

Inequality's contribution to global catastrophic risk

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Abstract

Inequality is rising and so is global catastrophic risk. These two problems are not independent from each other. Inequality has historically been a major driver of social instability, and is increasing the risk of global catastrophes today. We demonstrate this by drawing on the rich literature around societal collapse and global catastrophe from both past and modern societies, highlighting the corrosive effect that material and structural disparities have on social functions which can further carry over into multinational crises. The negative effects of inequality happen by destroying trust and information sharing in societies, which makes collective action much harder. This holds both true for current disasters where democracies, especially the ones with low inequality, face much lower death tolls, but also for global catastrophic risk, where democracies seem to be the form of government which invests the most resources and foresight into prevention of such risk. This means inequality is a risk factor for global catastrophes, both directly by making coordination more difficult in every form of society, but also by disrupting democracies and so limiting the ability to mitigate impacts. This means wealth redistribution is not only just, but also necessary to avoid the worst catastrophes.

Introduction

What could make societies resilient against global catastrophes? A question that has gotten more prominence over the last years, as the number of conflicts increase (Davies et al., 2025), democratic backsliding is experienced in many countries (Lührmann et al., 2018), extreme climate change comes closer into view (Kemp et al., 2022) and planetary boundaries are overstepped (Richardson et al., 2023). This convolution of crises is often framed in terms of polycrisis, meaning multiple systemic risks becoming active at the same time and interacting with each other (Hoyer et al., 2023; Lawrence, 2024). Against the backdrop of the deepening polycrisis being experienced globally today, the risk of several different global catastrophes loom on the horizon, including nuclear war, risks from AI, and major pandemics. These global catastrophes have in common that they have the potential to kill or harm a significant fraction of humanity (Jehn et al., 2025; Ord, 2020). Additionally, these global catastrophic risks can be made more likely or have worse outcomes due to the systemic stresses of the polycrisis (Arnscheidt et al., 2025).

Given this high-risk state of the world, having societies which are resilient against major disruption is essential. Converging research suggests that one critical linchpin in boosting resilience and effective crisis response is reducing inequality. Inequality can be connected to many negative societal outcomes. Accordingly, it gets regularly identified as a risk factor in major assessments. For example, the Global Risks Report by the World Economic Forum (2025) highlights inequality as a key issue of our time, due to its negative influence on many other potential risks, like societal polarization or a decline in health and well-being. Similarly, inequality is also identified as an underlying risk factor in the Sendai Framework, as it worsens the impact of other hazards (United Nations Office for Disaster Risk Reduction, 2015). There is also a variety of empirical research, which links inequality to more severe experiences with crises. An extensive study by Lindersson et al. (2023) notably studied outcomes after floods by wealth inequality and clearly shows that regions with higher inequality have higher flood mortality, even after controlling for confounders like wealth per capita. Higher inequality is also linked to instability within democracies (Rau & Stokes, 2025). This is a major problem for societal resilience, as democracies tend to be the form of government that can manage crises best (Boyd et al., 2026; Boyd & Wilson, 2021) and generates higher well-being for their citizens on the whole (Millemaci et al., 2024). Also, many of the global risk drivers are currently outside of democratic control, like some countries producing the majority of emissions (Carbon Brief, 2024) and nuclear weapons. Stronger democratic norms and processes are needed to reign them in.

These insights are further bolstered by recent historical research. Studies of the experiences of societies in the past with various sorts of crises, both recent and more distant, have explored why some societies fail in the face of such major catastrophes, while others persist (Fien & Charlesworth, 2025; Holder et al., 2024; Hoyer, 2023; Hoyer et al., 2025; Kemp, 2025; Patterson, 2023; Scheffer et al., 2023). Across different eras, geographies, and types of society, a consistent message in this work is that acute material and structural inequalities offer an important piece of this puzzle. In particular, two related theories – Structural Demographic Theory (SDT) and the ‘Goliath’s Curse’ idea recently advanced by Kemp (2025) – detail how disparities in wealth, income, and access to privileged positions and other means of wielding social power can grow across generations, eroding social cohesion

and resilience capacity. Further, as fragility and unrest grows within societies, there is a high risk of spilling over as crises and conflict in the international sphere.

The argument we therefore want to make here is that lower inequality within societies also decreases the dangers of global catastrophic risk. This is built on the following premises: 1) Resilience of societies is shaped by inequality, 2) democracies are important for resilience, but are in danger due to inequality. To demonstrate this, we will draw on literature from a wide range of fields, like collapse studies, governance research and disaster risk reduction. Unfortunately, we find growing inequality in many countries over the last two or three generations, right as the risks from climate change, AI, and other sources are rising as well; a highly volatile situation that calls for immediate recognition and intervention. We hope that this contribution will help in the growing call for tackling inequality as a core mission of polycrisis mitigation strategies in the years to come.

