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The societal responses to COVID-19: evidence from the G7 countries

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Katharina Lima de Miranda, Kiel Institute for the World Economy; Global Solutions Initiative

Dennis J Snower, Global Solutions Initiative; Hertie School of Governance

The Societal Responses to COVID-19: Evidence from the G7 Countries[1]

G7 evidence on a recalibrated relationship between market, state and society

Katharina Lima de Miranda[2] and Dennis J. Snower[3]

Abstract

This paper provides a new picture of how countries have responded to the COVID-19 pandemic by examining the effects of the pandemic in terms of normative foundations for societal wellbeing. Social prosperity depends primarily on the functioning of four domains: the economy, the state, civil society and the environment. We use the Recoupling Dashboard—composed of four main indexes: Solidarity (S), Agency (A), GDP (material Gain, G) and Environmental sustainability (E) —to uncover the divergent experiences of countries in 2020. This paper focuses on the G7 countries—Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States—as the first step towards a wider appraisal. In all countries under review we see a sharp drop in GDP due to the pandemic and a corresponding drop in CO2 emissions. The uniformity of response in the economic and environmental domains stands in sharp contrast to the diversity of social responses to the challenge of cooperation that the coronavirus posed. The only clear pattern that emerges from cross-country comparisons is that Inward Solidarity, important for social cohesion in close social networks, and Outward Solidarity, important for the will to cooperate with other nations and cultures, have drifted apart in all G7 countries except Japan. Otherwise the movements in solidarity are highly idiosyncratic. In addition, the responses of Agency to the pandemic are diverse and are not noticeably correlated with the changes in Solidarity. The discrepancies in the social responses to the pandemic may be expected to have potentially important implications for how these countries fare during the pandemic and how well they come out of this crisis.

Keywords: COVID-19, wellbeing, social sustainability, social solidarity, empowerment, beyond GDP

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[2] Post-doctoral Researcher, Kiel Institute for the World Economy; Research Director, Council for Global Problem Solving, Global Solutions Initiative.

[3] President, Global Solutions Initiative, Berlin; Professor, Hertie School of Governance, Berlin; Senior Fellow, The New Institute, Hamburg; Senior Research Fellow, Blavatnik School of Government, Oxford University; Non-resident Fellow, Brookings.

Introduction

The COVID-19 pandemic changed the relationship between the market economy, state, and society in the G7 countries and beyond. While economies collapsed due to the shutdown of broad swathes of the economy, the state and civil society have gained new significance in protecting people from the pandemic's effects. This dramatic shift has recalibrated the public's perception of the role of markets, government, and society in response to the worldwide shock. This is a central finding of this study, which examines the effects of the pandemic in terms of normative foundations for societal wellbeing.

The Recoupling Dashboard is an outgrowth of the research initiative on "Recoupling Economic and Social Prosperity."[4] The underlying motivation is simple: In view of the social fragmentation and environmental degradation that has accompanied economic growth over the past decades, it is apparent that economic prosperity (in terms of GDP) can become decoupled from social prosperity (in terms of wellbeing in thriving societies). Economic prosperity is not an end in itself, but a means to the end of social prosperity. The aim of economic and social policies should be to promote social prosperity and to recouple economic prosperity with it. The Recoupling Dashboard provides a simple empirical framework to measure economic and social success.

The Recoupling Dashboard 2020 provides a new picture of how countries have responded to the COVID-19 pandemic—one that tells quite a different story from the conventional analyses focusing on GDP alone. Social prosperity depends primarily on the functioning of four domains: the economy, the state, civil society and the environment. The pandemic was an attack on the economy, since public health concerns demanded shutting down or reorganizing economic activities requiring close interpersonal physical contact. If societies were to be cushioned from the health crisis and its economic fallout, the cushioning would have to come from the state and civil society. The Recoupling Dashboard 2020 uncovers the divergent experiences of countries in this regard. This paper focuses on the G7 countries—Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States—as the first step towards a wider appraisal.

Just as the drop in economic response to the pandemic was predictable, so the environmental response was broadly predictable as well, since the environmental consequences largely followed from the economic consequences. (For example, reduced economic activity led to lower CO2 emissions, while increased production and consumption of personal protective equipment—such as face masks, disposable gloves, and clothing—led to greater biomedical waste.) Since the environmental effects of the pandemic have already received detailed attention elsewhere,[5] we focus primarily on the social effects with regard to the responses of civil society and the state.

The Recoupling Dashboard is composed of four main indexes: Solidarity (S), Agency (A), GDP (material Gain, G) and Environmental sustainability (E)—SAGE for short.

[4] Lima de Miranda and Snower (2020)

[5] The collapse of economic activity has been accompanied by an associated decline in CO2 emissions, but by less than initially anticipated (Liu et al. (2020a). For example, on the positive effects on air pollution and greenhouse gas emissions, see Saadat et al. (2020), Berman and Ebisu (2020) and Evans (2020). Regarding reductions in water pollution, see for example Yunus et al. (2020) and Zambrano-Monserrate et al (2020). Negative environmental effects include increases in biomedical waste generation, municipal solid waste generation and recycling reduction (for example, Zambrano-Monserrate et al (2020), Fadare and Okoffo (2020) and Calma (2020)).

Solidarity (S) covers the need for social belonging and embeddedness in the society, as such, it deals with solidarity in the civil society and as opposed to institutionalized solidarity such as social security systems or cross-national support. It may be directed "inwardly" to one's national, religious, ethnic, racial, or class groups, or "outwardly" to groups with regard to which one does not define one's social identity. Inward Solidarity by itself may promote the wellbeing of one's in-group members, but lead to conflict with out-groups (which often detracts from the wellbeing of both in- and out-group members). Populism, for example, represents a form of Inward Solidarity that often generates hostility to immigrants, from which social conflicts within nations can arise. Under these circumstances, Inward Solidarity generates positive externalities for in-group members, but negative externalities for out-group members. But Inward Solidarity could also be positively related to Outward Solidarity—as when people with a strong sense of national identity welcome immigrants and benefit from the resulting cultural exchange—thereby generating positive externalities for in- and out-group members alike. The psychological relationship between Inward and Outward Solidarity is complex.[6]

The Agency (A) covers the fundamental human purpose of individual mastery and personal growth. It aims to measure how empowered people in a society are to influence their own fate through their own efforts.

Our measure of material Gain (G) is GDP and that of environmental sustainability is also conventional, covering a broad index (the Environmental Performance Index) and two narrower indexes (CO^2 emissions and greenhouse gas emissions).[7]

These indexes are not inherently substitutable for one another and thus need to be assessed separately. The dashboard suggests that when people have a secure sense of social belonging (S), are empowered to influence their fate through their own efforts (A), are materially well off (G) and live within planetary boundaries (E), then a groundwork for satisfying their fundamental needs and purposes is established.

It is well-known that there already exist many indexes of societal welfare that extend beyond GDP. For example, there are indicators that adjust GDP (such as the Index of Sustainable Economic Welfare, Green GDP, Genuine Savings, Brynjolffson's GDP-B metric); others measure human capacities (such as the Human Development Index); there are psychological measures of wellbeing (such as the Personal Wellbeing Index and Happy Life Years Index) and sociological measures of wellbeing (such as the Physical Quality of Life Index and the Social Progress Index of the Social Progress Imperative (2020)). Furthermore, there are indexes of happiness (such as Gross National Wellbeing and the World Happiness Report). Finally, there are hybrid indicators (containing objective and subjective measures, such as the OECD Better Life Index (OECD (2019a,b)) and indexes of desirable outcomes (such as Sustainable Development Goals of the 2030 Agenda for Sustainable Development).

The Recoupling Dashboard breaks new ground in being the first measure of social progress resting entirely on a few major ethical foundations. The S is the focus of communitarianism (covering people's social needs and purposes), A is the central value of classical liberalism (focusing on individual empowerment, civil liberties, and human capabilities), G is central to the utilitarian consequentialism that underlies the discipline of economics, and E covers the domain of environmental ethics (the value and moral status of the environment). This normative basis for

[6] See, for example, Brewer (1999).

[7] Data sources are described in Appendix 2. The indexes for CO2 emissions and greenhouse gas emissions may be understood as indicators of the concern for the environment.

measuring wellbeing is significant, for three reasons. First, living in accordance with one's moral values is a major source of wellbeing. Second, most of our moral values can be understood as potent instruments for inducing social cooperation among people. As such, they can be recognized as a key to assessing the social prosperity that lies beyond economic prosperity. Third, moral values are imbued with normative force, inducing people into action. Thereby our dashboard aims to capture components of wellbeing that people are especially inclined to act on.

