by first-generation resilience thinkers between adaptation and transformation. As a consequence, resilience has become a common concept for analyzing the impact

of a variety of forces on society. Would the group under examination responding to a crisis adapt to remain essentially what it was? Or would it be transformed into something new and different?

### From 'social' to 'societal': Resilience politicized

On closer view however, the application of the notion of resilience to individuals in society has produced consequences different from those that are produced by its application to technical systems. For social systems, resilience quickly becomes a political question, a question about who needs to adapt their lives to the new conditions brought on by the shock, and who needs to transform their lives. It's a question of whose life or what kind of life is worth preserving or defending against a given crisis, be it financial, climatic, or otherwise, and whose life must assent to transforming itself. In short, the use of the methods based on resilience puts into question what we imagine society itself to be.

From this important and sensitive issue the idea of societal resilience developed, which has replaced social resilience in some contexts. Societal resilience refers to the resilience of society as a whole, rather than specific individuals or groups. This means the distinct values and traditions of societies: their customs, languages, religions and spiritual heritage, ethnic distinctions, and much more. The question of resilience becomes one of preserving the rights and privileges, dignity, and moral character implicit in entire societies.

### The dark side of resilience

Despite increasing awareness of the complexity of resistance-driven social, political and commercial policies, resilience-based strategies for managing disaster risk often become problematic. Resilience-based policies can lean toward a politics of self-reliance, demanding a population with unevenly distributed resources, competence, and capabilities to respond equally to crisis and hardships. There is a clear danger of this thinking transforming into a set of demands on victims of catastrophes to simply 'be resilient.'

For this reason, resilience strategies must be coupled with policies that encourage inclusive growth, in order to avoid it becoming a mechanism for separating the resilient from the non-resilient. Instead, the forces of cohesion and shared values should always remain in focus to make sure that resilience is a benefit for society collectively.

## Societal resilience in the new risk society

Awareness of the societal character of resilience invites us to consider carefully our approach to the evolving risk landscape. The conclusion from this brief survey of the



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emerging concept of resilience is that the impact or risk management often reaches beyond the specific context in which it is carried out. The new risks — climate change, digitalization, energy insecurity, pandemic — all imply wide-ranging societal impacts and engage the societal values that we hold dear.

Societal resilience can be maintained only by recognizing and addressing the deeply interlinked nature of contemporary society. Risk mitigation measures that impact one part of society, produces impacts across society. All of the major risks highlighted by experts today are systemic. It is impossible to treat individual occurrences without awareness of the general impacts of both the risks and the risk mitigation measures.

The societal character of resilience shows us that we are a truly inter-connect world, for the good and for the bad.

# Chapter

# Areas of Inequality







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# Left behind Regions: The Geographical Face of Inequality

Left-behind regions are characterized by economic stagnation or decline, typically due to the departure of a cornerstone industry or population loss. These economic challenges have ripple effects for the residents in these areas, including negative impacts to career growth, overall health, and longevity. The plight of "leftbehind" regions has been sharpened by successive crises calling for necessary action in tackling region-based social, economic and environmental inequalities.

Could you explain the basis of the OECD's approach to regional recovery from the pandemic, and to building resilience and inclusive growth?

Lisanne Raderschall (LR): We understand inclusive growth as economic growth that creates opportunities for all, and resilience as the ability to recover from short-term and long-term shocks and transform these in positive ways. In terms of dealing with the social and economic effects of the pandemic, it is clear that impacts within countries have been uneven and thus recovery needs a targeted approach that takes into account these uneven regional differences. It also means that strengthening resilience, for regions

and more generally, needs to happen involving local and regional policy makers who know their respective regions best.

The goal of our work is to make regions more resilient and opportunities more equitable and inclusive. Since 2008, the OECD has moved away from policy approaches that focus solely on competitiveness and growth as their main objectives, with indicators on GDP per capita as the main tool of measurement towards a broader understanding of well-being, captured by a range of indicators such as air quality, housing affordability and life satisfaction. As part of this process the OECD moved away from a simple urban-rural binary comparison for regions, to understand how different types of regions have been doing.

Specifically, we have looked into understanding the differences between remote rural regions and ones closer to cities.

You often analyze regional demographic changes. How has the pandemic affected rural regions?

Michelle Marshalian (MM): At the start of the pandemic, some rural policymakers brought to the attention new possibilities for rural regions catalyzed by remote working and the long anticipated great urban flights. There has been movement, but not as much as we expected. In a recent working paper, we show that this donut effect has been fairly widespread across countries but limited to big cities<sup>2</sup>. In the US, for example, movement to regions peripheral to cities did happen. It's what is now referred to as the "donut effect." While the scale of the change has not been widespread in all areas as it is in big cities in the US, this change cannot be neglected.

In other countries we observe similar trends on different scales. For example, Canada has experienced an ongoing shift of population from cities to rural regions, and Covid-19 accelerated that process more than 3-fold (or 365%). In Montreal and Toronto, for example, population loss goes back at least a decade, but it is during Covid-19 that population took a visible dive.

LR: Rural regions were at higher risk during the pandemic because rural residents are often older and healthcare infrastructure is likely to be more limited and financially weaker. Moreover, a larger share of jobs with limited teleworking ability and increased risk of infections, such as agricultural and food processing industries are located in rural regions<sup>3</sup>. Residents in these places were therefore vulnerable to Covid-19. For instance in the US, between March 2020 and May 2021, rural communities have experienced 175 deaths per 100,000 residents, compared with 151 deaths per 100,000 residents for urban communities<sup>4</sup>.

Providing social services has been essential for many rural places through the pandemic and after. As mentioned earlier, many rural places have a larger share of the elderly population, which creates a greater need for health services and at the same time, reduces the workforce necessary to sustain them. Social services become inefficient if you have to run them at an excess cost for a small share of the population. Remote rural regions need to do more to attract young people including offering good digital infrastructure as well as childcare opportunities and educational offerings.

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### How has digital transformation played a part?

MM: Digital infrastructure has been vital. But there are significant challenges in rural regions that dense areas do not face. In many rural regions, digital infrastructure is lacking or in extreme cases simply absent. A recent study from the OECD demonstrated that internet download speeds are more than 50% faster in cities than in rural areas in G20 countries. This means that in G20 countries rural regions struggled to offer sufficient teleworking or online schooling possibilities to their residents, which require higher speeds to support teleconferencing. A lack of sufficient internet connectivity and speed also likely to have a disadvantage taking part in quickly digitalizing administrative processes such as case tracking and intra-administrative co-ordination. Rural region's reaction to this crisis and therefore their resilience has been hampered by lack of this service.

LR: There is also the question of the skills gap to make full use of opportunities brought by digitization. Skills in general are a challenge for rural regions. You need to provide not only infrastructure but also opportunities to build skills. That's really important for the resilience of a region.

MM: There are a growing number of interesting examples in which innovation is used to overcome inequalities. For instance, Highlands and Islands University in Scotland has been for quite some time delivering virtual courses to

<sup>&</sup>lt;sup>2</sup> Ahrend, R., et al. (2022), "Changes in the geography housing demand after the onset of Covid-19: First results from large metropolitan areas in 13 OECD countries", OECD Economics Department Working Papers, No. 1713, OECD Publishing, Paris, https://doi.org/10.1787/9a99131f-en.

<sup>&</sup>lt;sup>3</sup> OECD (2021), The territorial impact of Covid-19: Managing the crisis and recovery across levels of government, OECD Publishing Paris

https://www.mckinsey.com/industries/healthcare-systems-and-services/our-insights/covid-19-and-rural-communities-protecting-rural-lives-and-health

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Scotland's islands and rural regions. To ensure quality online courses, they developed a training on teaching in digital environments. It is one way to solve, at least in part, issues of access to higher education which physical access (either because of Covid-19 restrictions, or distance) is a challenge.

You mentioned the goal of your work is to make all regions more resilient and opportunities more equitable and inclusive. How do you go about this in terms of policy?

LR: The OECD has a "place-based" approach to regional development policy, with wellbeing at the core. The idea is that there is no one-size-fits-all solution for policy. Instead, we advise to look at a place's intrinsic conditions, assets, and challenges and to tailor policy to them. We produce data and analysis to work with partners to effectively develop such policies.

One example is the EU's "Smart Specialization Strategy", which is about identifying what a region is good at and using that as a basis to forge economic development, including building a strong business eco-system consistent of private companies, research institutions and the public

sector that allows for innovation, scaling and growth. Implementing these strategies also contributes to strengthen the links between rural and urban regions, which is important way to allow for knowledge exchange so that rural businesses can benefit from information and knowledge generated in other places.

# How is the place-based approach working, and what are some examples?

MM: It is really showing its potential in addressing inequality and building resilience. Switzerland, a federal country where the cantonal governments have a strong role, is a good example. We studied their regional innovation system (RIS), which looks to encourage entrepreneurship based on the needs of the area itself. The RIS relates to functional (generally inter-cantonal and in some cases cross-border) economic zones. Complementary to the focus of the national research driven innovation activities, their focus is on-demand and need-driven services, and a broader understanding of innovation that specifically targets SMEs. The RIS promotes competitiveness and innovative capacity of SMEs by offering coordinated support and services in the areas of information, consulting, networking, infrastructure, and financing. The federal government supports these networks financially. The whole structure is built from the bottom up.

LR: Sweden, a unitary country, is also a good example. Their national strategy on regional growth emphasizes that regions can build their own agendas and draw on their own strengths. It's important to build an authorizing environment and work with sub-national level governments, recognizing that it is at the local level where the needs are known.

One aspect of the place-based approach concerns the 39 million indigenous people living across 14 OECD countries. The OECD has researched how to achieve development objectives here. How does this contribute to regional resilience?

LR: There is a cultural aspect to inclusive growth and social resilience. Regions with Indigenous populations tend to have a particular sense of community, and attachment to land, often not included in policy making or local data collection informing policies. Indigenous communities also have unique assets and knowledge, for addressing climate change for example. Generally, there are

large inequalities between Indigenous populations and non-Indigenous populations over a broad set of socioeconomic indicators. For instance, Indigenous peoples have an annual household income that is on average about 30% lower than that of the non-Indigenous population. Despite these challenges, the strength of these communities over the past centuries has been remarkable and they have shown incredible resilience despite facing colonization and policies of forced assimilation5.

Further resilience and prosperity of Indigenous peoples can be enabled through economic development, building and growing businesses, and participation in policymaking, which has not generally been the case. Because Indigenous peoples tend to be more concentrated in rural regions than urban ones, they are an important population group to consider in addressing regional inequalities.

How can the financial sector best contribute to building regional resilience and reducing regional inequality?

MM: Regional participation by the financial sector is vital. There are a lot of places without access to physical banks. In the US, we recently visited a region where a large local community bank has a really important role. Where rural areas do not have easily accessible financial institutions, remote banking provides some alternatives.

The tricky part is getting the regulation right. In the US, federally-backed community banking financial institutions (CBFI) are created specifically to serve rural regions. Other initiatives such as the Community Reinvestment Act<sup>6</sup> have been an important mechanism through which financial institutions can build resilience and reduce regional inequalities. In some cases, the impact seems to be positive, and in others, the investment is not well targeted. In the US, opening a financial institution is relatively less difficult than in most other countries, and you find many more banks.

### Speaking of risk: what about the role of the insurance?

MM: There is no innovation without risk. Insurance companies need to make sure their instruments are adaptable to rural regions and, critically, that they have partners that are based in and understand the particularities of rural regions. In the US there is a particular acceptance of risk. In contrast, there can be a real hesitance

to taking risk in some rural regions, in particular when regulations make debt forgiveness difficult for budding entrepreneurs. One reason may be that communities don't forget about failure. Having rural insurance and banking institutions based in rural communities working with community anchor organizations can help tailor financial services that allow more risk to help build regional resilience.