How recent collapse theories explain societal resilience

As noted, two fairly recent theories of societal collapse have emerged as holding tremendous explanatory power, backed by a growing body of empirical support. One is SDT, articulated first by Goldstone (Goldstone, 2016) and later refined and empirically tested by Turchin and members of the Seshat: Global History Databank project (seshatdatabank.info; Turchin et al., 2019; Turchin & Hoyer, 2025). The main idea of structural demographic theory is that societies regularly experience phases of growing social unrest and that these patterns can be quantified and analyzed. Turchin highlights the role of rising disparities across the population in terms of wealth and access to the halls of power, a process he calls the wealth pump (Hoyer & Ainsworth, 2025; Turchin, 2023). This refers to the social structures – e.g. tax policies, public goods programs (or lack thereof), norms or regulations regarding credentialing for top positions in business or government, etc – that allow the wealthy and privileged citizens (so-called ‘elites’) to extract more than their fair share of the society’s wealth and valued positions. Over time this means that elites have ever more resources and social power in comparison to the rest of society. This has three main consequences:

- 1) Elite overproduction and counter elites: When elites have more resources, they can re-distribute more wealth to their children. These children then compete with each other and with new aspirants who have amassed some wealth or privilege and are looking to enter elite ranks. However, any given society can only have so many leading positions. Ultimately, there can only be one president for example. This means ever increasing competition between elites and elite aspirants as the wealth pump continues to redistribute resources upwards. This competition destabilizes states and can lead to things like civil wars (Turchin, 2023).
- 2) Popular immiseration: When elites get richer, this is often to the detriment for the general population. As the general population loses access to resources, they also lose access to things they care about like health care, housing or education. This further destabilizes states and generates a large pool of dissatisfied, marginalized citizens.
- 3) Falling fiscal health and lower state legitimacy: Linked to this, the state also loses resources, as wealth gets siphoned away and, typically, elites capture key governmental positions and turn institutions towards their personal advantage; in

other words, they influence societal structures to ensure that the wealth pump keeps flowing. However, to function a state needs a certain amount of money to guarantee services for its citizens. Further, a state gains its legitimacy and power from serving its citizens or by suppressing them (or a mix of both). For this it needs resources. If there are no resources, there is no legitimacy and power.

All of these three processes exert downward pressure on the society's resilience: States become less stable when elites compete over a small pool of privileged positions, hampering societal functions while at the same time finances are diverted from public coffers to private hands; the ability to respond to a crisis, let alone prevent it, becomes severely limited as the state lacks the resources or mandate for large-scale action; meanwhile factions of dissatisfied citizens – both elites and non-elites – will have formed and act to redirect attempted responses into their own service or to further inflame partisan hostilities. If no reforms are made, this means societal resilience tends to trend downwards over time in a vicious cycle of unrest, animosity, poor outcomes from crisis, and so further unrest. If resilience is not high enough, a crisis can lead to massive suffering, violence, and even complete societal collapse. In some cases, however, the crisis and destabilization it causes can lead to a reset – either in the same society, or in its successors after a collapse – where the wealth pump is turned off, or at least turned down, and more equitable distributions generate social cohesion and more positive trajectories, at least for a while (Figure 1).

