



The Paradox of Progress with Polarization

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ABSTRACT

This paper discusses possible reasons for the global deterioration in social attitudes despite greater economic prosperity, wider dissemination of technology and reductions in poverty. This deterioration manifests in the form of deeper political polarization, less trust in institutions and lower tolerance for dissenting views and opinions. Results suggest that this deterioration, as recorded by the attitudes domain of the Positive Peace Index and other indicators, could be linked to perceived increases in corruption and administrative inefficiency. In addition, while the diffusion of information technology has produced enormous economic and social benefits, there is some evidence that the spread of disinformation may have contributed to a decline in social attitudes and deeper polarization of society. Economic inequality and gender disparities also foment worsening social attitudes; however, their influence appears to be of a lesser quantum than that of maladministration and disinformation.

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Key findings

Recent decades have seen a global deterioration in social attitudes despite economic, social and technological progress. This deterioration often takes the form of greater polarization of sociopolitical views, less faith in democratic institutions, radicalization of nationalism and less tolerance of alternative opinions. This has occurred even as traditional indicators of development, health, wealth, gender equality and education have largely improved at an aggregate level. This paper assesses this paradox of progress with polarization through multiple angles.

Results suggest that at a global level, the deterioration in social attitudes is more closely aligned with perceived increases in corruption and administrative ineffectiveness. Whether there have been actual increases in corruption and maladministration or people have simply grown more aware and intolerant of these issues is unclear and warrants further research.

There have also been increases in the perception of some governments disseminating false information domestically and abroad. Similarly, there has been increased awareness of groups using the Internet to organize radical activism and violence. Evidence suggests that this rise in disinformation has occurred as social attitudes have worsened. The concept of disinformation is difficult to pin down. In some cases, the term is loosely applied to data and views that refute the opinions and objectives of specific individuals, organizations or governments. Additionally, there has been a spread of reliable information, the extent of which has not been adequately researched. Further conceptual and statistical research is needed to distinguish disinformation from constructive alternative interpretations of facts and events, and the impact of reliable information on perceptions.

The analysis finds evidence of intensifying political polarization. The statistics show evidence of increasing distrust in administrative institutions concomitant to greater support to governments by some social segments. If this is not due to statistical measurement or other error, it could be seen as an indication of polarization. This seeming contradiction may be interpreted as indicating dissatisfaction with public administration by some segments of society while other segments strongly support the government. Thus, in increasingly polarized societies, one segment of the population passionately supports the government while another fervently denounces it.

Poverty, economic inequality and gender disparities play roles in the deterioration of social attitudes. These factors appear to be less important, however, in determining global attitudes than maladministration and disinformation.

In specific regions such as Europe and North America, rising income inequality and poverty appear to have contributed to a deterioration in social attitudes and greater polarization of society. In fact, in contrast to all other regions of the world, income inequality and poverty were the principal drivers of attitudes in Europe and North America.

Introduction

Recent decades have seen a deterioration in social attitudes on a global scale. This has meant changes in social perceptions and patterns of interaction among individuals and groups leading to less social cohesion, greater radicalization of sociopolitical views, lower tolerance of alternative opinions, higher levels of violence or fear of violence and reduced cooperation in politics. These phenomena have led to a growing recognition of rising social polarization.

Importantly, this polarization has taken place despite growing economic prosperity, enhanced access to health care, greater dissemination of information and other technologies, and more widespread acceptance of human rights.

Polarization can take many forms across the ideological, social, political and economic realms. In 2012, Iyengar et al. suggested that a diagnostic indicator of mass polarization is the extent to which individuals view each other as a disliked out-group. This phenomenon, termed ‘affective polarization’, most closely aligns with the aims of this paper.

To the authors’ knowledge, no cross-country comparable data sets are available to measure affective polarization. Therefore, this paper analyses data on the global levels of deterioration in attitudes towards viewpoints and actions taken in interactions and exchanges among individuals, groups and the State. It compares these with other global trends in the past decade to identify potential relationships that could, in part, account for the growing sense of polarization.

The paper finds that at the global level, polarization does not correspond primarily to a generalizable trend in economic inequality, which is on the decline internationally. Nor is it due to gender disparities, which have in fact been declining markedly in almost all regions of the world. Similarly, long-term poverty trends have continued to improve on a large scale globally, which is at odds with deteriorating social attitudes.¹

¹ Despite a long-term improvement in many poverty indicators in recent decades, the past five years or so have seen exacerbated food insecurity in certain regions (Institute for Economics and Peace 2021a). While this phenomenon by itself has increased distress in some communities and nations, it appears to be too localized and recent to be a material influence on the global-scale deterioration in social attitudes. Further research would be needed to assess to what extent this phenomenon is linked with other long-term social, economic and climatic trends affecting discontent globally.

One possible explanation is a shift away from ‘basic’ needs and towards ‘enhanced’ needs on a global scale. The *2019 Human Development Report* (UNDP 2019) discusses the importance of these two categories of human requirements and their relationship to social well-being. In addition, the *2020 Human Development Report* (UNDP 2020) highlighted the rising importance and frequency of non-seasonal, unpredictable shocks. Resilience to this type of shock can only be developed with enhanced capabilities, making them more desirable across the planet.

If there had been a noticeable compositional shift away from basic needs, it could be possible for satisfaction with life to remain unmet even in the face of continuous economic progress. This hypothesis is consistent with the ‘Tocqueville effect’, whereby one’s needs and desires increase rapidly, outpacing the actual improvement in socioeconomic conditions. The more society and liberties progress, the more individuals become dissatisfied with the rate at which social problems and disparities are being addressed. Ferreira and Schoch (2020) use this hypothesis to explain qualitatively the widespread social unrest in Latin America in 2019.

Analysis of aggregate data, however, suggests that this effect may not be directly detectable or generalizable at the global level. Inspection of country level socioeconomic indicators did not find sufficient evidence that differences in levels of enhanced capabilities (e.g., tertiary education) had become significantly more related to attitudes than differences in levels of basic capabilities (e.g., basic education) over the past decade.

This paper’s finding that greater dissemination of information and means of communication may be linked to worsening social attitudes is consistent—without constituting proof—with the Tocqueville effect. The greater the access to information and communication, the higher the standards against which individuals measure their personal situations. This is because greater access to information and social connectivity gives people a broader choice of benchmarks against which they will assess their own personal situations.

Many decades ago, one could only realistically compare one’s living conditions with those of the local community. Now individuals have direct access to and communication with Internet influencers, media celebrities, sport stars and political activists from anywhere on the planet. This creates a distorted and unachievable view of benchmarks and references. One example is the negative impact that social media have on the mental health of young women who feel compelled to present a perfect social presence online in order to gain approval through ‘likes’ (Elsesser 2021). The Internet has painted the disparity between one’s own living conditions and those of one’s heroes in sharper colours.

This analysis uses multiple techniques to argue that while indicators of social attitudes have deteriorated, gauges of economic inequality, gender disparity and poverty have mostly improved at the same time. The

deterioration in social attitudes appears to be synchronized with worsening indicators of corruption and ineffective governance, and coincides with a rise in the use of the Internet as a major source of information.

This finding is consistent across most regions of the world, although each region has peculiarities that may impact social attitudes differently. In Europe and North America, for example, there is evidence of growing economic inequality; this may have had a localized negative impact on social cohesion. In the Russian Federation, Eurasia, and Asia and the Pacific, perceptions of corruption and governmental ineffectiveness have improved somewhat in recent decades, yet societies have also grown more polarized. The Middle East and North Africa saw plummeting confidence in local governments.

This paper is structured in the following way. It first introduces the concept of positive peace and how it is measured by the Positive Peace Index. It then illustrates relevant changes in the data for the past decade, specifically on declining attitudes globally. From this basis, it presents five hypotheses that are tested using regression analysis. The paper then provides deeper analysis of these results at the regional level.

The paper presents preliminary findings aimed at exploring dynamics that correlate with increasing polarization. It has taken a data-driven approach, which has both strengths and limitations. The authors intend to build on this work through a larger research agenda on polarization.

Positive peace and social attitudes

This paper uses, without exclusively relying upon, the concept of positive peace and some pertinent components of the Positive Peace Index. These are introduced below.

WHAT IS POSITIVE PEACE?

Positive peace is defined as the attitudes, institutions and structures that create and sustain peaceful societies. These same factors lead to many other positive outcomes that society feels are important. Higher levels of positive peace are statistically linked to higher gross domestic product (GDP) growth, better environmental outcomes, higher measures of well-being, better developmental outcomes and stronger resilience (Institute for Economics and Peace 2021b).

The concept was developed by Galtung (1969) and received empirical treatment by the Institute for Economics and Peace through the analysis of cross-country measures of economic and social progress to determine which have statistically significant relationships with actual peace, as measured by the Global Peace Index (GPI).

Positive peace can be used as the basis for empirically measuring a country's resilience—its ability to absorb, adapt and recover from shocks, such as climate change or economic transformation. It can also be used to measure fragility and help predict the likelihood of conflict, violence and instability.

The Institute for Economics and Peace has identified eight key factors, or pillars, that comprise positive peace, as discussed below and shown in Figure 1.

- **Well-functioning government:** It delivers high-quality public and civil services, engenders trust and participation, demonstrates political stability and upholds the rule of law.
- **Sound business environment:** The strength of economic conditions as well as the formal institutions that support the operation of the private sector. Business competitiveness and economic productivity are both associated with the most peaceful countries and are key to a robust business environment.
- **Equitable distribution of resources:** Peaceful countries tend to ensure equity in access to resources such as education, health and, to a lesser extent, in income distribution.
- **Acceptance of the rights of others:** Peaceful countries often have formal laws that guarantee basic human rights and freedoms, and positive informal social and cultural norms that relate to the behaviours of citizens.
- **Good relations with neighbours:** Harmonious relations with other countries and among ethnic religious and cultural groups within a country are vital for peace. Countries with positive internal and external relations are more peaceful and tend to be more politically stable, have better functioning governments, are regionally integrated and have lower levels of organized internal conflict.
- **Free flow of information:** Free and independent media disseminate information that leads to greater knowledge and helps individuals, business and civil society make better decisions. This results in better outcomes and more rational responses in times of crisis.
- **High levels of human capital:** A skilled human capital base reflects the extent to which societies educate citizens and promote the development of knowledge, thereby improving economic productivity, care for the young, political participation and social capital.
- **Low levels of corruption:** In societies with high levels of corruption, resources are inefficiently allocated, often leading to a lack of funding for essential services, which in turn can cause dissatisfaction and civil unrest. Low levels of corruption can enhance confidence and trust in institutions as well as improve the efficiency of business and the competitiveness of the country.