The Recoupling Dashboard combines this distinctive feature with the characteristics of brevity, regularity, and breadth. Regarding brevity, the dashboard contains only four indexes, matching the four things that humans can be kept simultaneously in working memory.[8] As for regularity, the dashboard is assessed on an annual basis, comparable with annual GDP statistics. Finally, regarding breadth, the dashboard covers a large number of countries (currently over 150), so as to allow country comparisons to be made. For the purposes of this paper, we focus solely on the G7 countries.

The four indexes of the dashboard are not closely correlated with one another. In particular, movements of GDP do not provide an adequate account of how Solidarity, Agency and Environmental Sustainability evolve. If GDP grows while S, A, and E stagnate or decline, we can say that economic prosperity has become "decoupled" from social and environmental prosperity. Then the aim of policy should be to "recouple" these separate domains, ensuring that all four fundamental needs and purposes are met.

The political and social implications of decoupling are momentous. For example, two years before Donald Trump won the U.S. Presidential election, Agency suffered a steep decline, Inward Solidarity stagnated, while Outward Solidarity fell. (See Figures 1 and 3 below.) In the period 2006-2016, Solidarity (both Inward and Outward) fell by 6 percent and Agency dropped by 12 percent in the U.S. These psycho-social developments were masked by a steady rise in GDP. Had such phenomena received the serious attention that they deserved, we could have gained a deeper understanding of Donald Trump's electoral appeal and new insights into ways of dealing with the underlying discontent. ("This time, it's not the economy, stupid.")

One year before the Brexit referendum, Outward Solidarity in the U.K. plummeted, Inward Solidarity rose, while Agency declined (as shown in Figures 1 and 3 below). Over 2006-2016, Inward Solidarity in the U.K. fell by 2 percent, Outward Solidarity was stagnant, and agency fell by 5 percent. This, too, provides a very different picture of British wellbeing than the steady rise of U.K. GDP. Once again, prominent recognition of these developments would have given rise to a different assessment of the social problems leading to Brexit than the ones on which Prime Minister David Cameron was focused. (Again, "It's not the economy, stupid.")

How the pandemic changed the relation between the market and society

It was inevitable that of the three domains in which people organize their joint affairs—their market economy, their polity, and their civil society—the economy would suffer grievously from the onslaught of the coronavirus. The spread of the pandemic necessitated social distancing and lockdowns, making it impossible for the market economy to function along accustomed lines. The result was the "Great Economic Mismatch,"[9] characterized by deficient demand for things requiring close physical

[8] Cowan (2010).
[9] Snower (2020). Empirical evidence is provided by Barrero et al. (2020), among others.

interactions among people and deficient supply of medical products, health services, and services compatible with social distancing (such as delivery services, video conferencing, and film streaming). Economies around the world suffered significant damage since markets were unable promptly to perform the requisite reallocation of resources.

Thus, it is no surprise that in all countries under review—G7 countries—we see a sharp drop in GDP due to the pandemic. Nor is it surprising that we observe a corresponding drop in CO2 emissions in all these countries. The uniformity of response in the economic and environmental domains is illustrated in the last two columns of Table 1 (GDP and CO2 emissions fall in all G7 countries). This uniformity stands in sharp contrast to the diversity of social responses to the challenge of cooperation that the coronavirus posed.

Country	Inward Solidarity Index		Outward Solidarity Index		Agency Index		Material Gain (GDP per Capita)		Environment (CO2 in MtCO2)	
	Score 2020	1-year change	Score 2020	1-year change	Score 2020	1-year change	2020	1-year change	2020	1-year change
Canada	0.93	0.6%	0.57	-3.5%	0.82	-1.3%	$ 43,142	-6.4%	644.00	-11.3%
France	0.94	-0.5%	0.47	-4.0%	0.77	-0.2%	$ 39,427	-8.4%	263.83	-9.0%
Germany	0.90	2.8%	0.50	-2.6%	0.84	1.2%	$ 47,464	-5.1%	605.78	-7.9%
Italy	0.89	6.8%	0.41	1.1%	0.68	3.4%	$ 35,424	-8.6%	292.85	-7.4%
Japan	0.89	1.4%	0.33	6.1%	0.77	0.4%	$ 40,626	-3.8%	1033.99	-5.0%
United Kingdom	0.93	-0.9%	0.51	-8.5%	0.79	1.7%	$ 39,474	-10.4%	311.35	-9.5%
United States	0.94	2.2%	0.55	0.0%	0.77	3.0%	$ 58,382	-4.0%	4581.70	-9.4%

Table 1: Responses to the Pandemic

Sources: Solidarity and Agency are based on own calculations using data from the Gallup World Poll and the World Bank, GDP data was extracted from *OECD National Accounts at a Glance*, CO2 Emissions represent estimates from *The Carbon Monitor*. Since no data from the Carbon Monitor is available for Canada we use Greenhouse Gas emissions from *Climate Action Tracker* instead. This is not directly comparable to CO2 Emission from the other source, but gives an indication of Canada's reduction in GHG emissions in 2020.

Inward Solidarity rose in four of the G7 countries (signaling the resilience of civil societies in providing social support networks where the economic ones had crumbled) and remained roughly constant in the three remaining countries.

By contrast, **Outward Solidarity** fell in four of the countries (mirroring the well-documented rise in nationalism, including support for the globally damaging "vaccine nationalism"[10]), rose in two countries, and remained roughly constant in the remaining countries. Needless to say, a fall in outward solidarity may be expected to hinder voter support for multilateral efforts to eradicate the pandemic worldwide.

The only clear pattern that emerges from cross-country comparisons solidarity is that Inward and Outward Solidarity have drifted apart in all G7 countries except Japan (as shown below). Otherwise the movements in solidarity are highly idiosyncratic. In two of the countries (Italy and Japan), Inward and Outward Solidarity both rose; in one country (Germany), Inward Solidarity rose while Outward Solidarity fell; in three of the countries (Canada, France, and the U.K.), Inward Solidarity remained

[10] Bollyky and Bown (2020)

roughly constant while Outward Solidarity declined; and in one country (the U.S.), Inward Solidarity rose while Outward Solidarity remained roughly constant. In short, there are many different ways in which societies respond to the pandemic, in line with the different social norms and values, as well as the different relations between civil society and state, across the G7 countries.

Those who believe that the global challenge of eradicating the pandemic should have helped prepare the world for dealing with other global challenges are likely to be disappointed. On the whole, citizens of the G7 appear not to have learned the most important lesson that the pandemic could have instilled, namely, that global problems call for global cooperation. Pandemics—like climate change and cybersecurity—cannot be overcome fully anywhere unless they have been overcome everywhere. However, citizens often responded to the pandemic by falling back on their traditional support networks, both national and social. Nevertheless, polls revealed support for some global cooperation (particularly among young, highly educated adults), even at the expense of own national interests.[11] With regard to global cooperation that is nevertheless taking place in response to the pandemic (such as the Covax Facility), policymakers in many countries appear to be more inclined to multilateralism than their citizens.

The **Agency** Index increased in most countries. Changes in Agency are to be understood in relation to the challenges that people have faced during the pandemic. An increase in Agency may be viewed as an enhanced sense of empowerment that comes from rising to a new challenge, such as dealing with the diverse problems—social and economic—associated with the loss of social contact and work during the pandemic. Under these difficult circumstances, people may have care and support within their communities – opportunities that may be absent under normal conditions. Conversely, a fall in Agency suggests a sense of being overwhelmed and increasingly helpless in the face of the crisis. Agency rose in four of the G7 countries (Germany, Italy, U.K., and US), remained roughly constant in two countries (France and Japan), and fell in one country (Canada).

The discrepancies in the social responses (S and A) to the pandemic may be expected to have potentially important implications for how these countries fare during the pandemic and how well they come out of this crisis.

To gain an overview of the different social responses, we divide the G7 countries into four groups, to give us an impression of how well civil society rose to the challenge of the pandemic:

- We classify a country as "**tribalizing**" if Inward Solidarity rises while its Outward Solidarity declines or remains roughly unchanged. By contrast, a country is considered "**cooperating** when both Inward and Outward Solidarity rise.
- A country is "**empowering**" when Agency rises, and "**not empowering**" when Agency falls or remains roughly constant.

From this perspective, civil society responds adaptively to the pandemic when it is cooperating (more socially cohesive nationally and more willing to cooperate with other countries) and empowering (addressing the COVID-19 challenges through one's own efforts). By contrast, when a country's response is tribalizing and not empowering, citizens tend to be focused primarily on their own health and economic concerns, but are not willing and able to address these concerns by themselves.

From this perspective, the G7 countries fall into the categories described in Table 2.