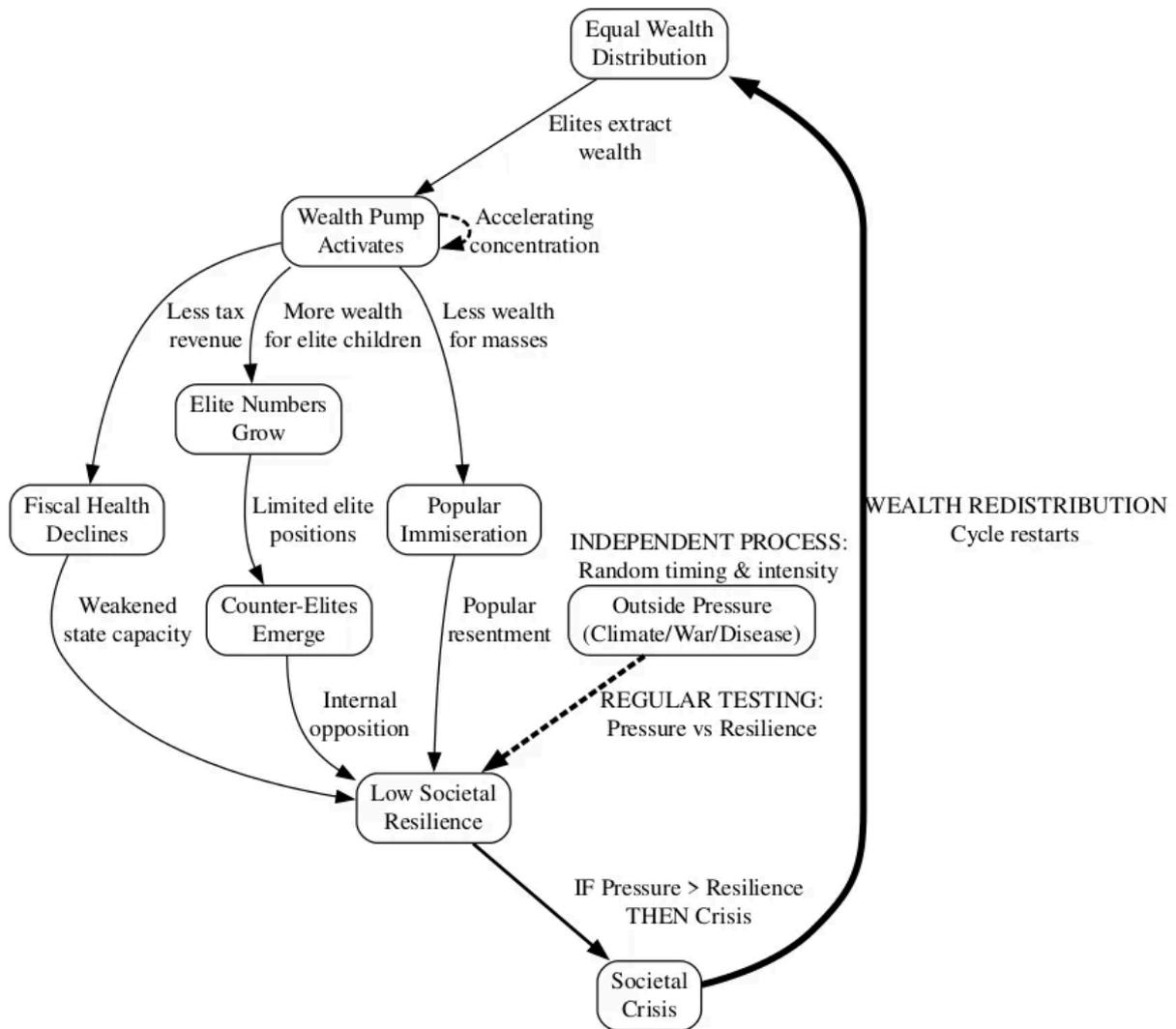


Figure 1: Flow diagram of structural demographic theory main processes (Jehn, 2025b).

The general trajectory described above has been shown in a variety of historical and contemporary societies. These include preindustrial societies such as the Roman Empire (Baker, 2011), Qing China (Orlandi et al., 2023), Medieval France (Turchin & Nefedov, 2009), as well as more contemporary ones including United Kingdom (Ortmans et al., 2017) and modern United States (Turchin, 2016; Turchin & Korotayev, 2020). The specific nature of the crises experienced differed in each case, as did the severity of the consequences faced by various segments of the affected societies (Hoyer et al. 2025). A clear common pattern across cases, however, is the influence of growing inequality over generations and how that both opened societies up to internal unrest while at the same time making them vulnerable to external influences, whether ostensibly exogenous shocks like pandemics or ecological disasters or conflict with other societies; and of course, in many of the cases explored, a variety of endogenous and exogenous stresses contributed to the severe outcomes seen, including complete societal collapse as for instance in the case of Qing China.

Goliath's Curse theory, as explained in Kemp (2025), talks about similar processes, but with a somewhat different focus. Grounded in a large number of empirical studies (for example, Peregrine, 2021; Scheffer et al., 2023; Turchin et al., 2019), it starts with the premise that humans prefer egalitarian societies, but that there are structural forces, which funnel

societies towards more hierarchical and unequal ones. For these forces to apply, their strongest factor is the presence of lootable resources (e.g. grain). When others do not have anything readily controllable or divisible, it becomes difficult (though not impossible) for individuals to accumulate enough resources and prestige to become a dominant social force. This is particularly salient when establishing hierarchical rule across generations, as a single individual may gain enough respect and accolades to become a *de facto* leader, but these traits are often not directly inheritable. When lootable resources are present, wealth accumulation typically starts up. And once wealth accumulation sets in, social power in society starts to funnel upwards along with it, much in the same ways as described by SDT (indeed, Kemp cites SDT as a major source for his own arguments).

In Kemp's articulation, people with more resources can set terms for those who need them, for instance paying relatively low wages for work at factories or charging exorbitant rents for tenants on agricultural land. Security and police forces often develop in tandem, as state agents monopolize violence in their communities and use it to enforce the rules and norms that they set. People who do not like this could start to leave and thus disrupt the society, so leaving gets made so difficult, so that people have to stay. When all of these factors are in place, dominance hierarchies can flourish. These processes also tend to entrench themselves over time, leading to a concentration of resources and power in few individuals. However, this also is not a stable situation, as when circumstances get too bad, the suppressed and exploited start to rebel. This often leads to a more egalitarian society again, at least until the cycle starts anew (Figure 2).