The pillars of positive peace work systemically to foster socioeconomic progress. This means that it is difficult to assess causality (which aspects of development lead to others), and that the informational content of the entire social system is often greater than the sum of the informational content of the parts.

Figure 1. The pillars of positive peace

A visual representation of the factors comprising positive peace. All eight factors are highly interconnected and interact in varied and complex ways.



THE POSITIVE PEACE INDEX

The Positive Peace Index (PPI) measures the positive peace of 163 countries, covering 99.6 per cent of the world’s population. The PPI is the only known global, quantitative approach to defining and measuring positive peace. This body of work provides an actionable platform for development and improvements in peace. It can also help to enhance social factors, governance and economic development. It provides the foundation for researchers to further deepen their understanding of the empirical relationships between peace and development, and stands as one of the few holistic and empirical studies to identify the positive factors that create and sustain peaceful societies.

The GPI is an inverted measure of peace; that is, scores close to 1 indicate lower levels of violence and scores close to 5 denote greater levels of violence. To preserve consistency with the GPI, the PPI is constructed so that lower scores indicate more socioeconomic development and higher scores reflect less development.

Positive peace provides a theory of change towards an optimal environment for human potential to flourish. This is important because it provides a framework to guide policy towards higher levels of peace and happiness, and more robust economies and societies that are resilient and more adaptable to change.

The Institute for Economics and Peace takes a systems approach to peace, drawing on recent research into systems, especially societal systems. In order to construct the PPI, it analysed over 45,700 different data series, indices and attitudinal survey variables in conjunction with current thinking about the drivers of violent conflict, resilience and peacefulness. The result was an eight-part taxonomy of the factors associated with peaceful societies. These eight domains, or pillars of positive peace, were derived from data sets with the strongest correlation with internal peacefulness as measured by the GPI, an index that defines peace as the “absence of violence or the fear of violence” (Institute for Economics and Peace 2021c). The PPI measures the eight pillars using three indicators for each. The indicators represent the best available globally comparable data with the strongest statistically significant relationship to levels of peace. Table 1 lists the 24 indicators in the PPI.

Table 1. Indicators in the Positive Peace Index

The following 24 indicators show the strongest relationships with the absence of violence and fear of violence.

Pillar	Domain	Indicator	Description	Source	Correlation coefficient (to the GPI)
Acceptance of the rights of others	Structures	Gender Inequality Index	Reflects women’s disadvantage in three dimensions: reproductive health, political empowerment and the labour market.	UNDP	0.67
	Attitudes	Group grievance indicator	Focuses on divisions and schisms among different groups in society, particularly divisions based on social or political characteristics, and their role in access to services or resources, and inclusion in the political process.	Fragile States Index	0.66
	Attitudes	Exclusion by socioeconomic group	Exclusion involves denying individuals access to services or participation in governed spaces based on their identity or belonging to a particular group.	Varieties of Democracy	0.72
Equitable distribution of resources	Structures	Inequality-adjusted Life Expectancy Index	Measures the overall life expectancy of a population accounting for the disparity between the average life expectancy of the rich and that of the poor. The smaller the difference, the	UNDP	0.61

Pillar	Domain	Indicator	Description	Source	Correlation coefficient (to the GPI)
Free flow of information			higher the equality, which reflects the equality of access to the health system.		
	Structures	Poverty headcount ratio at US \$5.50 a day (2011 purchasing power parity or PPP, percentage of population)	Poverty headcount ratio at \$5.50 a day is the percentage of the population living on less than \$5.50 a day at 2011 international prices.	World Bank	0.54
	Structures	Equal Distribution of Resources Index	This component measures the equity to which tangible and intangible resources are distributed in society.	Varieties of Democracy	0.68
	Attitudes	Freedom of the press	A composite measure of the degree of print, broadcast and Internet freedom.	Freedom House	0.51
	Attitudes	Quality of Information Index	Measured by government dissemination of false information domestically; how often governments disseminate false or misleading information.	Varieties of Democracy	0.61
	Structures	Individuals using the Internet (percentage of population)	Internet users are individuals who have used the Internet (from any location) in the last three months. The Internet can be used via a computer, mobile phone, personal digital assistant, games machine, digital TV, etc.	International Telecommunication Union	0.60
Good relations with neighbours	Attitudes	Hostility to foreigners/private property	Intensity of antagonistic attitudes towards foreigners or property held by foreigners.	The Economist Intelligence Unit	0.71
	Structures	International tourism, number of arrivals (per 100,000)	Number of tourists who travel to a country (staying at least one night) other than that in which they have their usual residence.	World Tourism Organization	0.62
	Structures	Regional integration	A qualitative measure reflecting the level of regional integration as measured by a country's membership in regional trade alliances.	The Economist Intelligence Unit	0.60

Pillar	Domain	Indicator	Description	Source	Correlation coefficient (to the GPI)
High levels of human capital	Structures	Share of youth not in employment, education or training (NEET) (percentage)	Proportion of people between 15 and 24 years of age who are NEET.	International Labour Organization	0.52
	Structures	Researchers in research and development (per million people)	The number of researchers expressed as per 1 million population.	United Nations Educational, Scientific and Cultural Organization	0.66
	Structures	Healthy life expectancy at birth (years)	Average number of years that a newborn can expect to live in full health.	World Health Organization	0.57
Low levels of corruption	Institutions	Control of corruption	Captures perceptions of the extent to which public power is exercised for private gain.	World Bank	0.78
	Attitudes	Factionalized elites	Measures the fragmentation of ruling elites and state institutions along ethnic, class, clan, racial or religious lines.	Fragile States Index	0.72
	Institutions	Irregular payments and bribes	Measures the prevalence of undocumented extra payments or bribes by firms.	World Economic Forum	0.68
Sound business environment	Structures	Starting a business indicators	Measures the ease of forming a business within a country. Considers components such as obtaining permits, getting credit, property registration and utility connection.	World Bank*	0.59
	Structures	Maintaining a business	Measures the ease of keeping a business venture operating within a country. Includes measures of enforcement of contracts, trading across borders and the nature of tax obligations.	World Bank*	0.57
	Structures	GDP per capita (current US dollars)	GDP per capita is gross domestic product divided by midyear population.	International Monetary Fund	0.66
Well-functioning government	Institutions	Political Democracy Index	Measures whether the electoral process, civil liberties, functioning of government, political participation and culture support secular democracy.	The Economist Intelligence Unit	0.64

Pillar	Domain	Indicator	Description	Source	Correlation coefficient (to the GPI)
	Institutions	Government effectiveness estimate	Captures perceptions of the quality of public services, the quality of the civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies.	World Bank	0.79
	Institutions	Rule of law estimate	Captures perceptions of the extent to which agents have confidence in and abide by the rules of society, and in particular, the quality of contract enforcement, property rights, the police and the courts as well as the likelihood of crime and violence.	Bertelsmann Transformation Index	0.68

* When the *2020 Positive Peace Report* was published, the Doing Business Survey had not yet been discontinued. These World Bank indicators have since been replaced.

PROGRESS WITH POLARIZATION

Table 1 classifies the 24 PPI indicators into one of three domains using the following typology:

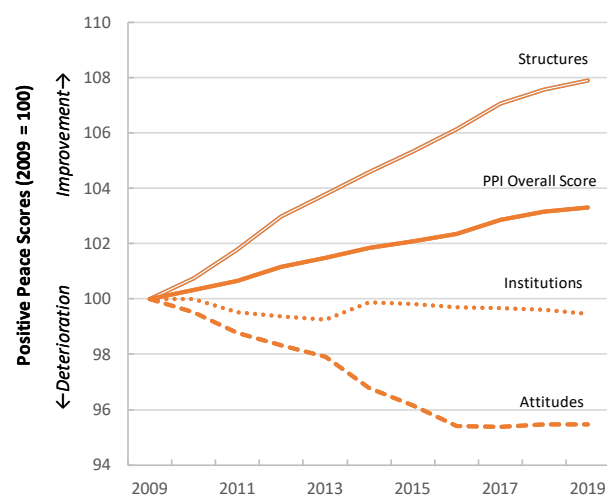
- *Attitudes* if they measure viewpoints and actions taken regarding the interactions and exchanges among individuals, groups and the State.
- *Institutions* if they are associated with the functioning of the formal and informal organizations that manage and influence the socioeconomic system.
- *Structures* if they are embedded in the framework of society, such as poverty and equality, or are the result of aggregate activity, such as GDP.

The six indicators comprising the attitudes domain were: factionalized elites, group grievance, quality of information, exclusion by socioeconomic condition, hostility to foreigners and freedom of the press. These indicators were used as proxies for social attitudes, that is, the way individuals and groups perceive and interact within their society.

- *Deteriorations in attitudes* are changes in social perceptions and patterns of interactions among individuals and groups that lead to more social disharmony, greater levels of violence or fear thereof, deeper political instability or more disruptive economic inefficiencies.
- *Improvements in attitudes* are changes in social perceptions and patterns of interaction among individuals and groups that lead to enhanced social cohesion, lower levels of violence, more political cooperation, greater institutional transparency and economic efficiencies.

Using this classification framework, the data suggest a steep divergence in the patterns of development over the past 10 years (Figure 2). On one hand, the global average of the structures domain suggests uninterrupted progress as gauges of aggregate economic performance and scientific and technological development as well as business indicators have continuously improved since 2009. On the other, the global averages of the attitudes domain have deteriorated markedly. The institutions domain has also deteriorated, albeit modestly. These results were discussed in the *2020 Positive Peace Report* (Institute for Economics and Peace 2021b).

Figure 2. Changes in the global Positive Peace Index and its domains over the past decade
Improvements were due to progress in the structures domain; the attitudes domain deteriorated.



Source: IEP

Economic and business progress with increasing social polarization is a paradox. Despite improvements in aggregate economic performance, technological advancement and business opportunities, societies appear to have become less harmonious, and political preferences more factionalized and intolerant (Box 1).

Box 1. Case study: polarization of political preferences

Income and education are highly correlated measures of inequality. A study by the World Inequality Lab identified a drastic shift in political preferences among different income and education groups in Western democracies (*The Economist* 2021, World Political Cleavages and Inequality Database 2021).

Throughout the 1950s and 1960s, individuals with low levels of income and education tended to vote for left-wing (democratic, labour and socialist) parties. In contrast, individuals with high levels of income and education tended to vote for right-wing (conservative) parties. Political preferences were largely class based.

Class divisions in political preferences have changed slowly over time, however. Although very wealthy individuals have continued to support ‘the right’, highly educated and high-income individuals have increasingly switched to left-wing parties. This trend has been so strong that highly educated individuals are now more left wing than their less educated counterparts. Political preferences have transitioned to being based on ‘multi-elite’ preferences (*The Economist* 2021).