[11] For example, Pew Research Center (2020).

	Empowering	Not empowering
Cooperating	**Italy**	**Japan**
Tribalizing	**Germany, US, U.K.**	**Canada, France**

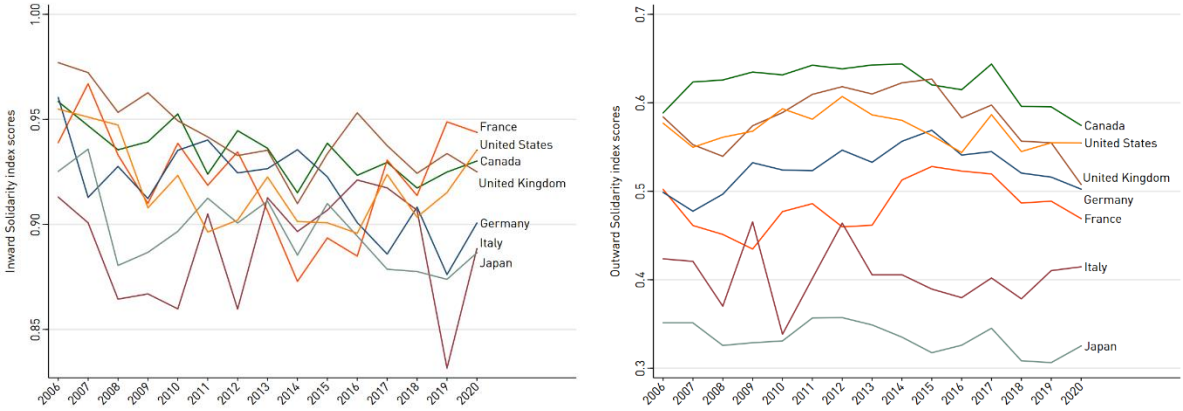
Table 2: Groups of countries according to their development in Solidarity and Agency

Note: The categorization of countries follows their development in Solidarity and Agency from 2019 to 2020.

The response of solidarity to the pandemic

The Solidarity Indexes, comprising Inward and Outward Solidarity, are based on data from the Gallup World Poll.[12] Inward Solidarity reflects social support received by friends and family. Outward Solidarity is composed of *giving behavior, satisfaction with efforts to deal with the poor,* and *minority rights*.[13] Figure shows the time series for Inward (left panel) and Outward Solidarity (right panel) in the G7 countries from 2006 to 2020. Their responses to the pandemic are given by the change in Inward and Outward Solidarity from 2019 to 2020.

Figure 1: Inward and Outward Solidarity Index over the past 15 years in the G7 countries



Note: The Solidarity Index is composed of Inward Solidarity and Outward Solidarity and is calculated using data from the Gallup World Poll. Inward Solidarity reflects social support received by friends and family. Outward Solidarity is composed of 1) a Giving behavior Index, 2) satisfaction with efforts to deal with the poor, and 3) a Minority rights index.

Inward Solidarity, important for social cohesion in close social networks, has increased in most G7 countries.

In most G7 countries, civil societies were perceived as rising to the challenge, cushioning citizens from the severe consequences of the coronavirus outbreak and restrictive measures that were imposed to keep the pandemic under control. Crisis events are often perceived as socially integrative in retrospect, because these events can be a catalyst for strengthening social ties. We observe that indeed Inward Solidarity, the feeling that one is embedded in a social group and can count on help

[12] The Solidarity Index was updated from the 2020 version.
[13] Further details on the definition and data sources can be found in Appendix 2.

by friends and family, has increased (or at least remained unchanged) in most G7 countries signaling the resilience of civil societies in providing social support networks where the economic ones had crumbled.

Despite this broadly positive social response to the pandemic, we observe a decrease in Inward Solidarity over the past ten years in four out of the seven countries (Canada, Germany, Japan, and U.K.).

Outward Solidarity—important for the will to cooperate with other nations and cultures—has decreased in most G7 countries.

Despite the self-evident need for global cooperation to overcome the pandemic, most governments (or, in the case of the EU, groups of member states) have sought to supply their own citizens with vaccines first, even at considerable cost to global pandemic response effectiveness. Those governments that favored equal vaccine rights for all nations were sometimes harshly criticized in public.

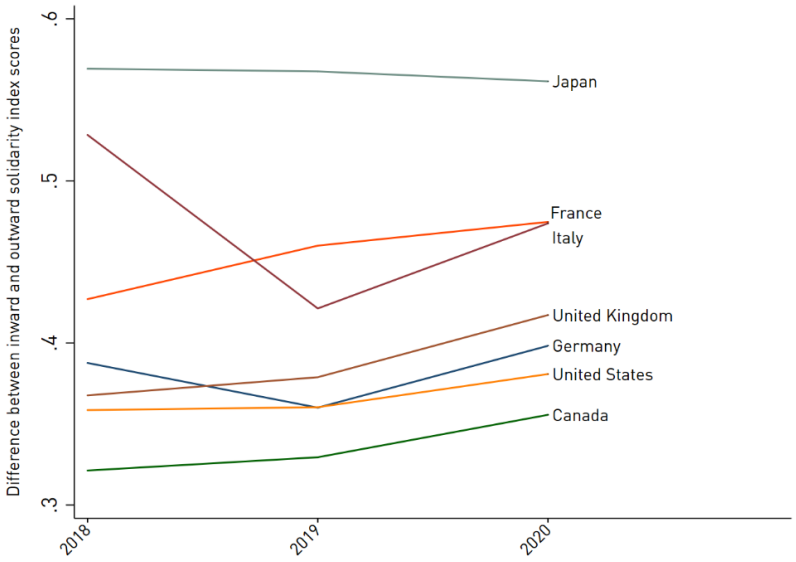
The "My Country First" approach of many governments appears to reflect the sentiment of their citizens. We observe that, in contrast to Inward Solidarity, Outward Solidarity has declined or stagnated in five countries (Canada, France, Germany, U.K. and US). In particular, the giving index—a component of outward solidarity comprised of helping a stranger, donating money, and volunteering time—declined sharply in all G7 countries.

Tribalism is on the rise in most G7 countries.

A rise of tribalism—measured in terms of the difference between Inward and Outward Solidarity—is a cause for concern. Figure 2 shows that this difference has grown over the past three years in all G7 countries except Japan.[14] This suggests that popular support for multilateral efforts to address global problems—not just pandemics, but also financial crises, cybersecurity, climate change, ocean acidification, biodiversity loss, forced immigration, and much more—is waning. This is particularly unfortunate since these problems are proliferating and multilateralism is the only way to address them.

[14] The rise of tribalism does not necessarily imply a rise in social cohesion within a country. The reason is that social and political boundaries often do not overlap well. When Inward Solidarity rises on average in a country, there may nevertheless be sharper divisions among different social groups in that country, provided that the country is socially diverse and Outward Solidarity has fallen. This consideration is relevant to a recent study of the PeW Research Center (2021), in which most respondents in the United States, Germany, France, Italy and the United Kingdom reported that they believed their country was more divided now than before the coronavirus outbreak.

Figure 2: The Rise of Tribalism



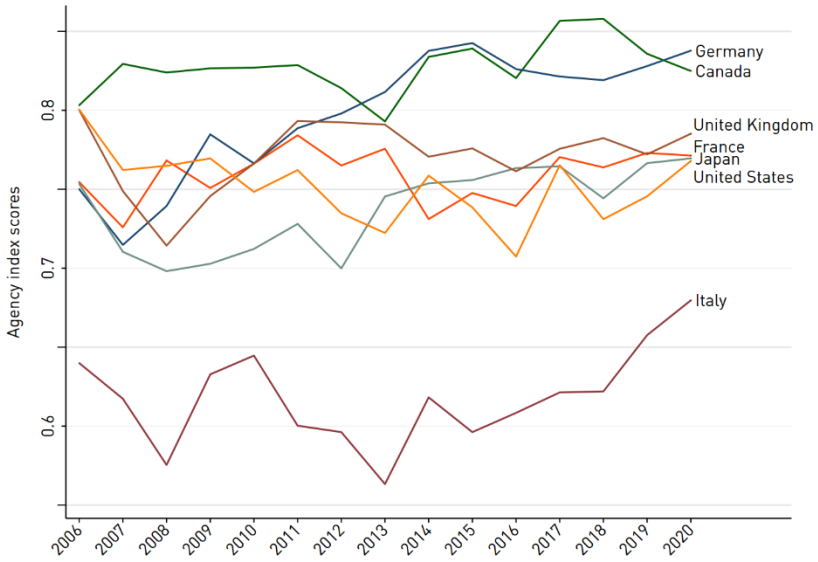
Note: Difference between Inward and Outward Solidarity over the past 3 years.