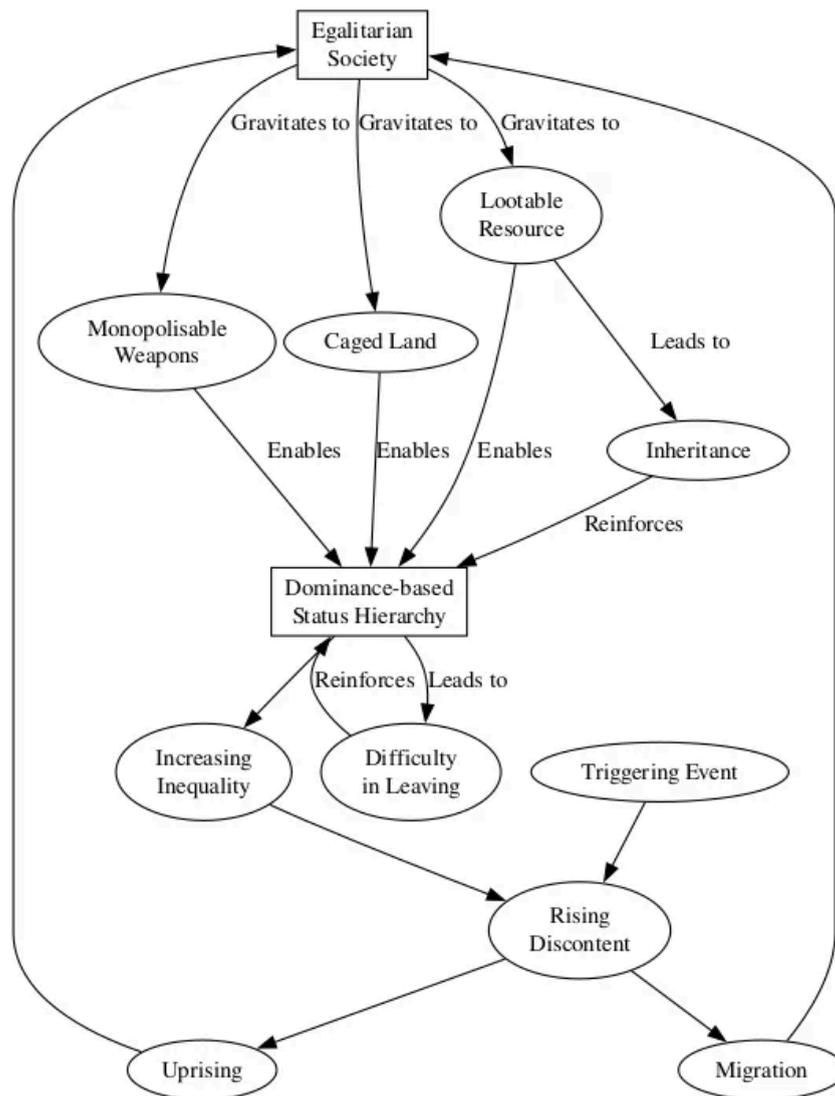


Figure 2: Flow diagram of Goliath's Curse main processes (Jehn, 2025a).

As with SDT, the arguments in Goliath's Curse are tested against a diverse set of historical and contemporary examples. Kemp argues that early states, or 'Goliaths', in North America such as Cahokia and the Pueblan communities in the southwestern USA collapsed on the weight of their own predation and extreme inequalities, as did a succession of dynasties in ancient Egypt and the Mesoamerican city-state of Monte Alban, while repressive and violent regimes in 20th century Argentina, Sierra Leone, and a host of other examples are said to represent a similar trajectory. Again, a core driver of the dynamic leading from peaceful, cohesive, relatively functional society to one of predation, sharp disparities in material well-being and access, and violent turmoil is in the amassing of wealth and power in the hands of a small group of individuals, or even super-powerful ruler.

What both of these theories emphasize is that inequality tends to increase over time and the higher it gets, the less resilient the society becomes, as the ability for collective action degrades and as accumulated animosity and factionalism grow. This means if no reforms are introduced these processes make societies less resilient against all types of shock over time. However, as many of these shocks, like earthquakes or pandemics, are somewhat random or at least chaotic in both frequency and magnitude, this means that societies with

low resilience can exist for a long time, if they get lucky. However, even high resilience societies can quickly crumble, if they draw the short end of the straw. How such a trajectory could look is visualized in Figure 3.

