WORK IN THE AGE OF DATA
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SOCIAL CONTRACT

WHAT IS IT?
Sacrifice individual freedom for SOCIAL GOODS

Is it BROKEN?
The rise of populism as a symptom of SOCIAL FRACTURE

What are the points of FRACTURE?

AN ECONOMY THAT DOES NOT WORK FOR EVERYONE
A WEAK AND QUESTIONED GOVERNANCE STRUCTURE
NEW FORMS OF INSECURITY

NEW SOCIAL CONTRACT FOR THE DIGITAL ERA

A possible DECALOGUE

1. DESIGNING an effective education for the future of work
2. MAKING taxation fair and taxing real sources of income
3. ENHANCING anti-trust policy and breaking data monopolies
4. STRENGTHENING and deepening the welfare state
5. ACHIEVING anti-trust policy and breaking data monopolies
6. DEEPENING regional integration and international cooperation
7. BUILDING effective and accountable governments
8. CONSTRUCTING a safe cyberspace
9. CRAFTING a digital compact and protecting privacy
10. PROTECTING a safe cyberspace
A New Social Contract for the Digital Age
Manuel Muñiz

This essay forwards the thesis that the social contract in Europe and the United States is under severe stress. The rise of populism is the clearest manifestation of current social and economic fracture across the Atlantic, with its politics amounting to a re-crafting of the preceding order along more nationalistic, interventionist and, in some instances, openly antidemocratic lines. A new social contract is therefore needed that addresses the economic, political, and even physical insecurities brought about by rapid social and technological change. The chapter suggests a full “Decalogue” of measures to be considered by policy-makers. These include measures in the education, taxation, antitrust policy, governance, security, and sustainability spaces. Taken all together, these measures could make up an initial exercise in the crafting of a new and effective social contract for the digital era.

We seem to be living through a deep political convulsion in the US and Europe. The rise of populism is changing the face of policy-making domestically and internationally. Populists advocate for an agenda that upends decades-old consensus about the role of the state, the importance of diversity, the centrality of trade and open markets in our economy, and, in many ways, the value of democracy itself. This new political landscape is a warning call; one that tells us that there are profound ills within our societies and deep social fractures that need mending.1

It could be argued that technological and social transformation has been so deep over the last decades that fundamental features of our social-contract have become undone. Some of the sources of social contract fracture would include the rise in economic uncertainty, the sense of lack of political representation or, even, a rise in insecurity brought about by new threats in cyberspace. These trends draw a rapidly changing world and one in which a debate about the resilience of our most fundamental norms and political arrangements is warranted.

Concept and Fracture of the Social Contract

The social contract has been defined over the centuries in many different ways. In its most abstract form it could be described as the tacit agreement between citizens and the society they live in. On the basis of that agreement, individuals give up some of their most fundamental freedoms in exchange for rules, common practices, and public services.2 In most societies, for example, people are willing to give up their capacity to use physical violence as a means of resolving social conflicts in exchange for common security measures to be implemented by the collective. This is so because it is generally understood that security is better procured if administered under certain clear rules and by a public entity. Another emblematic manifestation of the social contract would be that of the generalized acceptance of taxation in exchange for common security measures to be implemented by the collective. This is so because it is generally understood that security is better procured if administered under certain clear rules and by a public entity. Another emblematic manifestation of the social contract would be that of the generalized acceptance of taxation in exchange for some form of common services.

In the aggregate, these recurrent instances of acquiescence with certain norms constitute a code of collective behavior that enables social cohesion. In its classical definition by Hobbes, the social contract enables humans to move from the state of nature to
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The rise of Fascism and Marxism can be understood as symptoms of a dying social contract and of the rigidity of societies unable to accommodate to a new socioeconomic reality. A *social state* where one's radical freedoms are constrained in exchange for public goods of various kinds and for the possibility of living in a larger grouping. The sustainability of this contract is dependent on there being a broad social consensus that the norms, written and otherwise, under which people live are worthwhile, fair, and just.

Now, the concept of the social contract can be problematized *ad infinitum*. For starters, many argue that it is a social science construct to legitimize certain preexisting power structures. Nobody is really born free, the argument would go, and is then offered the possibility of joining this or that social contract. Rather, people find themselves belonging to a particular society and having to abide by its rules without having had a real say in their shape or content. Those rules are set by people with influence over government and with little say from others, let alone from future generations. In this sense the term “contract” is in itself problematic given that people do not really sign it or explicitly accept it. Seen through this lens the social contract is simply a theoretical construct that attempts to lend legitimacy to what are fundamentally unfair norms and practices set by those with power and in an attempt to codify and extend the *status quo*.