The response of agency to the pandemic

The Agency Index[15] has four components *confidence in empowering institutions, freedom of life choice, vulnerable employment* and *life expectancy* and is calculated using data from the Gallup World Poll and the World Bank.[16]

Figure 3 shows the time series for Agency in the G7 countries from 2006 to 2020. Their responses to the pandemic are given by the change in Agency from 2019 to 2020.

Figure 3: The Agency Index over the past 15 years in the G7 countries



Note: The Agency Index has four components: 1) Confidence in empowering institutions Index, 2) Freedom of life choice, 3) Vulnerable employment and 4) Life expectancy and is calculated using data from the Gallup World Poll and the World Bank.

[15] The Agency Index was updated from the 2020 version.
[16] Further details on the definition and data sources can be found in Appendix 2.

The diverse responses of Agency to the pandemic in the G7 countries are striking in the following respects. The changes in Agency across countries are not noticeably correlated with the changes in Solidarity. Only in Italy was a rise in Agency accompanied by a rise in Inward and Outward Solidarity, signaling a rise in the ability and willingness of civil society to take a proactive role in the face of economic breakdown. In Canada, by contrast, all three indexes fell, signaling the opposite.

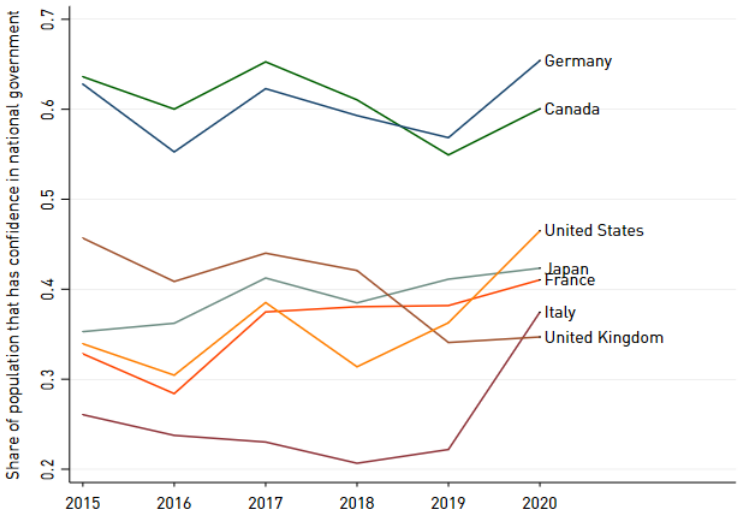
In the U.K., the fall in Outward Solidarity, stagnant Inward Solidarity, and rising Agency, suggests increased sense of empowerment despite weakening social ties. In the U.S. and Germany, the rise in Inward Solidarity, stagnant or falling Outward Solidarity, and rise in Agency indicates a sense of tribalizing empowerment.

In Japan, the rise in Inward and Outward Solidarity accompanied by stagnant Agency portrays greater willingness of civil society to cooperate within and across social groups, but no greater civil ability to fight the pandemic. By contrast, France—experiencing falling Outward Solidarity, stagnant Inward Solidarity and stagnant Agency—suggests less cooperativeness and no new willingness for civil society to compensate for the failure of the economy.

Changed attitudes toward government

Despite the proliferation of conspiracy theories among some social groups, trust in state institutions rose in response to the pandemic. This development reflects the recognition that state institutions have often been the ones that (a) regularly provide information about the current situation, (b) decide on measures to combat the COVID-19 pandemic and (c) can provide support for those affected by the measures.

Figure 4: Confidence in national government over the past 5 years



Note: Confidence in national government reflects the share of the people who reported to have confidence in the national government of their country. (Source: Gallup World Poll)

We see an increase in confidence in the national government from 2019 to 2020 for all G7 countries ranging from small increases (2 percent) in the U.K. to substantial increases (almost 70 percent) in

Italy (Figure 4). There are, however, large level differences. While in Germany 65 percent of the population have confidence in their national government, this is only true for 35 percent of the citizens in the U.K. and 37 percent in Italy. Regarding COVID-19, in particular, Germans seem to be satisfied with how the country is dealing with the outbreak. In Fall 2020, 77 percent of the interviewed Germans reported in a Pew survey[17] that Germany is doing a good job in dealing with the coronavirus outbreak, while only about half of the population said this about their respective country in France (54 percent), the U.K. (48 percent) and the U.S. (41 percent). (However, this perception appears to have reversed course in 2021.)

A more mixed picture arises when we look at a more complex index of empowering institutions taking also confidence in the judicial system as well as perceived corruption in the government into account. The Empowering Institutions Index, which is one of four components of the Agency Index, saw a substantial increase in Germany, Italy, and the U.S., while it stagnated or even decreased in Canada, France, Japan and the U.K. (detailed data of the sub-indexes can be found in Appendix 3).

Conclusion: Putting fundamental human needs and purposes at the heart of policymaking

The success of public health measures to control the spread of the pandemic—particularly the success of social distancing measures—depends heavily on public compliance. Perceived compliance with social distancing is empirically correlated with lower stress and anxiety levels and fewer depressive symptoms.[18] Such public compliance relies heavily on social solidarity.[19] Inward Solidarity is the binding force that induces members of a society to pursue a common purpose. If confidence in the existing political and judicial institutions is high, then this common purpose can be mobilized by the government in the public interest. Outward Solidarity is essential to deliver public support for multilateral efforts to contain the pandemic.

Pandemics cannot be effectively controlled through individualistic behavior patterns. Though governments can—and often do—impose financial and other punishments for breaking social distancing rules, these tend to be weak incentives since the infractions are inherently difficult to police. At best, the punishments serve as a symbol of moral values that citizens are intrinsically motivated to follow. These moral values highlight the importance of serving collective purposes. When individuals are driven by common values defining common purpose, they can cooperate effectively without contractual obligations. Inward Solidarity is meant to capture this proclivity to pursue common purpose.[20]

Needless to say, societies are not homogeneous. Some individuals have a strong sense of common purpose, while others free ride. In order to keep the free riders from undermining social cohesion during a pandemic, it is important for the state to set unambiguous rules of behavior where social coordination is vital for public health. These rules should ensure an equitable distribution of contributions to public health and welfare and a correspondingly equitable distribution of benefits. All members of society should perceive that the state is seeking to ensure that the current sacrifices and future rewards are fairly shared.

[17] Pew Research Center (2021).
[18] Zhao et al. (2020)
[19] See Mishra and Rath (2020).
[20] Gelfand et al. (2021) make this point with respect to tight versus loose cultures in the COVID-19 pandemic.

The principle of subsidiarity has an important role to play in this process, since it serves to promote a sense of agency. Members of society must feel that each of their contributions counts, that each is important for achieving the collective goal. For this purpose, collective action should be conducted at the most local level that is consistent with the resolution of the collective problem.[21] This means that the national government should intervene only when doing so is more effective than actions taken at regional or local levels. For national, regional, and local levels to act consistently with one another, it is important to ensure fair and inclusive decision making across these levels. Agreed behaviors must be monitored and there must be graduated rewards and punishments for helpful and unhelpful behaviors. Fast and fair conflict resolution mechanisms must be in place to deal with disagreements.

This is the context within which societies have been observed to address collective action problems effectively.[22] Around the world, there is much discussion among policymakers about "building back better" in order to achieve a durable and resilient recovery.[23] The pandemic has demonstrated vividly that a return to "business as usual" could have disastrous consequences for public health and the environment. The various plans for a "new normal," however, cannot be achieved without social cooperation and this will rest heavily on solidarity and agency.

From this enumeration of prerequisites, two things are clear. First, neither individuals on their own, nor civil societies on their own, nor the state on its own can overcome the health and economic crisis created by COVID-19. Rather, civil society and state institutions (at the supra-national, national, regional, and local levels) need to work harmoniously with one another. Within this social and political setting, individuals need to have a sense of empowerment and agency in contributing to the public interest, both socially and politically.

Second, most countries around the world still have a long way to go in dealing successfully with pandemics and global collective action problems. Some, such as New Zealand, South Korea, and Taiwan, have been relatively effective in responding to the COVID-19 challenge, but it is far from clear whether their effectiveness can be mobilized to address other global challenges. A global pandemic in an economically integrated and digitally connected world has never occurred before. Thus, it is not surprising that serious mistakes have been—and are still being—made in the economic, social, and political domains in achieving a sustainable, beneficial new normal. Policymakers and citizens around the world still have much to learn.