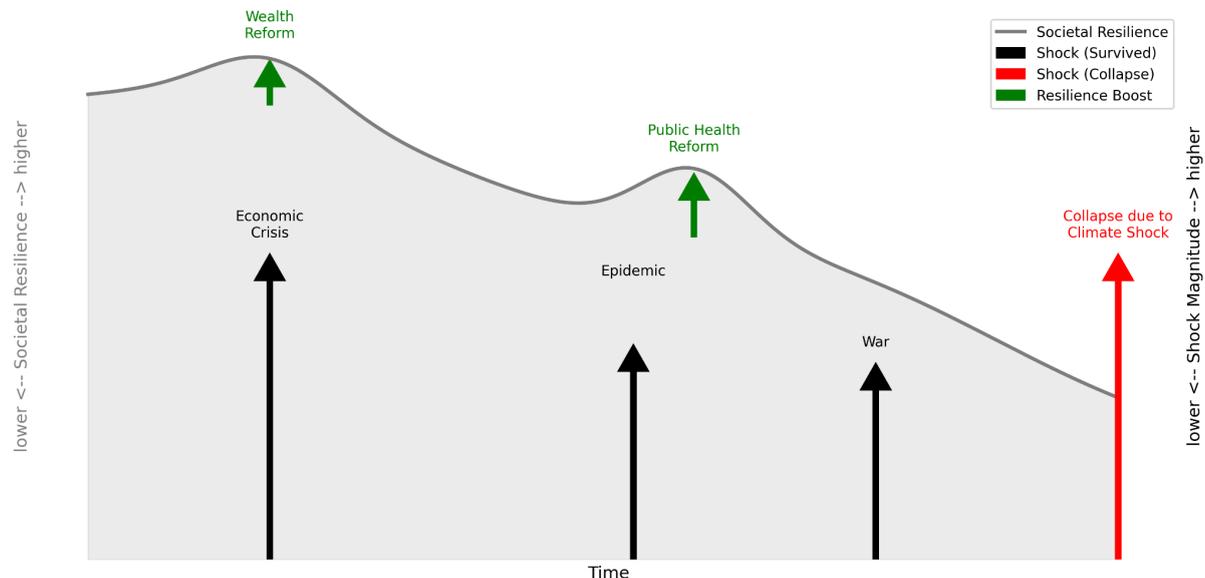


Figure 3: Example trajectory of a civilization, its resilience and occurrence of shocks.

The role of inequality and governance on societal resilience

The theories outlined above have demonstrated why inequality is so corrosive to societies in general. However, there is also more specific evidence from the modern world. Throughout the literature there are many arguments detailing how exactly inequality breeds societal fragility, undermines resilience, and how this connects with democratic forms of governance:

- Material deprivation erodes trust: Economic inequality leads to worse lives for citizens, as their material conditions degrade. This in turn decreases the trust in the political system, especially when it, like democracies do, promises broader participation and equality (Loughlin, 2019).
- Loss of social cohesion and cooperation: frustration and animosity between social groups can fracture societal-level cohesion, reducing the state's ability for large-scale collective action and emboldening self-serving interests. This can further lead to partisan tensions and even violent conflict (Houle et al., 2022; Jochim & Bornholdt, 2025; Loughlin, 2019).
- Support for populist and authoritarian rule: as conditions worsen for large segments of a population and tensions grow between social groups, the promise of authoritarian rulers to 'restore order' becomes increasingly appealing. These messages are often couched in populist, nationalist, even xenophobic terms seeking to scapegoat marginalized and vulnerable groups (Bosetti et al., 2025; Edelman, 2020; Quirk, 2022).
- Power concentration in large companies and rich individuals: Large companies like Amazon and billionaires like Elon Musk have significant influence on governmental policies. This is frustrating to voters, as they are repeatedly shown that their preferences are not taken into account (Centeno & Cohen, 2012; Gilens & Page,

2014; Loughlin, 2019). A clear example of this would be that ExxonMobile and many other large fossil fuel companies knew that their products would cause global warming, but still lobbied against regulation (Oreskes & Conway, 2012; Supran et al., 2023).

- Decline in Mutual Aid and Collective Care: Due to popular immiseration, people have to work more and thus have less time to participate in democratic processes and care for each other in general (The Care Collective et al., 2020).
- The fragility of concentrated systems: More concentrated systems are more vulnerable to disruption in general. For example, explained in detail for the food system by Clapp (2023).
- Even if you mainly care for the long-term future (meaning thousands of years or even longer), inequality should be a key consideration (Schmidt & Juijn, 2024). We know from research that societies with lower inequality tend to have better health outcomes, better education and generally more trust. It seems quite plausible that societies with better, better education and more trust are more stable even in the long term and can manage large crises better.

But there are also historical case studies that highlight how higher inequality is detrimental. Alfani et al. (2025), for instance, studied the differences between income inequality for the Roman Empire, the Aztec Empire and the Chinese Han Empire. Generally, they find that the Aztec Empire had the highest inequality with the richest 1 % having 42 % of income, next is the Chinese Han Empire with 26 % and finally the Roman Empire with 19 %. This is a higher inequality than present day countries, though the bottom 10 % in the United States have even less of the wealth in their nation than their equivalents in the Aztec Empire. The differences of inequality between those empires is mirrored in their stability. The Aztec Empire quickly fell to the Spanish, as those regions that faced the most extraction quickly allied themselves with the invaders. Similarly, both the Roman and Han Chinese empires experienced major turmoil and civil warfare shortly after the periods where these inequality estimates came from.

Another example of how the dangers of inequality play out can be found in Hoyer et al., 2023, cf similar arguments made in Borsch (2005) and Cohn (2023). They compared the reaction of England and Egypt to the Black Death. At that point in time both countries were similar when it came to infrastructure, population, agriculture and overall complexity. And both were highly unequal. Where they differed is how their political economies were structured and, in part as a result, how they managed the Black Death. Egypt's rulers sought to combat the unrest that sprung up during particularly bad outbreaks – which in Egypt were often accompanied by ecological shocks damaging food production – with suppressive measures and efforts to reassert the authority of the rulers. This backfired, leading to widespread protests, civil war, and the assassination of the Mamluk Sultan who ruled Egypt at the time. England's ruling class, on the other hand, lacked the cohesion or capacity – or perhaps the will – to suppress discontent with such aggression. Instead, they largely capitulated to their peasants' calls for higher wages and better terms on agricultural land. Even though these responses were likely aimed at retaining the wealth and power of the landowning nobility, they nevertheless resulted in significant improvements to the living standards of the peasantry and helped to create the foundation of the industrial revolution.