Some scholars, including some of the classical political philosophers that helped craft this concept, have pointed out that written constitutions epitomize the notion of the social contract. These important documents capture the general consensus about what is right and wrong in a given society and establish both rights and obligations for citizens. Constitutions can be amended and adapted to social changes and, in democratic societies, be put to the people for ratification, giving them broad legitimacy. Arguably people can leave a certain society and move to another if they disagree with certain aspects of its constitutional or normative structure. However, equating constitutions to the social contract is in itself problematic. It might, in fact, be too narrow an approach given how matters that fall well beyond the scope of particular constitutional clauses can affect people’s lives, well-being, and their perception of living in a fair and just society.

The truth of the matter is that the social contract is constantly tested, and hence rendered legitimate or illegitimate, by citizens. Indeed, citizens evaluate the fairness of the...
society they live in and react accordingly. Beyond the actual behavior of citizens, John Rawls suggested a theoretical exercise from which one could extrapolate a conclusion about the just or unjust nature of a given society. In this experiment people would be asked whether they would accept the risk of joining a given society without being told the place they would occupy in it.4

This leads us to another set of important questions surrounding this issue: when are social contracts born? And how do they break? Have there been instances of social-contract fracture in the past? This essay will argue that social contracts are a living concept. They are born at particular moments, expanded and changed as time goes by. Over the last decades Western societies have seen, for example, a major expansion of the social and political rights encompassed within their social contract. There are economic rights, such as generalized access to health care or education, which are considered fundamental by many Western citizens today but would have constituted truly extravagant propositions at the turn of the nineteenth century. Clearly, therefore, the elements of what citizens consider a fair set of social arrangements is mutable and its delineation requires analysis and interpretation.

What is certain is that in particular moments societies fail to adapt to fundamental changes in their environment and hence their norms become ineffective or obsolete. The fracturing of the social contract that ensues is accompanied by periods of social instability or outright unrest. This is manifested in social and political behavior that deviates from the norm and that, ultimately, seeks deep changes to the preexisting political or economic structure. Jurists sometimes refer to these moments as “constituent” in the sense that they produce a new “constitutional” reality. Thinkers like Rousseau anticipated this debate and spoke of the troubles that would follow if the government failed to forward the “general will” or to tend to the general interests of members of society.

In some instances, political stability only returns once a new social contract is crafted. This re-crafting of the contract might entail establishing new socioeconomic rights, generating new political processes and structures, or granting political representation to certain groups. The speed at which this new political and economic architecture is crafted determines the length and cost of the convulsion that precedes it. One could, in fact, speak of the rigidity or flexibility of political systems based on the ability of those systems to adapt to fundamental changes besieging them. Rigid systems would be those that need to sustain high levels of social and economic pain before they react and try to find a new and sustainable equilibrium. It takes major political fracture for these systems to adapt and in many instances prior institutions are flattened before new ones are built. Flexible systems, however, can adapt to a changing environment without leaving major social stakeholders behind.

A classical example of fairly rigid systems, I would argue, would be Western European societies in the second half of the nineteenth century and the early twentieth century. Changes brought about by the Industrial Revolution in everything ranging from where people lived, to how they earned a living, to how they communicated and socialized, were met with extremely modest political reform. In very general terms, the importance of the birth of a new socioeconomic class, the proletariat, was not fully grasped until in most cases that new class was behaing in deeply revolutionary ways. The rise of Fascism and Marxism can, indeed, be understood as symptoms of a dying social contract and of the rigidity of societies unable to accommodate to a new socioeconomic reality. The convulsion that ensued in the first half of the twentieth century could be seen, therefore, as a direct consequence of a poorly crafted social contract. The new consensus born out of the ashes of World War II could be summarized as, on the political front, the radical expansion of the suffrage to the working classes, and, on the economic front, the birth of the welfare state. These changes were constitutional in nature and required adjustments in political processes, taxation, and many others.

Now, we find ourselves in need of answering a fundamental question: is our current social contact broken? If it is, what are the forces driving its fracture? And, most importantly: how can it be fixed?

Populism and Social Pain

We seem to be living through a period of political convulsion epitomized by the rise of populism. At an aggregate level this is represented by the clear rise of populist rhetoric and politics over the last three decades.5 There is a populist holding the presidency of the United States and there are fourteen European countries, including Germany, France, the UK, and Italy, in which populist parties poll at over 10%.