The conventional measures of a country's success—focused primarily on GDP and its distribution across the population—miss something important in this regard. The Recoupling Dashboard is meant as a contribution towards measuring success more broadly along the economic, social and environmental domains that are relevant for a new normal. The normative foundations of the SAGE indexes serve to tie these empirical measures closely to fundamental moral values that drive people around the world towards achieving common purposes. These values, along with their social underpinnings of solidarity and agency, are bound to have an important role to play in creating a prosperous, inclusive, sustainable, and resilient future in the aftermath of the current crisis.

[21] Grimalda et al. (2021) find that altruistic acts during the COVID-19 pandemic are mainly local, rather than national or global in the U.S. and Italy.
[22] See, for example, Ostrom (1990), Wilson, Ostrom and Cox (2013), and Atkins, Wilson and Hayes (2019).
[23] See, for example, OECD (2020).

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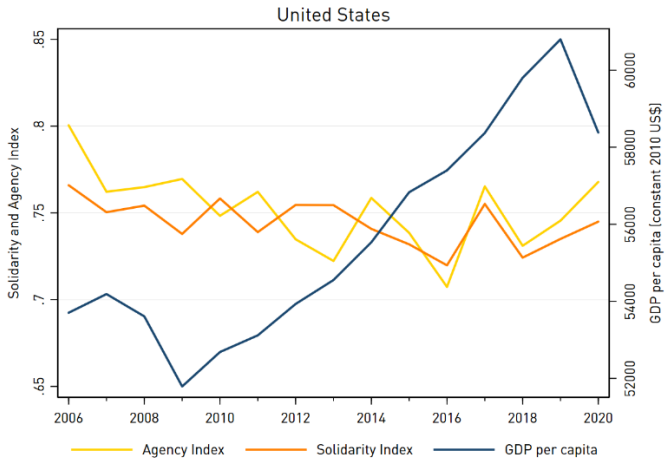
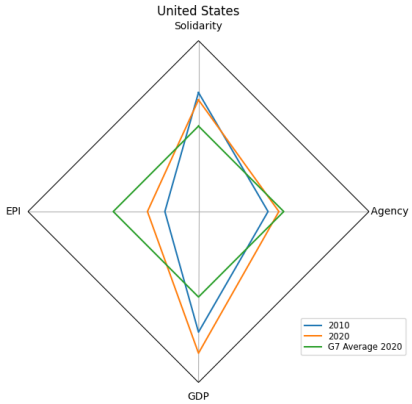
Appendix 1: Analysis of Individual Countries

United States





Breakdown of Performance	2020	1-year change	10-year change	Rank - G7 2020
Solidarity Index	0.74	1.4%	-1.8%	2
Inward Solidarity	0.94	2.2%	1.3%	2
Outward Solidarity	0.55	0.0%	-6.5%	2
Agency Index	0.77	3.0%	2.6%	6
GDP per capita	$58,382	-4.0%	10.8%	1
CO2 Emissions (Mt CO2)	4,582	-9.4%		7
Environmental Performance Index	71.00		4.4%	7

Agency

In the U.S.,[24] the Agency Index increased by 3 percent from 2019 to 2020. The increase in Agency is mainly driven by rebounding confidence in empowering institutions. Life expectancy continues to stagnate on a remarkably low level for an advanced economy while survey results on the perceived freedom to make life choices are high. Trust in institutions remains at a rather low level with approximately 45 percent of survey participants reporting to have confidence in the national government and less than 30 percent reporting no concern with regard to corruption in government. We observe an increase in the share of people satisfied with their freedom to make life choices.

Environment

The CO2 emission decreased by 9.4 percent from 2019 to 2020.

Solidarity

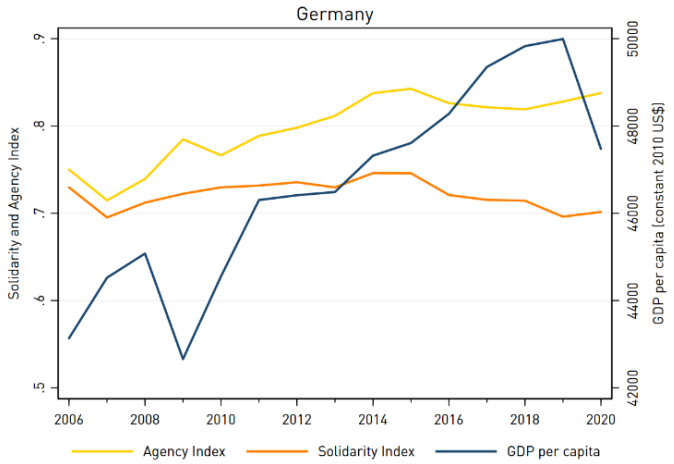
We see that the Solidarity Index has slightly increased by 1.4 percent from 2019 to 2020. The increase is mainly driven by an improvement in Inward Solidarity defined as perceived social support through family and friends. This is mostly offset by a decrease in Outward Solidarity along most dimensions with an improving treatment of minorities being a notable exception. The opposing trends in inward and Outward Solidarity described above materialize in the U.S.

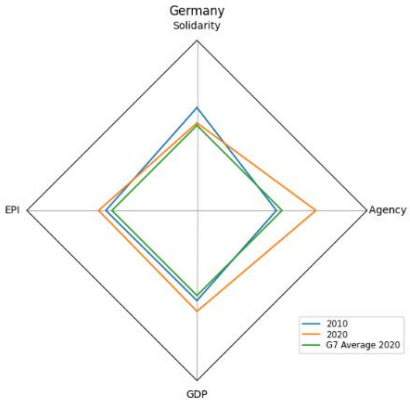
Material Wealth

GDP per capita has decreased by 4 percent from 2019 to 2020 (a direct cause of the pandemic, since the financial crises/over the past ten years GDP per capita increased steadily).

[24] Gallup survey period: Mar 16 – May 8, 2020

Germany





Breakdown of Performance	2020	1-year change	10-year change	Rank - G7 2020
Solidarity Index	0.70	0.8%	-3.9%	5
Inward Solidarity	0.90	2.8%	-3.7%	5
Outward Solidarity	0.50	-2.6%	-4.1%	4
Agency Index	0.84	1.2%	9.3%	1
GDP per capita	$47,464	-5.1%	6.5%	2
CO2 Emissions (Mt CO2)	606	-7.9%		4
Environmental Performance Index	71.00		1.6%	3

Agency

In Germany,[25] the Agency Index increased by 1 percent from 2019 to 2020. The main driver behind this slight uptick in Agency for Germany is the increased confidence in empowering institutions as observed in the section on Agency above. While both the decrease in the fraction of the workforce in vulnerable employment as well as average life expectancy are stagnating, the main counteracting force is a decrease in the reported freedom to make life choices.

Material Wealth

GDP per capita has decreased by 5.1 percent from 2019 to 2020 (a direct cause of the pandemic since the financial crises/over the past 10 years GDP per capita increased steadily).

Solidarity

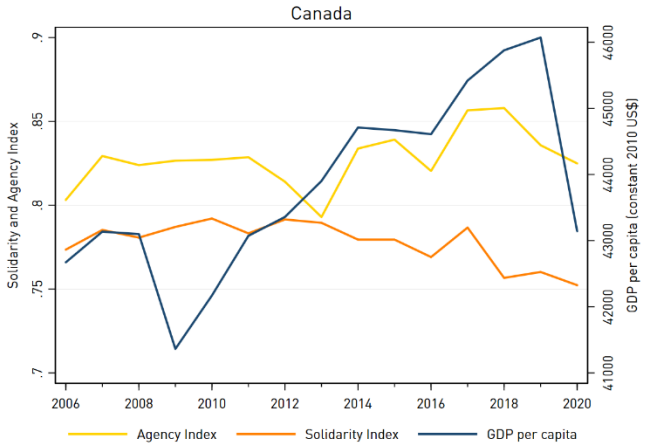
We observe that the Solidarity index stagnates with perceived levels of Inward Solidarity increasing while Outward Solidarity decreases along most dimensions. Again, the opposing trend occurs while an improvement in the perceived treatment of minority groups is a notable exception for Outward Solidarity in Germany. Looking more closely we see that perceived social support has increased by 3 percent from 2019 to 2020, while dimensions of Outward Solidarity, which account for Giving behavior as well as perceived treatment of minority groups and the poor, has decreased by 2.5 percent. This is particular the case because giving behavior decreased sharply.