Skills in general are a challenge for rural regions. You need to provide not only infrastructure but also opportunities to build skills. That's really important for the resilience of a region.



<sup>&</sup>lt;sup>5</sup> OECD (2019), Linking Indigenous Peoples with Regional Development, OECD Publishing, Paris

 $<sup>^{6}\</sup> https://www.federalreserve.gov/consumers communities/cra\_about.htm$ 



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# Informal Networks in a Changing World

In much of the world, informal networks are vital tools of societal resilience where more formal structures are weak or simply not present. Traditionally, these multi-generational networks create a support structure for the larger community, but as the world has become more urbanized, the structure of these networks has begun to break down. In urban environments, a more transitory population and lower social trust limit the impact of informal networks. With targeted help from the state and the private sector to provide social protections and enable households to create their own safety nets, the resilience effectiveness of informal networks can be improved.

Informal networks — based on kinship, community and relationships, and the financial assistance they may provide — are vital tools of societal resilience in the many parts of the world where institutional support networks are underdeveloped or absent. While they may be viewed as unorthodox in societies where the state and financial sectors lead the way in times of crisis, for much of the world they are the norm, and the primary instrument for coping with shocks.

For those living with the "triple whammy" of poverty — low income, uncertain income streams and no access to financial products — informal networks are flexible safety nets. Subsistence-level entrepreneurs, for example, may need to call on them from time to time.

# Rural to urban: A changing context

However, informal networks are not generic: context is vital. In urban environments, they are becoming less effective. While support networks in tight-knit rural communities may span generations, slum neighborhoods of large cities are a different story. There, many different backgrounds come together with higher levels of movement into and out of neighborhoods, which works against building the trust and solidarity that binds smaller and more established communities.

This means that many of the most disadvantaged individuals, households, and small businesses may not even have access to the limited provision of informal networks. Furthermore, informal networks alone are nowhere near sufficient to provide economic

security to the level of effective societal resilience.

The question then becomes, how can we boost resilience where informal networks may be the only realistic option? An effective approach would be to build on informal networks: to sharpen their effectiveness by enhancing them with systems of formal social protection. We've seen that this can be done at the household level.

# Building societal resilience: The private sector's role

So, how best to complement and strengthen informal networks? There are tried and tested tools like microfinance, but these work best for those who may already have some resilience — for example, small-scale businesses. The needs

of the most disadvantaged tend to be quite different. For them, the process of resilience-building starts from a lower base. Interventions are sometimes needed to ensure that individuals or members of the household group are not experiencing acute or chronic hunger, debilitating medical conditions, abuse, or neglect. Often — and even in communities that are generally very poor — such struggles are accompanied by stigma, leading people to disengage from community life. This kind of social withdrawal inhibits people from developing the kind of local networks upon which they may be able to rely in times of crisis, exacerbating their vulnerability. Ensuring households can meet their most elemental needs with regularity is a prerequisite for their proper participation in society, and in turn, for the kind of resilience strategies which support people and families across the developing world.

While providing basic forms of social protection is traditionally the role of the state, there is a need for the private financial sector to build on this foundation. In poorer countries, it is savings (and to a lesser extent loan products) that perform an insurance role in coping with risk and building resilience. By enabling access to and innovating the savings products that households in acute poverty need, the private sector can play a vital role — even more so by leveraging the power of technology (in particular smartphones) to widen these services' reach.

# **Back to the state: Targeting households**

Yet for all the innovation the private sector can bring, we can't completely rely upon it to meet the needs of those in poverty. Ultimately, the state has bottom-line responsibility for the welfare of its citizens. Thus, it is a matter of how the state can best provide security for those at the bottom of the pyramid and improve resilience for those reliant on informal networks.

An effective, affordable, and achievable approach by the state here could be to target major items of household expenditure vital for resilience, for example housing, healthcare, or energy costs. These are huge recurrent expense items, and assistance with any could help alleviate pressure on disadvantaged households.

# Looking ahead: A joint approach

Coming back to informal networks, if both the private and the state sectors can take an innovative approach to the provision of social protection, this could enhance the resilience of those currently served only by informal means by sparking new possibilities for self-reliance and small-scale entrepreneurship. The economic activities between households and businesses at the micro level tend to be intertwined, so solutions that relieve financial pressure on households can actually help both.

Informal networks as tools of societal resilience must be understood in the context of how they are changing and becoming more limited in an urbanizing world, where the breakdown of community ties is a real challenge. Yet for many they remain vital. Employing innovative social protection tools has a lot of potential to boost the resilience of those facing the challenges of poverty, and their ability to cope with current and future crises.

In short, a joint approach could maintain and build on the best features of informal networks — their flexibility and strong social roots — while also ensuring that they're not the only game in town (or country, for that matter).

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Employing innovative social protection tools has a lot of potential to boost the resilience of those facing the challenges of poverty, and their ability to cope with current and future crises.





**Olivier Desbiey** Head of AXA Group Foresight



Kirsty Leivers, AXA Global Head of Culture, Inclusion and Diversity

There is social value derived from in-person work life through community building and the sense of belonging it creates, and we risk losing that value somehow in a remote world.

# Inclusivity and the Future of Work

The pandemic has without a doubt accelerated change in the world of work, introducing flexibility and technological innovation that contribute to workforce resilience in the face of crisis. But benefits have been unevenly distributed, particularly in the favor of white-collar workers. Relatedly, companies are facing a reckoning in the great resignation. What does the future of work look like, and how can we ensure inclusivity in the new model?

How has the pandemic changed the world of work?

**Kirsty Leivers (KL):** It has rapidly accelerated change. The digital revolution had already introduced alwayson patterns and some remote working, but change was painfully slow and battling legacy systems. The new remote working boom is a genuine gift and proves that we can adjust to new ways rapidly. We are also seeing that a hybrid workforce is more resilient to external shocks.

Olivier Desbiey (OD): I agree. The crisis has shown a new way of working and living, at least for the white-collar workforce. Those employees have been empowered through the digitization or hybridization of most of their tasks. Since the unprecedented lockdowns around much of the world in 2020, many workers have developed new expectations in terms of flexibility, recognition, and overall meaning of their work. This had been happening for a while — David Graeber, for example, famously coined the term "bullshit jobs" in 2018, arguing that much work was pointless and harmful. I think the pandemic only accelerated the feeling that work should be meaningful and flexible. Perhaps the greatest evidence of this is the great resignation movement that resulted.

Are there downsides to the changes?

**KL:** First, with remote working, there is the risk of lack of balance, of not being able to switch off in an always-on environment. Second, there is social value derived from in-person work life through community building and the sense of belonging it creates, and we risk losing that value somehow in a remote world. It also presents challenges for



The most difficult thing will be figuring out the balance between flexibility and community and making sure the benefits are evenly spread across the workforce.

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team management in learning how to manage and build trust in hybrid teams. The most difficult thing will be figuring out the balance between flexibility and community and making sure the benefits are evenly spread across the workforce.

**OD:** Absolutely. Right now, the benefits accrue to the class of workers that can work remotely, which excludes many. The pandemic has sharpened debate about work inequality, and the lockdown highlighted the importance of those working in care, of delivery drivers, of teachers, of nurses, and more. That has stimulated debate around the social value of work and its recognition by society. Already some progress has been made on rights and status for some occupations.

Referring to the French sociologist Marie-Anne Dujarier, the pandemic highlights the three dimensions that define work. Up to the 1980s the consensus was to consider work as: an activity (painful), a useful production (creating something useful to society), and a related employment (being able to live from this work). Today, these dimensions no longer fit together. We have many examples of useless or even harmful activities (especially from an environmental perspective), high incomes not necessarily correlated to an activity, and finally the working poor. The crisis exacerbated these inequalities and is redefining the social value of work.

**KL:** Yes, and if this inequality is entrenched, it can be a huge threat to societal resilience.

**OD:** Interestingly, we are seeing insurance companies responding to this inequality by designing policies for workers not traditionally covered by insurance, such as platform gig workers.

# So, we see quite a break from the previous world of work in the future?

KL: Change only happens quickly when something is broken, and recent events have broken the way that we worked. The structure and control of a workplace is a difficult thing to replace, and we're putting a lot of pressure on individuals to reconstruct and create the boundaries and structure of the "old" way of working — it's a whole workplace redefinition, and you don't do that in a week. That takes years to get right. We certainly will never go back to exactly where we were before. So, there will be a change, only time will tell just how big it will be.

**OD:** Going beyond the way we work, and the way certain types of work are valued, I think the whole nature of the company is under question. Businesses need to strike a balance between purpose and profit. They must be able to justify their role in society beyond their business model and aim to reduce harmful ecological and social impacts, including on employees, even if that impacts profits. In the past, companies could claim they were socially responsible just by having a mission statement. Now, employees and customers alike are demanding clear action and transparency.

KL: I'll also add that the pandemic opened the door to more awareness about diversity, about wellbeing, and about mental health, so this is something I think we will see more emphasis on in the future.

# Olivier, going back to purpose over profit, what about new business models? How are they shaping the future of work?

**OD:** With new business models, there is some tension there. The increasing business of platforms illustrates how tech can sometimes compete with rather than benefit the workforce. For example, a platform delivery company can use their technology as primarily an organizing principle for innovating and improving service, rather than a tool for their workers. Workers are entirely integrated into the platform, and as they perform their work, they also generate data on delivery routes and patterns. This feeds an algorithm, with the purpose of eventually

replacing the drivers with autonomous vehicles. Ironically, generating data to eliminate their job is part of their job. However, the excesses of this kind of model have also given birth to the development of platforms based more on the social role and well-being of workers. To stay with the example of delivery, new forms of organization relying on cooperative mechanisms<sup>7</sup> are emerging to grapple with the purpose versus profit trade-off.

Kirsty, you mentioned an increased emphasis on diversity. What kind of diversity are we talking about?

**KL:** Diversity is crucial to workplace and societal resilience. Since diversity can be actively introduced to a workplace, it's an important path to permeating diversity into wider society. Right now when we talk about diversity, we use simplistic models or broad categories to start, in order to start the conversation. As we progress with those changes, we will then move closer to what I consider to be true diversity.

With the nature of work changing, we need to be open to as much talent as possible. Recruiting and retaining those previously excluded is a route to that, as well as to wider societal resilience. How workplace diversity is understood is an evolving concept: skills or background diversity, for example. A workplace may be ethnically diverse, but still draw on only one type of socioeconomic or educational background. It's more difficult to achieve true diversity in skills and thought, which is what actually makes a difference to the way the organization thinks and functions. There is still much work to be done on that front.

### Are you optimistic about the future of work?

KL: There are lots of interesting things going on, and I consider the progress and the change in a very positive way. There will be challenges in getting the balance right, getting past some of the tensions in workplace relationships as flexibility becomes more of the norm. But we're now having these conversations explicitly in a way that we weren't before, and at the end of the day that helps everyone and fosters greater diversity. It is necessary change, and in the right direction.

**OD:** I am optimistic in the sense that we have always been able to adapt our ways of working, particularly in relation to technological and industrial revolutions. What is at stake today

is perhaps more profound and involves integrating social and sustainable development expectations. The younger generations seem to already have this awareness. The challenge is more broadly for society to have a well-prepared, trained and therefore more resilient workforce. There is no doubt that companies — especially the largest ones who have made a social mission the cornerstone of their model — have a role to play.