The trend is consistent across almost all 21 Western democracies that were studied (*ibid.*). It is even more striking given the large disparities in politics, history and institutions across countries (e.g., two-party systems in the United Kingdom and United States of America versus the multi-party systems in

Denmark and France). The two exceptions are Ireland and Portugal, which have weak divisions over ‘identity-based politics’.

The divergence in how income and education affect voting preferences may explain why a rise in economic inequality in some countries is not strongly associated with redistribution or renewed class conflicts. In the same way, it might also explain the weak association of inequality with social attitudes.

As the traditional left-leaning parties became more educated and degrees became a prerequisite for employment in senior positions, blue-collar representation declined. The traditional left became more focused on factors of inclusion and identity. Simultaneously, there was an exacerbation of wealth inequality in some countries.

This meant that the working class and low-income, low-education demographic was largely unrepresented. While many of these voters have switched their allegiance to right-wing parties in recent decades, conservative values are probably still better suited to sources of capital than labour.

This gap may have created some alienation and disenfranchisement, which may have contributed to deteriorations in social attitudes and the rise to power of ‘alternative-right’ individuals in a number of countries as well as a search for alternative informational sources.

EXAMPLES OF CHANGES IN ATTITUDES

A deterioration in social attitudes alongside improved economic and technological development was observed across all geographical regions and most countries. Some examples are summarized below.

In the United States, the attitudes domain has deteriorated since 2009. But the pace of this deterioration accelerated from 2015. Individual indicators with the steepest declines were ‘quality of information’, ‘factionalized elites’ and ‘group grievances’. These trends are consistent with increased political polarization and distrust in information provided by authorities.

In China, a sharp deterioration in the attitudes domain was recorded in 2013. This coincided with the Chinese banking liquidity crisis, which saw an end to easy credit and had a negative impact on gold and stock markets. Indicators such as ‘exclusion by socioeconomic group’ and ‘hostility to foreigners’ were most affected.

In Europe, the attitudes domain deteriorated noticeably on all indicators through the decade, especially from 2015 onwards. The largest deteriorations were seen in ‘quality of information’, ‘factionalized elites’ and ‘group grievances’. In line with global trends, the ‘quality of information’ worsened among European nations, coinciding with some political groups taking to the Internet to disseminate radical views of both right- and left-

wing persuasions. Other declining indicators were ‘rule of law’, ‘government effectiveness’, ‘corruption’ and ‘political democracy’. Freedom of the press has been curtailed in some nations, which further contributed to a perceived deterioration of informed debate. Economic inequality has increased to some extent although inequality levels remain low in relation to other parts of the world. This may have contributed to greater social tensions and a radicalization of the political debate as captured by the ‘factionalized elites’ indicator.

From around 2014, Europe saw itself in the middle of a migration crisis as it received a large number of refugees from the Middle East and North Africa, especially Iraq and Syria as well as Afghanistan. Eastern European nations were other major origins of displacements. The migration crisis contributed to polarized sociopolitical views and was a symptom of underlying grievances threatening the political stability of the European Union.

In a 2016 referendum, the United Kingdom elected to leave the European Union, initiating a period of economic and political uncertainty. In the wider public, antagonism intensified between those who elected to leave and those wanted to stay in the European Union. Businesses delayed investment decisions as a result of the uncertainty, which affected economic growth. The attitudes domain in the United Kingdom recorded substantial deteriorations from 2009 to 2012, and once again from 2016.

Deterioration in attitudes

Attitudes have deteriorated globally and across a broad range of demographics segments but some have greater levels of discontent than others.

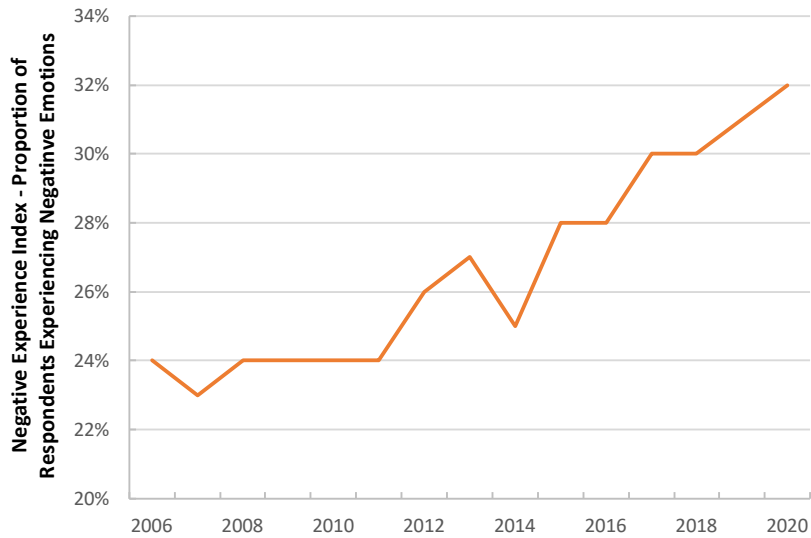
WHO IS DISCONTENT?

The deterioration in the attitudes domain means that interpersonal and intergroup relationships are becoming less harmonious, and that these groups and individuals are less trusting of governments, the media and other institutions.

Broader measures of satisfaction have also deteriorated over the past decade. One example is Gallup’s Negative Experience Index, which shows that the proportion of persons experiencing discontent has increased markedly around the world (Figure 3 and Box 2). The index is compiled by aggregating individuals’ responses to questions on whether they felt physical pain, worry, anger, stress or sadness on the day prior to taking the survey. The cause of such negative feelings is not recorded.

Figure 1. Negative Experience Index, worldwide, 2006–2020

Respondents reported a rise in feelings of sadness, anguish, worry, anger and physical pain over the past decade and a half.



Source: Gallup World Poll, 2020

Box 2. Gallup Global Emotions

A survey for the *2020 Gallup Global Emotions Report* asked individuals from around the world about their positive and negative experiences during the previous day. While positive experiences involved feeling well rested, being treated with respect, smiling or laughing, and doing something interesting and enjoyable, negative experiences related to feeling pain, worry, sadness, stress or anger.

The results indicated that:

- The number of people reporting negative emotions reached an all-time high in 2020; a long-term trend increase extends back to at least 2006 (Figure 3).
- 40 per cent of people experienced worry or stress in the day before the survey.
- 29 per cent of people experienced physical pain.
- 27 per cent experienced sadness.
- 24 per cent experienced anger.

The increase in negative emotions in 2020 might not be surprising, given that the world was in the midst of a pandemic. The loss of a job or income or a loved one could easily contribute to stress, anger, worry

and sadness. The growth in negative emotions cannot be attributed to the COVID-19 pandemic alone, however, because the upward trend has been continuous for more than a decade.

The Gallup Global Emotions index indicates that approximately 35 per cent more people are experiencing food insecurity now than in 2014. This rise in food insecurity is aligned with the global rise in negative emotions, although it is localized to some regions and countries. Seventy per cent of people believed corruption was widespread in their government in 2020.

The Institute for Economics and Peace has reconfigured Gallup's Negative Experience Index to exclude physical pain in order to derive a gauge that is arguably more reflective of individuals' mindsets. The result was parsed by different demographics, shedding light on which types of individuals were experiencing the most discontent.

Importantly, the frequency of negative emotions has risen across all demographics available in the Gallup data (Figure 4). No demographic group is as content today as it was 10 years ago.

Women tend to report higher levels of discontent. By 2019, almost 34 per cent of female respondents reported having felt sadness, anguish, worry or anger. This compares with less than 30 per cent of men. Women's higher levels of negative emotions are consistent with lingering disparities between genders and barriers that women still face in labour markets, politics, and corporate and other areas.

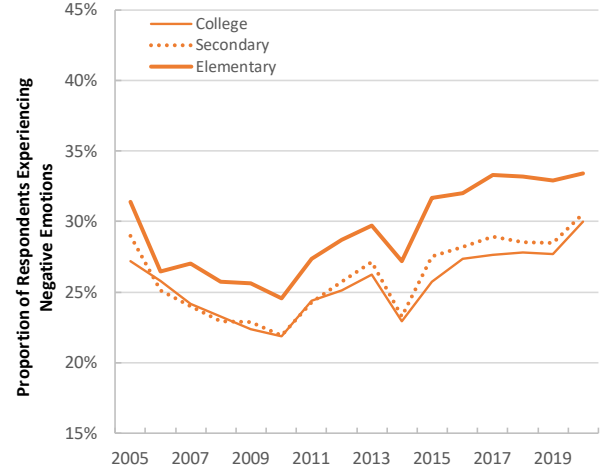
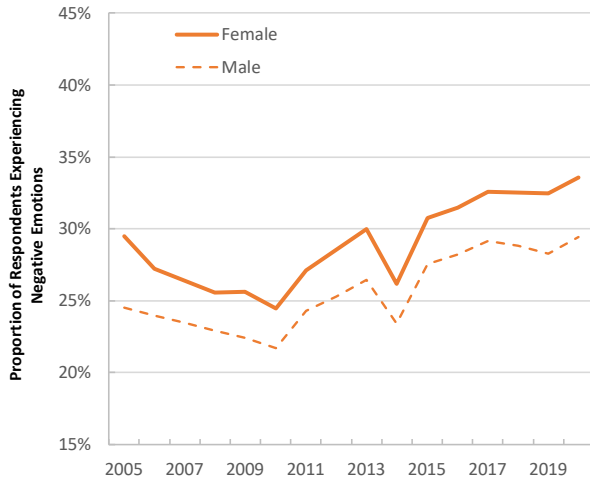
Persons with elementary education tend to have comparatively higher levels of negative emotions, presumably reflecting higher vulnerability and exposure to lower wages and unemployment, and harsher working conditions. There was virtually no difference in discontent between those with secondary school and college education.

Unemployed and underemployed workers tended to report the highest levels of discontent, relative to other employment statuses. Almost 42 per cent of unemployed persons reported discontent in 2019. This compared with 31 per cent for those with an employer-provided full-time job. For the underemployed—those employed part time but who would prefer to work full time—around 36 per cent reported being discontent. Persons working part time but who do not need or want to work full time reported the lowest level of negative emotions.