There are numerous explanations for the rise of populist politics but a consensus seems to be emerging around the notion that insecurity, be it economic or cultural, has been a key driver of political behavior in countries such as the UK or the US.6 This rise in insecurity and fear of the future is leading to growing support for political forces that sit on the extreme of the political spectrum. Numerous scholars have defined populism as a way of doing politics, centered around the notion of the “pure people” vs. the “elite.”7 For many, therefore, populism is a process or a set of tactics more than an ideology. However, if one looks at the key drivers of this phenomenon as well as at its protagonists and the agenda they are putting forward, one starts to see echoes of past instances of social-contract fracture. The populist agenda varies depending on the country and the particular ideological tilt of its proponents. Right-wing and left-wing populists, however, seem to coincide on an overarching goal: that of undoing fundamental features of the preexisting, and fundamentally liberal, order. Many of these new political movements are anti-trade, oppose porous borders, and its corollary, cosmopolitanism, and in some instances are openly anticapitalist or, even, antidemocratic. If applied in full, some of these populist agendas would lead to the outright upending of the preestablished order, making them deeply revolutionary.

Could one, therefore, argue that indeed the social contract is broken? Is populism truly a harbinger of deeper shocks to the political systems or an ordinary political manifestation that will be dealt with within normal democratic procedures? How could that fracture be categorized and analyzed? This essay will argue that our current social contract is under stress and it is so along the following three vectors: economics, political representation, and security. The section below will address each of these categories.

1. The Economics of Technology

Over the last decades, most OECD economies saw very rapid rates of growth. US GDP went from 2.8 trillion USD in 1980 to over 20 trillion USD today. UK GDP, in turn, went from just over 560 billion USD to over 2.6 trillion USD during the same time
key role in displacing certain types of jobs and automating key tasks within certain job categories. In the aggregate, emerging technologies are leading to the erosion of the middle of the jobs distribution by reducing demand for middle-skilled routine jobs, which are, in fact, the cornerstone of middle-class income earning. Some jobs have been created in the low-skill, low-pay end of the spectrum, in large part because many of these are hard to automate, and a small number of well-paying jobs have emerged in the higher end of the spectrum for highly skilled workers. In the aggregate, however, these new jobs seem to be less than the ones being displaced in the first place.

In addition to the changes in the jobs space itself there seems to be a greater force at play as well, driving income toward capital and away from labor. Since 1970 the total share of national income accruing to labor in advanced economies fell from over 54% to under 40% (in 2015). This means that there is something to how the digital economy functions that enables businesses to, in the aggregate, capture a greater proportion of wealth without having to employ more people or remunerate them better. As we will see, this has dramatic effects on the redistributive role that wages play and on the vital role that firms play in generating social prosperity.

Interestingly, technology and digitalization in particular are also radically changing the corporate landscape. Scale and network effects are altering the way markets operate, creating clear winners in the digital race and clear losers. Firms that can capture and process information about their operations, and clients and others are capable of increasing their productivity and, hence, be more competitive. The rest fall behind. This is, in turn, leading to winner-takes-all markets and a digital economy that has strong oligopolistic if not outright monopolistic characteristics. One of the clearest ways in which this is captured is through the study of productivity growth in the private sector. The OECD has discovered that the corporate sector is being segregated into firms whose productivity has grown over the last thirty years, which it terms “frontier firms” and which represent less than 5% of the total, and the rest, called “laggard firms,” whose productivity growth has stalled. This decoupling of the private sector is problematic for many reasons. It concentrates income in a very reduced number of firms, which can then build highly sophisticated strategies to reduce their tax footprint; it also narrows the offer of high-quality and high-paying jobs, as it is mostly frontier firms that generate these; and, ultimately, it poses a competition and antitrust challenge.

The debate about the drivers of the erosion of the Western middle class and of the rise in inequality will be an ongoing one. What is clear, however, is that some of the fundamental tenets of our economic model have shifted significantly over the last decades. We now live in a world where middle-skilled employment is decreasing and where income is accruing to capital holders. This draws a highly competitive world; a perilous one, in fact, where economic opportunity is harder to come by.

One could well argue that all of the changes described above amount to a fracture in the social contract. While in the past one could, with some degree of certainty, craft a path toward economic stability through academic and professional achievement, today such an exercise is much harder. Not even with abundant forward planning can one have the certainty that this or that profession will fare well. The velocity at which technology is changing our environment makes forward planning extremely complicated. So a fundamental equation of our social contract—study, work hard and in exchange you shall receive stability, a decent income and you will live within an equitable society—is now under clear stress.