In the past, companies could claim they were socially responsible just by having a mission statement.

Now, employees and customers alike are demanding clear action and transparency.





Tista Kundu AXA Fellow, Centre de Sciences Humaines of New Delhi



Ursula Mello AXA Fellow, Barcelona School of Economics

# Building Resilience by Addressing Intergenerational Inequality

Intergenerational inequality, which refers to the inheritability of socioeconomic status and the difficulty of social mobility, is a major and persistent challenge to building effective societal resilience, even in the face of reducing poverty and improvements in other wellbeing indicators. Understanding how intergenerational inequality happens and creating effective policy tools to address it are needed. India and Brazil offer two case studies in how to approach this issue and the challenges it presents in different cultures.

What is intergenerational inequality and why is it important?

Tista Kundu (TK): Focusing on intergenerational inequality is important to be able to understand why inequality persists. Looking at India, economic growth has led to a remarkable reduction in poverty, with the poverty rate almost halving since the beginning of this century. Nevertheless, inequality has increased. Rather than thinking about poverty in absolute terms, we need to address the relative position of the poor and how inequality is generated. Another way of describing intergenerational inequality is inequality of opportunity.

This is what Francisco Ferreira, an economist and director of the International Inequalities Institute at the London School of Economics, calls the "bad cholesterol" of inequality, the factors beyond individual control that start before birth and have an effect throughout life. In India, it is generated by caste, sex, parental education, and occupational status, as well as other social circumstances that individuals are

born with, allowing inequality to persist even while poverty reduces.

Ursula Mello (UM): The connection between intergenerational inequality, social mobility, and resilience is clear if you look at different countries. Countries like Denmark, Norway, and Finland have low levels of intergenerational inequality and high social mobility. Brazil has low mobility, high inequality, and high and persistent intergenerational inequality. This lowers aspirations, which leads to low social cohesion, low social trust, disenfranchisement, marginalization, and social conflict. These are all factors in low societal resilience.

How should intergenerational inequality be handled?

**TK:** To address inequality of opportunity, we must consider the wider factors behind it, for example, race or gender and other circumstances beyond an individual's control. What studies show is that, in

There are many possible policy tools. Reduction of application costs through financial waivers, mentoring for low-income students, interventions that give information about the value of college that change aspirations.

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India, the most important factors behind inequality of opportunity are parental background, mostly the father's occupation, and even more important, the father's and mother's education.

**UM:** A large part of the cause of intergenerational inequality is inequality of opportunity early in life, which prevents many children from achieving their full potential. This affects their labour market prospects as adults. So, public policies to address this should be directly aimed at parents. For example, parental leave to allow parents to spend more time with their children, high quality childhood care, and high-quality public education, with policies inside of schools, but also outside that include nutrition, health, and poverty reduction.

So clearly education across the generations is an important factor. How can education be used to break the intergenerational inequality cycle?

TK: It is very important. But it can be very challenging to break the generational cycle of poor education in India, as one study that focused on lower-caste families in Mumbai showed. Lower caste parents intentionally send their children to low quality schools and eventually withdraw them from the schools, because they want them to take jobs to earn money. That is their choice, based on the reality of

their circumstances. The jobs the children take tend to be low quality and earn poorly. But in the parents' eyes, education has no immediate benefit to the financial survival of the family — instead it's a huge opportunity cost. That's a vivid demonstration of why intergenerational inequality persists and underlines the challenges of making policies to break the cycle.

UM: It is challenging, but education is a very important tool, at all levels, from early childhood education to university. And research on its role is evolving. Policies to reduce intergenerational inequality have so far been focused on early childhood and adolescence, not so much on higher education. Recent research by economist Raj Chetty and coauthors, focused on the US, has found that higher education is very important for upward mobility. Whether the entrant has a poor or rich background, once they enter the same elite college, they have a high likelihood of having a similar income later on. This approach can be applied to other countries.

So, what are some policy tools that could be applied to higher education, in Brazil and in general?

**UM:** There are many possible policy tools. Reduction of application costs through financial waivers, mentoring for low-income students, interventions that give information about the value of college that change aspirations. These are small-scale interventions that can easily be implemented.

In Brazil, where inequality is so high, large-scale interventions are necessary and are beginning to be made: for example, the expansion of the public higher education system, and the expansion of financial aid through grants and laws. In Brazil, this has included affirmative action in admissions for low-income students and for black students, and a centralized admission system for federal universities. Before, each federal university had its own system, but now there is one exam that can be taken for multiple applications, for an easier process at less cost.

Looking at affirmative action in education in Brazil, has that been an effective tool for addressing intergenerational inequality?

**UM:** Affirmative action has been a federal policy since 2012, focused on public school students because as there is very high-income segregation between public and private schools. There are quotas of 50% public school students in each federal higher education institution, broken into percentages by income, gender and race.

In combination with centralized admissions, it's been transformative. Research shows it's been

really effective at increasing enrolment of low socioeconomic status students and their enrolment in the most prestigious majors. This is important for social mobility, and for the way students view higher education. It's early days – the first cohorts are only just graduating. But the causal effects are visible in low-income high school students entering the best state universities and majors. And it has lifted enrolments across the board, not just for students that used to apply to higher education before, but also to some that thought that the college dream was impossible.

# How about affirmative action policies in higher education in India?

TK: Where they have reached the targeted population, they have worked to some degree. But where they have not, they have actually caused harm, which is why they are so controversial in India. For example, when an academic job is advertised for candidates from so-called "backward" castes, if suitable candidates are not found, the job goes unfilled, which leaves gaps in the education system and causes resentment among candidates from nontargeted groups. What is needed is a lot more work in education policy so targeted groups can reach the level to be able to benefit, and a better understanding of how important timing is in policy design.

# Finally, what is the connection between intergenerational inequality and building societal resilience?

**TK:** To build societal resilience, it is important to put inequality of opportunity and intergenerational persistence of inequality on the map in this debate on development. This is the first step. Let's see how it overlaps with all the other factors behind inequality and poverty. When we assess all these things together, we can move towards more implementable socially resilient policies. The persistence of inequality at scale across generations is deeply harmful to societal resilience.

We have never thought of inequality like this before. We are lifting the curtain of inequality and seeing what is happening behind it. What we see is that inequality of opportunity is negatively related with growth. If we reduce inequality of opportunity, we can actually increase growth. Inequality is not an inevitable consequence of growth.

**UM:** Policies on higher education in Brazil have demonstrated the societal resilience potential of policy tools to reduce intergenerational inequality. We need to care about intergenerational inequality because it is a matter of fairness. Inequality related to different opportunities at birth affects social

mobility, which harms aspirations and creates animosity between groups, which as I mentioned earlier is harmful to societal resilience.

The pandemic has heightened the need for policies targeting intergenerational inequality, because it has affected the poorer far more. Parents in richer families have more scope to help their children through school closures. In Brazil, it has exacerbated inequality in education, increasing school dropouts. We have not yet learned the extent of the damage. We know from research that more egalitarian societies are more resilient. There is more trust, more community, more happiness. And it is not just a matter of equity, but also a matter of efficiency and growth. If we have higher social mobility, there is a better likelihood of breaking the intergenerational cycle of inequality. The incomes of children of lowincome parents are lifted and resources are allocated to enable individuals to achieve a higher potential. This leads to more growth and higher levels of equality, themselves beneficial for societal resilience.

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Tristan Dissaux AXA Fellow, Université Libre de Bruxelles

# The Social Role of Money in an Age of Digitalization

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Monetary systems are not just technical in nature, but vital tools of social cohesion, creating a "community of payment". They embody shared values, legitimacy, and societal trust. Their functionality is vital for societal resilience.

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The digitalization of money and the move towards a cashless society brings significant efficiency gains. However, it also has a perverse impact on social cohesion and financial inclusion: as the scales tip further toward digital currencies, the payment system becomes more a private good than a public one - and one that risks leaving the most vulnerable behind.

In the past few decades, monetary systems have transformed: in the developed world at least, it is digital money, not cash, at the apex of payment systems. The pandemic has turbocharged this, with card-only payments and online and mobile payment systems becoming ubiquitous, and cash being partly phased out. Without action, this is only going to increase and develop further.

Yet while there are undoubted gains — in terms of efficiency, security, ease of use — they come at a cost to social inclusion. On one level, digitization is a tool of inclusion, in that it provides means that extend possibilities for transactions and creates financial histories. But the flipside is that it excludes those who cannot, or will not participate, in particular those on the financial margins who must rely on cash.

This can deepen social fractures. For the vulnerable, the juggernaut of digitalization can feel forced. It is a particular manifestation of the wider "digital divide" that afflicts those without access to technology, the less technologically-savvy and especially many elderlies. Many may struggle with digital payment tools and find themselves without familiar options, such as cheque payment systems for household bills, or the easy availability of bank branches for personal assistance.

## **Erosion of the social role of money**

The analysis of the digitalization of money tends to be in economics terms, stressing costs and utility gains. But this overlooks the social role of money. Monetary systems are not just technical in nature, but vital tools of social cohesion, creating a "community of payment". They embody shared values, legitimacy, and societal trust. Their functionality is vital for societal resilience.

Digitization as it is developing also has implications for a sense of public ownership of the payment system. It is a critical infrastructure where the private financial sector is leading the way and owns the tools and networks. This increases a tendency of the payment system becoming more and more of a private good. Cash, as legal tender, is legitimized by the state and carries the sense of a public good. As cash is partly phased out, this sense recedes.

Digitization has also curtailed the particular quality of cash—its anonymity—and enabled greater surveillance and analysis of financial transactions, by private institutions as well as the state. While this increases transparency and security, it also erodes freedom and institutional trust.

The sense of exclusion is further eroded by the costs of payment systems disproportionately falling on the poorest. Those who cannot or do not use digital payment systems — often people on lower incomes — pay more when cash-handling fees are attached to payment systems or they are unable to take advantage of digital rates for services.

More and more, means of payment become positional goods, highly correlated with the socioeconomic status of each individual. Those at the lower end are restricted to cash and relatively costly prepaid or debit cards, while the better-off enjoy a wide range of services and advantages materialized by their glistening credit cards.

# Money as a public good

Since the pace of digitization will only increase in the face of further technological innovation in payment systems, the question then becomes how to address these drawbacks, and how to preserve the social role of money.

It needs to be recognized that digitization has grown because it makes sense in cost and efficiency terms for the private financial Digitization has also curtailed the particular quality of cash – its anonymity – and enabled greater surveillance and analysis of financial transactions, by private institutions as well as the state. While this increases transparency and security, it also erodes freedom and institutional trust.

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sector to move away from cash. This led to the erosion of the cash infrastructure itself, which in turn incentivizes individuals to shift to digital. Therefore, to preserve cash for those who need it, cash needs to be recognized as a public good akin to a public utility. This requires the commitment of the state.

In parallel, steps must be taken to minimize exclusion. These should include the guarantee of access to payment accounts, and effective help and training to those who need it in order to utilize digital tools. This will involve a cooperative approach between the public sector and the private financial sector, to be led by the state through legislation, regulation and incentivization.

And as central banks develop digital currencies, it is important that we preserve the social legitimacy of money as a symbol of sovereignty that cash has for so long represented. Great care must be taken in designing public digital currencies in order to preserve the particular qualities of cash. A true public option for digital payments may be good in addition to existing solutions.

The design of the "digital euro" is a case in point. It is intended to complement cash, not replace it, and to widen accessibility, choice, and inclusion. This is perhaps a heartening assertion of the public sector in the digital payments space. But care must be taken in developing user tools and their symbols — here the European Central Bank can take inspiration from China, whose digital yuan (e-CNY) utilizes in its apps the trusted iconography of the yuan bills.