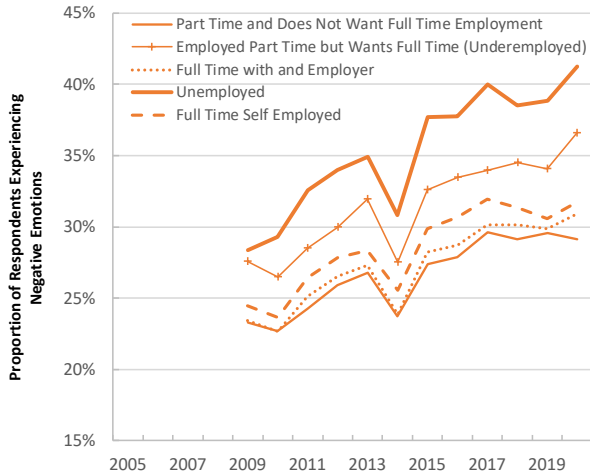
Discontent among the unemployed has increased more rapidly over the past decade than in any other category. From 2009 to 2019, the proportion of unemployed persons reporting discontent rose from 28 per cent to 42 per cent, a 14 percentage point rise. In comparison, the proportion of fully employed persons reporting discontent rose by 8 percentage points. There were no discernible differences in discontent between urban and rural populations, according to the Gallup data.

Figure 2. Negative emotions by demographic group, 2005–2020

All groups reported increases in negative emotions over the past decade. Those reporting higher levels of negative emotions were female, had lower levels of education, and were unemployed or underemployed.

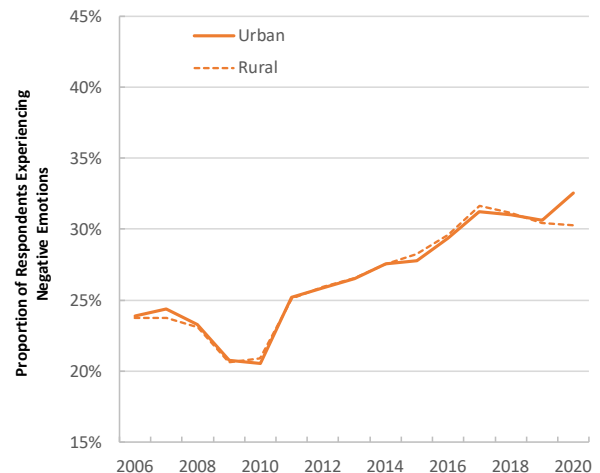


Source: Gallup World Poll, IEP calculations



Source: Gallup World Poll, IEP calculations

Source: Gallup World Poll, IEP calculations



Source: Gallup World Poll, IEP calculations

HYPOTHESES

This research considers five non-mutually exclusive hypotheses that could help explain the paradox of progress with polarization.

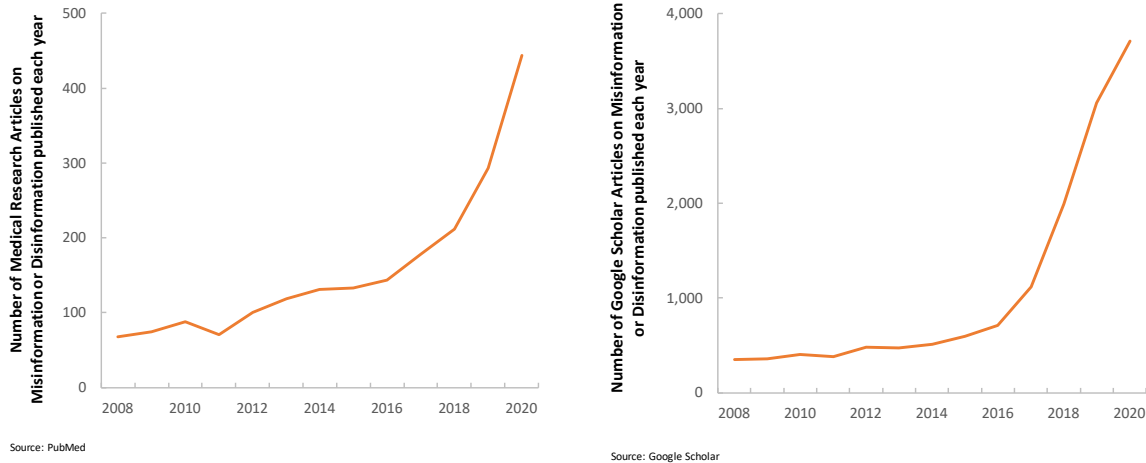
1. Changes in inequality and poverty: The deterioration in social attitudes could be a response to rising inequality or levels of poverty. Given that aggregate economic performance and technological advancement gauges, such as GDP per capita or access to the Internet, have improved globally without interruption over the past decades, social polarization could reflect differences in the apportioning of

such progress to different social demographics. A more nuanced understanding of societal groupings and a wider net of inequities may help to explain societal alienation.

2. Higher levels of corruption and governance ineffectiveness: Measures of corruption and administrative inefficiency have shown an increase globally in the past decade. It is difficult to determine from the available data whether this is due to an actual rise in corrupt activities and inefficiencies or simply to greater access to information that allows citizens to better understand corruption and maladministration that has always existed. This inability to separate causes is a limitation of the quantitative approach. Regardless of the origin, however, increases in measures of corruption undoubtedly affect the attitudes of citizens and are treated as an independent variable.
3. Enhanced access to information and disinformation: The vast array of information sources and communications modalities available in modern society contributed to lifting standards of living and promoting human rights. One unintended effect, however, may have been a certain degree of polarization, as citizens, through choices and suggestions from social media algorithms, engage in 'echo chambers' of information (Cinelli et al. 2021). This has given rise to increased interest in misinformation and disinformation around the world (Figure 5). This rise has not been confined to politics and governance but has extended into medical research and other fields.

Figure 3. The rise in misinformation and disinformation

Growth in studies about misinformation and disinformation has been exponential around the world, especially since 2016.



4. *Social and political polarization*: The pace of social change may mean that certain groups feel more alienated, that their voices are not being heard and that political institutions are not responsive to their views (see Box 1). Social activism, both from the left and the right, has become more inflexible. This issue is systemic and its analysis would require a deeper understanding of the optimal pace of social change and the systemic effects of change. Anecdotal evidence suggests that both far-right and far-left activity have been escalating over the past decade and on occasion have significantly influenced legislative and executive activity in multiple countries.
5. *A shift from basic towards enhanced needs*: If individuals' needs for economic, educational and technological resources have become more sophisticated and outpaced what society can offer, it is possible that dissatisfaction with life could arise despite nominal socioeconomic progress. Inglehart and Welzel (2005) have termed this 'post-materialist cleavage'.

TEST OF THE HYPOTHESES

To test these hypotheses, the following analysis uses social indicators from multiple sources, comparing changes in these indicators in light of trends in PPI attitudes.

All variables have been redirected and rescaled. Higher values indicate more social and economic development. Thus, for example, a 1 percent increase in the attitudes indicator implies an improvement in social attitudes, as described earlier. A 1 percent decrease describes a deterioration. A 1 percent rise in the poverty indicator describes an improvement, i.e., a reduction in poverty, and so on. Not all indicators are available for the full time window of the analysis. Table 2 describes the indicators.

Table 1. Indicators used in this study

This set of 17 indicators offers a concise but comprehensive picture of social attitudes, governance, media and inequality.

Indicator short name	Indicator name	Description	Data range	Source
<i>GovConf</i>	Confidence in government	The extent to which survey respondents declared having confidence in their national government	2005–2020	Gallup*
<i>ElitesSocMedia</i>	Elites' use of social media to organize offline action	The extent to which social activism is organized through social media	2000–2019	Varieties of Democracy
<i>EqualDistRes</i>	Equal Distribution of Resources Index	The extent to which tangible and intangible resources are fairly distributed among members of society	2000–2019	Varieties of Democracy
<i>GovDisinfAbr</i>	Government dissemination of false information abroad	Government practices in disseminating false information abroad for strategic or political purposes	2000–2019	Varieties of Democracy
<i>GovDisinfDom</i>	Government dissemination of false information domestically	Government practices in disseminating false information domestically for strategic or political purposes	2000–2019	Varieties of Democracy
<i>IndivInternet</i>	Individuals using the Internet (percentage of population)	Number of individuals who used the Internet through computers or mobile devices in the three months prior to the collection of data	2000–2019	International Telecommunication Union
<i>LifeSat</i>	Life satisfaction	The extent to which survey respondents declared satisfaction with their lives	2005–2020	Gallup*
<i>GenderGap</i>	Overall Global Gender Gap Index	Assesses the extent of the gap between men and women in four areas: economic participation, educational attainment, health and political empowerment	2006–2018	World Economic Forum
<i>Polarization</i>	Polarization of society	Indicator assessing the extent to which different social views result in major clashes	2000–2019	Varieties of Democracy
<i>PovertyGap</i>	Poverty	Poverty gap at \$3.20 a day, expressed in 2011 dollars PPP	2000–2018	World Bank
<i>Attitudes</i>	PPI attitudes	PPI domain assessing social views, tensions and perceptions	2009–2019	Institute for Economics and Peace
<i>LowCorruption</i>	PPI low levels of corruption	PPI pillar assessing the perceptions of corruption in a country	2009–2019	Institute for Economics and Peace

Indicator short name	Indicator name	Description	Data range	Source
<i>WellFunGov</i>	PPI well-functioning government	PPI pillar assessing the effectiveness of government in a country	2009–2019	Institute for Economics and Peace
<i>PreTaxB50</i> **	Share of national income earned by bottom 50 percent of income earners	The proportion of pre-tax national income earned by the lowest 50 percent of households in the national income distribution	2000–2019	World Inequality Database
<i>PreTaxM40</i> **	Share of national income earned by middle 40 percent of income earners	The proportion of pre-tax national income earned by the middle 40 percent of households in the national income distribution	2000–2019	World Inequality Database
<i>PreTaxT10</i> **	Share of national income earned by top 10 percent of income earners	The proportion of pre-tax national income earned by the top 10 percent of households in the national income distribution	2000–2019	World Inequality Database
<i>SocMediaVio</i>	Use of social media to organize offline violence	Indicator assessing the extent to which violent acts are planned and organized with the help of social media	2000–2019	Varieties of Democracy

* Aggregation and compilation of responses into an index by the Institute for Economics and Peace.

** These shares do not add to 100 percent of national income because they exclude other destinations for national income such as government or undistributed corporate profits.

Sources: As listed in the table.

It is difficult to disentangle different aspects of development. Societies tend to operate systemically in that all aspects of development (or the lack thereof) are interrelated with one another. For this reason, the results discussed in this paper should be taken in the context of contemporaneous, self-reinforcing trends and developments rather than in terms of causal relationships in the traditional sense.

Static relationships

An analysis of static correlations—cross-sectional analysis—shows the interrelationships between the levels of these variables across countries, calculated from 2008 to 2019 (Table 3). Countries with the most favourable social attitudes (*Attitudes*) tend to be those with lower levels of corruption (*LowCorruption*), more effective governance (*WellFuncGov*), lower incidence of government disinformation (*GovDisinfAbr* and *GovDisinfDom*), more egalitarian sharing of resources through society (*EqualDistRes*) and greater access to information (*IndivInternet*). They also tend to have higher proportions of individuals stating they are satisfied with their lives (*LifeSat*) and more egalitarian gender relativities (*GenderGap*).