2. Politics in an Interdependent World

In parallel to the process of economic transformation described above the world of politics has undergone a set of radical changes as well. Two are of particular importance for the debate around the fracturing of the social contract: the deepening of interdependence and the worsening of what Robert Putnam termed the two-level problem, or the inability of individual political actors to tackle complex problems alone.

Interdependence is defined in the field of international relations as the phenomenon of having linkages across states. The most obvious example is that of economic interdependence which is a product of trade across borders. Interdependence produces the necessity of interstate collaboration and, when sufficiently strong, leads to supranational governance arrangements. Many would argue, for example, that the EU is the most emblematic case of a set of institutional arrangements agreed upon in an attempt to manage...
deep levels of interdependence. The reason why the EU exists, the argument would go, is to manage the complex relations of its member states through common regulation and the setting of Union-wide standards in the fields of trade, labor rights, environmental protection, and others. One of the consequences of interdependence is, therefore, the elevation of certain governance issues to an intergovernmental level, distancing the decision-making process from national fora. Globalization would be another good example of interdependence with the plethora of institutions that it has given birth to being also good examples of how linkages across borders lead, necessarily, to intergovernmental governance arrangements.

One of the fundamental challenges of managing interdependence is that it forces national authorities to engage in international debates about rule setting and in some instances to delegate decision-making to supranational bodies. This all equates to sacrificing part of their powers and distancing decision-making from their electorate. Some authors have, in fact, questioned whether globalization and democracy are fully compatible given the effects of interdependence on sovereignty and accountability of decision-making.36

The two-level problem theory, on the other hand, addresses a similar but somewhat different challenge: that of the inability of national political tools to address global challenges. According to this theory some global problems, like climate change, overwhelm the capacity of single states and require concerted action if they are to be properly addressed. Or to put it differently, the scale of a problem is greater than the reach of the policy-making tools available to any single state.

Recent decades have seen a rise in the number and scale of two-level problems. Digitalization has itself produced a whole range of challenges of this nature given how unable individual states are of managing online content, regulating or taxing Internet companies, and others. Two-level problems tend to be better addressed by elevating governance to a higher level and hence equating the scale of challenges to the reach and power of governance tools. However, if this outcome is not achieved, citizens perceive that their elected representatives are only able to address some of the challenges that affect their daily lives, while others remain obscure, complex, and out of reach. This sense of loss of political control over one’s own destiny and of the community one inhabits is extremely detrimental to the legitimacy of the social contract. Indeed, a core premise of social-contract theory is that citizens abide by the rules, pay taxes, and, in exchange, get to participate in the political process and to have a voice in public affairs. If political representatives fail to address pressing problems, then the contract is perceived as broken.

The two challenges identified above, the distancing of decision-making as a consequence of interdependence and the inability of national political elites to deal with global challenges, could seem contradictory. On the one hand, citizens are concerned about their ability to affect decisions being taken in intergovernmental and supranational institutions such as the UE or the UN, but, on the other, they also feel that their governments are unable to address problems of a global scale which would require, in essence, further use of institutions such as the EU or the UN. And, indeed, there is a contradiction in these feelings but this does not make them less real or consequential. In fact, it seems that growing numbers of Western citizens are critical of the functioning of international institutions and are at the same time concerned about the inability of their governments to tackle global challenges. The consequence has been for many to want to go back to a more insular world, one of hard borders and a false sense of control. This is one of the greatest paradoxes of populism: its rise is explained to some extent by the insecurity brought about by the mismanagement of global challenges but the solutions that it forwards would lead to the dismantlement of precisely the institutions that could address those very challenges. Perhaps, and as we will see later in this essay, what is truly needed is a better and more legitimate system of global governance.

3. Data, Privacy, and the Future of the Biosphere

As argued above, one of the fundamental features of the social contract was the notion of giving up fundamental freedoms, including that of using force, in exchange for the public provision of security. Digitalization and changes to our economic model have led, however, to the rise of new forms of insecurity. This is derived from a new feature in global affairs: the radical porousness of borders and the fact that certain threats can now impact the most intimate and private dimensions of individuals’ lives.

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A protester wearing an Anonymous mask and a dollar bill with the words “they won’t silence us!” at the sixth anniversary of the 15M social movement. Born in Madrid on 15 May 2011, the movement’s demands included jobs and decent wages for young people.
The growth and deepening of cyberspace is perhaps the most emblematic example of this process. Cyberspace has become a new battleground for security where pernicious actors operate and seek advantage. What is unique about cyberspace is that it penetrates people's lives to the point of, literally, being in their pocket at almost all times. This opens up a number of risks of which I would highlight three.