# Reasserting the social role of money

It is important not to lose sight of the positives of digitization. In the Global South, it has been a boon for financial inclusion as with the likes of M-Pesa, a mobile phone money transfer service originally launched in Kenya and now expanded around the continent. Yet its success has not necessarily translated in increased resilience for individuals: better connected to finance, they are also more exposed to shocks, indebtedness, fraud, or online gambling. As innovation is strongly associated with an ideal of progress, it takes some effort to confront its potential detriments.

With a future including cryptocurrencies, machine-to-machine payments, central bank digital currencies, and more, money is only set to become ever-more digitized. A time of shock is a good time to collectively consider what we want money to be and what its qualities should be, as change is forced and accelerated. For the sake of societal resilience, the social aspects of money must be given equal weight alongside the economic and efficiency gains of digitalization.

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For the sake of societal resilience, the social aspects of money must be given equal weight alongside the economic and efficiency gains of digitalization.





Anne Boring
Director of the AXA-Sciences Po
Women in Business Chair



Paola Profeta
Director of the AXA-Bocconi
Research Lab on Gender Equality

# Barriers to Women in Employment and Leadership

Gender equality has come a long way but pay gaps and barriers to women's labor force participation and business leadership are sustained in many countries, despite women obtaining a larger number of higher-education degrees than men in developed nations. Fuller participation and representation of women in the workforce have tangible benefits for societal resilience. This makes addressing the gender gap a key element in policymaking.

Can you describe the current gender gap in employment and leadership?

Paola Profeta (PP): There are many differences between countries, but it's still an issue everywhere. The average female employment participation in Europe is around 62.8%. The pay gap is around 14%. Then there is the glass ceiling to women in leadership positions. That's below 10% in some places. This is at odds with the level of women's education.

Anne Boring (AB): In developing countries women are getting less education than men, whereas in the developed economies, women have been overtaking men in education status for the past few decades, and it was expected this would close the gaps. That didn't really happen. In France, the wage gap has stuck at around 16% for the past 15 years.

Why does the gap persist?

**AB:** There are several reasons. Although women study longer and earn more degrees, they tend to earn degrees in fields that lead to lower paying jobs. More broadly on the labor market, women sort into firms, occupations, and industries that pay less. The so-called "child penalty" is also a very important factor.

**PP:** Motherhood is a time of penalty for women's resilience in the labor market, a big drop in earnings and prospects. We really have to address this at firm and government level.

AB: High-paying professions demand time, and women suffer from having to reduce their hours when they have children. And the need for childcare affects job choice, as wages are traded for flexibility. We have not reached gender equality on sharing childcare.

There are clear benefits for leadership. A larger pool raises the quality of candidates, and more women in leadership encourages other women and implementation of family-friendly policies.

It's a virtuous circle.

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So, better measures for sharing childcare would help?

**PP:** Paternity leave is important in order to entrench that child are a dual responsibility. Symmetry at family level to nurture symmetry at firm and society level. But childcare policies are scarce in many countries.

**AB:** Better access to childcare doesn't only mean that women can work more. There are societal benefits to better access to childcare, as men and women come to believe in gender equal norms. That's good for children as well.

That brings us to resilience. What are the societal resilience benefits of addressing the gap?

PP: There are so many measurable benefits. Female participation is positively related to economic growth. As we said, women surpass men in higher education, so why waste talent and competence? It benefits fertility, because two incomes encourage more children, which ties in with pensions, counterbalancing the effects of us all living longer. There are clear benefits for leadership. A larger pool raises the quality of candidates, and more women in leadership encourages other women and implementation of family-friendly policies. It's a virtuous circle.

AB: Economic power for women helps at household level too. Research has shown it reduces domestic violence. The more women in leadership, the more stereotypes are reduced. And diversity in leadership teams tends to increase creativity within firms.

Women are more educated than men, but is it a case of what they are learning? You've both written about the importance of more women learning STEM [science, technology, engineering, mathematics] disciplines.

**PP:** Women's segregation into humanities, less rewarding on the labor market than STEM disciplines, is worrying for future gender gaps. We need to ask why women are so poorly represented, if they are discouraged away at a younger age. It's a cultural problem.

AB: Lack of STEM degrees means that women's entry points to the labor market are not as good, and the high-career trajectory is harder. If we manage to close that gap to start out with, that would make a huge difference later. There is not necessarily a lot of gender discrimination, at least not in western and northern European countries, but small differences grow and grow. At maternity, they explode.

**PP:** Context matters. For STEM disciplines, testing can be competitive and stressful, and we know this penalizes girls. In a more "normal" environment, they perform as well as boys. We need to build a more inclusive culture here.

Let's look at policy tools. How about quotas for women in leadership, for example?

**AB:** Quotas definitely work in bringing more women to leadership positions. When France and Norway introduced quotas on boards, firms were able to adapt very quickly. Some large firms are pushing for more equality as they see benefits to having more diversity in leadership positions.

But quotas generally only work if there are strong incentives to implement them. There needs to be a cost to firms if they don't generate more gender equality. Or no cost if they do. For instance, extending paternity leave. That could incentivize firms to hire more women because there will be a cost to replace men going on leave too, levelling the field.

**PP:** Quotas are controversial. But sometimes they are the only way. In Italy, my country, there is a compulsory quota for boards of listed companies. And the qualification level increased, because men faced competition from women who previously wouldn't have been considered.

### What other policy tools could be useful?

**PP:** Transparency in the collection of data and information about gender pay gaps. In Europe, there is discussion about making it obligatory for firms to report pay data. Making firms responsible and taking action to recognize issues and improve things.

**AB:** Where pay transparency has happened, the public sector in Canada for instance, it has helped to reduce the gap. There's a stereotype that women are not supposed to ask for more money. So, if you increase information about wages, this really helps women.

# How about recognizing the unpaid labour that is typically mostly done by women?

**PP:** The problem I have with this is that it risks backfiring on female participation, causing women to work less than they already do. If women don't work, the problems remain. Much better would be to have policies that rebalance things. Better childcare, for example. Not reduce the incentives for women to work in the first place.

What has the pandemic meant for female employment status, and how does this compare to the 2008 financial crisis aftermath? Then was called the "hecesssion" because it hit the male-dominated financial sector, whereas 2020 marked the "shecession", since service industries disproportionately employ women.

**PP:** 2020 was indeed a "shecession", but since then, thanks to government support and the like, the level of female employment is not that different than before the pandemic. But there is another effect. The increase in family responsibilities through school closures and lockdowns impacted women more. The stereotypes around traditional gender divisions held true, even with more remote working for everyone. Men may have done more, but women did much more. The gap, if anything, increased.

Having said that, if remote working is maintained as the new way of working, that will be good for women and everyone. I think it will be difficult to go back to the old ways.

AB: After 2008, this narrative emerged that if Lehman Brothers had been Lehman Sisters, there wouldn't have been such a crisis. There was quite a push for policies to actually close the gap, larger firms especially embraced the business case for gender equality in leadership positions. And in the past 10 years, this push has really accelerated.

Covid-19 did see a "shecession" at first, but now women's employment has gone back up. But there

are longer-term consequences that could impact women more than men. It's early days, but there are signs that women are going to be working from home more, be less present in the office, and this may lead to a setback in career advancement.

More widely, we are still seeing a lot of sector gender segregation, female dominated sectors and male dominated sectors. That is what really created the difference between 2008 and 2020. There's a lot still to do there, a need for public policies to improve diversity and reduce this segregation. It's an obvious issue.

### So, for more progress, what is needed next?

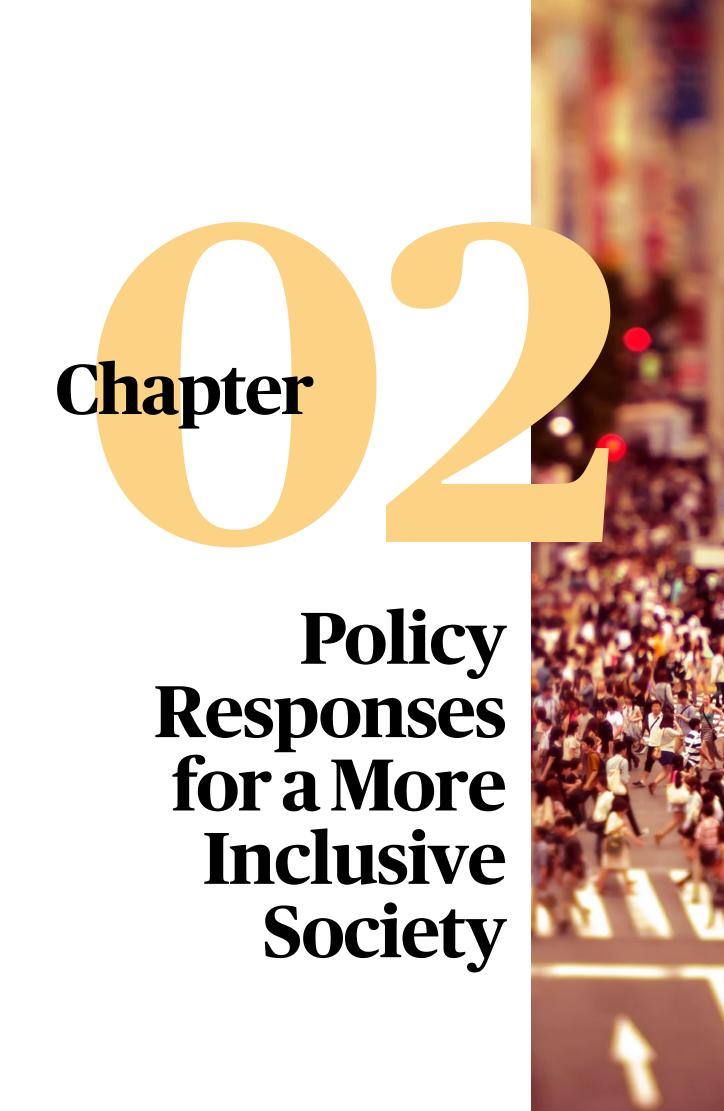
AB: What is missing in firms is solid research on effective strategies to close the gaps. There are inequalities within firms and across firms. There's a big role for public policies, and a lot of political interest to increase gender equality. I think the trend is going in the right direction. But it's not a clear road.

**PP:** It's about changing culture. If there is a mindset not open to women's empowerment or women's participation in the labor force, then even the best policies can fail.

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Lack of STEM degrees means that women's entry points to the labor market are not as good, and the high-career trajectory is harder. If we manage to close that gap to start out with, that would make a huge difference later.









Maria Lucia Villela Garcia AXA Fellow, University of Bristol

# Place-based Approaches for Tackling Regional Differences

Recent shocks have resulted in uneven economic and social effects between and within countries. Already challenged or "left-behind", often rural, regions, even in richer countries, are testing their societal resilience "Place-based" approaches create the empowerment and agency needed to build sustainable societal resilience. By involving the community both to generate solutions and contribute to execution, place-based approaches leverage local talent and expertise, along with expert advice and public and private sector involvement.

In the United Kingdom, "levelling up" — a government-led ambition to boost productivity, living standards, infrastructure, community pride, and empowerment in areas where they are lacking – has become a constant in political debate. While the noise is not necessarily matched by action or spending commitment, the discussion has drawn attention to the challenges of "left-behind" regions across the UK, often in post-industrial towns and fading coastal areas, and even in poorer neighborhoods of richer cities like London and Bristol.