Satisfaction with life (*LifeSat*)—a concept related to social *Attitudes*—is highly correlated with effective governance (*WellFuncGov*), low corruption (*LowCorruption*) and access to the Internet (*IndivInternet*).

Confidence in government (*GovConf*) is largely orthogonal to the other variables in the set, suggesting that trust in authorities could be associated with specific local issues. It is interesting to note a negative (albeit weak) correlation between confidence in government and access to the Internet.

Polarization of social views (*Polarization*) is more intense where social media are used to organize violent acts (*SocMediaVio*) and where institutional corruption is highest (*LowCorruption*).

The findings suggest that polarization and deterioration in social attitudes appear primarily more linked with poor governance and corruption and exacerbated through social media. Poverty, economic inequality and gender disparities play a role in deteriorating attitudes but their impact seems less than that of maladministration.

Regressing the attitudes indicators against the variables described above provides further insights through the investigation of each variable's influence in the presence of other factors (Table 4). Corruption (*LowCorruption*) and disinformation spread by governments (*GovDisinfDom*) are highly statistically and numerically significant determinants of attitudes.

Administrative effectiveness (*WellFuncGov*) assumes a lesser but still significant role. This suggests that there could be some aspects of maladministration that are not necessarily linked with (perceived) corruption and that are important drivers of social attitudes.

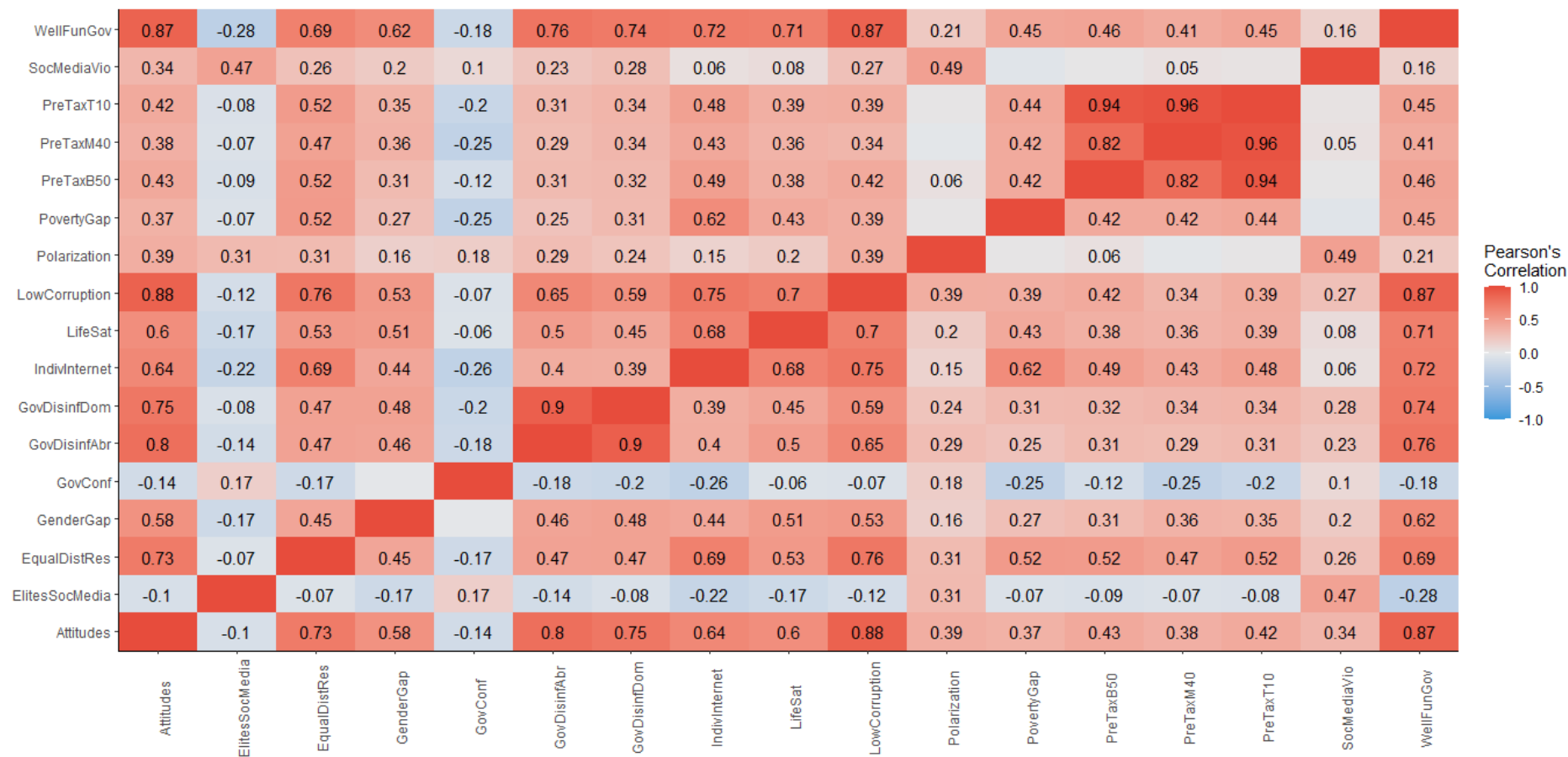
Inequality also influences attitudes. Higher levels of inequality, as gauged by the share of pre-tax national income earned by the top 10 percent of earners (*PreTaxT10*) are associated with worse social attitudes. The coefficient of this inequality variable, however, is numerically less significant than those of corruption and disinformation.

The coefficient for confidence in government (*GovConf*) is difficult to interpret. This variable was broadly uncorrelated with *Attitudes* (Table 3). It is possible that this coefficient is picking up a residual influence on that explained variable.

It is also possible that the negative coefficient in *GovConf* is emblematic of increasing polarization within society. This coefficient may be interpreted as indicating the presence of substantial confidence and support to the government at the same time that large swathes of the population are dissatisfied with public administration. This could indicate sociopolitical polarization, whereby one segment of the population passionately supports the government while another fervently denounces it. Examples of sharpening political polarization can be found all over the world, including in Brazil, Belarus, France, Hungary, India, Poland, Russian Federation, Turkey, the United Kingdom, the United States and others.

Table 2. Static correlations between indicators, 2008–2019

Substantial interrelationships exist between the levels of the variables across countries.*



* All variables have been redirected and rescaled; higher values indicate more social and economic development. Source: As listed in Table 2.

Table 3. Regressing attitudes on the governance and inequality variables, 2009–2019

This regression assesses the impact of the independent variables on PPI attitudes scores across 520 country-year data pairs.

<i>Independent variables</i>	<i>Dependent variable: attitudes</i>
<i>PovertyGap</i>	-0.094** (0.037)
<i>GovDisinfDom</i>	0.333*** (0.024)
<i>GenderGap</i>	0.078** (0.035)
<i>PreTaxT10</i>	0.109*** (0.020)
<i>LifeSat</i>	-0.051 (0.038)
<i>GovConf</i>	-0.109*** (0.030)
<i>WellFunGov</i>	0.121** (0.047)
<i>LowCorruption</i>	0.475*** (0.034)
<i>Constant</i>	0.394** (0.199)
<i>Observations</i>	520
<i>R²</i>	0.891
<i>Adjusted R²</i>	0.890
<i>Residual std. error</i>	0.277 (df = 511)
<i>F Statistic</i>	523.825*** (df = 8; 511)
<i>Note:</i>	* $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Economic inequality and attitudes: consistency of results

This section assesses the relationship between attitudes and different indicators of economic inequality. The preceding analysis used inequality indicators derived from the World Inequality Database, especially the share of national income earned by the top 10 percent of income earners and the share of national income earned by the bottom 50 percent of income earners. These measures have been chosen given their accuracy and ease of interpretation. Other measures of economic inequality, however, also suggest that higher levels of disparity are associated with deteriorating social attitudes (Table 5).

Some measures of economic inequality, such as those calculated by the Varieties of Democracy and the Fragile States Index, hold higher absolute values of correlation against the attitudes domain of positive peace. These broader measures encompass more than just income discrepancies, however.

Table 4. Indicators of economic inequality—correlations against attitudes, 2019
Multiple measures show that economic inequality is associated with worse attitudes.

Indicator name	Source	Comments	Correlation coefficient against PPI attitudes*
Exclusion by socioeconomic group	Varieties of Democracy	Measures access to services and participation in government spaces based on economic standing. Higher values mean greater degrees of exclusion.	0.82
Equal Distribution of Resources Index	Varieties of Democracy	Measures how resources are distributed within society. Higher values mean more equal distribution.	-0.73
Economic inequality	Fragile States Index	Measures several aspects of economic inequality. Higher values mean more inequality.	0.70
Power distributed by socioeconomic condition	Varieties of Democracy	Measures the distribution of political power according to individuals' wealth. Higher values indicate more equal distribution.	-0.66
Poverty rate	Sustainable Governance Indicators	Measures the level of poverty relative to population. Higher values indicate less poverty.	-0.49
Share of national income earned by bottom 50 percent	World Inequality Database	The proportion of pre-tax national income earned by the lowest 50 percent of households in the national income distribution. Higher values indicate less economic inequality.	-0.42
Share of pre-tax national income earned by top 10 percent	World Inequality Database	The proportion of pre-tax national income earned by the top 10 percent of households in the national income distribution. Higher values indicate more economic inequality.	0.42
Share of pre-tax national income earned by middle 40 percent	World Inequality Database	The proportion of pre-tax national income earned by the middle 40 percent of households in the national income distribution. Higher values indicate less economic inequality.	-0.38
Multidimensional Poverty Index	United Nations, INFORM	Measures poverty including living standards, access to health and education. Higher values indicate more poverty.	0.18
Gini index	World Bank	Measures the statistical distance from a totally equal distribution of income. Higher values mean more inequality.	-0.01

* Variables are used in their original form; that is, they have not been redirected or rescaled. Thus, the sign of the correlation coefficient indicates the actual directionality in which the variable influences and is influenced by attitudes.

Sources: As in table.