First, it increases the risk of cybercrime, including the theft of valuable data and IP, altering banking transactions, digital extortion or the use of ransomware. Second, the generalized use of the Internet and of an app ecosystem built on the back of exploiting people's data generates a significant privacy challenge for individuals. This is not just manifested in cases of identity theft but also in the growing capacity of certain firms to know the full detail of people's behavior, wants, and needs. As knowledge of neuro and behavioral sciences increases, abundant data on someone could well mean being able to nudge that person into certain types of behavior if not to outright manipulation. This questioning of free will and of individual agency brought about by an abundance of data on people's behavior will be a major source of concern for citizens and governments moving forward. Third, digitalization exposes our information systems to external interference and, hence, to manipulation by actors that do not seek to enhance the quality of our public debate but rather distort it for partisan reasons. Indeed, we have witnessed over the past years an increase in what has been termed "election hacking" or instances where hostile actors seek to disrupt a particular democratic process through the spreading of misinformation to the electorate.

What makes the cases above relevant is how sophisticated, pervasive, and invasive they are. Many individuals feel that borders and frontiers no longer serve the purpose of containing external threats. Governments, on the other hand, are scrambling to first of all understand the nature and scope of these threats and to come up with the right governance mechanisms to contain them. In the void left by government inaction a sense of inefficacy on the part of public actors is born, further hindering the legitimacy of the social contract.

A separate but significant example of an emerging security threat is that of climate change. The climate crisis shares with digitalization one fundamental feature: it ignores national borders and affects individuals in a very direct manner. The scope and scale of the challenge is such that it is impossible to ignore, with consequences of mismanagement ranging from the loss of biodiversity to the destruction of human habitats and livelihoods. Here again policy-makers are faced with the difficult task of managing a problem that requires intense interstate cooperation.

Crafting a New Social Contract for the Digital Era

It is evident from the analysis above that governments around the world have a very difficult task ahead of them. The rate, nature, and implications of social and technological change have brought enormous challenges forward. It is now urgent that we set on the task of putting forward solutions and of regaining the trust of citizens in their institutions.

The following pages will address a "Decalogue" of solutions to the challenges identified in the preceding section.

1. Education for the digital era

One of the first areas in dire need of effective public policy action is that of higher education. The reason is simple: the world of work is changing extremely rapidly and educational institutions must adapt accordingly. Despite the ominous predictions about the unavoidable loss of work due to automation there are numerous studies that in fact suggest that there are many jobs to be filled at the frontier of the economy. According to the European Centre for the Development of Vocational Training (CEDEFOP), skills shortages affect a majority of firms in the EU to a large extent because people are not getting the right education and training.9

And yet there is abundant information about the types of knowledge and skills that are required to navigate the digital revolution. We know, for example, that jobs demanding high social and quantitative skills have been on the rise over the last two decades.9 Social skills, such as empathy or team management, are growingly important in a world where robots and algorithms take on the most repetitive tasks. We also know that from all of the "quantitative skills" the ones in most demand are "digital skills." According to the Brookings Institution, two-thirds of all jobs created in the US between 2002 and 2016 required medium- or high-level digital skills; with these being defined as the ability to engage with hardware and software in a sophisticated manner.20 The transformation this is producing in the jobs market is enormous. According to the same Brookings report, the total number of jobs in the US requiring low or no digital skills collapsed from 69 million, or 56% of all jobs, in 2002 to 41 million, or 30% of the total of jobs only fourteen years later.21 This means that jobs that do not require digital skills are on a clear path to extinction. Graduating today without some knowledge of key software management, data analytics, comprehension of coding, and other related disciplines is an extremely risky path to follow.

So, part of a new social contract should include a true revamping of our university system. Academic institutions need to be agile and adaptive. Their programs need to be interdisciplinary and embed technology throughout the curriculum. This would significantly reduce the transition cost to the new economy and provide opportunity for millions of recent graduates.