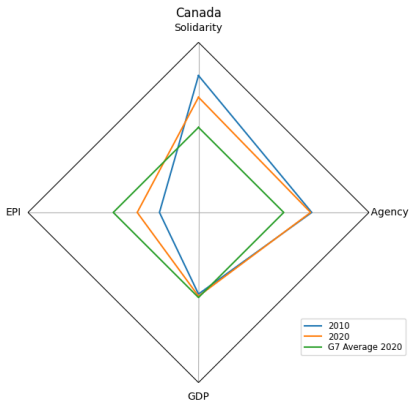
Environment

CO2 emission decreased by 7.9 percent from 2019 to 2020.

[25] Gallup survey period: Aug 24 – Sep 19, 2020

Canada





Breakdown of Performance	2020	1-year change	10-year change	Rank - G7 2020
Solidarity Index	0.75	-1.0%	-5.0%	1
Inward Solidarity	0.93	0.6%	-2.4%	3
Outward Solidarity	0.57	-3.5%	-9.0%	1
Agency Index	0.82	-1.3%	-0.3%	2
GDP per capita	$43,142	-6.4%	2.3%	3
GHG Emissions (Mt CO2)	644	-11.3%		5
Environmental Performance Index	71.00		5.5%	5

Agency

In Canada,[26] the Agency Index decreased by 1.3 percent from 2019 to 2020. This coincides with reduced levels of trust in empowering institutions where trust in the judicial system decreasing and fear of corruption increasing, while the share of people having confidence in the national government increased to a level of 60 percent, the second highest level among the G7 countries. We also observe a marked decrease in the perceived levels of freedom to make life choices from over 94 percent in 2018 to a 2020 level of approximately 88 percent. The fraction of the workforce in vulnerable employment and average life expectancy both stagnate.

Environment

The Greenhouse Gas emission decreased by 11.3 percent from 2019 to 2020.

Solidarity

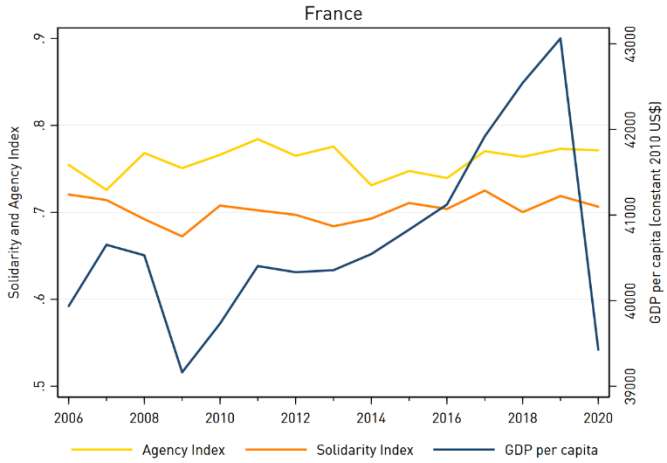
The Solidarity Index decreased by 1 percent from 2019 to 2020. An uptick in perceived levels of Inward Solidarity measured by social support through family and friends is counteracted by a decreasing level of Outward Solidarity. This confirms our general observation with a drop in Outward Solidarity being driven by marked reductions in giving behavior that dominate an improvement regarding the perceived treatment of the poor and stagnating developments regarding minority rights.

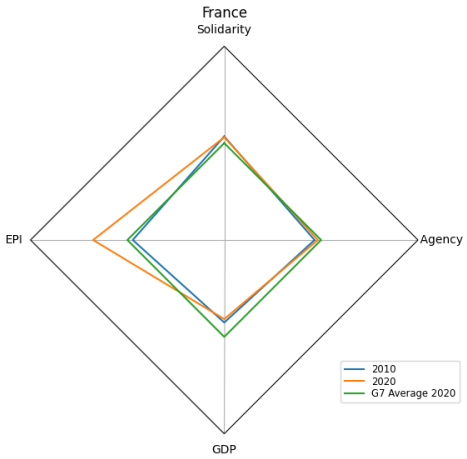
Material Wealth

GDP per capita has decreased substantially by 6.4 percent from 2019 to 2020.

[26] Gallup survey period: Aug 03 – Sep 21, 2020

France





Breakdown of Performance	2020	1-year change	10-year change	Rank - G7 2020
Solidarity Index	0.71	-1.7%	-0.2%	4
Inward Solidarity	0.94	-0.5%	0.6%	1
Outward Solidarity	0.47	-4.0%	-1.6%	5
Agency Index	0.77	-0.2%	0.7%	4
GDP per capita	$39,427	-8.4%	-0.8%	6
CO2 Emissions (Mt CO2)	264	-9.0%		1
Environmental Performance Index	71.00		7.8%	2

Agency

After a marked increase in previous years, the Agency Index for France[27] stagnates in 2020 along all measured dimensions. Noteworthy is that slightly increasing levels of trust in the national government as well as reduced fear of corruption in government are both offset by a marked decrease for trust in the judicial system.

Environment

The CO2 emission decreased by 9 percent from 2019 to 2020.

Solidarity

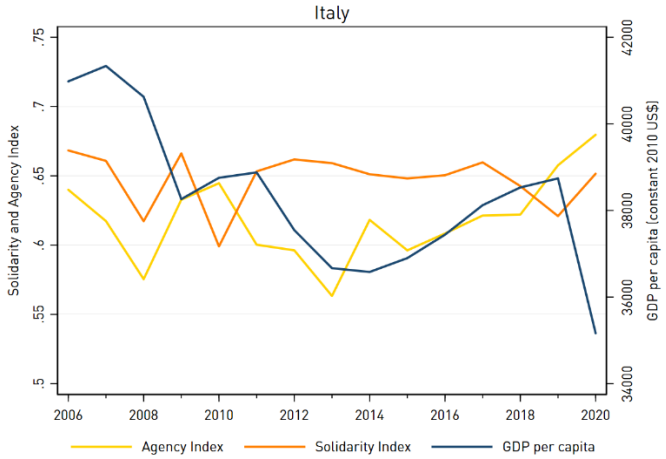
The Solidarity Index decreased by approximately 1.7 percent from 2019 to 2020. This reflects that both, Inward Solidarity measured as social support through family and friends, as well as Outward Solidarity decreased. Beyond a significant reduction for Giving behavior being a driving force, the latter decrease also coincides with the perceived treatment of minorities and the poor decreasing by -0.5 percent and -4 percent respectively.

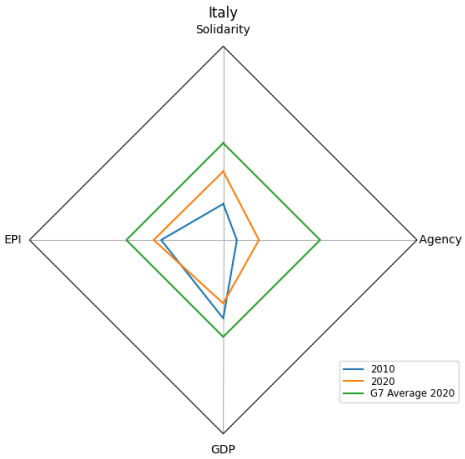
Material Wealth

GDP per capita has decreased substantially by 8.4 percent from 2019 to 2020.

[27] Gallup survey period: Sep 7 – Oct 2, 2020

Italy





Breakdown of Performance	2020	1-year change	10-year change	Rank - G7 2020
Solidarity Index	0.65	4.9%	8.8%	6
Inward Solidarity	0.89	6.8%	3.3%	6
Outward Solidarity	0.41	1.1%	22.6%	6
Agency Index	0.68	3.4%	5.4%	7
GDP per capita	$35,424	-8.6%	-8.6%	7
CO2 Emissions (Mt CO2)	293	-7.4%		2
Environmental Performance Index	71.00		1.6%	5

Agency

In Italy,[28] the Agency Index increased by 3.4 percent from 2019 to 2020. This was driven by a marked increase of confidence in empowering institutions, where we observe that confidence in the national government almost doubled from roughly 20 percent to 40 percent. The fear of corruption in government diminished to a historical minimum of 20 percent. Noteworthy, is that the share of people satisfied with their freedom to make life choices increased to over 70 percent. Vulnerable employment continues to stagnate at its minimum of 17 percent, which still reflects a relatively high share as percentage of total employment compared to other G7 countries.

Environment

The CO2 emission decreased by 7.4 percent from 2019 to 2020.