The arguments so far stress the deleterious impacts of high material and structural inequalities. On the other side of the equation, we find that more inclusive societies indeed display higher resilience to various crises. Peregrine (2021), for example, compared the response of a host of societies during the so-called Late Antique Little Ice Age – a period of abnormally cold and unpredictable weather across the Northern Hemisphere during the 6th and 7th centuries CE, driven largely by volcanic activity (Büntgen et al., 2016). For this, Peregrine studied twenty ancient societies sampled from across all over the world and generally finds that more flexible, participative, less hierarchical societies fared better (e.g. in amount of population lost). In another study by Blanton et al. (2020) these problems to find good solutions to societal problems are linked to governmental fairness. They looked at 30 pre-modern societies and found that those societies that had fairer practices (like higher taxes for the richest, limits on leadership power and impartial courts), generally achieved a higher welfare for their citizens. Likewise a study by Carballo & Feinman (2024) found that collective and more inclusive forms of governance, generally associated with more equitable distributions of wealth and social power, had significantly longer and more stable rule than more hierarchical and exploitative settlements across ancient Mesoamerica.

More specifically, when we look at more modern democracies, these have a quite good track record when it comes to avoiding negative societal outcomes. Democratic states tend to have much fewer famines in comparison with autocratic regimes. (Hasell & Roser, 2013). Also, democracies are more peaceful and tend to wage war against each other only very rarely. Likely this is strongly influenced by the difficulties of convincing your population that attacking another liberal democracy would be a good idea. Politicians who suggest such things simply do not get re-elected. Thus many refrain from it in the first place (Reiter, 2017; Tomz & Weeks, 2013).

While most historical societies are not considered democracies in the modern sense, they nevertheless differed in the degree of collective responsibility, inclusivity, and responsiveness with respect to the majority population. Critically, more inclusive and representative societies – let's call them democratic, even if not fully reaching the level of modern democracies – tend to be associated with lower levels of inequality and, thus, higher overall well-being. And, as we see above, both of these qualities tend to generate more stable, resilient societies. These relationships hold for modern countries as well. Indeed, a study by Lin (2015) found that disaster impacts are substantially lower in countries with democratic governance, although only if they also had a high state capacity. A high state capacity in turn requires cohesion and resources, which above we highlighted are eroded by inequality.

The complicated relationships between democracy, inequality, and risk response

But why are democracies thought to be better at securing more equitable distributions of wealth and power, maintaining higher living standards for their populations, and preserving more resilience in the face of major social and environmental risks? One general idea is that in a democracy a larger part of the population is a stakeholder and has to be kept happy. And the best way to keep large groups of people happy is to maintain, or improve, their well-being. Millemaci et al. (2024), for instance, compared modern autocracies with

democracies and found that democracies tend to deploy more resources towards making the life of their citizens better than autocracies, such as through public infrastructure, progressive fiscal policies, and welfare programs.

Another critical factor is information sharing. Generally, the more people that can be brought in to help solve problems, the better the solutions will be. The relatively more democratic societies tend to cast wider nets in terms of the people participating in decision making, which means that more information gets shared and a greater number of ideas are generated. How this plays out for example is that democracies tend to have much better national risk assessments (Boyd & Wilson, 2021). They also share them publicly, so they can be corrected by public critique. Autocratic states on the other hand typically do not share their risk assessments, do not face public scrutiny, and thus are more likely to focus on the wrong things or overlook dangers. Similarly, citizens' assemblies have a good track record of delivering very forward looking policy suggestions (Lage et al., 2023). These assemblies are not a feature of all, even modern democratic societies, but can be a powerful supplement that raises the representation, inclusivity, and responsiveness of governments, no matter how they are structured (Lempert, 2022; Smith, 2024). This highlights that good democratic governance goes far beyond simply holding occasional national elections.

However, the link between democratic governance, inequality, and resilience is not as straightforward as many of these theoretical and empirical studies would suggest. Indeed, it is clear that many modern, ostensibly highly democratic countries in the Global North like the United States, United Kingdom, and others have allowed material and structural inequalities to skyrocket in the last 40 or 50 years (Bonica et al., 2013; Saez & Zucman, 2019; Scheve & Stasavage, 2017). Arguably, many of these countries have become less democratic, or at least their democratic institutions are not functioning as in the past (Carlisle & Maloney, 2023; Collins, 2021; Hickel, 2016). Which way the direction of causality lies – whether inequality is driving democratic backsliding, or the reverse – is largely immaterial. The key fact is that both democratic governance and redistributive, equity-enhancing measures are failing in many of the largest, wealthiest, and politically powerful societies in the Global North.