2. Fair and effective taxation

One of the greatest contradictions in economic policy of the last decades has been the evolution of tax pressure in advanced economies. In parallel to a process of decline of labor-income share and of growing precariousness of labor-income earners, there has been a steep rise in tax pressure on labor income; and a dramatic decline in the effective tax pressure over capital. This latter point is particularly true for Internet companies, whose activities are harder to identify, track, and tax. According to the Financial Times, the effective tax pressure over corporations in OECD countries has declined 10% from the mid-1990s to today.22 The drop goes up to 20% for Internet companies. So not only have salaries for the middle class stagnated or declined over the last thirty years but tax pressure on those salaries has increased, in large part to make up for the loss of public revenue from capital earnings. This has led to the incongruous situation of collectives that should now be the beneficiaries of redistributive policies being the ones asked to help solve public funding problems or bail out mismanaged banks.

A fairer and more sustainable distribution of the tax burden would require recalibrating tax pressure from labor to capital, closing loopholes for corporations, fighting...
In parallel to the process of decline of labor-income share and of the growing precariousness of labor-income earners, there has been a steep rise in tax pressure on labor income, and a dramatic decline in the tax pressure over capital. This latter point is particularly true for Internet companies.

There is no reason to believe that the welfare state cannot be deepened. Logic would state that with the increases in productivity brought about by the technological revolution it should be feasible to procure higher taxation income for states, and to build a more solid social safety net against tax havens, and finding ways to tax digital companies more effectively. Additionally, states could also enter the investment space and through public sovereign wealth funds and venture capital funds provide liquidity, support innovation, and procure the public with some form of fiscal traction over capital income. Public stockholdings in frontier firms would surely be a boon to public budgets. Some countries are already following similar policies through their sovereign wealth funds or by creating specific investment vehicles.

3. An enhanced competition and antitrust policy

It is growingly clear that the digital economy has strong oligopolistic forces within it. Firms with scale, access to data, and the capacity to process that data dominate their core markets and are beginning to take on adjacent markets with ease. Not only are we seeing strong market concentration in certain actors but, as indicated above, productivity diffusion is almost non-existent. Additionally, the rate of churn in the economy, the number of firms being born and shut down, is slowing down, in a sign of a loss of economic dynamism that could well be explained by the market dominance of a few actors. Large digital firms, such as Google, Facebook or Amazon, have also very radically increased their merger and acquisitions activity, another sign that they now have the financial capacity to purchase potential rivals and stifle competition.

The argument that these dynamics do not pose a competition problem because customers are still getting an excellent service, and, in some instances, a service for which they are not charged a price (i.e., customers are paying with their personal data) is one that legislators and regulators should tackle head-on. Data portability and other measures that seek to break the monopoly over data that some of these firms have might be a first step but it is hard to imagine a more effective solution than breaking them up into smaller units.

4. New redistribution mechanisms

If the fiscal traction and competition problems are solved, states should have the capacity to both fund public services properly but also experiment with new redistributive mechanisms. Governments could experiment with new measures such as conditional cash transfers (CCTs), a negative income tax or, perhaps, a “universal basic income” (UBI). The truth of the matter is that we have scant evidence about the effects of many of these measures, with perhaps the exception of CCTs, which have been extensively used in developing economies; UBI has proven to be an ineffective tool for creating employment opportunities in Finland, for example, but it did improve social trust and perceptions of political elites. Some other cases exist that point to the pernicious effects of UBI-like measures on social cohesion, transparency of public institutions and corruption, and on social psychology dynamics. Pilot programs and testing the effects of new measures should be a central feature of policy-making in the coming decades.

The bottom line here, however, is that there is no reason to believe that the welfare state cannot be deepened. In fact, logic would state that with the increases in productivity brought about by the technological revolution it should be feasible to procure higher taxation income for states and to build a more solid social safety net. Such a process would surely enhance the perception of equity of the social contract for many of those at the bottom of the socioeconomic pyramid.

5. A new and expansive role for the private sector

Some of the trends identified above, but particularly those that point to a decline in labor-income share, bring into question the sustainability of a private sector exclusively focused on shareholder value. In an environment where firms can gain productivity and competitiveness without employing more people or remunerating those in employment better, then having as a sole purpose that of maximizing shareholder value is insufficient. In fact, if all firms had such a narrow goal they might find themselves performing extremely well against their own metrics but causing havoc in the social fabric. Indeed, firms could be doing extremely well but not contributing to the establishment and advancement of a healthy middle class of labor-income earners. This would, in turn, pose a major challenge for business sustainability given that, as we have shown before, precarious and unequal societies lead to populist politics. It is populists who then initiate trade wars, limit the inflow of foreign talent into their countries, attack regional integration projects and currency unions, and intervene on open markets in the name of national security. A large portion of the cost of such actions will be born by
Compensating for the loss of public revenue from capital earnings has led to the incongruous situation of collectives that should now be the beneficiaries of redistributive policies being the ones asked to help solve public funding problems or bail out mismanaged banks.