Solidarity

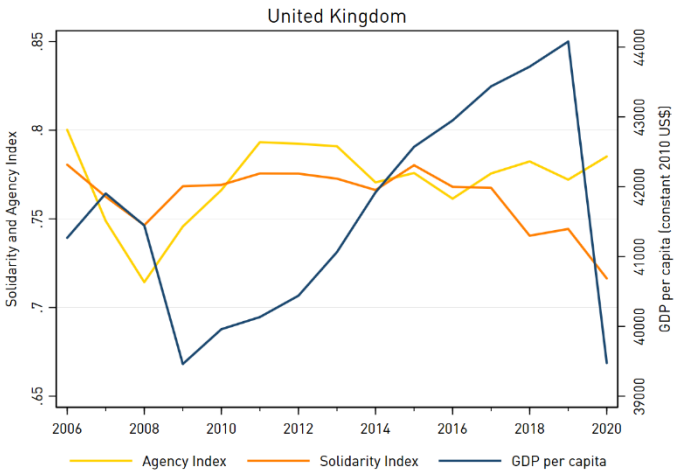
The Solidarity Index increased by 4.9 percent with a major previous decline in Inward Solidarity being mostly offset during the last year. Outward Solidarity also increased slightly with improvements regarding the perceived treatment of minorities and the poor being a driving force that offset declining levels of trust in empowering institutions.

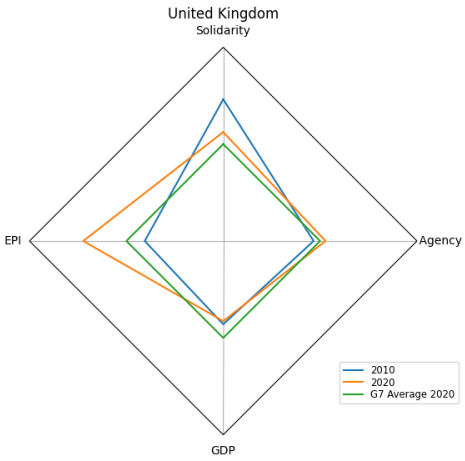
Material Wealth

GDP per capita has decreased by 8.6 percent from 2019 to 2020.

[28] Gallup survey period: Aug 24 – Sep 16, 2020

United Kingdom





Breakdown of Performance	2020	1-year change	10-year change	Rank - G7 2020
Solidarity Index	0.72	-3.7%	-6.9%	3
Inward Solidarity	0.93	-0.9%	-2.6%	4
Outward Solidarity	0.51	-8.5%	-13.8%	3
Agency Index	0.79	1.7%	2.5%	3
GDP per capita	$39,474	-10.4%	-1.2%	5
CO2 Emissions (Mt CO2)	311	-9.5%		3
Environmental Performance Index	71.00		12.4%	1

Agency

In the United Kingdom,[29] the Agency Index increased by 1.7 percent. Digging deeper, this rise is mostly driven by a substantial increase in the share or people who are satisfied with their freedom to make life choices to a level of approximately 87 percent, a trend that can be observed since 2017. In contrast, confidence in the national government only slightly increased at a level of roughly 35 percent while the fear of corruption in government substantially decreased.

Environment

The CO2 emission decreased by 9.5 percent from 2019 to 2020

Solidarity

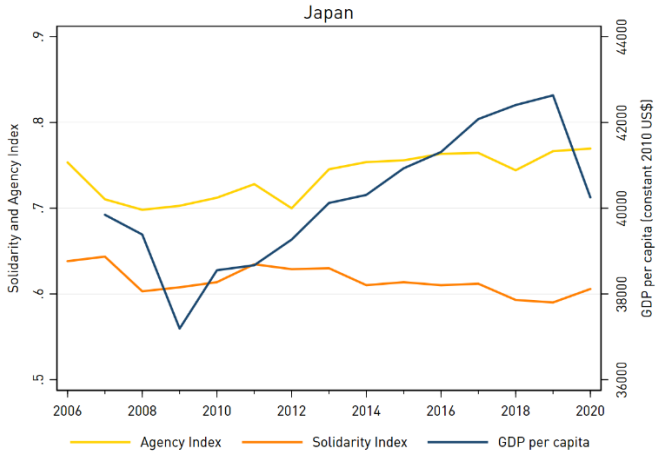
The Solidarity Index decreased by 3.7 percent in 2020 along both the Inward and Outward dimension. Notable is again the marked decrease in reported Giving behavior along worsening conditions for the poor that jointly offset slight improvements regarding the perceived treatment of minority groups.

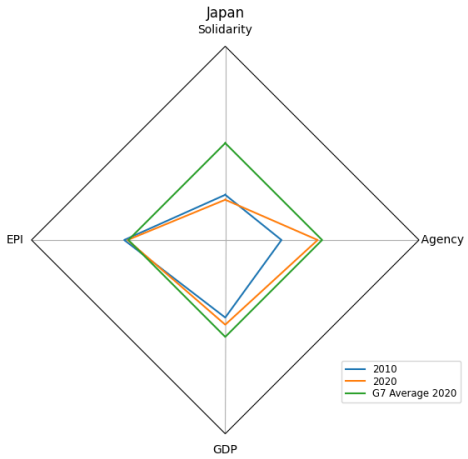
Material Wealth

GDP per capita has decreased substantially by 10.4 percent from 2019 to 2020.

[29] Gallup survey period: Aug 17 – Sep 12, 2020

Japan





Breakdown of Performance	2020	1-year change	10-year change	Rank - G7 2020
Solidarity Index	0.61	2.7%	-1.3%	7
Inward Solidarity	0.89	1.4%	-1.1%	7
Outward Solidarity	0.33	6.1%	-1.7%	7
Agency Index	0.77	0.4%	8.0%	5
GDP per capita	$40,626	-3.8%	6.4%	4
CO2 Emissions (Mt CO2)	1,034	-5.0%		6
Environmental Performance Index	71.00		-0.7%	4

Agency

After a dip in 2018, the Agency Index in Japan[30] returned to its' prior level in 2019 and now slightly increased by 0.4 percent from 2019 to 2020. This development follows an increase in reported levels of Confidence in Empowering institutions, along with an uptick in the share of people satisfied with making life choices. The latter share almost reaches its 2015-2017 level with approximately 77 percent after a decline in 2018.

Environment

The CO2 emission decreased by 5 percent from 2019 to 2020.

Solidarity

The Solidarity Index increased by 2.7 percent from 2019 to 2020 with levels of Inward Solidarity growing again after a decline in previous years. A slight growth in the level of Outward Solidarity is driven by improvements in the reported treatment of minorities and the poor that both counteract the continuing decline of Giving behavior.

Material Wealth

GDP per capita has decreased substantially by 3.8 percent from 2019 to 2020.

[30] Gallup survey period: Aug 7 – Oct 8, 2020

Appendix 2: Data Sources

Data provided were used to take up the already established indexes of Material Gain and Environmental Sustainability on the one hand, and to determine the indexes first presented with the Recoupling Dashboard on the other hand. The indexes of Solidarity and Agency are based on data exclusively provided.

Material Gain

- GDP per capita (constant 2015 US$, constant PPPs)
  GDP per capita is gross domestic product divided by mid-year population. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated without making deductions for depreciation of fabricated assets or for depletion and degradation of natural resources. Data are in constant 2015 U.S. dollars and constant PPPs. More information on GDP data is available through the OECD's National Accounts at a Glance.[31]

Data Sources included in the Agency Index

- Confidence in empowering institutions (Gallup World Poll)
  Confidence in empowering institutions is an indicator for showing empowerment and sourced from the Gallup World Poll. Each country is ranked for the following three measures of confidence in institutions: Confidence in judicial systems, confidence in national government, spread of corruption. In order to establish a rounded measure of confidence in empowering institutions across the world, the Index relies on a simple averaging of the responses from the three key questions asked in each country. Each country is given a percentage score (calculated as a combined average of the proportion of people who reported one or more of the three aspects in the month prior to interview).

- Freedom of life choice (Gallup World Poll)
  Satisfaction regarding the freedom to choose one's lifepath is an indicator of empowerment and sourced from the Gallup World Poll. This indicator refers to the share of people reporting that they are satisfied with the freedom to choose what they do with their life. It is based on the survey question: "In this country, are you satisfied or dissatisfied with your freedom to choose what you do with your life?" and presents the percentage of the sample responding "yes".

- Vulnerable employment (World Bank)
  Vulnerable employment is contributing family workers and own-account workers as a percentage of total employment.[32]

[31] OECD, 2021
[32] World Bank, 2021

- Life expectancy (World Bank)
  Life expectancy measures how long on average people could expect to live based on the age-specific death rates currently prevailing. This measure refers to people born today and is computed as a weighted average of life expectancy for men and women. [33]

Data Sources included in the Solidarity Index

The Solidarity Index is composed of Inward Solidarity and Outward Solidarity.

Outward Solidarity

- Giving index (Gallup World Poll)
  Giving behavior is an indicator originally developed by the Charities Aid Foundation. This index relies on a simple averaging of three giving behaviors: Helping a stranger, Donating money, Volunteering time.