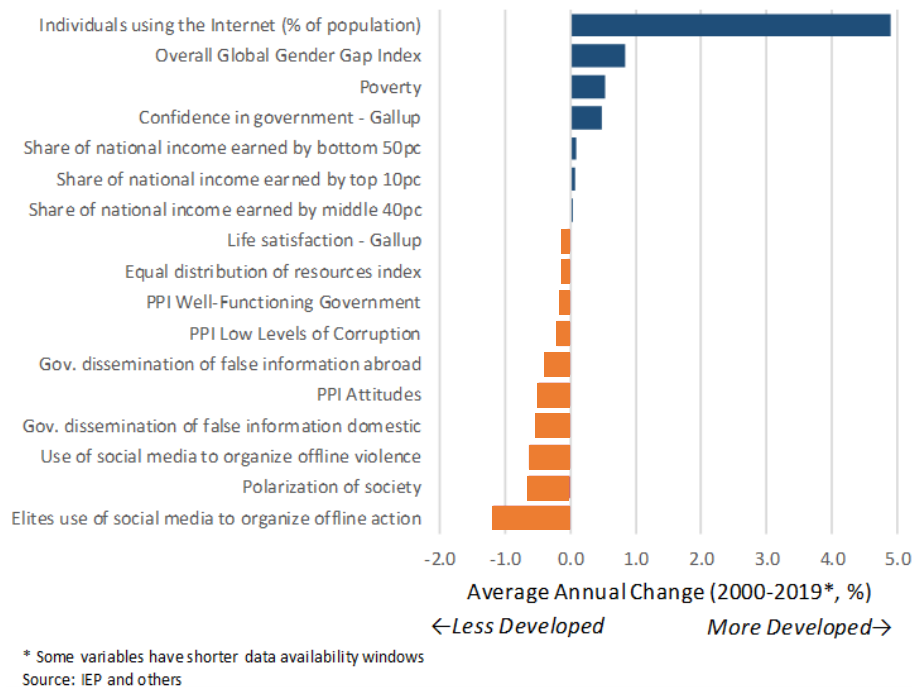
Dynamic relationships

The analysis of static (cross-sectional) correlations may not necessarily capture dynamic trends in social variables in the recent past. These trends can be seen by assessing co-changes in the set of attitude variables over the past two decades. This analysis excludes the two most recent years because most variables had not been estimated for 2020 and 2021 at the time of writing. In addition, by using the 2000 to 2019 time window, the analysis excludes the distortionary impact of the COVID-19 pandemic and global recession.

The deterioration in the attitudes domain was accompanied by substantial deteriorations in perceptions of corruption, as gauged by the positive peace pillar on low levels of corruption, and in the effectiveness of governance, as measured by the pillar on well-functioning government (Figure 6). There was a concomitant increase in governments’ practice of disseminating false information. All these events accompanied increasing use of the Internet and social media to organize activism and violent protests.

Figure 4. Changes in attitudes and other variables globally, 2000–2019

A deterioration in attitudes was accompanied by deteriorations in corruption, the effectiveness of governance and disinformation.



It is possible that greater activism and protests resulted from an actual increase in corruption and governmental ineffectiveness. Alternatively, greater access to the Internet, different sources of information and discussion fora could have facilitated a more open debate about the prevalence of corruption and ineffectiveness that had always existed.

While the corruption, governance and disinformation variables deteriorated with the attitudes indicator, the variables portraying economic inequality, gender inequality and poverty did not. The share of income earned by the top 10 per cent was broadly stable from 2000 to 2019. The indicator on the equal distribution of resources changed little in this period.

Individuals may feel dissatisfied with high levels of economic inequality, which may impact their views of society. Inequality may be a particularly important issue in some regions of the world or for some demographic groups. But on an aggregate data level and from a global perspective, the deterioration in social attitudes has not taken place alongside a substantial exacerbation of economic inequality.

Gender inequality, as gauged by the overall Gender Gap Index compiled by the World Economic Forum, has shown an improvement over the period. Other indicators of gender inequality studied for this analysis but not included in it, including the Women's Civil Liberties Index by Varieties of Democracy and UNDP's Gender Inequality Index, corroborate this finding.

Again, it is possible that society may have grown increasingly wary of the lingering state of disadvantage that women still endure in today's global society. But at the aggregate data level and from a global perspective, the deterioration in social attitudes has not been matched with worsening gender inequality in recent decades.

Deteriorations in attitudes are associated with changes in government effectiveness, perceptions of corruption and dissemination of disinformation by governments (Table 6). Changes in inequality, as gauged by changes in the share of income earned by the top 10 percent of income earners, did not exert a statistically significant impact on attitudinal changes.

Table 5. Regressing changes in attitudes on changes in governance and inequality variables, 2009–2019
Deteriorations in attitudes are associated with changes in government effectiveness, perceptions of corruption and dissemination of disinformation by governments.

<i>Independent variables: change in...</i>	<i>Dependent variable: change in attitudes</i>
GovDisinfDom	0.291*** (0.045)
PreTaxT10	0.084 (0.081)
LifeSat	-0.159** (0.080)
GovConf	0.033 (0.058)
WellFunGov	0.281*** (0.105)
LowCorruption	0.224** (0.091)
Constant	-0.057** (0.024)
<i>Observations</i>	163
<i>R²</i>	0.399
<i>Adjusted R²</i>	0.376
<i>Residual std. error</i>	0.257 (df = 156)
<i>F statistic</i>	17.244*** (df = 6; 156)

Note: * $p < 0.1$; ** $p < 0.05$; *** $p < 0.01$.

Numbers in brackets are standard errors.

Has there been a measurable shift in the composition of needs?

One possible explanation for the paradox of progress with polarization is the hypothesis of a shift in the desires and expectations of citizens.

This hypothesis can be illustrated using the concept of the expectations gap developed by Davies (1962). According to this seminal but still debated framework, sociopolitical upheaval would result when the gap between expectations and reality grew past a certain threshold. In normal times, expectations would broadly accompany the real level of socioeconomic development, such that the gap between expectations and reality would be constant and small. A negative shock could lower the level of satisfaction—or economic utility—derived from real socioeconomic conditions, however, thereby causing the gap to widen (left-hand panel of

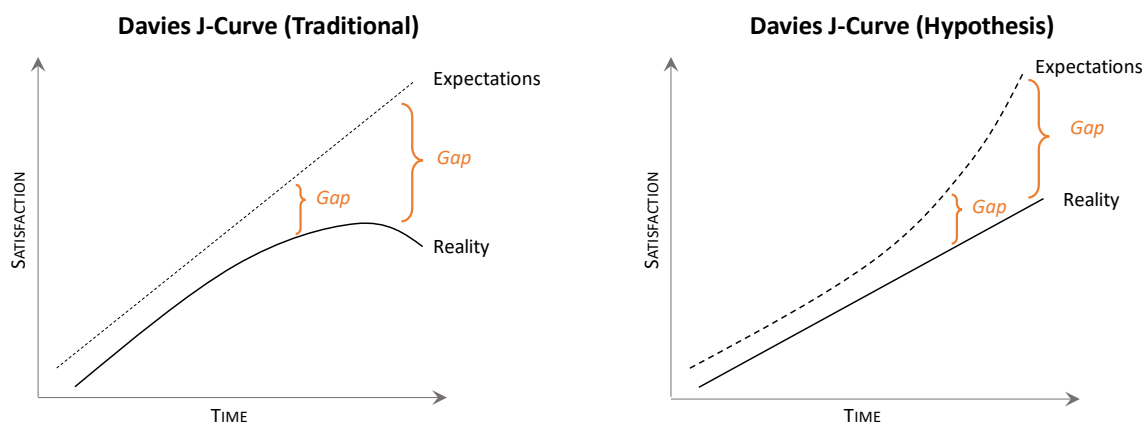
Figure 7). If expectations do not adjust to reflect the lower level of satisfaction after the shock, the gap could continue to widen rapidly.

There are a number of reasons why expectations may be ‘sticky’—that is, they do not adjust rapidly enough in response to a negative real shock. Individuals, firms and communities may expect that the shock will be short-lived and quickly resolved, thereby rendering a downward correction in expectations unnecessary. Where a negative shock is local to a specific country, region or demographic group, it may not affect neighbouring reference points. Affected individuals may benchmark their situation against that of an unaffected group, so their expectations post-shock would be wildly at odds with their experience.

Even in the absence of a real negative shock, it is possible for the expectation gap to widen if there has been a shift in the composition of needs of a person or community. In fact, this widening could take place even if the individual’s actual socioeconomic circumstances continue to improve (right-hand panel of Figure 7). In such cases, it is not just the level of satisfaction or utility derived from one’s real circumstances that is vexatious. The rate of improvement may be seen as too low.

Figure 5. Widening expectations gaps—with and without real negative shocks

The expectation-reality gap may widen if there has been a real shock (left-hand panel) or if the composition of community expectations shifts towards more sophisticated needs (right-hand panel).



Source: Davies 1962 and Institute for Economics and Peace.

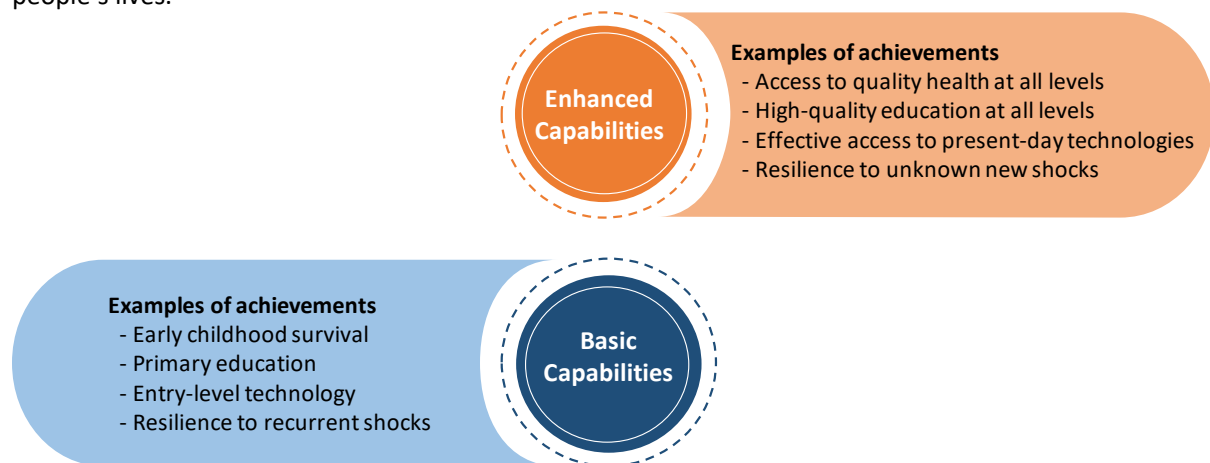
The idea that past socioeconomic progress and reforms may lead individuals to expect even higher rates of progress in the future is often called the Tocqueville Effect or the Tocqueville Paradox. This is a conjecture by French political scientist Alexis de Tocqueville (1805–1859) that as socioeconomic conditions develop and improve, people become more sensitive to societal inequalities. Therefore, the frustrations of citizens with their social situation increase at a faster rate. Tocqueville claimed that “the appetite grows by what it feeds on” and suggested that this mechanism helped explain the French and the American revolutions (Vernon 1987). Finkel and Gehlbach (2018) use this argument to analyse the Russian Emancipation Reform of 1861 and Ferreira

and Schoch (2020) develop a cogent argument that the Tocqueville Effect could be the source of social unrest in Latin America in 2019.