A man takes a break after eating at the Capuchin Soup Kitchen in Detroit, Chicago, which started serving hundreds of people after the 2008 crisis devastated the city. Detroit had been known as “Motor City” because of its powerful automobile industry.

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businesses, which means that they too have a significant interest in building an equitable and fair society. The effect of technology on corporate models and employment structure, therefore, calls for a redefinition of business sustainability.

A private sector committed to positive social and environmental impact would go a long way in solving some of the challenges delineated above. Companies can support local communities, fund educational programs, and lead on the application of the environmental sustainability agenda. All of these measures would greatly contribute to the enhancement of our social contract and make of the private sector one of its strongest guarantors. Luckily, this message seems to have reached business leaders in the US and some have now formally stated their desire to expand the social footprint of their firms.  

6. Deeper and more effective regional integration and international cooperation

Despite concerns about the functioning and transparency of regional and global organizations such as the EU or the UN, the truth of the matter is that they are more needed than ever. Some of the most significant challenges of our time require concerted action on the part of states and other actors. The only fora capable of managing such scale and complexity are organizations such as these. We, therefore, need a push toward greater integration in these institutions.

An emblematic case for Europeans is, of course, the EU, which needs to see its competencies strengthened in everything from the European Monetary Union (EMU), and in particular through the full development of its Banking Union project, to the Single Digital Market, to the Energy Union. Additionally, the EU should continue its push to regulate emerging technologies, with measures such as the General Data Protection Regulation (GDPR) being a case of success when it comes to protecting privacy. Other areas where concerted action at the EU level is now more important than ever would include the fight against tax evasion by large corporations, particularly Internet firms, as well as expanding and applying in full an effective antitrust agenda. These are all
matters that no single EU member state can address alone and where acting through the EU would enhance Europe’s economic potential, attract more talent, enable deeper and more-widespread innovation and entrepreneurship, and better protect the interest of European citizens.

The UN agenda is enormous and complex but one issue is worth mentioning here. What comes closest to a full re-crafting of a new social contract is the 2030 Development Agenda with its seventeen Sustainable Development Goals (SDGs).23 Approved by the UN General Assembly in 2015, the SDGs are a perfect example of how much could be achieved if the international community were to work together to address global problems. A key component of the new social contract should include supporting initiatives such as the 2030 Agenda and looking for ways to enhance international cooperation across the whole spectrum of global challenges.

7. Better global governance and a digital government
Calling for more intergovernmental mechanisms will not suffice. One has to address the issue of their governance, transparency, and efficacy as well. Elevating governance beyond the nation-state calls for the re-crafting of democratic systems for a higher level of governance. This can be done through many mechanisms but there is one which deserves particular attention: applying advanced technologies to governments and international organizations. The field of GovTech, or technology geared toward improving governance and tackling public problems, is expanding at a very rapid pace.24 Governments would not only fare better through the use of technology but they would be perceived as closer to the citizen, more accountable and transparent. Additionally, digital governments would serve as true catalysts for innovation by sustaining a socially minded ecosystem of start-ups and entrepreneurs.

8. A secure cyberspace
Just as in past instances of technological transformation, we are faced today with the need to procure security in a new domain. Citizens demand today that their governments take effective action against cybercrime and other forms of misuse of the Internet. Doing this in an effective manner will require creating new capacity within government, producing the right regulatory framework, and acting decisively. A particular area of activity should be that of IP theft and online corporate espionage, an area where the private sector has not received sufficient public support.25

Problems associated with misinformation and election hacking should be addressed in partnership with online platforms. In fact, it is quite likely that social networks will have to deal with growing regulation regarding the veracity of the content shared on their platform; in a move that will bring them closer to a media company.

Additionally, data and the management of data networks should be the object of stricter regulation and oversight on the part of governments. The recent Huawei case is perhaps the tip of the iceberg of a process that will produce the “securitization” of the data ecosystem. Governments will almost certainly be forced to look at their data infrastructure as strategic and, therefore, worthy of particular regulatory attention. Who owns the infrastructure and the data that travels on it will be a fraught issue moving forward. This should be perceived not so much as a threat to free and open markets but rather as governments performing their duty of protecting their citizens and corporations from external interference.