These insights highlight that democracy is not simply a magic form of government that does everything better. Instead, the important factors are distributed decision-making power, information sharing, and mechanisms for collective action. What unites them is their opposition to concentrated power and inclination to more distributed flows of material resources, information sharing, and opportunities for participation. This underscores the importance of intersectional analysis, as neither democratic institutions nor relatively low inequality on their own are likely to relieve all of the symptoms described above. More to the point, these factors tend to be highly correlated in time. The clear takeaway message, then, is that increasing the effectiveness and reach of a society's democratic governance, working to reduce inequality and achieve high quality of life for the population, and maintaining strong state capacity, social cohesion, and, thus, the ability for collective response are all absolutely critical components of societal resilience; and are each inexorably entangled with each other.

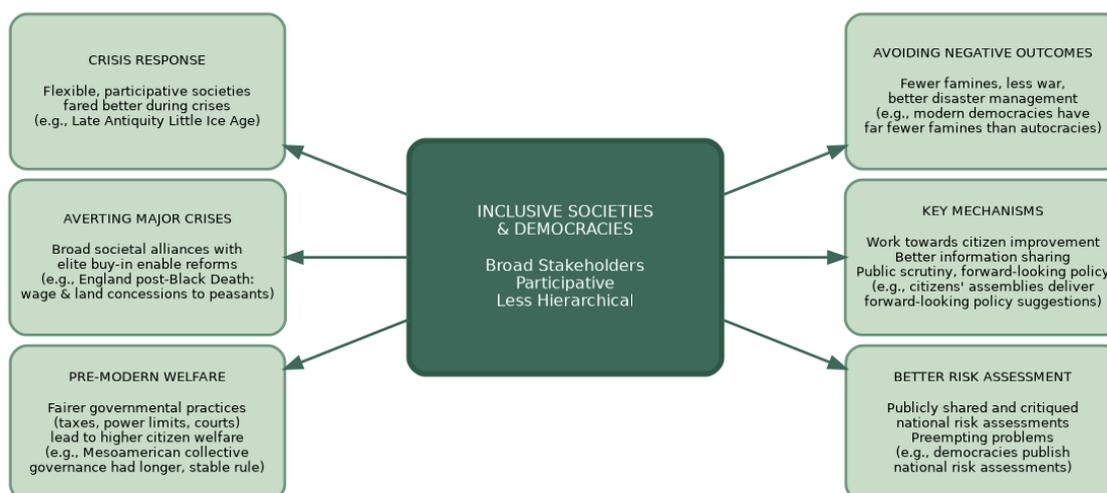


Figure 4: Visual summary of the main processes that lead to higher societal resilience.

Within-Country Inequality Spills into Between-Country Animosity

A growing convergence in work on international relations seeks to expose how domestic circumstances and structures impact the way that nations engage in the international arena. Here, too, inequality stands out as a critical force (Flaherty & Rogowski, 2021; Klein & Pettis, 2020; Miller, 2019). As we document above, growing inequality within a country carries a host of costs, including raising animosity between social groups and undermining large-scale social cohesion and breeding support for nationalist, populist, and authoritarian rule.

Aspirant leaders applying such tactics will tend to veer towards protectionism, amplifying conflict between groups, and domestic economic and cultural issues as a means to rally support and secure authority nationally. These inclinations naturally undermine international cooperation and threaten to erode multilateral organizations and agreements; which indeed we are seeing in recent years (Coulibaly & Qureshi, 2025; Siddiqui, 2025).

Further, as domestic tensions and unrest breed authoritarian responses, democratic institutions are weakened. This feeds into a vicious cycle, where inequality undermines democratic functioning and generates a host of frustration and tension, which in turn incentivizes un-democratic leaders who focus on populist rhetoric and scape-goating measures which do little to address the inequality (as it, in part, helps support their popularity), which then erodes support for and may lead to active hostility against multilateralism. Or to make a concrete example, inequality contributes to the rise of far right, populist parties, which in turn decrease climate action, which further drives inequality (Bosetti et al., 2025). Societies under these conditions are extremely vulnerable to a host of risks, as documented above. Further, without well-funded, broadly supported, and highly functioning international bodies, countries are left without recourse to international aid, coordinated support, and crisis management that we would have been otherwise (and indeed may have been in the past). Crises are, thus, likely to become severe and highly

unlikely to reduce inequality or restore democratic functioning, further reinforcing this risk-laden dynamic.

Distributive justice and democratic participation as risk mitigation strategy

All of the above lays out what we see as the main mechanisms by which inequality contributes to global catastrophic risk. Inequality is harmful for society on many levels, but in regards to global risk, the most dangerous part is its corrosiveness for democratic and participatory processes. These weaken states' abilities to organize collective response to risks, to engage in preventative measures and mitigation strategies, and can undermine international cooperation as well, spreading these issues to the global arena. All together, this leads to a poorer and more endangered world, one of high vulnerability, low cooperation, and few prospects to resolve the root causes. Tackling inequality, thus, stands out as an essential process for progress in battling a host of the risks and stresses which threaten the world today.