This acceleration of expectations could be due to a shift in individuals' expectations from basic to enhanced needs. As individuals see their most basic needs fulfilled, they would pursue less elementary aspirations, which would most likely be associated with higher costs and greater value added. The *2019 Human Development Report* (UNDP 2019) discusses the evolution of human aspirations from basic to enhanced capabilities and suggests that such evolution constantly changes the face of inequality in human society (Figure 8).

Figure 6. Basic and enhanced capabilities as discussed by the 2019 Human Development Report

Basic capabilities satisfy the basest human needs while enhanced capabilities bring greater agency along people's lives.



Source: Human Development Report 2019

The hypothesis of a shift in the composition of needs can be tested at an aggregate level with the selection of statistical indicators to represent both basic and enhanced capabilities.

Given the difficulty in ascertaining what is a basic and what is an enhanced need, this analysis uses a relativistic approach. It applies a set of variables that may be perceived as more about basic needs compared with other sets. If the correlation of basic needs with the attitudes domain of positive peace declined over time, and conversely, the correlation of enhanced needs rose, this could be a tentative indication of a shift.

Data show that the correlation of needs with attitudes has either stayed broadly unchanged or declined over the past decade, however, for both basic and enhanced needs (Table 7). This refutes the hypothesis that there was a shift away from basic and towards enhanced needs, or if there was such a shift, that it could be measured with aggregate data.

Table 6. Selected indicators for basic and enhanced capabilities—correlations with attitudes over the past decade

There was a small reduction in the correlations of basic needs with attitudes; correlations between enhanced needs and attitudes also tended to decline.

Indicator	Source	Type of need	Cross-country correlation with the attitudes domain of positive peace*	
			2009	2019
Access to electricity	World Bank	Relatively more 'basic'	0.44	0.38
Basic welfare	Global State of Democracy	Relatively more 'basic'	0.71	0.68
Access to at least basic sanitation facilities	Social Progress Imperative	Relatively more 'basic'	0.46	0.42
Enrolment in primary education	World Economic Forum	Relatively more 'basic'	n.a.	0.45
Fundamental rights	Global State of Democracy	Relatively more 'basic'	0.86	0.87
Mobile cellular subscriptions per 100 people	International Telecommunication Union	Relatively more 'enhanced'	0.57	0.40
Households with Internet access	World Economic Forum	Relatively more 'enhanced'	0.68	0.66
Internet users per 100 inhabitants	United Nations	Relatively more 'enhanced'	0.77	0.64
Access to advanced education	Social Progress Imperative	Relatively more 'enhanced'	0.68	0.61
Enrolment in tertiary education	World Economic Forum	Relatively more 'enhanced'	n.a.	0.38

Note: * Absolute value of correlation coefficients calculated in a cross-section of countries. Where 2009 data were not available, the nearest available data points were used.

Sources: As listed in the table.

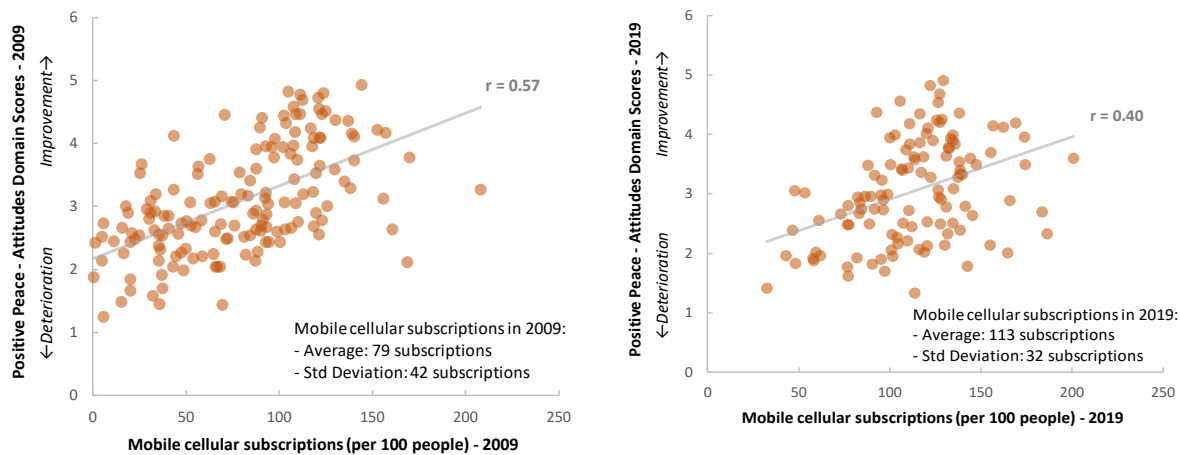
This result is inconsistent with the hypothesis of a shift in human needs away from basic capabilities and towards enhanced ones. Country-level aggregate data do not support the idea of a compositional shift towards enhanced capabilities dictating the differences in the attitudes domain of positive peace across nations.

Perhaps there has been no such shift in the composition of needs. Or if there has been one, it may not be detectable with country-level aggregate data over the relatively short time window for which statistics are available and consistent.

This finding suggests that, as discussed in previous sections, a deterioration in attitudes—perhaps both over time and cross-sectionally—is not solely a response to unmet citizens' needs. Most welfare, education, inequality and technological access indicators have improved over the past decade but their ability to explain (deteriorating) attitudes has weakened (Figure 9).

Figure 7. Mobile cellular subscriptions and attitudes, 2009 and 2019

In 2009, the relationship between mobile cellular subscriptions and attitudes was more robust than in 2019. As access to this technology increased, having or not having a cellular phone became less important in determining one's attitudes or discontent.



Source: International Telecommunications Union, Institute for Economics and Peace.

REGIONAL DIFFERENCES AND PECULIARITIES

When parsed geographically, the results in Table 4 are broadly consistent across world regions (Table 8). In almost all regions, corruption (*LowCorruption*) and disinformation disseminated domestically by the government (*GovDisinfDom*) are highly statistically significant determinants of (negative) attitudes. Numerically, the coefficients are also rather large in comparison with other influences. This suggests that the perception of corruption and resulting popular dissatisfaction are rather widespread. It also indicates that disinformation is commonly resented, presumably as it is disseminated by authorities to conceal malfeasance.

Perceptions of poor administration (*WellFunGov*) are also widespread across the regions. The impact of this variable is most statistically and numerically significant as a driver of discontent in the Middle East and North Africa, Latin America, and the Russian Federation and Eurasia.

Some global economic trends likely impact some regions more intensely than others. For example, according to the Food and Agriculture Organization of the United Nations, global food prices have more than doubled over the past two decades (FAO 2021). This rise may have had an impact on global levels of discontent. In certain regions with higher levels of poverty and food insecurity, the impact of rising food prices could have been larger.

More regional peculiarities are discussed below. These discussions are predicated on the regressions shown in Table 8 and in the time trends depicted in Table 9.

Europe and North America

Europe and North America have recorded a sharp deterioration in attitudes and increased social polarization in past decades.² Like elsewhere in the world, this has been accompanied by worsening perceptions of corruption, governance inefficiency and disinformation. There are signs that inequality has also worsened in Europe. The share of income earned by the bottom 50 per cent of the population declined more sharply than the share of other segments. The overall Equal Distribution of Resources Index confirms a certain degree of exacerbation of economic inequality (Table 9).³

Reflecting this, inequality was a key driver of deteriorating attitudes in Europe. The coefficient of the share of income earned by the top 10 per cent of earners (*PreTaxT10*) was a highly statistically and numerically significant driver of attitudes (Table 8). In fact, with the exception of the Middle East and North Africa, which has a low number of useable observations, Europe and North America were the only regions where income inequality was a statistically significant determinant of attitudes. The coefficient for poverty (*PovertyGap*) was also significant and numerically large. In fact, in contrast to all other regions of the world, income inequality and poverty were the principal drivers of attitudes in Europe and North America. Other determinants of worsening attitudes, such as perceived corruption, maladministration and disinformation, are also present in Europe and North America.

Of note, these regions are the only ones where the coefficient for confidence in the government (*GovConf*) was negative and highly statistically significant. This result is consistent with the polarization hypothesis discussed above. While a government may be vehemently supported by a segment of the population (driving an improvement in confidence in government), it may simultaneously be vigorously denounced by another segment.

Carothers and O'Donohue (2019) find examples of such polarization in many countries around the world, especially in Europe and North America. They show that polarization runs hand-in-hand with the spread of disinformation and is threatening many democracies. In the United States, in particular, polarization is not simply a result of the electoral process. It “has deep societal roots and is the outcome of a profound sociocultural struggle between contending conservative and progressive visions of the country” (ibid.).

Latin America: South America, Central America and the Caribbean

² The two regions were combined due to the low number of countries (data points) for North America. As the indicators are unweighted, the results largely reflect European trends and developments.

³ The shares do not add up to 100 percent of income earners because they exclude other destinations for national income.

South America saw worsening corruption and efficiency in governments over past decades. Accordingly, social attitudes and life satisfaction have deteriorated materially. The share of national income earned by the middle 40 percent of society has grown far less than the other tiers (Table 9). This suggests a hollowing out of the middle class and an exacerbation of income inequality to some extent.

The key drivers of attitudes in Latin America have been the same as those described at the global level. The region has a strong influence from gender inequality, with the coefficient for the *GenderGap* variable being both a statistically and numerically significant influencer of attitudes.

Russian Federation and Eurasia

The Russian Federation and Eurasia follow the broad trend observed globally. But a key particularity of this region has been an improvement in perceived levels of corruption and government effectiveness as measured by the respective positive peace pillars. These improvements, however, come from a comparatively low base as the region has continued to develop following multiple decades of communism. Social attitudes were broadly unchanged over the past decade. Disinformation and the use of social media to support social activism as well as violence have increased.

In addition to corruption, disinformation and maladministration, gender inequality is an important driver of cross-country attitude differences in the region.

Asia and the Pacific and South Asia

Asia and the Pacific also recorded improvements in perceived corruption and government effectiveness. But the region has seen a substantial deterioration in social attitudes at least over the past decade. The share of national income earned by the middle 40 per cent of the population has declined materially. If confirmed by other assessments, this could indicate a certain hollowing out of the middle class. The Equal Distribution of Resources Index suggests that there could have been an exacerbation of inequality in the region. Importantly, life satisfaction has deteriorated sharply, coinciding with increases in polarization.

South Asia recorded some improvement in perceptions of corruption and government effectiveness. Poverty has declined substantially in the region although gains have materialized from a low base. Consistent with this, there are indications of a decline in income inequality. This was not enough to improve social attitudes and life satisfaction in the continent, however.