- Satisfaction with efforts to deal with the poor (Gallup World Poll)
  This indicator refers to the share of people reporting that measures that deal with poverty in this country are satisfactory.

- Minority rights index (Gallup World Poll)
  Each country is ranked for three statements regarding the rights of minority groups: racial minorities, gay or lesbian people, and immigrants. To establish a rounded measure of minority rights across the world, the index relies on a simple averaging of the responses from the three key questions asked in each country. For our analysis, we focus on the percentage of people who believe that the city or area where they live is a good place for the minority groups.

Inward Solidarity

- Social support (Gallup World Poll)
  This indicator refers to the share of people reporting that they have friends or relatives whom they can count on to help in case of need. It is based on the survey question: “If you were in trouble, do you have relatives or friends you can count on to help you whenever you need them, or not?” and presents the percentage of the sample responding “yes”.

Data Sources included for measuring Environmental Sustainability

- Environmental Performance Index
  The Environmental Performance Index (EPI) ranks countries on 32 performance indicators across 11 issue categories covering environmental health and ecosystem vitality. Source: Wendling et al. (2020).

- Co^2 Emissions (Carbon Monitor)
  Carbon dioxide (CO2) emissions from the use of fossil fuels and the production of cement are the main driving force of climate change. The Carbon Monitor is an international initiative providing for the first time regularly updated, science-based estimates of daily CO2 emissions. Estimates of fossil CO2 emissions rely on activity data (e.g., the amount of fuel burnt or energy produced) and emission factors. The data

[33] World Bank, 2021

reveal the drop and re-growth of emissions during the COVID-19 pandemics for all G7 countries (no data available for Canada). The data is available on https://carbonmonitor.org/ [34]

- Greenhouse Gas Emissions (Climate Action Tracker)
  No data from the Carbon Monitor is available for Canada. In order to still have an idea about Canadas performance in terms of emissions we use Greenhouse Gas Emission data from the Climate Action Tracker. This is not directly comparable to CO2 Emission from the other source, but gives an indication of Canada's reduction in GHG emissions in 2020. Source: Climate Action Tracker

General Notes on the Collection and Variables Selection

As is frequent with data projects, some of the variables included in the Recoupling Dashboard have a degree of missing data. To ensure continuity and comparability between composite scores over time, it is necessary to estimate values for these years. Missing data can be located in the interior of the available time series or at the exterior. For the former, the linear interpolation method is used—values are replaced with numbers incrementally higher or lower than the neighboring data points. For the latter, the missing values are replaced using the closest data point from source (last value carried forward—LVCF—or first value carried backward—FVCB).

Data collected to compute the indexes are diverse. At source, the variables collected are produced on different scales, and can also have different polarities—higher is better or higher is worse. In order for them to be meaningfully combined and compared, raw data are standardized before being included in the indexes. We employ a min-max normalization whereby all raw data are transformed to a scale of 0.0-1.0 (where a score of 1.0 is the best score a country can achieve). While this constitutes an order-preserving linear transformation of the data, a score of 1.0 after normalization does not imply that a country's score in raw data terms is perfect, but rather is the best score in the set of countries.
We use linear, additive aggregation and weigh each sub-component equally within its dimension.

[34] Liu et al. (2020b)

Appendix 3: Tables of the SAGE indexes and their sub-indexes in the G7 countries in 2020, 2019 and 2010

Country	Year	Solidarity Index	Agency Index	GDP per capita	CO2 Emissions (MtCO2)	EPI	Solidarity Sub-indexes					Agency Sub-Indexes						
							Inward Solidarity Index	Outward Solidarity Index	Outward Solidarity Index components			Empow. institutions index	Empow. Institutions Index Components			Freedom of life choices	Vuln. Employ-ment	Life expec-tancy
									Giving Index	Minority Rights Index	Efforts to deal with the poor		Confi. in jud. system	Confi. in nat. govnmt	Govern-ment not corrupt			
Canada	2020	0.75	0.82	43,142	644	71	0.93	0.57	0.38	0.90	0.44	0.60	0.66	0.60	0.52	0.89	10.68	81.95
France	2020	0.71	0.77	39,427	264	80	0.94	0.47	0.25	0.74	0.42	0.44	0.53	0.41	0.37	0.82	7.41	82.72
Germany	2020	0.70	0.84	47,464	606	77	0.90	0.50	0.30	0.76	0.45	0.65	0.70	0.65	0.60	0.86	5.58	80.89
Italy	2020	0.65	0.68	35,424	293	71	0.89	0.41	0.22	0.77	0.26	0.31	0.35	0.37	0.21	0.72	16.87	83.35
Japan	2020	0.61	0.77	40,626	1034	75	0.89	0.33	0.12	0.54	0.32	0.46	0.65	0.42	0.31	0.78	8.25	84.21
United Kingdom	2020	0.72	0.79	39,474	311	81	0.93	0.51	0.41	0.79	0.32	0.50	0.67	0.35	0.47	0.88	12.94	81.26
United States	2020	0.74	0.77	58,382	4582	69	0.94	0.55	0.43	0.84	0.39	0.44	0.59	0.46	0.27	0.85	3.81	78.54

Country	Year	Solidarity Index	Agency Index	GDP per capita	CO2 Emissions (MtCO2)	EPI	Solidarity Sub-indexes					Agency Sub-Indexes						
							Inward Solidarity Index	Outward Solidarity Index	Outward Solidarity Index components			Empow. institutions index	Empow. Institutions Index Components			Freedom of life choices	Vuln. Employ-ment	Life expec-tancy
									Giving Index	Minority Rights Index	Efforts to deal with the poor		Confi. in jud. system	Confi. in nat. govnmt	Govern-ment not corrupt			
Canada	2019	0.76	0.84	46,071	726		0.92	0.60	0.48	0.89	0.41	0.60	0.72	0.55	0.54	0.91	10.69	81.95
France	2019	0.72	0.77	43,062	290		0.95	0.49	0.30	0.74	0.43	0.45	0.59	0.38	0.37	0.82	7.43	82.72
Germany	2019	0.70	0.83	49,991	658		0.88	0.52	0.37	0.74	0.44	0.59	0.72	0.57	0.49	0.88	5.62	80.89
Italy	2019	0.62	0.66	38,740	316		0.83	0.41	0.27	0.72	0.23	0.25	0.38	0.22	0.14	0.70	16.87	83.35
Japan	2019	0.59	0.77	42,226	1089		0.87	0.31	0.13	0.49	0.29	0.47	0.64	0.41	0.35	0.76	8.31	84.21
United Kingdom	2019	0.74	0.77	44,080	344		0.93	0.55	0.53	0.76	0.37	0.49	0.63	0.34	0.51	0.84	13.00	81.26
United States	2019	0.73	0.75	60,800	5059		0.92	0.55	0.52	0.82	0.33	0.38	0.55	0.36	0.22	0.84	3.84	78.54

Country	**Year**	**Solidarity Index**	**Agency Index**	**GDP per capita**	**CO2 Emissions** (MtCO2)	**EPI**	**Solidarity Sub-indexes**					**Agency Sub-Indexes**						
							Inward Solidarity Index	Outward Solidarity Index	Outward Solidarity Index components			Empow. institutions index	Empow. Institutions Index Components			Freedom of life choices	Vuln. Employ-ment	Life expec-tancy
									Giving Index	Minority Rights Index	Efforts to deal with the poor		Confi. in jud. system	Confi. in nat. govnmt	Govern-ment not corrupt			
Canada	2010	0.79	0.83	42,170		67	0.95	0.63	0.54	0.84	0.51	0.56	0.61	0.55	0.52	0.93	10.79	81.25
France	2010	0.71	0.77	39,731		74	0.94	0.48	0.31	0.73	0.39	0.41	0.54	0.40	0.28	0.84	7.04	81.66
Germany	2010	0.73	0.77	44,552		76	0.94	0.52	0.43	0.70	0.44	0.45	0.59	0.40	0.35	0.84	6.71	79.99
Italy	2010	0.60	0.64	38,754		70	0.86	0.34	0.26	0.51	0.24	0.25	0.37	0.33	0.05	0.70	18.58	82.04
Japan	2010	0.61	0.71	38,172		76	0.90	0.33	0.26	0.42	0.31	0.37	0.63	0.27	0.20	0.73	10.23	82.84
United Kingdom	2010	0.77	0.77	39,959		72	0.95	0.59	0.57	0.71	0.49	0.49	0.61	0.50	0.36	0.83	11.34	80.40
United States	2010	0.76	0.75	52,684		66	0.92	0.59	0.60	0.76	0.41	0.41	0.57	0.42	0.23	0.83	4.20	78.54