Broadly, left-behind regions are defined by poor socioeconomic outcomes and multiple deprivations (in skills and education levels especially), lacking investment and the cultural and social facilities that build a sense of engaged community and societal resilience. Healthy life expectancy is also strongly affected by levels of deprivation — according to recent Office of National Statistics

(ONS) figures, girls born in the most deprived areas of England are expected to have almost 20 fewer years of good health than those born in the wealthiest areas. Boys will have almost 19 years less.

Their challenges demonstrate how nation-based economic analysis can provide a misleading picture of a country's wellbeing, where a country can appear to be relatively prosperous, but with wealth concentrated only in certain cities and regions. Decline in certain regions, sustained and gradual, has been heightened by the Covid-19 pandemic. In early January 2022, a parliamentary study found that residents of left-behind communities in England were 46% more likely to die from Covid-19, generally worked longer hours for less pay, and had shorter, less healthy lives than those living elsewhere.

The question is how to build the societal resilience of left-behind

regions by tackling social, economic, and environmental inequalities. One way of thinking has focused on the idea that "connectivity" — meaning connection to good digital infrastructure (something often lacking in left-behind regions) and key services (such as transportation links) — is the solution. Certainly this is important and necessary, but alone, it is insufficient to build deep societal resilience.

Systemic crises, such as Covid-19 or the cost-of-living crisis, as well as highlighting problems, are an opportunity to examine how local economies and networks can be rethought and regenerated to build resilience. While many communities struggle, others have developed more resilient communities with inclusive, collaborative. and sustainable values through smaller, "placebased" projects that forge identity and a sense of pride. Place-based approaches consider the complex

mix of environmental and social factors in a particular area, or place, by engaging and empowering local people and communities as the main sources of knowledge on the issues at stake and leveraging their potential to drive change. They usually involve processes of collaboration between community actors and local institutions (e.g., anchor organizations, public authorities, universities, local businesses etc.) and are concerned with setting up democratic systems of governance in which communities can gain ownership over the future of their place.

# **Building resilience**

At its core, resilience is about the ability to recover from shocks and to prepare for future shocks. Markus Keck (University of Augsburg) and Patrick Sakdapolrak (University of Vienna) define resilience as having three dimensions: coping capacity to overcome adversities; adaptive capacity to learn from adversities for the future; and transformative capacity to craft institutions and welfare measures to build societal resilience for future shocks. Thus, resilience is a dynamic and adaptive process.

For left-behind communities, building resilience is not a technical process but a political one. This is where a place-based approach is valuable.

Looking at communities where this approach has been taken offers lessons and inspiration to local stakeholders — be they residents, local government, organizations, or businesses — to pursue innovative ways of building inclusion and sustainability, and thus more resilient futures.

### A place-based approach – the challenges

So, how to use a place-based approach to build societal resilience in left-behind communities? It is important to inspire at grassroots level so communities can pursue disruptive ways of shifting local economies towards inclusion and sustainability. This means both strengthening existing groups and enabling the formation of new ones aimed at representation the diversity of the community and their issues. It could involve experimenting with different ways in which they can perform a central role in the local economy, such as through the community wealth building model where councils commission local organizations to provide local services, thus using their procurement power to keep wealth within communities. It could also To address the needs of left-behind communities, they must be taken seriously as truly locally led processes with much potential to forge grassroots societal resilience and give voice to marginalized communities.

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involve bringing communities to the forefront of decisions around planning, development, social inclusion, and environmental sustainability, such as through processes of co-production and co-design where solutions are designed in close collaboration with community members.

Social memory is also important, to allow learning exchange about what has and hasn't worked in the past — the best practices, successes and failures, and problems that remain. This is the inbuilt memory of community groups in particular place which comprises of the knowledge, experience and wisdom accumulated over a period of time on the different attempts, solutions and decisions involving their issues of concern.

Then there is the relational aspect — how to create channels of cooperation and collaboration between the different actors from different

# Systemic crises [...] are an opportunity to examine how local economies and networks can be rethought and regenerated to build resilience.

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sectors. The private sector and the public sector will bring their different skills and processes, as will experts from academia, civil society and elsewhere. Most crucial is that the community always has agency and is not dominated by other actors, since the impact of the changes will be felt most by them. A place-based approach is about creating a non-hierarchical process that works towards common goals. Therefore, particular care needs to be paid to governance and power relations throughout.

# Place-based approaches in practice

Looking at place-based approaches in practice shows the challenges and the potential for building resilience in left-behind communities. The Rhondda Valley in South Wales was once an area at the heart of the coal mining industry. It has had to contend not only with decades of economic deprivation in the wake of that industry's decline, but also a significant legacy of environmental degradation thanks to residues of pollutants from the industry still present, affecting rivers and forests.

At the center of a local project is ecological sustainability, an important aspect of resilience in a time of climate change, which addresses the legacy of the coal industry's past pollution of the valley while creating a new sense of pride. The aim is to create a future where sustainable development provides income, jobs, and social and cultural activity while also protecting and conserving nature by making use of hundreds of hectares of publicly owned land on the Welsh Government Woodland Estate.

In its progress, the project has shown adaptive capacity — an ability to cope with the constraints and limitations presented to their original dream. The dream involving an ambition for community ownership of the land foundered in negotiation with the public body. Instead, a co-production process between the community and the public body was proposed. A series of workshops led by a community social enterprise formed a long-term vision of the forest as a combination of nature reserve and a sustainable forestry enterprise to create jobs and sustainable energy, with the social enterprise leading on training and employing local residents.

The process is ongoing, but the public body has signed an agreement with the community as a pilot and precedent to evaluate social value in commissioning contracts. This is promising: forestry experts from a government body could have easily drowned out community voices had the project been managed differently.

# One promising piece of the resilience puzzle

Place-based projects are just one method of building societal resilience in left-behind areas. Larger government-led policies such as political devolution and decentralization and infrastructure development, in particular digital infrastructure, and transport, all have a part to play. But the signs indicate that the crises of our age have sharpened appetites for community-led collective action. To address the needs of left-behind communities, they must be taken seriously as truly locally led processes with much potential to forge grassroots societal resilience and give voice to marginalized communities.

# Climate Urbanism: Building Resilience in Urban Contexts



Vanesa Castán Broto AXA Award Recipient, University of Sheffield

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Climate change shapes not only the way people imagine the future of cities but also how people design and plan them, which in turn impacts our resilience.

New and expanding urban areas concentrate vulnerabilities through their large populations, carbon emissions and assets but they also provide opportunities for action in the face of climate change notably through "climate urbanism".

Can you introduce us to the concept of climate urbanism and its importance for societal resilience?

Cities have a large role to play in addressing climate change. They concentrate many of the activities that produce carbon emissions, as well as population and assets, thus concentrating vulnerabilities to climate impacts. Yet by virtue of this fact, they also offer many areas of possible intervention and mobilization – including the mobilization of every urban resident in climate action.

Climate urbanism refers to the new ways of thinking about cities fostered by concerns about climate change. Climate change shapes not only the way people imagine the future of cities but also how people design and plan them, which in turn impacts our resilience. Many people fight daily for climate justice, that is, for climate action that redresses existing inequities in our societies. Unfortunately, much of the climate action taking place in cities tends to increase urban inequalities and create further injustice.

Inequality compounds climate impacts. Marginalized people may be greatly exposed to climate risks and simultaneously impacted by them more (e.g., a typhoon may damage a well-built house but destroy a small hut). They may also have limited capacity to respond to those risks if they have no access to resources or savings and lack a voice in the political process. This is particularly visible in informal settlements, where people lack access to good quality housing and services, land tenure, or livelihood opportunities and often struggle to make themselves heard in political debates.

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### How does climate urbanism distinguish between cities? There are many types of urban areas, after all.

The patterns of urbanization are varied and flexible. From forms of suburbanization to fragmented settlements where agricultural land use coexists with industrial ones, the urban landscape is changing rapidly. Some cities are completely new, while others are growing through the agglomeration of villages. Climate change responses will have to consider this spatial diversity. Planning responses such as densification, zoning, or compact cities may have their place, but they are certainly not the only means of intervention. Climate change action must consider the context and history of each urban area and must be developed with or by the people affected. Solutions parachuted from other locations have historically failed.

# How does climate change affect urban resilience?

The most common definition of resilience is the ability to bounce back from shock. A few years ago, some experts advocated redefining resilience as the ability to "bounce forward" — to take actions that create a society that can respond better to the next shock. Responding to the impacts of climate change is not sufficient. Climate action must also address the structural drivers of vulnerability.

One question is how to respond to risks like extreme temperatures, flooding, drought, or food shortages. However, an even more difficult challenge is to respond to the uncertainty generated by the interactions between these phenomena and with the networked infrastructures that support urbanization. For example, in the case of cities dependent on long-distance transfers for their water supply, forest fires in remote areas could directly impact water access.

# What about climate change and urban inequality?

Central to climate urbanism is the idea that climate change represents a new moment for cities. What does this mean? It came from observing that actions to address climate change had a different impact on people's lives in urban environments.

Perhaps the most salient of these is "climate gentrification" and its sibling "green gentrification." This is where development plans improve an area, reduce its vulnerability to climate change impacts, and raise property prices, forcing poorer populations out.

The Intergovernmental Panel on Climate Change (IPCC) report explains that people living in informal settlements are the urban population most vulnerable to climate change. How do you build resilience in these areas? The IPCC report explains that adaptation may draw on different actions to improve physical, green, and social support infrastructures. In addition, harnessing the efforts of residents in informal settlements — rather than discounting them— is crucial to build resilience. In the Philippines, residents in informal settlements have shown that they can lead incremental housing efforts that build community resilience. In Mozambique, residents regularly organize themselves to provide services such as drainage and waste management that local governments or institutions cannot otherwise provide.

Urban dwellers cannot build resilience alone, however. Building structures that support them is crucial to sustaining these efforts over time. The local government in particular can play a key role in connecting community efforts with institutions that can sustain them.

### What should be the policy responses?

One current project, Community Energy and the Sustainable Transition, or CESET, concerns sustainable community energy in Mozambique, Malawi, and Ethiopia. The energy crisis in Europe has revealed the limits of current models of energy provision. Countries like Malawi and Mozambique are developing regulations to support the development of an alternative model of decentralized energy production. Community energy, where local residents play a role in project management, is a great strategy to build resilience as residents gain control of their resources and energy supply.

A just transition depends on demonstrating how climate innovation works in practice and

maximizing innovation locally by creating an atmosphere of experimentation. For example, my team is developing a laboratory in Mozambique to show the potential of community energy. There is a balance to be struck between using expertise that may not be available locally and developing skills at the local level.

There are challenges, such as a lack of recognition of local capacity by sponsors and policymakers and the long-term sustainability of projects. Development aid tends to come through inconsistent, infrequent pots of money that do not necessarily reach communities. But as the pandemic has demonstrated, local governments and communities can effectively mobilize in a rapidly changing situation. There are many possibilities for building climate change resilience, but they need to put communities at the center of action.

# Is there a role for the private sector in climate urbanism?

What could be useful is developing a social enterprise model to provide insurance in informal settlements, for example. Families in these areas, if hit by a flood, for example, can very easily end up with nothing. Providing some security would create resilience. Communities have already led the way by creating savings groups that act as their own forms of insurance. Still, the private sector could help by developing models of insurance dedicated to improving people's resilience.

Climate change is highly unequal: the most vulnerable are the ones who suffer its effects the most. Cities are not and will not be resilient until every last citizen is resilient. If you have a city where every time there is a heatwave, many people die, which negatively impacts the entire city both morally and practically, that city is not resilient. Climate action should create resilience for everyone. If you improve things for just a minority, you make things worse for the whole.