Thankfully, both distant and more recent examples show that it is possible to reduce inequality within societies. Indeed, there are many instances in the past where hierarchical and exploitative social structures were effectively 'reset' after a major event, leading to greater equality and life quality improvements for large segments of the population in subsequent periods, though typically some disparities have always lingered. Shuffling of wage and tenant terms in England after the Black Death, mentioned above, is a prime example of this. There is likewise evidence that the fall of the Western Roman Empire in the late 5th century CE led to improved health and living standards in many of the communities left in its wake (Scheidel, 2017; Kemp, 2025). Unfortunately, in these and many other similar cases, the event triggering structural change is a major catastrophe or violent unrest—an ecological disaster like volcanic eruption or climate-induced famine, a pandemic, a major revolution (Scheidel, 2017).

But not all cases of reduced inequality require some calamity, nor do all societies experiencing such crises respond with egalitarian- and inclusion-enhancing reforms; other forces are clearly at play (Hoyer, 2018). The major ancient Mesoamerican settlement of Teotihuacan, for example, managed to retain a relatively long-lived, stable, low-inequality regime by having many separate power centers in the city, which all kept each other in check, preventing one from dominating the others (Marienbach, 2024). More recently, a host of countries in early modern Europe and North America followed the examples of England, Russia, and others in instilling a suite of institutional changes aimed at giving broader representation to non-elite populations, reigning in exploitative fiscal policies, and regulating unsafe working conditions in the countries' newly-industrializing urban factories (Hoyer et al., 2025). The results were somewhat mixed, but overall generated much improvement in well-being for millions and set the stage for what we consider today hallmarks of functional social democracies (Quest, 2015; Stasavage, 2003).

There are notable modern cases as well. Although as mentioned both equality and democratic functioning have both been on the decline in many countries over the last 4 or 5 decades, there have also been some recent instances where inequality has been

successfully reduced. Mexico along with Brazil and several other countries across Central and South America have seen wealth and income inequality shrink, while investments in public goods and programs aimed at giving political voice to broader segments of the population than in the past have revitalized social systems. In Brazil, this was accomplished by creating cash transfers to poor families and minimum wage increases, while in Mexico education, investments in public services targeted to underserved communities, and support for small business owners coupled with overall growth have led to “historically low” levels of income inequality in the country (Kanbur, 2019; Pandiella & Maravalle, 2024).

Based on this, it is clear that inequality and erosion of democratic functioning have made societies more vulnerable to the host of global, catastrophic risks which face them. At the same time undermined international agreements and cooperation. All of which have made it more difficult for states to address these two core issues and have led to our current, unprecedented moment where we face a collapsing multilateral order. A truly vicious cycle.

Surveying historical and contemporary examples, we find a few critical policy directions likely to contribute to reducing these stresses and raising resilience both within and between countries

- **Reduce inequality**: As established in this paper, inequality itself has many negative consequences and destabilizes societies. However, we have also seen many examples of how inequality can be reduced, like minimum wages or much higher taxes on the richest parts of society.
- **Strengthen participatory mechanisms**: In many current states there are neither the mechanisms in place, nor do citizens have the time to participate meaningfully in societal decisions. Improving these mechanisms could involve citizens’ assemblies, participatory budgeting, or any number of other measures aiming to delegate power to lower levels of government. The time aspect can be managed by alleviating the financial pressure that forces many people to work extremely long hours. There are many potential measures here, but for example this could be done by reducing tax burdens on lower class people, improving public transport or introducing a universal basic income. Examples of current polities where inspiration can be drawn from are Rojava (Democratic Autonomous Administration of North and East Syria, 2023) or governance in Switzerland.
- **Resilience through distribution and public services**: more broad-based representation in governance can also help identify where investments in public goods, services, and infrastructure are most needed, leading to more distributed systems in critical elements like food supply and health care facilities. More concentrated systems are generally more vulnerable than distributed ones, since they have only a single point of failure. Working towards more distributed systems with broader and more inclusive access not only raises the well-being of beneficiaries, but supplies greater resilience to shocks by adding more points of redundancy and flexibility.

Conclusion and outlook

Global catastrophic risk threatens the worst outcomes for humanity, death of a significant fraction of global population, societal collapse or even both. This has to be avoided as much

as possible. In this paper we have demonstrated the corrosive effects of inequality on society and how it is especially detrimental to democratic forms of government. However, these more democratic governments are also those that manage disaster best. This is demonstrated by a growing body of evidence from historical and contemporary societies, explained particularly by two prominent, related theoretical perspectives.

Following these insights, it is clear that any new version of the Sendai Framework must, therefore, push hard for reducing inequality as a critical priority in the drive towards building the resilient systems we need to navigate the difficult futures ahead. Reducing inequality enhances well-being within societies, can help – along with a host of other mechanisms – restore and enhance democratic, participatory institutions, and provides a footing to restore multilateral cooperation. Reducing inequality is, thus, a true all-hazards approach to global catastrophic risk.

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