9. Data protection and a digital compact
Data regulation seems to be moving in three different directions in the US, China, and Europe. In the US it is large corporations such as Facebook that collect, process, and store people’s data. In China it is the government, which, ultimately, holds all data. This is the case even if the initial collector of the information was a private corporation. In Europe, however, and particularly after the approval of GDPR, data ownership has been attributed to the individual that produced it in the first place. This is a first and modest step in the direction of providing a clear set of rules and regulations that protect individuals’ data and privacy.

The economics of this process could end up being extremely significant given how valuable data is becoming. Some economists have even argued that data should be considered a factor of production, just like land, labor, and capital, rather than just a by-product of other activites.26 If data is a full factor of production and if it is owned by the individual that produced it, then that individual should be paid for the use of his or her data. This could end up being a significant source of revenue for the EU would enhance Europe’s economic potential, attract more talent, enable deeper and more-widespread innovation and entrepreneurship, and better protect the interest of European citizens.

The UN agenda is enormous and complex but one issue is worth mentioning here. What comes closest to a full re-crafting of a new social contract is the 2030 Development Agenda with its seventeen Sustainable Development Goals (SDGs).23 Approved by the UN General Assembly in 2015, the SDGs are a perfect example of how much could be achieved if the international community were to work together to address global problems. A key component of the new social contract should include supporting initiatives such as the 2030 Agenda and looking for ways to enhance international cooperation across the whole spectrum of global challenges.

7. Better global governance and a digital government
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It is increasingly clear that the digital economy has strong oligopolistic forces within it. Firms with scale, access to data, and the capacity to process that data dominate their core markets and are beginning to take on adjacent markets with ease.

The field of GovTech, or technology geared toward improving governance and tackling public problems, is expanding at a very rapid pace. Governments would not only fare better through the use of technology, they would also be perceived as closer to the citizen, and more accountable and transparent.
We need a true digital compact to emerge, a full code made up of norms, regulations, and common practices that enshrine privacy and put the individual back at the center of the data-ownership debate. This would greatly enhance people’s perception of security online and contribute to their appreciation for the rights provided to them by the societies they live in.

10. Environmental sustainability

None of the measures above will amount to much if the environment and biodiversity are not protected. Environmental degradation is perhaps the most existential of the challenges addressed in this essay. Full implementation of the Paris Agreement should be a priority for every government. This will entail changes in every sector from the finance sector, with the necessary rise of green finance, to infrastructure, to energy, to the food industry. What is clear, however, is that the social contract will remain broken if young people perceive that the planet they will inherit will be a barren one. It will also be impossible to think of equitable development or of social justice if large swathes of the planet are under severe climate-related stress.

Conclusion

The implementation of the measures described in the preceding section would lead to a more secure and a more sustainable future. A society with an effective and well-calibrated education system would be capable of creating opportunity and of furthering innovation. More competitive markets and a better-balanced taxation system would not only be a source of legitimacy for political systems around the world but it would also enable greater fiscal traction over corporate profits and, hence, the provision of better public services; something much needed to compensate for the wealth-concentration effects of emerging technologies. A private sector that is, in turn, committed to these goals would be a requirement for sustainable growth. Additionally, better governance mechanisms would assuage doubts about the efficacy of public institutions and, ultimately, of democracy as a system of government. If all of this is accompanied by an effort to enhance data protection, security in cyberspace, and a push for environmental sustainability, the general sense of personal security on the part of citizens would be greatly enhanced.

A different world to the one we have today is therefore possible. It seems feasible to do away with some of the most significant drivers of social pain within our societies. It is hard to imagine that if those issues are addressed in a systematic and effective manner populism would still thrive. Extremist and radical rhetoric should find unfertile ground in a well-educated, prosperous, and optimistic society.

Arriving at a solution requires a flexible and dynamic polity. One that is willing to listen to the concerns of its citizens and act decisively. Rigidity, or the inability to react to the clear signals of stress in our social contract, will only result in greater social pain and a deeper political convulsion. The hope should remain that academics, policy-makers, and business leaders come to the realization that our societies need profound changes if they are to be truly sustainable.

The challenge we face is not one of resources or scarcity but one of managing abundance. Many of the problems studied throughout this essay are a product of the human ability to build complexity into its social and economic structures. That complexity has been an enormous source of intellectual, social, and economic prosperity. It has, however, also become a challenge in itself, given the difficulty of governing a highly complex, interdependent, and fast-changing society. We are faced, therefore, with the task of proving that our social intelligence can match the complexity of the society we have built.
A New Social Contract for the Digital Age by Manuel Muñiz


31. For more information on the Paris Agreement see: https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement.
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