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Climate change action must consider the context and history of each urban area and must be developed with or by the people affected.

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# A Successful and Just Energy Transition to a Net-zero World

A just and inclusive transition to a net-zero emissions world by 2050 means supporting economically developing countries as well as industries that stand to lose toward a greener future. However, large-scale, internationally coordinated changes and funding have historically proven to be difficult to negotiate, incremental, and uneven. While resistance at the individual, industry, and political levels has remained persistent, the pandemic has shown that international action to address a major crisis is possible.

# What is the impact of climate change on resilience?

The impetus for the energy transition comes from the need for revolutionary change to our relationship with energy, on the scale of the Industrial Revolution of the 19<sup>th</sup> century. We urgently need to turn the page from depleting fossil fuels that are major contributors to climate change to carbon-free energy.

The potentially catastrophic consequences of inaction were made clear in early 2022 by the report of the Intergovernmental Panel on Climate Change (IPCC): the world is on track to reach average temperatures of 1.5°C above pre-industrial levels within two decades. The consequences of a changing climate and extreme weather events increasingly weigh on the developing world. The costs are likely to increase exponentially and unevenly if urgent action is not taken.

Where resilience is concerned, the IPCC report is unambiguous on the damage to ecosystem resilience from climate change. Essentially, climate change will erode the capacity of ecosystems to function, and to adapt. This in turn erodes societal resilience, especially among the poorest individuals and societies.

The energy transition has the potential to benefit societal resilience and the ability to recover from shocks by reducing damage from climate change — and consequent gains to health and life expectancy — as well as reducing dependence on finite fossil resources. However, this will require ensuring that energy sources are available to all populations, in both developed countries and emerging economies. Transfers of technological and financial resources from richer countries to poorer ones are an essential aspect of the transition.

The energy transition is far from cost-free. There will be direct costs, for example developing infrastructure, and job losses and business shutdowns in fossil fuel-dependent industries. But these costs must be compared with the long-term benefits.

Cost is one barrier to transition. What are the other main barriers to an effective energy transition?

Cost is certainly an issue. There will be winners and losers from the transition, and some of the major costs will be borne by a few sectors, namely the fossil fuel industry and industries heavily dependent on fossil fuels, for example the steel industry. Thus, there is a lot of entrenched opposition to transition and expected resistance. There is also the issue of perception of higher domestic energy costs from green transition, which could lead to political pressure to delay moving away from fossil fuels. This is especially true in an inflationary era, although the surge in oil and gas prices as a result of the war in Ukraine may concentrate more minds on the need for transition.

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Another major challenge comes from the need to transition while still meeting the development objectives of the emerging world, which understandably wishes to catch up economically and socially with richer countries. The technologies that would substitute for fossil fuels here, such as hydrogen or carbon capture and storage, have a long way to go to reach maturity. This is linked with the difficulties of financing research and development with long-term aims and potential when investors expect short-term returns.

Finally, there is an imagination barrier. How to measure the costs and benefits of the transition? We tend to see costs and benefits in market terms. What value is attributed to the climate, to health, to social justice? New instruments are needed to measure the non-market values of global commons, that have a clear benefit in societal resilience terms. A transition not just in energy, but to thinking in non-market terms, is a huge challenge in itself.

Coming back to the developing world, how can an inclusive energy transition be achieved there? How can we synchronize the development agenda with the transition agenda?

To facilitate the transition in emerging countries, transfers and solidarity will be necessary — and are justified — because our planet is our common future. The tools exist: financial solidarity funds, fair trade agreements, technology transfer agreements, and debt relief to implement environmental projects.

These scenarios are not new. In late 2021, the UN Climate Change Conference of the Parties (COP26) saw a significant boost to adaptation funding from developed countries to developing countries; the pact at the end of the conference set the goal of doubling annual funding to US\$40 billion by 2025, as well as significant funding for locally led adaptation approaches and specifically for adaptation in the least developed countries.

Their implementation at the scale needed, however, is more uncertain. The criteria take into account historical responsibility, ecological debt, and the ability to contribute according to level of development. While it is important to consider all of these elements, it can also cause obstacle and delay.

### Briefly, what are the roles of the state, the private sector and civil society in the transition?

The state must provide the impetus, the guidance, and the right incentives, with tools such as setting effective net-zero targets, carbon taxation, tax incentives for sustainable investment and research in clean technologies and developing infrastructure. The private sector should seize the right signals. We have seen BP, a big fossil fuel producer, be quite explicit in expressing ambitions for sustainable energy, although it is actions rather than words that count of course. Finally, civil society can do, and should be helped to do, what it is doing: pushing for change and helping change behavior by focusing on education and ideas and representing those for whom change is a necessity because of climate change and more.

Looking forward, how has the pandemic affected progress and prospects toward an energy transition? And what does this suggest for future shocks?

While coordinated international action to fight the pandemic was lacking in many ways, the pandemic did demonstrate that international cooperation can exist – that countries can work together to tackle a problem. Where the search for effective vaccines was concerned, countries more or less showed solidarity and collaborated to develop and produce immunizations.

The same urgency needs to be applied to the energy transition. Moreover, this crisis has enabled political action to regain the upper hand over economics. Public debt has once again become a virtuous instrument of economic policy. However, there is a downside: countries that are heavily indebted after the pandemic may lose the ability to fight the consequences of climate change effectively. This especially concerns the poorest countries, the ones most exposed to climate effects.

As for other shocks, the war in Ukraine, beyond the immediate human horror, is a huge blow to the energy transition, as the fight against climate change has been pushed off the political agenda and replaced by the objective of counteracting the increase in fossil fuel prices as much as possible.

However, it also highlights the fragility of dependence on fossil fuels in an unstable world and the need to transition away from fossil fuel energy. The hope is that this will give impetus to the transition. To build resilience in the face of future shocks, and the building slow shock of climate change, an energy transition to net-zero emissions is simply vital.

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The state must provide the impetus, the guidance, and the right incentives [and] the private sector should seize the right signals.





Emilia Lamonaca AXA Fellow, Università degli Studi di Foggia

# Trade Policy, Climate Change and Shifting Comparative Advantage

International trade is yet another area where resilience is being threatened by climate change. Indeed, for many countries, the ability to produce commodities that have been central to their comparative advantage is eroding. Adaptation policy is therefore necessary and a uniform approach to standard setting could be an essential step towards both trade security and climate change mitigation.

# A bilateral relationship

The relationship between trade and climate change is bilateral. Trade affects the climate through CO<sub>2</sub> emissions resulting from the production, shifting and consumption of goods. On the other hand, long-term climate change can alter the comparative advantages of countries and shift trade patterns.

As an example, the wine sector is strategic for countries such as Italy and France, as well as for "new world" producers including the United States, Chile, Australia, and South Africa. Grape production requires a specific set of climate conditions currently present in some regions of these countries. However, climate change has the potential to expand these

favorable conditions to other countries. This could shape their comparative advantage and therefore alter trade patterns. By the same token, climate change may induce negative effects for current producer countries, who will need to adapt their production to be more resilient to these changing conditions and keep their comparative advantage.

# **Unequal terms of trade**

From a trade perspective, a country can remain resilient in the face of climate change if it can produce a higher value of products as opposed to a higher volume of less-valued production. But this advantage tends to accrue to richer countries due to their starting point in development and knowledge.

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It is easier for richer countries to adapt to climate change because they are more focused on the processing part of the international supply chain. In comparison, many developing countries produce agricultural commodities, which are already strained by changing climate conditions.

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Simply put, it is easier for richer countries to adapt to climate change because they are more focused on the processing part of the international supply chain. In comparison, many developing countries produce agricultural commodities, which are already strained by changing climate conditions.

In theory, these countries should be taking steps to change their trade patterns by changing ways of production and planting crops that are resilient to new climate conditions. However, this is a long-term process and adaptation of this nature is neither quick nor simple to achieve in practice.

How then can countries achieve a more advantageous trade architecture for building resilience, particularly in parts of the world where climate change will have a more dramatic effect?

# A cooperative approach

The key is international cooperation through the existing trade architecture and institutions such as the World Trade Organization. There is already scope for international agreements that allow developing countries to receive not only support from developed countries to adjust to changing climate conditions but also knowledge on cleaner production techniques.

However, the international trade system is inherently unequal. Developed countries tend to outsource their most polluting activities to developing countries while retaining the high-value ones, such as services and value-added processing. Since the effects of climate change are international, this is not a viable long-term approach.

For the common good, cooperation must be achieved. However, multilateral cooperation is difficult and complex. Bilateral cooperation between regions is therefore more realistic. At this level, cooperation on cleaner standards would be an effective trade policy to mitigate climate change and build resilience.

# **Setting new standards**

Harmonization of regulations is essential to achieve equilibrium between developed and developing countries. With international cooperation, developing countries could achieve trade resilience through homogeneous standards across countries. But what should this harmonization look like?

It should not simply consist of pricing mechanisms. Although tariffs are the most

common tool in trade, their effect is blunt and affects the price of goods rather than sets standards.

One important tool to consider is non-tariff measures, such as sanitary and phytosanitary measures in the agri-food sector. These are complex, because they increase the cost of production, and thus the costs of compliance. But they could be very useful as a tool to promote both resilient trade and climate change mitigation by setting standards for cleaner production.

The expansion of the agri-food trade in recent decades has boosted the market share of developing countries. This increase has taken place alongside the implementation of non-tariff measures, namely sanitary and phytosanitary measures. This suggests that such measures are indeed pro-trade and reduce the developed-developing divide by setting common standards and ultimately boosting the trade resilience of developing countries. There is clearly potential for non-tariff measures to yield further benefits.

Let's take the case of applying the same food safety standards in both developed and developing countries. More harmonization of standards provides security to developing countries since they know their goods can be traded internationally, creating scope to pursue a higher-value approach rather than simple commodity production. Adaptations like these can boost trade resilience in a time of climate change.

At the same time, this approach has the potential to set standards for cleaner production techniques to mitigate climate change, all while setting a path for cooperation on policies and standards to tackle climate change itself.

For such uniform adaptation of standards to work to their full potential, they need to be adopted internationally. We are a long way from that. But if embraced, they could be trade policy's key contribution to mitigating climate change and building resilience.



The key is international cooperation through the existing trade architecture and institutions such as the World Trade Organization.





# The Role of the Insurance Industry in Promoting Inclusion







Garance Wattez-Richard Head of AXA Emerging Customers

# Inclusive Insurance in Emerging and Mature Markets

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While emerging markets may have growing middle classes, many households remain one crisis away from falling back into poverty.



An inclusive protection model of insurance is appearing in both emerging and mature markets. "Inclusive insurance" allows insurers to achieve social impact as well as business objectives. Different markets have different needs; by understanding the nature of each market and designing appropriate products and distribution networks, insurers can positively contribute to societal resilience.

How inclusive is insurance? When the industry was first pioneered by mutual societies in 17th century England, it was with the principles of mutualization and inclusion at its heart. Today, that role is looking battered. In mature markets that have long valued insurance, successive crises, like the 2008 global financial crisis and the Covid-19 pandemic as well as changing work and career patterns have hit the middle class hard. Working people have become vulnerable, stuck between falling or uncertain incomes and growing expenses. Consequently, even in countries like France, more and more people are dropping insurance, with potentially serious consequences to their resilience.