As in the Russian Federation and Eurasia, corruption, disinformation, maladministration and gender inequality are important drivers of cross-country attitudinal differences in Asia and the Pacific and South Asia.

Middle East and North Africa

The Middle East and North Africa recorded deteriorations in social attitudes and life satisfaction, and worsening polarization of society, corruption and administrative inefficiency. There has been a precipitous fall in confidence in governments. Economic inequality appears little changed; gender inequality posted small gains.

Sub-Saharan Africa

Gender inequality and life satisfaction have improved in sub-Saharan Africa over the past two decades. There is also some indication that economic inequality may have improved, albeit marginally. An overall deterioration in social attitudes has been accompanied by worsening corruption and governmental effectiveness.

According to the regressions in Table 8, the deterioration in attitudes in sub-Saharan Africa had little to do with the determinants of attitudes in other continents. This result could have been influenced by the small number of useable observations. It is also possible that the region could have been disproportionately affected by rising food and other prices. Sub-Saharan Africa has a high prevalence of food insecurity and hosts many of the most vulnerable countries in the world (Institute for Economics and Peace 2021a).

Table 8. Regressing attitudes on governance and inequality variables, regional differences, 2009–2019

Regional results are broadly consistent with global trends. In Europe and North America and the Middle East and North Africa, income inequality between the top 10 percent of earners and the rest of the population is a far stronger determinant of deteriorating attitudes than the global average.

Independent variables	Global	Europe and North America	Asia and the Pacific and South Asia	South America, Central America and the Caribbean (Latin America)	Middle East and North Africa	Russian Federation and Eurasia	Sub-Saharan Africa
	Dependent variable: attitudes						
PovertyGap	-0.094** (0.037)	0.978** (0.377)	-0.395* (0.199)	-0.192 (0.154)	0.889** (0.229)	0.076 (0.225)	-0.075 (0.133)
GovDisinfDom	0.333*** (0.024)	0.252*** (0.038)	0.302*** (0.095)	0.285*** (0.051)	0.185 (0.105)	0.313*** (0.044)	0.417** (0.191)
GenderGap	0.078** (0.035)	0.092 (0.068)	0.239** (0.109)	0.321*** (0.088)	-1.983*** (0.392)	0.362*** (0.124)	-0.251 (0.147)
PreTaxT10	0.109*** (0.020)	0.415*** (0.050)	-0.124 (0.106)	0.089* (0.045)	0.730*** (0.105)	0.037 (0.083)	0.047 (0.184)
LifeSat	-0.051 (0.038)	-0.220*** (0.063)	-0.066 (0.134)	0.218*** (0.066)	-0.189** (0.068)	-0.080 (0.094)	-0.365 (0.320)
GovConf	-0.109*** (0.030)	-0.222*** (0.052)	-0.100 (0.099)	0.081 (0.064)	0.048 (0.108)	0.034 (0.061)	0.027 (0.139)
WellFunGov	0.121** (0.047)	0.267** (0.113)	-0.464** (0.188)	0.351*** (0.112)	0.979*** (0.242)	0.291*** (0.073)	0.403 (0.299)
LowCorruption	0.475*** (0.034)	0.396*** (0.071)	1.058*** (0.159)	0.429*** (0.067)	0.994*** (0.070)	0.309*** (0.050)	0.307* (0.161)
Constant	0.394** (0.199)	-5.540*** (1.795)	2.653** (1.091)	-1.443** (0.565)	-4.303*** (0.712)	-1.345 (1.207)	1.173 (1.208)
Observations	520	233	49	126	14	69	29
R ²	0.891	0.845	0.865	0.911	0.998	0.866	0.806
Adjusted R ²	0.890	0.840	0.838	0.905	0.995	0.848	0.728
Residual std. error	0.277 (df = 511)	0.258 (df = 224)	0.278 (df = 40)	0.198 (df = 117)	0.044 (df = 5)	0.139 (df = 60)	0.327 (df = 20)
F statistic	523.825*** (df = 8; 511)	152.857*** (df = 8; 224)	31.999*** (df = 8; 40)	149.417*** (df = 8; 117)	313.998*** (df = 8; 5)	48.521*** (df = 8; 60)	10.366*** (df = 8; 20)

Notes: *P<0.1; **P<0.05; ***P<0.01. Numbers in brackets are standard errors. To maximize the number of observations in each regression, some regions have been combined. Dark-shaded cells represent significance at the p<0.01 level. Light-shaded cells represent significance at the p<0.05 level.

Table 9. Average annual change in indicators of attitudes, inequality, poverty and governance, by region, 2000–2019

Improvements are displayed in shades of blue and deteriorations in shades of red.

Indicator	Time window of change	World	Europe	Russian Federation and Eurasia	Central America and the Caribbean	Asia and the Pacific	Middle East and North Africa	Sub-Saharan Africa	South Asia	South America	North America
		% p.a.	% p.a.	% p.a.	% p.a.	% p.a.	% p.a.	% p.a.	% p.a.	% p.a.	% p.a.
Confidence in government, Gallup	2005–2020	0.5	1.4	-2.3	0.9	-0.1	-2.4	0.0	0.5	-0.9	0.7
Elites use of social media to organize offline action	2000–2019	-1.2	-1.7	-1.2	-1.1	-0.9	-1.1	-1.0	-1.3	-1.9	-2.6
Equal Distribution of Resources Index	2000–2019	0.0	-0.2	-0.2	0.2	-0.1	0.0	0.2	0.3	-0.4	-0.4
Gov. dissemination of false information abroad	2000–2019	-0.4	-0.4	-0.6	-0.7	-0.1	-0.5	-0.3	-0.7	-0.8	-0.3
Gov. dissemination of false information domestic	2000–2019	-0.5	-0.6	-0.8	-0.7	-0.3	-0.4	-0.4	-0.5	-1.1	-0.7
Individuals using the Internet (percentage of population)	2000–2019	4.9	4.8	6.5	5.8	3.9	6.3	3.4	3.9	5.9	2.4
Life satisfaction, Gallup	2005–2020	0.0	0.5	0.9	0.0	-0.5	-0.4	0.7	-0.8	-0.7	0.5
Overall Global Gender Gap Index	2006–2018	0.8	0.8	0.3	1.4	0.7	0.6	1.1	1.3	1.3	0.8
Polarization of society	2000–2019	-0.6	-1.1	-0.2	-0.9	-0.3	-1.1	-0.3	-1.0	-1.5	-0.8
Poverty	2000–2018	0.5	0.0	1.3	0.3	0.8	0.2	0.4	1.8	0.6	0.0
PPI attitudes	2009–2019	-0.5	-0.6	-0.1	-0.1	-0.2	-0.8	-0.4	-0.6	-0.7	-1.3
PPI low levels of corruption	2009–2019	-0.2	-0.2	1.5	-0.6	0.4	-0.6	-0.6	0.4	-0.3	-0.8
PPI well-functioning government	2009–2019	-0.1	-0.3	0.4	-0.4	0.2	-0.6	-0.1	0.1	0.1	-0.1
Share of national income earned by bottom 50 percent	2000–2019	0.1	-0.2	0.0	1.0	0.0	0.1	0.2	0.0	1.0	-0.3
Share of national income earned by middle 40 percent	2000–2019	0.0	-0.1	-0.2	0.4	-0.1	0.0	0.2	-0.1	0.2	-0.1
Share of national income earned by top 10 percent	2000–2019	0.1	-0.1	-0.1	0.6	-0.1	0.0	0.2	-0.1	0.5	-0.2
Use of social media to organize offline violence	2000–2019	-0.6	-0.6	-0.8	-0.5	-0.4	-0.8	-0.7	-1.2	-0.5	-1.0

Source: Institute for Economics and Peace and others.

Concluding remarks

These results suggest that the increased deterioration of social attitudes and the polarization of sociopolitical views observed in recent decades is not linked to deepening economic inequality, gender inequality or an exacerbation of poverty at the global level. While inequality and poverty are important determinants of worsening attitudes in Europe and North America, they are not significant factors driving discontent in all other regions of the world.

It is possible that despite recent progress, lingering economic inequality, disparities among genders and existing levels of poverty are important reasons for vexation and dissatisfaction with the current state of global society. Perhaps society has become more aware of or more bothered by the persistence of these imbalances. A deepening in these imbalances, however, has not accompanied a deterioration in attitudes and polarization at the global level.

A more promising avenue for deeper research is to consider the deterioration in social attitudes in light of perceived increases in corruption, administrative ineffectiveness, dissemination of false information and the widespread practice of using social media to curb dialogue and incentivize radicalism. This avenue of research may provide more plausible explanations for the paradox of progress with polarization.

A deeper understanding of changes in the values of working-class people and how they perceive the institutions that govern them may provide insights into the acceptance of misinformation and rising levels of group grievances.

Annex 1. Topics for further research

Regional variation in the drivers of discontent: Gallup, the World Value Survey, the European Values Survey and other data could be used to assess factors specific to regions. For example, the rise in food prices in the last six years in developing countries has had a dramatic impact on food insecurity, while in Europe, other issues, such as job insecurity, may be in play. To what extent is the deterioration in attitudes related to local issues and to what extent is it a response to global trends and developments?

The impact of information on society: Access to information has never been easier. This has resulted in the propagation of accurate information mixed with disinformation, however. Due to the construction of modern social media platforms, many people are caught in information bubbles—what is termed narrow information—where the facts and views presented match and corroborate individuals' biases. Even when the information circulating is accurate, the exclusion of alternative data and views may exacerbate polarization. A useful research question is which demographics are consuming accurate information, misinformation and narrow information, and how does that affect their interactions with society. This can be analysed through survey data and changing attitudes to societal institutions.

System-designed solutions: Many current problems relating to the lack of social resilience are systemic in nature. Interventions by international agencies tend to be thematic, however. An example would be the fragilities in the Sahel, which combine military, food, refugees, water, unsustainable population growth and poor governance issues. How can systems principles articulate the issues using concepts, such as homeostasis and encoded norms, in addressing runaway feedback loops? What would future interventions look like based on systems thinking? Would this approach create more efficient agencies and programmes enjoying greater buy-in from local communities?

Assessing voicelessness: Has the pace of social change been faster than a sizable proportion of a population is comfortable with? If so, this could have left a disaffected share of the population feeling they do not have a voice. There has also been a shift in political party orientation whereby the traditional right and left-of-centre orientation no longer represent large sections of the population. To what extent has this been a factor increasing discontent and mistrust in institutions?

Methodological enhancements: The approaches used in this paper are preliminary and are intended as a basis for future research. Methodological enhancements that could offer greater insight include lagging time series variables, structured equation modelling and granger causality.

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