Despite this, insurance companies have not evolved to a model to address the new reality. The bias towards linear lives, with social protection historically based on a career of fulltime work for one company, remains. Insurance models are only slowly taking into account the changing world of work, of flexible and contract work and the gig economy. This further widens inclusion gaps.

On the other hand, most emerging markets lack insurance inclusion in the first place. Unlike mature markets, the middle classes in emerging markets are growing, albeit defined by precarity of earnings and informal work structures. Yet insurers focus on the small number of high earners — a missed opportunity for the industry. Products are often cut and pasted from western models that do not meet local needs, and distribution networks are underdeveloped.

Together, these challenges suggest an industry far from first principles. Paradoxically, companies whose purpose is to protect against risks have not evolved to meet new ones. There are consequences for trust: in emerging markets from lack of familiarity with insurance models, and in mature markets through mutual suspicion between companies and potential customers.

Lack of inclusion has consequences for resilience, with widening protection gaps and higher exposure to risk. While emerging markets may have growing middle classes, many households remain one crisis away from falling back into poverty. In the absence of formal insurance, more expensive, uncertain, and informal risk management strategies are relied upon. The pandemic has also heightened risk, with approximately 100 to 120 million people per year falling back into poverty due to healthcare expenditures<sup>8</sup>.

### A new inclusive model

The situation highlights the need for a new model of inclusive insurance that takes into account the points of rupture and transition and builds resilience by protecting from financial and social vulnerabilities, as well as fulfilling business goals. The industry is aware of the challenge. At AXA, we have been using Financial Diaries to investigate how to design adapted safety nets since 2016.

Inclusive insurance is vital to building societal resilience as well as the personal resilience gained by health coverage, for example. This is clear by looking at who it is intended to protect. At AXA, our expectation was that the reach of insurance in emerging markets would "stop" at the poverty line. Instead, we discovered a "missing middle", a growing low- to middle-income population too rich to be poor, but too poor to be rich, with lives becoming better over time and generations, but still defined by financial vulnerability, volatile levels of income, and lack of access to credit.

These people often serve as the economic motor in their markets — retail merchants, smallholder farmers, and microenterprises. Lack of trust in or access to affordable insurance ties up potentially productive capital in costlier

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alternatives and reduces appetite for risk. Here, inclusive insurance builds resilience in two important ways: it covers the most relevant risks in an affordable and accessible manner, and it optimizes revenue. It allows businesses to grow and take risks. A smallholder farmer, for instance, rather than keeping back some crop as a buffer, could choose to sell and invest in expansion. Thus, inclusive insurance helps create upward mobility in emerging markets by formalizing risk management strategies or complementing informal ones.

In mature markets, the purpose of inclusive insurance is slightly different: rather than enabling upward trajectories, it stops people from falling as their lives become less linear.

Rather than a "missing middle", there is a "sinking middle" — in France, 25% of the population, after meeting every constrained expense, has between just 70 and 90 euros left per month. As the numbers of those in multiple employment, independent employment, and the gig economy grow and become a significant economic motor, well-adapted insurance products can preserve or increase societal resilience.

# How to make inclusive insurance happen in practice

Key to making inclusive insurance happen in the emerging world is appropriate product design and distribution. There is a need to look at the entire value chain.

In emerging markets, we have found that while some countries, such as India and the Philippines, have strong insurance cultures, products are not designed for local needs and thus do not register. One meaningful example is an accident policy for India that specifically excludes ice skating, a sport with almost zero presence in that market — an indication of how policies are often simply replicated from mature markets. There is a need to create relevance, with simple policies that can be explained easily and with minimal complexity via SMS, WhatsApp, and other micro forms of delivery. This is not about making products smaller, but about building a relevant insurance culture.

Equally important is product distribution. In the absence of brokers and other traditional means of distribution, this comes via leveraging and partnering with telecoms companies, microfinance institutions, remittance companies, and e-wallet and e-commerce platforms, as well as direct and word-of-mouth means. Again, it is about creating relevance using trusted digital and physical networks.

Lessons learned from Indonesia, one of AXA's biggest emerging markets for inclusive insurance, underline the above. There, in partnership with a microfinance institution, we conducted market research with a view to extend life insurance coverage to other areas and to create a life insurance product designed specifically for women. But the research revealed that in the eyes of women, it was important to focus on coverage

for their husbands, for that was where the financial risk lay. Likewise, we discovered the importance of distribution and marketing via digital payment and credit companies, getting messages out via SMS, and making use of digital wallets.

# The future of inclusive insurance

Ultimately, inclusive insurance is about making the industry itself resilient, by capturing the economic opportunity presented by markets either uninsured or disengaging from insurance, to serve the markets of the future.

Emerging markets are a work in progress. The next frontier for inclusive insurance, for AXA and other companies, is mature markets such as France, where tools like Financial Diaries will prove valuable in closing data gaps and learning how people manage their financial lives. The objective is to create relevant and affordable products that meet the needs of both the middle-income population that already value insurance and those in the new world of work, such as the gig economy.

For the industry and for its customers, the move to inclusive protection is an essential one in a world defined by successive crises, from the climate crisis to the financial crisis to the pandemic. Customers are becoming aware of protection gaps, and insurers are realizing business and social impact cannot be siloed. If insurers do not adapt, they will cover an ever-diminishing share of the population. Ultimately, inclusive protection is about returning to first principles, and ensuring a responsibility to protect people at a time of change, when building resilience is crucial.



The objective is to create relevant and affordable products that meet the needs of both the middle-income population that already value insurance and those in the new world of work, such as the gig economy.





Eric Comte
Director of the Geneva
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# A New Approach to Building Robust Health Systems

The pandemic has exposed the weaknesses of health systems all over the world in coping with major shocks. To create a sustainable health economy, the importance of countries working together has been underscored in responding to and preparing for future crises. In addition, a strong community approach involving all social players from local and national administration to civil society and the private sector has wide resilience benefits through "advance approaches".

The Covid-19 pandemic has starkly revealed the fragility of global health, underlining the lack of resilience in the international health economy. Countries all over the planet have been affected by gaps in the medical supply chain, whether for pharmaceuticals or personal protective equipment. This is a consequence of decades of neglect.

There is a clear need to build greater health resilience. Efforts have already been made – in Europe, for example, there have been moves to localize aspects of drug production. In Africa, the continent suffering most from lack of vaccines, the pandemic has given impetus to the African Union Assembly's decision in 2019 to adopt a treaty to establish an African Medicines Agency to enable continent-wide access to pharmaceuticals.

These developments underline the importance of countries working together. Alliances are necessary, not just to address the effects of this pandemic, but to prepare for future shocks. Internationally, discussions are in progress for a "Pandemic Preparedness Treaty" under the auspices of the World Health Organization — a whole-society approach to strengthen the global capacity for resilience in future pandemics through international cooperation and information and production sharing.

To build resilience, preparation is vital. When a crisis is already underway, it is too late to change behavior. Resilience also involves strategizing to prevent the causes of pandemics, be they Covid-19,

Ebola, Zika, SARS or MERS. The zoonotic nature of Covid-19 has demonstrated the linkages between our treatment of the environment and global health.

# Care in the community

These are the big and daunting issues, concerning entire global systems. But there are a host of smaller ways to build resilience too, as important as addressing systemic issues. In aggregate, they can make a significant difference.

With public health systems creaking where they exist, a more sustainable approach is needed, combining economic constraints with social needs rather than simply treating illness: a community approach involving all social elements, from local and national administration to civil society to the private sector.

With different groups having different needs and agendas, this may seem counterintuitive. But that can also be a source of strength, allowing different angles on shared situations. Bringing in more players has proved effective in the past: during the HIV epidemic, civil society, activist groups, and patient advocate groups did much of the work to raise awareness and campaign for a retroviral solution.

A strong community approach has wide resilience benefits, as it can be utilized to deliver advance approaches, rather than reliance on treatment after the fact. As society ages and chronic diseases increase, lifestyle changes and management will become more vital. It is clear that hospital and aftercare treatment in the existing health system is insufficient. For diabetes and obesity, for example, more is needed.

At the Geneva Health Forum, we are working with a Canadian health co-operative organization. Their ethos is not simply about "health," but more holistic. Of course, health professionals are involved and indispensable, but so are utilizing exercise and fitness, changing eating habits and more.

# Opening the toolbox

There are other tools to strengthen health resilience. We need a global structure for health data. For over a decade now, there have been pilot projects on this front, but they are not interconnected. We also need effective systems of national social health insurance. The private

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A strong community approach has wide resilience benefits, as it can be utilized to deliver advance approaches, rather than reliance on treatment after the fact.

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sector is important here, but ultimately it is the state's responsibility to organize.

New tools, such as digital health platforms, have a greater and greater role to play in building resilience by easily delivering services and advice. Take the example of ultrasounds. Results can be delivered electronically relatively cheaply, while the platform collects and analyses data. Digital systems can also give access to specialists far and wide.

Of course, there are limitations. Digital systems rely on sound digital infrastructure – which excludes much of the developing world. And digital will remain a tool, not a substitute, for face-to-face consultation.

### **Taking it private**

For sustained health resilience at the international level there is one particular tool that should be utilized more effectively: the private sector.

We cannot rely on state health systems and the charity/development aid sector alone. Even in Europe, the state system involves private enterprise. For certain countries in Africa where public health systems struggle, the private sector is crucial.

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# A multi-faceted approach for health resilience

The staffing example given here is just one example of the potential of the private sector in building resilience. And approaches need not be purely for profit — partnerships can be made between international insurance companies and local organizations, for example. But we need to create structures to help systems develop.

Most of all, to achieve resilience, we must enlarge our vision for health. It needs to work at the local, national, regional, and international levels. We need to open to the larger community, beyond the health sector.

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Take Cameroon, where compared with 20 years ago, there are many well-trained health professionals. Yet despite the need, the public health system simply cannot absorb them.

Staffing issues have eroded resilience all over the world, especially during the pandemic but also more generally. Even developed economies like the UK and France rely on immigration to keep state systems functional, often from countries that desperately need to retain their own professionals. Meanwhile, professionals in the developed world may prefer private sector employment. For the developing world, this highlights the potential of the private sector.

In the case of Cameroon, opportunities must be created in the private sector to allow professional skills to be effectively utilized. This can be done through international development agencies working with private partners as well as civil society. With growing city-based middle classes in Africa, there is opportunity to grow a system based on profit and investment, adapted to the local situation and all toward the good of creating greater resilience.



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Kai-Uwe Schanz Deputy Managing Director and Head of Research & Foresight, The Geneva Association

# Mitigating Social Inequality and Addressing Protection Gaps

In an age of growing social inequality, what is the role of insurance in creating societal resilience? The sector is addressing "protection gaps", responding to risks such as pandemics, climate change and cyber-risk.

In mid-2020, when the Geneva Association published its report on how insurance can help mitigate growing social inequality, the effects of the pandemic on inequality were yet to be felt. Since then, inequality has dramatically accelerated as a trend growing since the 1980s, when the postwar period of falling inequality came to an end.

The massive growth in social inequality is a big challenge for societal resilience, defined by society's ability to withstand shocks, and to bounce back from them. Insurance is clearly important in this respect and the question is how insurers should respond: empirical findings show countries with high insurance penetration have a higher ability to recover from shocks.

With the pandemic heightening societal perceptions of risk and vulnerability — reflected, for example, in the sharp increase in demand for life insurance in many countries — the pandemic offers a moment for insurers to consider how

they can even more effectively address social inequality and contribute to societal resilience.

# Minding the gap

For insurers, this greater risk awareness is an opportunity to address long-standing protection gaps, defined as the difference between the level of insurance payouts and the total cost of damage, for example, from a natural disaster.

Protection gaps are problematic also when it comes to the way the public perceives the insurance sector. Gaps cannot be entirely eliminated and thus result in vulnerability for households and businesses.

The pandemic has presented multi trillion-dollar economic loss scenarios as a result of nation-wide lock-downs, and total losses from growing cyber risk are estimated at \$1 trillion annually. Hence, there are limitations to insurance in a world of increasing systemic risks, which can no longer be spread across

a risk pool when all pool members suffer a loss at the same time.

Yet the problems of gaps cannot be ignored. The lack of coverage they represent contributes to social inequality and weakens societal resilience. Insurance has an important role in indirectly mitigating social inequality by providing a safety net. The pandemic has only heightened this role.

# Bridging the gap by other means

If gaps cannot be closed completely, how else can insurance contribute to building societal resilience? There are opportunities to broaden coverage. For example, by making it possible to assess risk more accurately, technologies using Big Data and Al can help extend insurability to more people.

In particular, insurers can help boost social protection by responding to the changing world of work, such as the challenges posed by the huge growth in the "gig economy" of delivery 66

# Empirical findings show countries with high insurance penetration have a higher ability to recover from shocks.

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drivers, platform workers and other precarious workers. With their general lack of employment protection and safety nets such as sick leave, this workforce is particularly vulnerable to income-related risks resulting from illness or injury. Because of their unpredictable income, insurers have been reluctant to offer protection.

But there are signs this is changing. We are seeing flexible policies such as on-demand insurance, namely policies that can be switched on and off as required for coverage, rather than fixed-period cover. This is quite a major conceptual change, needing a completely new approach to assessing risk.

Insurers are working with the platforms themselves, which have started offering insurance protection to their workers due to changing social expectations and inter-platform competition. And while it is early days, it is a positive sign of the adaptability of insurers to a changing world of work and to increasing the resilience of a significantly vulnerable section of society.

# Looking ahead

In a world of increasing systemic risk, how is the role of insurance likely to develop in societal terms? Governments, focused on protection gaps, have recognised that insurers can play a role in societal resilience, both as risk takers and promoters of risk prevention and mitigation, and many governments are encouraging insurers to become involved in the societal management of risk to help cushion the impact of disasters on

people's income and wealth. With the pandemic, the global food and energy crisis and rising interest rates severely testing the capacity of governments to fund social security systems, the question is to what extent governments will come to rely on private insurance?

Private insurance has always played a complementary role, particularly in developing countries lacking social security systems and with large informal sectors (think microinsurance policies, delivered by mobile phone, for example). There is also scope for a greater role for public-private partnerships. The sector already has a long record of these, with particular focus on disaster and climate change risk protection in developing countries.

Overall, the pandemic and its aftermath as well as the more recent surge in inflation have highlighted the importance of insurance in addressing social inequality and building societal resilience. Adaptation to unprecedented challenges and finding ways of addressing protection gaps are vital to the sector's contribution to society.

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Governments have recognized that insurers can play a role in societal resilience, both as risk takers and promoters of risk prevention and mitigation.





Sandrine Coulange Chief Health Officer, AXA Europe & Latin America

# Making Healthcare Accessible and Sustainable

AXA aims to bring together a complete and personalized approach to healthcare through a collaborative ecosystem of health services that combine the digital and the physical. For those who may be excluded from healthcare due to a lack of remote or physical access, these services can contribute to sustainability of healthcare systems through addressing protection gaps and providing easy-to-use digital solutions.

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To be effectively inclusive, digital healthcare solutions need to be designed to maximize access, adoption, and affordability.

The Covid-19 pandemic rapidly accelerated the digitization of healthcare systems and helped to decrease the digital divide. With in-person access restricted, health providers and patients, including the elderly, relied on remote consultations and online advice. However, insurers have been exploring and investing in digital health services for years. The future of healthcare involves a digital ecosystem of services that will create a more inclusive, sustainable healthcare system.

Although there is much variance in levels of integration with physical care and quality, digital solutions contribute to improving access to care for populations in rural areas and in developing countries, supplementing physical services, closing health gaps, and delivering advice and information to strengthen preventive care.

But digital tools are powerful beyond emerging markets and remote populations. Even in European countries with comparatively high access and quality of care, shortages of general practitioners and budget restrictions have led to increased medical waiting times and regional discrepancies. Furthermore, lack of access to mind health support is particularly acute in Europe, with digital services offering great potential to cover unmet need.



# The key to digital adoption

The benefits of digital access to care. should not be overstated in a world where many lack reliable digital access. To be effectively inclusive, digital healthcare solutions need to be designed to maximize access, adoption, and affordability, especially among unconnected and underserved groups. This also requires careful design ensuring compliance to standards, ethics, and data privacy regulations.

AXA is pioneering a range of digital health services to serve these needs. One example is through AXA's Digital Healthcare Platform (DHP), launched in partnership with Microsoft in 2020. The DHP functions as "pipes," connecting different health services together to enable hassle-free and personalized patient journeys. To facilitate access, DHP was built as an open platform, adapting to the local healthcare systems and supporting an ecosystem of third-party service providers.

Digital services can also be tailored to support specific populations, for example, AXA France is developing a digital offering to support new parents, an often overlooked group with high needs that could benefit greatly from practical and wellbeing support.

Inclusiveness via digital healthcare systems cannot be achieved without trust on data and privacy. This is why AXA is building a strong consent management system in compliance with data privacy regulations.

# The future of healthcare: Phygital and local

If digital and physical are used in tandem, inequality of access can be significantly mitigated. A digital-first response system takes pressure off physical services, and digital services are often more affordable or even free. For example, in Italy and Spain, AXA's digital symptom checker is available to everyone, not just AXA customers, simultaneously helping users understand what medical care they need and removing pressure on emergency rooms. To date in Italy, the digital health portal has attracted more than 1 million unique users, completed more than 40,000 symptom checker assessments, and performed more than 80,000 health facility searches. Additionally, AXA expanded access to remote teleconsultations during the peak of the Covid-19 pandemic and has retained those services since.

Although one of the strengths of digital tools is their ability to transcend borders, they are in practice always adapted to the local context. Consider AXA's symptom checker: while the same tool is used in each country, the user journey reflects the differing health systems. For example, in Germany where AXA provides full insurance coverage and substitutes for public insurance, the symptom checker also becomes a coordination tool to connect with disease-specific support programs. In Italy, where private health insurance is supplementary, it acts more as an entry point to primary care: teleconsultation or facility search and appointment booking.

To address local adaptability, digital health services have been launched in all markets where AXA health services are present. There are, however, challenges in terms of scale and viability that are exacerbated due to the impact of medical inflation on health systems. And integration is no small matter — digital systems, healthcare systems and insurance systems are all very different.

# **Building a more sustainable society**

AXA's digital health services are not only making healthcare more accessible but are also tools that can contribute to the sustainability of healthcare systems in the face of medical inflation and future shocks. Through collaborative, open, and thoughtful design, these services contribute to realize the true potential of digital health, and its role in a sustainable society.

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Gilles Moëc AXA Group Chief Economist and AXA Investment Managers Head of Research

# Investment, Inequality, and Societal Resilience

Rising inequality, which today affects more than 70% of the world's population, is a major threat to societal resilience. Broad economic trends as well as successive crises have contributed to the widening gap between the wealthiest and poorest in our societies. While the financial sector is often seen as a primary driver of rising inequality, financial markets and institutions, as well as investors, have an important role to play in supporting inclusive growth.

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some of the tools used to support economic growth over the last 15 years — although necessary to prevent a catastrophic rise in unemployment — often inadvertently benefited those at the top of the income distribution.

The rebound in inequality pre-dates the Great Financial Crisis of 2008 — divergence in the income growth of the top and bottom deciles of income distribution was already evident across the OECD during the previous decade, with some notable exceptions such as France — but the slowdown in trend growth which followed the crisis made the divergence more acute. More recently, the rise in energy and food prices triggered by the war in Ukraine is fueling an inflation wave which, as often, penalizes those at the bottom of the income distribution. Spending on those two items — energy and food -absorbs more than half of the total income of the poorest 20% of the population in Europe.

Governments' short-term capacity to mitigate income inequality was impaired by slow tax receipts and market pressure on more fragile debt trajectories. Moreover, some of the tools used to support economic growth over the last 15 years — although necessary to prevent a catastrophic rise in unemployment — often inadvertently benefited those at the top of the income distribution: central bank activism, in the form of direct purchases of securities, bolstered the price of financial assets.

While income inequality rose, other forms of inequality came into focus as part of societal change. Unequal opportunities across gender, sexual orientation, social and ethnic background rose to the fore. Government action can address those as well — for instance by implementing legislation mandating equal pay - but more subtle forms

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Beyond responsible investment, financial businesses can improve general social resilience.

Deep, liquid, well-functioning – and well-regulated – financial markets are key attributes of efficient economies which can lift those who are struggling.

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of inequality are not always easily addressed by regulation, while long delays can be found between the emergence of a societal concern and policy action.

Responsible investment, although no full substitute to legislation, can help. Fundamentally, a possible broad definition of inequality is a distribution of economic and social outcomes disconnected from individual talent and work but instead driven by identity. This is the source of massive economic waste. Firms which disregard these issues will ultimately lose in productivity and flexibility. It is a central tenet of responsible investment that is not only morally right; it is also financially good.

An asset manager combines two approaches. A "defensive" one consists in trying to avoid being exposed to companies which will struggle over the lifetime of the investment. A poor social record can be an effective forward-looking indicator. In concrete terms, and that's what we do at Investment Managers (AXA IM) — this can entail general exclusion policies against companies faring too low on social scores. In the "offensive" approach, asset managers try to

select the investments which will strive, and faring high on social scores is an input into such selection. In practice we have developed a series of financial products which target strong performers on some social scores.

How can this contribute to collective welfare? By skewing portfolio allocation towards the best performers, their cost of capital will fall, thus strengthening their capacity to grow. Of course, a certain "critical mass" is needed to trigger a visible change in relative funding costs. This is why some form of collective action is needed — for instance, AXA IM has been a pioneer in developing in France a collective push by asset managers to demand a stronger representation of women in corporate boards.

We don't want to paint too rosy a picture. Pursuing social goals which cannot be easily expressed in widely available, harmonized data can raise questions on the outcomes. Environmentally responsible investment has gradually converged towards a metric widely recognized in the industry — carbon intensity. Dealing with inequality cannot resort on a single set of data. Regulators can help though to set a level-playing field. Much like the "green" taxonomy implemented in the EU provides a helpful map to investors and issuers, the social taxonomy will in the future drive investment in this field, although the recent delays in the completion of this project says a lot about the complexity of the issue.

Still, the financial industry can at least benefit from the work of the United Nations' towards defining Sustainable Development Goals (SDGs). Beyond SDG 10 which directly targets inequality, several of them pertain to the broad definition which we have sketched out above, e.g. SDG 5 (gender equality) or SDG 8, which promotes inclusive growth. Data providers are busy analyzing corporations through this prism. Although not perfect, they will contribute to a development in "social finance" which over time will reach the "critical mass" which we mentioned.

Beyond responsible investment, financial businesses can improve general social resilience. Deep, liquid, well-functioning — and well-regulated — financial markets are key attributes of efficient economies which can lift those who are struggling. Unregulated finance can of course magnify crises and undermine welfare states, but investors every day assess the long-term fiscal sustainability of governments, hence their future capacity to continue supporting social action against the temptation of "runaway deficits". This is a more discrete, sometimes unpopular, but ultimately vital role of financial markets.



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